SPACES OF COMMUNICATION IN HIGH-RISE RESIDENTIAL BUILDINGS

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ABSTRACT

SPACES OF COMMUNICATION IN HIGH-RISE RESIDENTIAL BUILDINGS

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The aim of thesis is to evaluate criticisms directed to high-rise buildings which have firstly used for residential purposes with modernism in terms of their hindering social contact, and to explain in what kind of spaces the residents of high-rise building sustain their social and environmental contacts. This form was aimed to be used as the building type of high-rise, low density urban form in CIAM meeting for decreasing health problems created by industrialization on individuals. In contrast, Team 10 criticized high-rise residential buildings by propounding disposal of street and not gathering people by using green areas. They propounded the urban element which is low-rise spreading in horizontal as the form of increment of social connection.

In this study, principally diversified existence of social and environmental communication space are advocated in every urban environment depending on distinctive spatial organizations. Matrix study was made depending on height, density and coverage as three inputs of residential types, and the idea defended was tried to be proven. Communication spaces in high-rise residential buildings were analyzed in urban design and architecture scales. For this purpose, urban design scaled study was analyzed in the frame of territoriality which is related to the main topic of the thesis as residential area, and public and private space continuity types came into prominence. Architecture spaces constituting social and environmental contiguity spaces in high-rise residences were discussed in the frame of contemporary buildings and utopias. The explanation of diversified connection spaces in high-rise residential blocks will be hold.

Keywords: High-rise residential building, spaces of communication, territoriality, spatial definition.

ÖZ

ÇOK KATLI KONUT YAPILARINDA İLETİŞİM MEKANLARI

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Bu tezin amacı, ilk defa modernizmle birlikte konut olarak kullanılmaya başlanan çok katlı yapılara yöneltilen, sosyal ilişkileri sağlayamadığına dair eleştirileri değerlendirmek ve çok katlı yapılarda yaşayan insanların sosyal ve çevresel temaslarını ne çeşit mekanlarda sağladığını açıklamaktır. Bu form, endüstrileşmenin kişiler üzerinde yarattığı sağlık sorunlarını azaltmak amacıyla, CIAM toplantılarında çok katlı ve az yoğunluklu kentsel çevrenin konut tipi haline getirilmiştir. Bunun karşıtı olarak Team 10 grubu, modernizmin yarattığı çok katlı konut alanlarını, modernizmin sokağı ortadan kaldırması ve yeşil alanları kullanarak insanları bir araya getirememesini öne sürerek eleştirmiş, ve de az katlı ve yatayda gelişen kentsel elemanı sosyal teması arttırıcı form olarak önermiştir.

Bu çalışmada öncelikli olarak, her çeşit kentsel çevrede, farklı biçimlerdeki mekansal örgütlenme sonucu farklı sosyal ve çevresel iletişim mekanlarının varolduğu savunulmaktadır. Bu doğrultuda, konut tiplerinin üç bileşeni olarak yükseklik, yoğunluk ve kapsama ilişkin bir matris çalışması yapılmış ve savunulan düşünce kanıtlanmaya çalışılmıştır. Daha sonrasında ise konut olarak kullanılan çok katlı binalarda varolan iletişim mekanları kentsel tasarım ve mimari ölçeklerde incelenmiştir. Bu amaçla, tezin konut alanı çalışması olması nedeniyle, yapılan kentsel tasarım ölçeğindeki çalışma, bölgecilik kavramı çerçevesinde incelenmiş ve kamusal-özel alan devamlılık şekli ön plana çıkmıştır. Çok katlı konutlarda sosyal ve çevresel teması oluşturan mimari mekanlar çağdaş binalar ve ütopyalar çerçevesinde tartışılmıştır. Bu çalışmanın sonucunda çok katlı konut alanlarında farklı mekansallıkta sosyal ve çevresel temas mekanlarının varolduğu tespit edilmiştir.

Anahtar Sözcükler: Çok katlı konut yapıları, iletişim mekanları, bölgecilik, mekansal tanımlamalar.

To my childhood heroes many of whom are not alive anymore…

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INTRODUCTION

1.1. Structural Definition of the Thesis

1.1.1. Problem Definition and Main Criticisms of the Thesis

The high-rise building is one of the most structured urban elements in an urban environment. It is an element which can be seen in nearly all districts of the cities, from the city center to the urban fringe, in different functions such as residential or commercial. On the one hand, it is an element which can form a general urban pattern; on the other hand, it can be a tool to acquire upper scale visions of the urban element, such as the compactness of a dense population in limited areas. However, even though this urban element is still used in many cities for many reasons which have effective supply and demand considerations, the high-rise building has started to be criticized since its application in residential areas with the birth of modernism and been perceived as a problem resource in terms of its decreasing social contact chances between peoples while creating a solution for increasing the contiguity chances between human and environment.

Industrial cities started to induce negative results in terms of inhabitants' health through the end of the 19th century.[1] In this context, high-rise buildings had offered as the solution to overcoming degraded environmental problems encountered by inhabitants of residential areas.[2] Thus, it can be claimed that modernism had interpreted high-rise buildings as a tool to create environmental contact in residential areas. The position of these buildings generally had been subject to resolving the dwellers' biological needs like *air, sun, light* and *view*.[3] For these reasons, high-rise buildings in residential areas were born as a reaction against the environmentally degraded industrial city. However, these environmentally exalted high-rise residential areas favored by modernism were criticized in terms of decreasing social contact, which is another human need. In this sense, in contrast to the skyscraper (or high-rise building), which rises vertically with multi-floors, the *groundscraper* was promoted as a low-rise urban element spreading in a horizontal line to develop social contact.[4] However, it should be noted that despite the criticism directed toward the spatial organization and architecture of modernist high-rise blocks in terms of their decreasing social contact amongst humans, it does not mean that all modernist high-rise residential buildings reflected negative social conditions. The subsidence of modernist high-rise blocks should also be considered with the economic, social and cultural reasons apart from physical conditions.[5]

In order to evaluate and elaborate upon the main criticisms directed toward high-rise residential buildings, this thesis deals with the criticisms in three main categories in terms of decreasing social contact. Firstly, high-rise buildings were located in vast green spaces in point blocks by refusing a

[1] Sert (1942)
[2] Sert (1942)
[3] Sert (1942)
[4] Günay (1988)
[5] Hall (1988)

street pattern depending on modernism ideology. In this direction, the social contacts were anticipated to be formed in this green public sphere without providing a horizontal direction.[6] Secondly, the public sphere was brought inside the building by creating public facilities on the ground level or floors in a modernist approach, which caused areas at risk in terms of losing the feeling of control around private zones.[7] Lastly, the height issue will be discussed independently from the interpretation of modernism, which is resourced by the nature of the building. While the height was used as an environmental input which allows for human biological necessities inside the buildings, it decreases the control of the ground; and as a result, the contact with the ground becomes more difficult as the height increases.[8] All in all, the main criticisms of high-rise buildings are concerned with decreasing social contact in the residential environment while increasing environmental contact due to the environmental concerns of modernism and the nature of the building. This approach to high-rise residential buildings still continues for contemporary high-rise residential buildings.

The main question that this thesis asks is whether the high-rise residential building decreases social contact or not. Can the high-rise residential building provide social contact besides environmental contact? If the answer is yes, how can this relationship be established? These questions will try to be answered in view of the concept of *spaces of communication,* which comprises both social and environmental contact areas in high-rise residential settings.

The concept of spaces of communication can be explained as in-between spaces in terms of architecture and semi-spaces in terms of urbanism. These spaces provide contact areas such as arrangements surrounding the building with markers, fences, and/or walls and interior meeting areas inside the building such as corridors, entrance halls, façades and/or balconies. Even though the spaces of communication have existed in traditional urban elements such as low-rise buildings that would be used as contact areas[9], high-rise buildings also shelter these arrangements in similar and differentiated forms, which will be discussed in this thesis in terms of providing social and environmental contact in the frame of the modern city. Apart from these territorial definitions, the spaces of communication also can be defined as streets, squares, courtyards as social contact areas or parks, individual, communal or public gardens in general as the main environmental contact areas in horizontal urban environment.

1.1.2. Hypothesis

The thesis argues that the spaces of communication, which are assumed to create social and environmental contact in space, can exist in any kind of urban environment in various ways. Moreover, despite all the criticisms, modernist high-rise buildings are thought to provide social and environmental contact distinctively. In order to demonstrate this point, an empirical study was conducted under the name of "Space Matrix". The main reason for this study was to express the types of social and environmental contact provided in low, middle and high-rise buildings, depending on different degrees of coverage and density. In this direction, lifestyles (individual, community or society-based) will be analyzed and expressed as a result of the dimensions of height, coverage and density inputs. It is maintained here that life styles formed as a result of spatial differentiations are the indicators of different social and environmental contact types.

[6] Newman (1972)
[7] Newman (1996)
[8] Gehl (1987)
[9] Barlas (2006)

Secondly, it is also acknowledged that social and environmental communication spaces, types and forms in high-rise residential buildings exist. In this respect, concepts of *territoriality* will come into prominence. Territoriality is behavior and spatial organization forms of the individuals around their residential areas.[10] Territoriality in urban space comprises control and contact types between public and private spheres.[11]

The two main criticisms about the modernist high-rise blocks are highly related to the development of territoriality in residential area. Firstly, it has been argued that the modernist blocks constructed on a vast open space in the vertical line could not allow for any social contact. The reason why this is the situation subject to the concern of territoriality is because public and private continuity styles gain importance together with the territoriality concept. On this point, the vast open space of modernist high-rise blocks has been described by Newman as a "no-man's-land", used of everybody, and not controlled by anyone.[12] The second criticism is also a territoriality and control concern that criticizes the penetration of public facilities and public spheres inside the high-rise modernist buildings. As a result, uncontrolled areas have been formed inside the buildings in the corridors and around the communal facilities that are open to the public.[13] It will be explained in this thesis by using the territoriality concept again in terms of hindering the gradual transition from public to private spheres via some architectural elements like walls, floors or corridors. The criticisms directed against the modernist high-rise residential blocks are generally based on the territoriality problem, that is a control problem. The territoriality feeling concerns all those dwellings in residential buildings, which is a survival type by controlling the environment that exists in any kind of urban element and urban form. Thus, it is accepted by the thesis that there are several kinds of public and private continuity types and contact spaces in high-rise residential buildings exist, even in modernist high-rise residential blocks.

1.1.3. The aim of the Thesis

In the direction of the problem definition, the thesis argues that social and environmental communication spaces can be formed in any kind of residential areas. This is in turn reconciled with the criticisms about modernist high-rise residential buildings that have differentiated territoriality and control styles as the main points that constitute the life style in residential areas. The research topic of this thesis has two different dimensions; urban design and architecture scales of spaces of communication both in social and environmental respects. The thesis moves on to explain first the types of public and private space continuity and combination in the high-rise residential building environment, and second the steps of bringing public space in to vertical alignment by spaces of communication analysis which takes a part in conclusion part.

In order to explain the exterior arrangements of high-rise residential buildings in respect to determining the territoriality types between the public and private sphere in degrees, the first dimension of the study has been conducted based on empirical experiences of the author about high-rise residential areas. The aim of this study is to focus on the public and private continuity differentiation in urban design scale, which reveals different kinds of urban lifestyles. In this respect, the high-rise residential building environments are researched from different samples ranging from a gated community environment to the modernist high-rise residential buildings together with the lifestyles they constituted as a result of control and public-private contact styles. As the elements of the life style in residential areas are contact areas, this part of the thesis aims to determine the

[10] Madanipour (2003)
[11] Madanipour (2003)
[12] Newman (1972)
[13] Newman (1996)

differentiated spaces of communication in various high-rise residential environments depending on the arrangements between public and private continuity styles. The categorization from gated community to modernist buildings has been assigned according to the degrees of providing communication on space. Here, communication and contact styles with public became prominent as the manner and degree of providing social and environmental communication spaces.

Secondly, the high-rise residential environment will be analyzed in terms of the applied (contemporary) high-rise buildings so as to express the step of providing the spaces of communication as community communication spaces. The importance of this dimension of the thesis is that it is a general condition in contemporary high-rise buildings which limits the spaces of communication as "common to the users of the building" without letting the public inside. In order to carry the spaces of communication one step closer to the public sphere, non-applied (utopic) examples are discussed in the conclusion part as proposal of this thesis. These examples are importantly illustrates the society communication spaces in terms of creating an urban pattern and combining dwellers with the public. Thus, this dimension of the analysis is done under three groups, the first of which is contemporary high-rise buildings locating in the Chapter 4. A classification is made by considering new design interior approaches of the contemporary high-rise buildings, which make a difference in spatial design in order to create social and environmental contact in the interior space. However, it should be noted that these contemporary high-rise buildings are assumed to allow interior access only to their own dwellers, not the public, because providing control in contemporary high-rise buildings was to be solved by a controlled entrance.

The thesis positions to suggest spaces of communication which are closer to public use. In this direction, two utopias are proposed in conclusion part. The first of which is a utopic environment, which is Archigram's *Plug-in City*. There exists the penetration of public inside the three dimensional environment via a significant axis in the vertical and horizontal lines. In this sense, Plug-in City is one step ahead of contemporary high-rise buildings in terms of creating the spaces of communication and allowing for a meeting between public and private in a vertical line. The second step is exemplified by a metabolist urban utopia: Yona Friedman's *Pro Domo*. Here, it is expressed that the vertical pattern which high-rise building have turned to both vertical and horizontal patterns. Thus, Pro Domo does not involve a singular high-rise building but a vertical urban pattern. Concordantly, both public-private relations and the spaces of communication existing in the cities until the present have attempted to achieve a vertical urban pattern in horizontal and vertical lines in the air located higher than the existing city. In brief, the second aim of this thesis is to represent the architectural scaled spaces of communication and explaining the penetration styles of the public area inside the building or three dimensional urban patterns via contemporary and utopic urban environments.

The thesis offers a general discussion on the intersecting public–private continuity styles with the spaces of communication. Thus, the first part provides a general expression of the spaces of communication in the frame of public–private relations. Consequently, except for these mentioned expressions and targeted inferences, constituted life styles are explained. This is followed by a categorization of high-rise built environment, to analyze communal inspired high-rise buildings by referring to samples of applied (contemporary) urban environment. The present architectural interior space of communication types will be explored in contemporary high-rise residential buildings, as will the description of interior contact spaces.

1.1.4. Methodology

The thesis employs two research methods: Assessments focus on literature review and empirical study based on written (derivative resources) and visual materials belong to the author. Primarily, the structure of the thesis relies upon literature readings, and the hypothesis and inference parts

have been formulated from onsite observations. There was no specific sample of high-rise building environment chosen; the empirical study was based on different high-rise residential areas that represent various life styles from different cities and neighborhoods.

Firstly, in order to offer a general discussion on high-rise residential buildings in the first part of the thesis, the introduction to the high-rise buildings, a literature review has been conducted especially from the books of modernist writers such as Le Corbusier, Sert and critics such as Gehl and Newman who deal with CIAM and Team 10 architecture and urban movements. Articles and other short texts on the study of high-rise buildings also are induced. Visual materials also are represented in the first part of the thesis, taken from books, Google Earth and various internet sites. Furthermore, some of the practices of CIAM and Team 10 are illustrated by the author's personal photographs.

The second part of the thesis, which comprises the hypothesis explanation and demonstration, draws upon the tabulation method of low, middle and high-rise buildings with different coverage and densities under the term "Space Matrix". The literature consulted includes Frank Lloyd Wright's *Broadacre City*, Ebenezer Howard's *Garden City*, *Karl Marx Hof* and Le Corbusier's *Contemporary City* and *Unite d'Habitation,* which addresses the Space Matrix. Low, middle and high-rise residential areas also are evaluated by an empirical research method. Here, Google Earth images and the author's personal image archive have also important place in the photography method.

The last section is the demonstration part, which is assessed by site observation and photography methods (both the personal archive and modeled Google Earth views) as empirical study. The explication of the observed samples was realized by classification into groups and exhibiting by sketching in an electronic environment. It should be noted that secondary or derivative resources are added to the empirical study based on observed environment to the categorization. From this aspect, the two dimensions of the study were made depending on empirical study which depends on the author's observations and secondary resources.

There have been some advantages and disadvantages of this method based on empirical study of high-rise residential buildings. The advantages of this study based on observation were that the accessibility and photography was easier in some high-rise residential environments such as TOKİ, Koru Sitesi and Ataköy Neighborhoods, which have dominant "public character" when compared to the newly constructed high-rise residential buildings or building complexes that appeal to upper income groups. There is strict control at the entrances of such residential buildings that limits taking photographs of the interior of the building, the model of the buildings or even entering into the building. Especially this situation has affected and narrowed the samples used in the thesis. In these circumstances, the method of interview has been used with high-rise housing development salespersons and security staff. Introductory brochures about the features of the high-rise buildings also have been consulted. Some parts highly pertinent to topic of the thesis but do not able to be well incorporated have been moved to the Appendix.

In the empirical study, some data sets were specified as inputs such as; public space, private space, semi-public space, semiprivate space, community space, commercial and public facilities. These inputs are important in order to explain the spaces of communication in high-rise buildings by determining the stages of public-private continuity. As the output data, the differentiated spatial definitions take place in the following parts of the thesis and described in conclusion part in detail.

1.1.5. Thesis Structure

The first chapter gives general explanation about the whole of this thesis in terms of the main questions, hypothesis and the aim of the thesis by explaining the methodology.

The second chapter gives detailed information about high-rise buildings in terms of the definition of high-rise buildings, their emergence as an urban element and urban form. Here, it should be noted that the emergence of the height in the urban environment has symbolic and rational reasons in general which was linked to heaven and god in ancient times. Then, this reasoning started to change in medieval as an indicator of power. At the end, modern-day high-rise buildings emerged as a result of capital relations and rent.

The third chapter is mainly comprised of two parts, the first of which is related to the application of high-rise buildings into residential areas; the second part comprises general criticism about high-rise buildings and their applications in the residential environment. This chapter is significant in terms of explaining the thesis' problem definition through a comprehensive literature review. In this respect, the first part of the chapter deals with the inclusion of high-rise buildings in the residential environment after the architectural approach developed by modernism and CIAM meetings as an environmental solution proposed by citizens in their dwelling areas. Then, the Team 10 section explains the main counter criticism of the high-rise residential environment perceived as decreasing social contact in contrast to increasing environmental contact with a low-rise residential environment spreading in a horizontal line which can bring people together. The second part evaluates the criticisms directed toward the high-rise residential buildings criticisms related to the modernist approach on high-rise residential areas and criticisms related to the nature of the high-rise buildings.

The fourth chapter is of three parts: The first part is the explanation and demonstration of the hypothesis. The second part is the research and determination of the high-rise public-private continuity intersecting with the spaces of communication explanations in urban design scale. The third part is the explanation of the spaces of communication in high-rise residential building which are generally based on community character in the contemporary applied examples in architectural scale. Thus, the first part of this chapter presents the hypothesis which argues that any urban residential area has its own social and environmental contact character. This is supported by the "Space Matrix" where the lifestyles of the residential areas will be analyzed with the help of height, coverage and density inputs which have the effect of shaping the urban environment. The second part of the chapter explains the public and private continuity spaces around the high-rise buildings in the urban design scale. As a result of this study, different lifestyles formed by different public-private continuity styles are determined in high-rise residential buildings depending on various spaces of communication. In the last part of this chapter, contemporary high-rise buildings are determined in terms of providing spaces of communication ranging from "exclusive public spaces" or "common space to the users of the building" such examples address the dwellers' needs in the spaces of communication to the public sphere as the commitment to urban utopias.

The last chapter mainly expresses the main position of the thesis about the spaces of communication as a result of the hypothesis and study in different dimensions. Accordingly, the thesis discusses the spaces of communication in different characters and sublimates the publicly dominated contact spaces in high-rise residential building environment. For that reason, the thesis proposes utopic environments such as *Plug-in City* and *Pro Domo* by creating vertical pattern in both infrastructure and superstructure fields which dominate public character in contact areas in different stages.

1.2. Philosophical Discussion of the Spaces of Communication in terms of the Need of Human As a Social and Biological Being

Before starting to the discussion of high-rise buildings, the discussion about the need of social and environmental communication space of human will be made. Here the main question is that why social and environmental communication spaces are designed and why humans need social and environmental contact, so they produce their urban environment and residential areas accordingly. As the human is in the central place of architecture and urbanism, the philosophical explanation of the communication spaces can be made by human's being a social and biological being.

Man has always felt the necessity of nature and sociality in his environment. Before starting to give the answer why man needs social and environmental contact, this part may start with the discussion about the most necessary part of human body responsible for providing the first step of socialization, which is the human face. Face is the scene of self which is seen from the outside, thus seen by the others, and which has a meaning of social symbol due to its nature acting like an interface in between mind of its owner and outside world.[14] All societies have different or similar idioms reserving "face" inside the sentence. For example, "to lose face" comes to mean "to be out of face, to be in wrong face, or to be shamefaced" in Anglo-American linguas.[15] Similarly, in Turkish, "to be without face" is said for the people who are shameless. On the other hand, "to give face" is to be friendly with, to indulge and to be tolerant of someone else in the Turkish language.

Face is the sensual answer given abruptly during getting in touch with the others. Goffman suggests that the basic rule of face-to-face interplay is reciprocal approval. According to him, this is a situation through which people approve each other's demeanor style[16]. One can express his thinking about any situation by his face; both encourage or discourage others for attending in the social interaction by "supporting his face" or not. On the other hand, people behave as face-saving to control and maintain the state. It can be exemplified by people walking on pedestrian paths or crossing roads without striking each other in an orderly manner. In such cases, the control of order is not gained by any written rules, but glancing at each other.[17]

According to Goffman, man generally acts *defensive oriented* in order to save his own face and *protective oriented* in order to save the other man's face. That's why it can be said that one has the responsibility for the other to save his/her face. As a result, there is a connection in between face and person who is either the owner of the face or the other. Goffman categorizes this connection as "the participant himself against his own face, himself against the face of the others, the others against their own face, or the others against himself". These interactions are produced intentionally, unconsciously, or planlessly but expected depending upon the nature of the action or situation.[18] This interaction which is subject to face is not only carried out by some codes, laws or other roles depending on societal rules, but also has social and symbolic meaning on conversation. First, Goffman determined the codes according to their ceremonial contents, and categorized these as *linguistic*, *gestural*, or *spatial* codes. The importance of these codes is that they are not the practice in itself, but the constituent part of it. Thus, the existence of these codes cannot be mentioned alone. There exists a root of conditions that created these codes in the past. This inference is highly relevant to Jung's notions about conscious and unconscious acts.[19] Unconscious acts produce

[14] Goffman, E. (1967: 5)
[15] Goffman, E. (1967: 9)
[16] Goffman, E. (1967: 11)
[17] Goffman, E. (1967: 12, 42)
[18] Goffman (1967: 14, 15)
[19] Barlas, A. Urban Streets & Urban Rituels. (2006: 10)

conscious acts and disappear by generating new symbols and improving the value of life with this new conscious world. Second, during the whole communication process, persons give messages by their bodies not verbally but by some signs and symbols to the other participant(s) of conversation. Face and mimics are mostly striking way of nonverbal but symbolic way of communication which completes the verbal communication[20].

After the discussion about the importance of the face, other vital questions come to the minds; as the face is the image of the self and expressive way of the self, then what is the self and what is the place of the self in human and city evolution process? Who is the man and where did the man gained his self; in the nature or in the city? If he has achieved his personality in the city, what is the nature and why people insist on turning back to the nature in present times?

Communication has been there either verbally or nonverbally from the beginning of the first human communities, that treated the way to respond to many kinds of needs first to survive, then to produce and trade. Except these, it is thought that man has gained his "self" as a result of the face-to-face communication. Significance of face-to-face communication in the formation of personality can be exemplified by a well-known and quasi-scientific and perhaps speculative story. Mowgli, from The Jungle Book,[21] is probably one of the most popular fictive characters of the previous two or three generations. He is a boy who was lost in the jungle when he was a baby. While he was growing in the jungle, he was not actually alone with his crocodile, snake, monkey and the other animal friends. Then, one day Mowgli meets humans, and the story begins. When he saw creatures who were like him and who behaved different than animals, he does not exhibit humane behaviors; on the contrary, he behaves intuitively by reacting like an animal. His body was healthier and more powerful than an ordinary-civilized man, but he could not even utter sounds which is the easiest and civilized way of human interaction because there were no other people to interact with in the middle of the jungle. Here can we say Mowgli was a human in the middle of the nature or was an animal who just looks like a human? It is very clear that the nature develops the muscle volume and physical health of humans, but does it improve the quality of human life, help emerge the civilizations and the human brain develops on its own?[22] This example shows that in the nature or the city, the thing that provides mental development for humans is his structuring of face-to-face relationships with others. When humans are separated from the others, they become wild and do not have humane features anymore. Edward T. Hall explicates culture and communication relationship which contributes to the example of Mowgli, and expresses the importance of language and continues that language is not only the disclosure of ideas, but also has a special place on the formation of thought system. Culture which is in accord with language also changes the thought system, too, which is one

[20] Goffman (1967: 33, 55, 56)

[21] Kipling (1894)

[22] Actually Mowgli is not just a history. It is thought that there are other real Mowglies in our real world. Until this day, some cases of children have been seen who had been in the forest alone during some part of their lives or was trained like an animal by their parents. There is a common name for that kind of children: "The Mowgli Syndrome". Even though all of their growth in the forest was not proven exactly, it was not disproven, as well. The common features of that kind of children are mental deficiencies, their incapability of speaking any language even after their civilized lives, and their wild behavior. The reason for this is probably that they never interacted with any other people previously. One of them is the Bird Child who is another example of the Mowgli Syndrome. He grew up in his parent's house not like a human, but like a bird. According to the newspapers, his mother has always treated him as he was a bird and put him inside a bird cage with the other birds in the house. Though he grew up in a man-made environment, he has never interacted with other humans. That's why he thinks himself as a bird and cheep like a bird for communication; but could not develop contact and understand people.
(http://www.milliyet.com.tr/2008/02/29/son/sonyas04.asp)

of the returns of civilization.[23] Another example comes from U.S.A.: "American Dream" cities. According to the statistics of FBI, nearly 800.000 people disappear in a single year in the United States[24]. Also, even the crime rates are dropping in big cities, the rate in small towns is increasing day by day in America[25]. The reason for increasing rates of crime in American Dream suburbs can be related to the extreme individualism. Actually it is not possible to mention the perception of space in that kind of sprawled urban pattern. The distances between buildings are very large which hinder people's interaction with each other. As a result, strong human relationships may not be structured because people cannot come together, thus cannot socialize and individuate. Even though the American Dream brings people to the nature more than any city by putting less people in a larger area, it is brutalizing people by damaging human relationships by separating them from each other while improving environmental conditions.

Except for the importance of socialization, natural contact should also be gained in human life which is the prerequisite for health. Before bringing civilization on life and making man a senior living as a result of his socialization,[26] firstly the biological integrity of man should be sustained which can only be possible with adequate food production. Moreover, hygiene is important in order to be protected from the illnesses which arise in overcrowded physical environments as it was the case in Medieval and Industrial cities.

Goffman insists that the improvement and socialization process is principally dependent on face-to-face interaction.[27] Already the different features of human when compared to other living beings is his socialized life, as it is in the general description of what the human is. In addition to biological existence, humans gain their humane features by developing face-to-face relations with others, not through a solitude in the nature. As a result, human ego and individuality develops accordingly. In any case when we look at the history, we see that the human ego has developed as he created the civilization through collective efforts which happens totally in man-made environments. Human is definitely an organic form and comes from nature in both theological debate which consists on the emergence from the earth; and in scientific aspect which supports the Big Bang Theory that suggests all the cosmos was emerged by an explosion, so the man; and Evolutionary Theory which supports the idea of roots of the species coming from one root. While all these theories support the idea that the body of man has emerged in the nature, his personality emerged as a result of the man-made civilization. Hall describes this differentiation ideally with his these words;

> "In the light of what is known of ethology, it may be profitable in the long run if man is viewed as an organism that has elaborated and specialized his extensions to such a degree that they have taken over, and are rapidly replacing, nature. In other words, man has created a new dimension, the cultural dimension, of which proxemics is only a part. The relationship between man and the cultural dimension is one in which both man and his environment participate in molding each other."[28]

To sum up, human came from the nature but did not stay there and have created artefacts. As a result of that, they have come to the civilized level by interacting with their own creation. The meaning of the habitat for human is the city. Human organism has developed his/her personality by

[23] E. T. Hall, (1969: 1)
[24] http://www.fbi.gov/about-us/cjis/ncic/ncic-missing-person-and-unidentified-person-statistics-for-2010
[25] http://crime.about.com/b/2009/06/02/crime-rates-drop-except-in-small-towns.htm
[26] Detailed information is given in Appendix A.
[27] Goffman (1967)
[28] Hall (1969: 4)

developing face-to-face relationship with his/her counterparts during the civilization process. Ego has come into existence again by this way and human's desire to control. Thus, it can be said that human has dual track in the history of their existence and development; biological existence and social contact. Thus the thesis aims to seek for the traces environmental and social contact in human's urban environment. Detailed information about the development of self of human in history of civilization together with the development of rationalism in civilization history will be given in Appendix A.

CHAPTER 2

INTRODUCTION TO HIGH-RISE BUILDINGS IN THE URBAN SPACE

2.1. Definition of The High-rise Building

The high-rise building is a special urban element that was discovered after the machine age, which has been the reason for creating a totally new urban environment. In that sense, the high-rise building has an important place after its discovery when compared with other forms, especially in terms of its height. In order to understand the "otherness" of the high-rise building from other building forms, firstly a description of that new form should be made. Even though there exists no common definition of the high-rise building, the common idea of the description is the impression of the design of the building stemming from the height. In this respect, Council on Tall Buildings and Urban Habitat (CTBUH) has defined the tall building as:

> "…whether or not the design is influenced by some aspects of "tallness"… It is a building what height creates different conditions in the design, construction, and operation from those that exist in "common" buildings of a certain region and period."[29]

A similar description about tall buildings comes from Ali and Armstrong, but in a more comprehensive manner:

> "The tall building can be described as a multistorey building generally constructed using a structural frame, provided with single-speed elevators, and combining extraordinary height with ordinary room spaces such as could be found in low-buildings."[30]

The differentiation in the description of high buildings manifests in Turkish construction legislation of different metropolitan cities. For example, Istanbul Metropolitan City construction legislation considers high buildings to be a minimum of 60.50 meters in height while Izmir Metropolitan City high buildings legislation states that high buildings are those that have more than 13 floors.[31]

As can be seen, the terms of "high buildings", "high-rise building" and "tall building" have conceptually the same meaning. On the other hand, the term "skyscraper" defines another concept which involves the tall building or high-rise building. The difference of the term of skyscraper can be referred to its extreme height. However, as the maximum height of buildings has changed over time due to technological development, skyscrapers could never be described by set upper or lower limits. In this direction, Ilgın compares the "tall building" with the image of the city and the silhouette, while "skyscraper" is linked with the height. Thus, Ilgın explains this differentiation of the term "skyscraper" from "tall building" or "high-rise building" with these words:

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[29] Yeang (1996: 13)

[30] Ali & Armstrong (1995: 143)

[31] İstanbul Büyükşehir Belediyesi İmar Yönetmeliği, Part 18, p. 81.
İzmir Büyükşehir Belediyesi Yüksek Yapılar Yönetmeliği. Part 2.

> "Skyscraper is a word usually used to describe a very tall building. The "very" is a comparative adverb dependent on time, while "tall building" and "high-rise building" are the terms depending on place."[32]

Except for the height and position in urban pattern as Ilgın discusses, skyscrapers contain daily life activities in special spaces.[33] Thus, skyscrapers can be defined as the vertical cities that provide spatial differentiations depending on differentiated activities by bringing mixed-uses inside.

2.2. Emergence of High-rise Buildings as an Urban Element

2.2.1. Rising of Height in Urban Area Before The Neoclassical World

Since the determining factor of tall buildings is the height, both symbolic and rational meanings of height have had an important place together with its architectural meaning from the start of urbanization. To begin with, the symbolic meaning can be related with lying through the sky. As it is discussed in Appendix A, human perceived the earth as a temporary place while heaven was permanent, which was linked with the sky. This symbolic meaning of the height can be firstly exemplified by the discoveries from Göbeklitepe excavations in a chronological line, which remained from the age before man's passing on to permanent settlements. This location was a gathering place for hunter-gatherers to worship. According to archaeologists conducting research at the site, these hunter-gatherers constructed firstly their sanctuary at Göbeklitepe which rose from the earth before building their shelters.[34] As a result, religious and adoration was matched with the sky and height in human's architectural world even before the settled life. According to Aregger and Glaus, this is the primary instinct of humans to "rise above the self", which explains the inclination towards building high.[35]

This symbolism of height continues along with the development of civilization by adding some rational concerns. For example, the reason for constructing the temple and fortress at the top of a mountain, as in Acropolis of Athens, was primarily associated with religious concerns and followed by security concerns.[36] While the symbol of height had an important relation with religion, this notion started to change together with the development of civilization and transitioned to represent power and superiority of the persons or families preceding the society. The reason for this was associating these persons with the divine as seeing them as the reflection of god on earth (discussed in detail in Appendix A). In this context, Bascomb exemplifies information mentioned above:

> "…On the Nile's west bank, the Great Pyramid of Giza, reaching 450 feet high with over two million stone blocks, served as the tomb for King Khufu. On a hilltop in Athens the Greeks built Parthenon, a temple that towered over the city below (…) Great Chinese pagodas, French cathedrals, ziggurats, lighthouses, bell towers, and even the simple steeple that stands above a countryside village – what they may not have in common purpose or scale, they shared in command of height. This height expressed preeminence, whether of their gods, their engineering skill, their power, their wealth, or their position above the others."[37]

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[32] Ilgın (2006: 6)
[33] Ilgın (2006: 6)
[34] Batıya Doğru Akan Nehir. Part 1.
[35] Aregger and Glaus (1967: 13)
[36] Mumford (1961: 36)
[37] Bascomb (2003: 5, 6)

Bascomb tries to explain the symbolic relation between height and the important positions of the ones who creates the height. As the symbolism of highness and architecture bound preconditions in many religions, Le Corbusier valued the silhouette of historical peninsula of Istanbul from this perspective in 1920's. According to him, the silhouette with spreading mosques gives one the feeling of god's watching people from the sky which started to be constructed after the conquest of the city.[38] The feeling of control of god has been reflected to the silhouette and architecture of Istanbul which is highly related to the symbol of height. Concordantly, during the same period of Istanbul case, the city of Sienna in Middle Ages had been a witness to the power wars between the leading families of city-states during that era; thus, the power conflicts of the families who had the will to take control of the city had reflected their ambition on the city silhouette and architecture by constructing the towers in their territories, whose power was supposed to be measured by the height. These examples were the symbolic meaning of the height in urban scene before the present.

Figure 2. 1 High-Rise buildings before Neoclassic Era (from top left to bottom right); Göbeklitepe Tumulus, Babylon, Athens Acropolis, Egyptian Pyramids, Colosseum of Rome, İstanbul Silhouette and San Gimignano with towers
(https://www.google.com.tr/imghp?hl=tr&tab=ii (accessed on 11th of December, 2012))

Besides symbolism, height was also used for rational purposes in ancient Rome which does not coincide with the previous cases in time line. Due to the strict rules about protecting the territory of the cities without having urban sprawl such as the rule about protecting the lines around the cities, Roman cities rose vertically which was the antecedent of the modern high-rise residential units.[39] The "high-rise building" of the era, called *insula* as a building type, could be separated from others by its height.[40] In fact, as the Roman cities became more populated, building heights increased so much that they constituted a danger in case of fire. Thus, new regulations were instituted in the urbanization of Roman cities to restrict the height of *insula* to twenty meters.[41]

As a result, the height was highly linked with both symbolization and rational purposes during the same periods in history. Symbolically, the height has gained the meaning of power in the fields of divine and kinship. On the other hand, it was used for rational purposes in order to meet need of shelter. After the emergence of industrial age, the height emerged in the concept of high-rise building or skyscraper which was highly related to changing economical basement. After that, the meaning of height was reconciled with the capital, which will be discussed in detail.

[38] Le Corbusier (1929: 61)
[39] Carcopino (1940: 22)
[40] Carcopino (1940: 24)
[41] Carcopino (1940: 24, 25)

2.2.2. Arising of High-Rise Buildings in Neoclassical World (18th And 19th Centuries)

In order to understand the place of high-rise buildings in modernism[42] and the field of architecture, one should firstly deal with the relationship between urban form and citizens' lifestyles under changing economic conditions during the end of 19th century which was the basic factor reasoned urban change. Industrial Revolution occurred firstly in Great Britain between the years of 1750 and 1850, which prompted major change in nearly all aspects of daily life.[43] After Great Britain, this movement enveloped most of the European and American cities.

The main turning point of the Industrial Revolution was in economic activities which provided surplus in the production of the goods. It is explained by Angus Maddison as follows:

> "In the two centuries following 1800, the world's average per capita income increased over tenfold, while the world's population increased over sixfold."[44]

These indicators stated by Maddison were nearly at the same levels before the revolution.[45] The production of surplus can be explained by the acceleration of production which was the first step of humans' guaranteeing their own survival beyond a sustainable life. That is why it was the real turning point of economy, and then industrialization reflected itself in many other fields, including social life. As economic production changed, social life, which was based on rural life until the Industrial Revolution, also experienced a change; as a result, people's lifestyle were altered, too, which will be dealt with in detail later in the thesis.

The first skyscrapers were constructed here. Considering the cities of late 19th century in general, three main factors can be emphasized for why buildings rose in significantly high: Scarcity of land in the city center, land rents and new construction techniques.

First of all, the reason for scarcity of land is that as a result of mechanization, production of goods accelerated especially by the factories which were generally located in the city centers. This situation resulted in high rates of migration to the cities due to the job opportunities.[46] Sert explains factories and the city relation during 19th century in his book *Can Our Cities Survive:*

> "Our cities have become, above all, *factories* and *centers of trade*. Nearly all of them have been constructed on this basis, factories, office buildings, and shops rising up endlessly throughout the urban area, no matter where and how."[47]

This location selection of factories and other working areas inside the city can be linked to the closeness to transportation modes of the era such as harbors in order to decrease the carrying cost of raw materials. Industrial location theory, put forth by Alfred Weber in 1909 in his book *Über den Standort der Industrien,* explains that firms determine their ideal location in order to mostly decrease the transportation cost which is inside the market and raw material locations triangle.[48] Together

[42] It is a movement appeared through the end of 19th century.
[43] Baykan Günay, Bahçe Kent (Kentsel Planlama Ansiklopedik Sözlük. 2012: 21)
[44] Maddison (2003: 256-262)
[45] Lucas (2002: 109, 110)
[46] Redford (1976: 6)
[47] Sert (1942, 106)
[48] Emine Yetişkul Şenbil, Yer Seçimi Kuramı (Kentsel Planlama Ansiklopedik Sözlük. 2012; 495)

with new working areas, new laborers who worked for very low wages came to the city and selected locations around factories as residential areas in order to decrease transportation costs. Such behavior is highly related to the location selection theory of households because residents select location to be closer to some specific services.[49] This situation has been a cause of overpopulation and land scarcity in the city center, especially through the end of the 19th century.

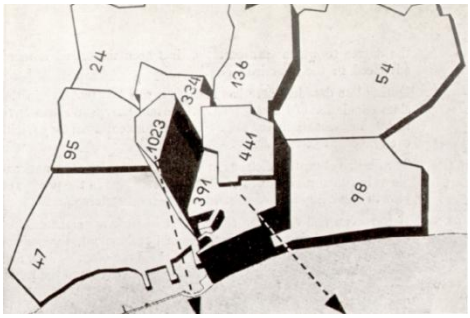

Figure 2. 2 An illustration of Barcelona, Spain which is called by Sert as "Human Skyscrapers" (Sert, 1942: 21)

As can be seen in Figure 2.2, Sert deals with the human population in a limited area which was the reason of mentioned overpopulation in the 19th century. The reason why this image was used by Sert was to determine slum formation in Barcelona.[50] This illustration also is very effective in explaining one of the reasons for the emergence of high-rise buildings. As the population significantly increases in a very limited area, low or middle-rise blocks may be insufficient under extreme circumstances such as overpopulation due to the land scarcity in the city center. As such, there is the need for high as buildings serving as "Human Skyscrapers".

A second factor influencing the formation of high-rise buildings or skyscrapers was one of the effects of industrialization which is the early modes of capitalism. As capitalism means free market economy, location selection gained importance in nearly every urban function. That created land rents which made city centers highly important places functioning as hubs with the highest level of rent return due to the closeness of transportation modes and all activities occurring in the city. This idea can be supported by Kılınçaslan:

> "Land rent is generally comes to the meaning of rise in value acquired from real estate which comes up spontaneously without any work of its owner… First main factor of rise in value is infrastructure investments made by state; the second is increase in demand depending upon migration and economic growth; and third factor is applied urban planning policies… As a result of transportation investments made by state, central areas of the city has a vast rent income. The locations which have the fastest accessing opportunities have generally the highest land rent… (15) Second rent factor is shaped by supply and demand rules of economic system and is resourced by land location features. As it is known all urban lands are scarce resources. However, demand pressure on urban land is in very high levels that migrations and societal economic development is becoming the reason of concentration of urban land demand in some specific locations. (16)"[51]

[49] Ibid, p.495
[50] Sert (1942: 21)
[51] İsmet Kılınçaslan, Arazi Rantı. (2012: 15, 16) Kentsel Planlama Ansiklopedik Sözlük

In addition to Kılıçaslan's explanations about land rent, Sert[52] explains the relationship between land rent and building height, and displays the transformation in city center with Figure 2.3. The upper part of the picture shows high-rise office blocks of Manhattan. According to Sert, the urban pattern is shaped by land speculation on the cities (which is a characteristic of capitalism); thus, he correlates the silhouette with the land values of the city of the Detroit city center. On this point, Sert focuses on the similarities between the shapes of the two. Going through the city center, height increases as the land value increases.

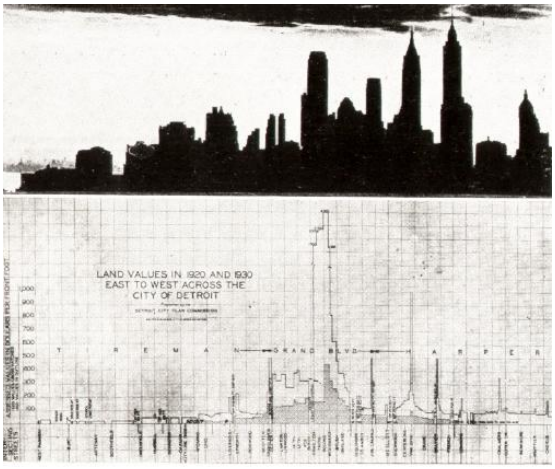

Figure 2. 3 The silhouette of Manhattan business center with the explanation of changing land values of Detroit
(Sert, J. L., 1942: 211)

On the other hand, Willis states that there exists a reciprocal relationship between high buildings and the rent. According to her, the skyscraper of the era was "a machine that makes the land pay". In this direction, high-rise buildings were separated into minimum flats in order to have maximum profit from the land which also had influenced the skyscraper design in time.[53]

The third factor prompting the vertical rise of buildings was technological improvements after the Industrial Revolution. The invention of modern steelmaking in the 1800s changed construction methods of many industries.[54] Some of the first skyscrapers were constructed with a steel frame.[55] The Eiffel Tower is an example of this technological improvement.

[52] Sert (1942: 211)
[53] Willis (1995: 19, 23)
[54] Morison (1966)
[55] Finniston & Williams & Bissel (1992: 322)

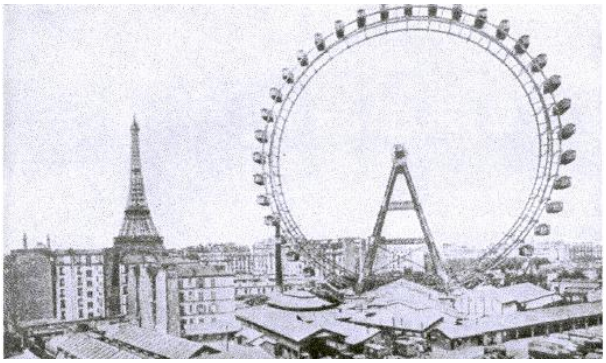

Figure 2. 4 Eiffel Tower and Great Wheel after 1920
(Le Corbusier, 1929: 49)

Le Corbusier celebrates the steel age in his book of *The City of To-morrow and Its Planning*. In Figure 2.4, he purports steel material to be a lyrical expression of the urban view by suggesting that it offers a new scaled environment shaped by mathematics. [56]

In contrast, according to Ochshorn, one of the most wide-ranging uses of steel and iron materials is in building construction. He states that most of the skyscrapers were constructed by steel, and even if they are not, the material is being used for reinforcing the high building. That is why it can be said that steel use was the indication of economic prosperity of any country because steel was used as a construction material for any field of infrastructure system which is an implication not only available in the 19th century but also valid for contemporary world, too.[57]

Sert also addresses the emergence of the skyscrapers and correlates this with the development of techniques after the machine age:

> "…These technical advances, together with the economic changes of recent times, have already created new features in the urban structure – for example, large business districts, characteristics of our commercial civilization and most directly symbolized by the concentration of skyscraper office buildings in American cities."[58]

In this context, first skyscrapers generally were seen in Chicago, which won its challenge with height during the second half of the 19th century. As the most important feature of a skyscraper or a high-rise building is its height, the structure was supposed to be constructed according to this feature, which means a reliable elevator system was the second technical improvement in the way of constructing high-rise buildings.[59] By this means, the first skyscraper was constructed with ten-storey in 1885 by taking its name of "skyscraper"; Home Insurance Building in Chicago.[60]

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[56] Le Corbusier (1929: 49)
[57] Ochshorn, Steel in 20th Century Architecture (2002)
[58] Sert (1942: 140)
[59] Broadbent states that the invention of elevator was achieved by Elisha Graves Otis that let the urban environment an important trnasformation from low rise to the high-rise buildings especially in New York (1990: 64)
[60] Chrysti M. Smith (2006)

Figure 2. 5 The first "skyscraper": Home Insurance Building (http://en.wikipedia.org/wiki/File:Home_Insurance_Building.JPG (accessed on 18th of January, 2013))

Soares Gonçalves & Umakoshi explain the evolvement of high-rise buildings in the city of Chicago during the end of the 19th century as linked with the concept of modernism with these words:

> "Already towards the end of 19th century in Chicago, signaling the affirmation of the economic power of the building sector of the US, industry leader, Louis Sullivan, marked the history of the tall building of the modern city, breaking the first height restrictions, designing buildings that were ten-storey high and based on the first ideas of the modern concept "form follows function", responding to the growth of the modern office culture."[61]

As can be understood, there is an important relationship between high-rise building evolvement and capital. All of the first skyscrapers functioned as office buildings (as the symbol of private sector capital) in order to be located in the city center and gain maximum rent, not for residential uses until the 20th century. At the same time, high buildings were the symbol of the power or accumulated capital in architectural form in an urban environment which overlaps with the old symbolic meaning of the high-rise urban element which was the symbol of the power in the urban silhouette. According to the same authors, the reason for the vertical rise of buildings was not only to "search for maximum profit over the value of the land", but also it can be clarified by "interest in the "image" inherent in vertical".[62]

These factors started the movement in American cities of tall building construction beginning from the 19th century. This situation can be understood from the changing urban form of Manhattan Island through the end of the 19th and the beginning of the 20th centuries.

[61] Soares Gonçalves & Umakoshi (2010: 3)
[62] Soares Gonçalves & Umakoshi (2010: 2)

Figure 2. 6 Rising buildings in The Golden Horn, Manhattan during the first decades of the last century
(Sert, J. L., 1942: 43)

Even though these high-rise buildings became the prominent elements of city centers for decades, after their first creations, they still were not used for residential purposes in general; they were office buildings, as business was one of the prominent functions of the city center. We can refer to this argument with the sentence of Sert by describing machine age structural techniques; "For modern technics, which has permitted the erection of high buildings, has not been rationally applied to the dwellings." [63]

The other uses of the central area were residential and industrial. Sert argues that the resulting urban chaos was caused by the unplanned togetherness of these uses. According to him, together with these unplanned functional areas, urban land rent supported speculative urban development which was one of the reasons for emerging high-rising blocks. In this way, low or middle rise urban residential blocks of laborers of factory laborers, industrial areas and high rise financial areas were all together and developing spontaneously by creating a chaotic environment in terms of urban uses for the daily life of man.[64]

2.3. High-rise Buildings as an Element of Urban Form

Especially the first cities where the high-rise buildings emerged, such as New York and Chicago, sheltered the high-rise buildings in an integrated way with the city from the beginning of the bringing height dimension into the urban environment. Yet, this quality generally arrived much later in Asian and Middle Eastern.[65] This process of creating an urban form comprised of high-rises can be understood by examining the historical background of the high-rises in the cities after their discoveries.

It can be claimed that the development and fame of New York was gained and accelerated by the presence of high-rise buildings. According to Willis, there was a high demand for the development of commercial properties in New York City toward the end of 1800s. For such development, the best place was considered to be Manhattan Island with its tower buildings.[66] The configuration of the

[63] Sert (1942: 64)
[64] Ibid, p.43
[65] Soares Gonçalves & Umakoshi (2010: 3,15)
[66] Wilis (1995: 23, 36)

term of "tower" was necessary to the small and nearly regular shape of properties. According to Willis:

> "…Farther uptowns in the regular grid of avenues and cross streets of the 1811 Commissioner's Plan, the standard blocks measured 200 feet wide (north-south) and about 600 to 800 feet long (east-west). Lots were generally 100 feet deep (half the width of the block) and tended to be divide into 25-foot frontages or multiples thereof, which were suitable dimensions for individual homes and shops. Thus, despite the regularity of the blocks, parcels within them tended to be small."[67]

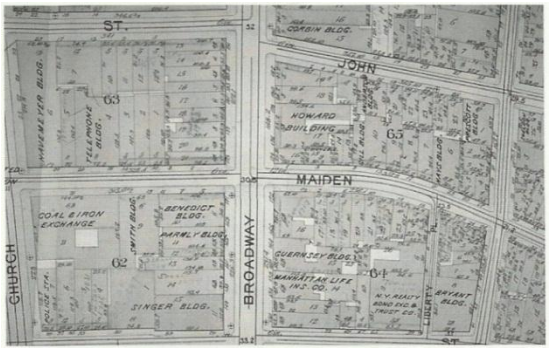

Figure 2. 7 Manhattan, Broadway and Maiden Lane Details (1899)
(Willis, 1995: 37)

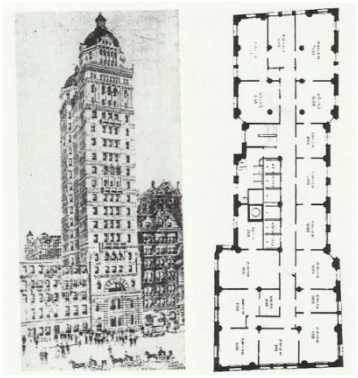

Figure 2. 8 Commercial Cable Building (1887) in New York
(Willis, 1995: 40)

In view of Figure 2.7 and Figure 2.8, it is clear that even the parcel shape is not sufficiently large; as such, the buildings rose in the height due to economic reasons. However, these high-rise buildings have affected urban life in a negative way by bringing "coverage, congestion, lack of sunlight and fresh air on the streets and inside the buildings"[68]. Thus, new regulations of urban design were needed in New York City in between the years of 1920 and 1950, such as height zoning. According to Willis:

[67] Willis (1995: 36, 37)
[68] Willis (1995: 67)

"Designed to protect some measure of light and air for Manhattan's canyons, it required that after a maximum vertical height above the sidewalk (usually 100 or 125 feet) a building must be stepped back as it rose in accordance with a fixed angle drawn from the center of the street. A tower of unlimited height was permitted over one-quarter of the site. The resulting "setback" or "wedding cake" massing, with or without a tower, became the characteristic form for the New York skyscraper from the 1920s through the 1950s."[69]

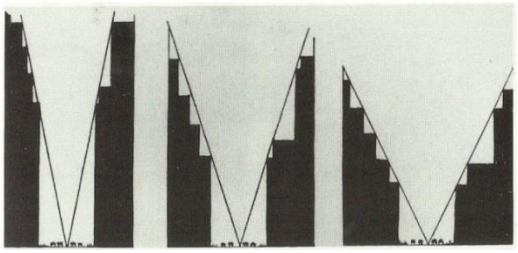

Figure 2. 9 Height zoning diagram of New York
(Willis, 1995: 71)

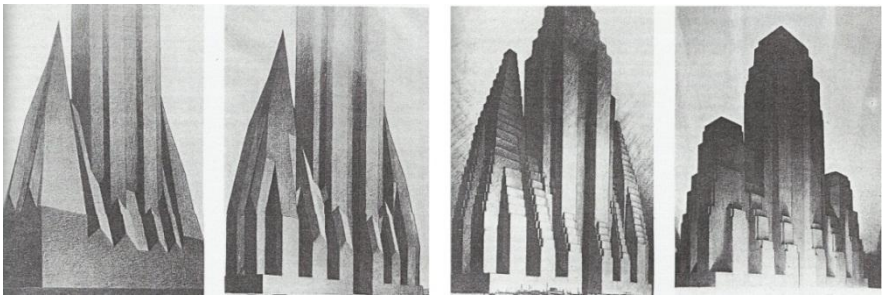

Figure 2. 10 Anticipated high-rise building figures as a result of zoning law drawn by Hugh Ferris
(Broadbent, 1990: 69)

Figure 2. 11 Height and use zoning map of Manhattan in 1916
(Willis, 1995: 70)

[69] Willis (1995: 67)

As can be illustrated from the figures of height zoning diagrams and maps, this order of height zoning had been made by dividing the districts according to their parcel size and width of the streets. These were the elements which determined the angle of the setback line. In this direction, Manhattan Island was divided into zones during which the high-rises with setbacks constituted the basic architectural characteristics of the New York high-rise buildings.[70]

Height zoning was put into practice until the 1960s; then the height restriction was rearranged again. This time, Willis states that the reason was generating maximum rent depending on the architecture style. Thus, the aim was to exploit the maximum light shining onto the all façades of the building, which was to gain the maximum rent by increasing the values of all façades. In this direction, zoning principles were broken in the design of the buildings.[71] After that, the tower buildings have started to rise by "occupying the full width of the block".[72]

Figure 2. 12 Present skyline of New York (http://mjcfromct.deviantart.com/art/Manhattan-Skyline-Panorama-19053985 (accessed on 17th of December, 2012))

The skyline of New York was inherited from the relationships in between parcel width and architectural style in order to gain maximum capital from the real estate. There has never been a limitation on the height as the parcel width allows rising. Hence, this unlimited height brought fame to New York City.

Unlike New York, Chicago had developed its urban form with high-rise blocks through aesthetic and rational concerns related to the real estate market.[73] When compared with the New York "tower" buildings, Chicago high-rise buildings were shorter in height with their cubic shapes.[74] Resembling the former, the reason for the traditional high-rise building shape depended on the parcel and street widths. However, the building blocks were larger and all the buildings were facing large streets in a grid-iron plan.[75]

As the building type was different than those in New York, the building height also was shorter in Chicago. The reason was height control actions starting from 1893 due to the fact that the real

[70] Willis (1995: 71)
[71] Willis (1995: 102-107)
[72] Willis (1995: 137)
[73] Willis (1995: 64, 65)
[74] Willis (1995: 65)
[75] Willis (1995: 50)

estate market appeared which has the possibility to bring financial crisis later on by bringing a new kind of architectural style:[76]

> "The historical grid, the programmatic limitation for shallow, well-lit offices, and, after 1893, height restrictions produced two characteristic solutions for Chicago office buildings. The first was a solid, rectangular form, either tall and thin, like the Reliance Building, or high and long, like the Monadnock; the second type was a light-court building-either a cube-like block with a "hollow square", a "U" plan, or other variations."[77]

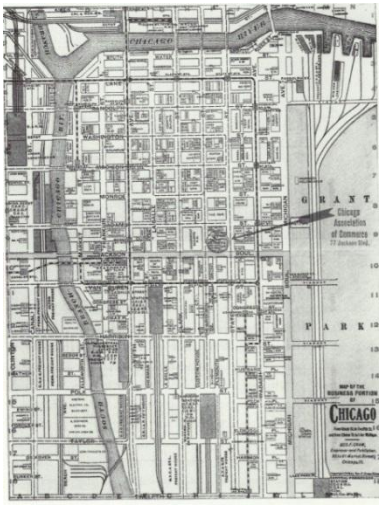

Figure 2. 13 Chicago Layout (1909)
(Willis, 1995: 48)

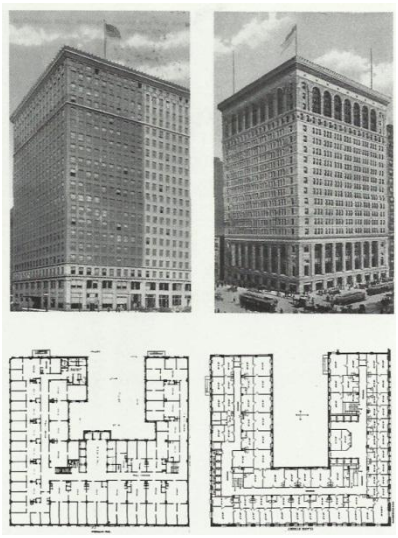

Figure 2. 14 The variations of "u"-shaped buildings in Chicago
(Willis, 1995: 65)

[76] Willis (1995: 50)
[77] Willis (1995: 53)

Through the 1920s, high-rise buildings in Chicago also were designed according to setback principles. However, these were rising vertically as a whole mass which was integrated with the basement having a larger base and lower height which was the opposite of New York high-rises.[78]

It can be said that the process of the Chicago urban form shaped the present city with a wider form of building with lower height when compared with New York. The high-rise buildings of Chicago stand as integrated with the entire urban environment.

Figure 2. 15 Urban form of Chicago in present days
(Willis, 1995: 141)

The formation of high-buildings and their changing integration manners with the urban form of the city is also a cultural issue. Unlike the US examples of Chicago and New York, Paris developed its new financial center not in the city center but in a new place out of the city. This was the indication of the level of acceptance of high-rise buildings in a traditional city center by the citizens of Paris. [79] On the other hand, Günay relates this issue of Paris' new center with "rent of land". Accordingly, the problem of an insufficient city center appeared in the 1950s, and today's La Defense area which was produced newly was designed already. Using the tool of land rent, Paris developed La Defense. As a result, the newly produced city center gives the opportunity of vast public space inside this high-rise integrity.[80]

Figure 2. 16 Paris La Defense
(http://www.re-moto.com/photos.php?lang=tr&img=13461 and http://www.pss-archi.eu/forum/viewtopic.php?pid=37210 (accessed on 18th of December, 2012))

[78] Willis (1995: 127)
[79] Soares Gonçalves & Umakoshi (2010: 34)
[80] Günay (2006: 33)

Together with developments in the construction industry in the 1960s, there has been competition in order to build the highest buildings all over the world, which has become a means of prestige. In this sense, the Asian and Middle Eastern cities have turned into a new market of construction.[81] However, while high-rise buildings of western cities have created an integrated urban form with the city, Asian and Middle Eastern examples have not generally carried the same concerns, especially for the last decades. According to Soares Gonçalves and Umakoshi:

> "Unlike the classical examples of tall buildings in North America and Europe, such as in New York, Chicago and London, the ground level created by the new towers in Middle East and Far East Asia over the last three decades has been characterized by extremely poor physical, social and environmental conditions and integration with the locale, with little to no sense of urbanity. Therefore, alongside the concerns associated with environmental performance, the problems created within the public realm are major issues to be addressed in the design of new tall buildings in these regions of the world, as part of the drive and necessary for more sustainable cities."[82]

Istanbul is a prime example for these statements. Especially the new CBD of İstanbul located alongside Büyükdere Avenue in the Levent district of the Europeans Side has been the area where the high-rise building development has been observed in the last decades. Even though there has been clustering of high-rises, it is observable from Figure 2.17 that the ground level does not provide this integrity where the pedestrians are forced to walk not in a public sphere but on narrowed pavements. Günay states that this composition of new CBD in İstanbul has not been as a result of a process, but constituted spontaneously inside the market mechanism which resulted in the prevention of the creation of public space, as in the Paris La Defence example.[83]

Figure 2. 17 Photo of narrowed down residential line near Sapphire Building and clustered high-rise buildings in Büyükdere Avenue taken from the terrace of Sapphire Building
(Personal Archive, October, 2012)

In contrast, there are integrated examples of high-rise buildings in Asia even though it was implemented many years after development of Western examples. Dubai and Singapore are two of these examples. The integration of new city center of Dubai in a manner of urban form with high-rises was attained by the same reasons with Paris, as a result of the need of city. This was envisaged

[81] Soares Gonçalves & Umakoshi (2010: 7, 9, 10)
[82] Soares Gonçalves & Umakoshi (2010: 15)
[83] Günay (2006: 33, 34)

before that infrastructure was brought there accordingly which paved the way of entrepreneurship. The land rent is sourced by the property there which was to be left for the owner of the land. On the other hand, the land of Singapore belongs to the state which bestows the right of use to its citizens. By this way, planning institution resembles the law making which can bring high-rise buildings and low-rise Chinese district alongside. By this means, urban form can be correlated with any kind of building with any height in an integrated way by using planning as a tool of code making.[84]

[84] Günay (2006: 33, 34)

CHAPTER 3

EVALUATION AND CRITICISMS ABOUT THE HIGH-RISE RESIDENTIAL BUILDINGS IN MEANS OF SOCIAL AND ENVIRONMENTAL COMMUNICATION SPACES IN THE PROCESS OF URBANIZATION

3.1. Development of Architectural Notion in Modern World (20th Century) and Its Reflection on Residential Area

3.1.1. Urban Life in 19th century

The most important effect of the industrialization during the 18th and 19th centuries was creating a new model of urban life. It's mostly basic reason was the change of production pattern; from rural-based and home-based to machine-based production and the latter was highly faster than the former as mentioned in the previous chapter by referring to Angus Maddison. As Marx states, the human has started his relationship with the nature by using nature directly in order to produce his foods.[85] We can observe this transformation from rural and home-based to the machine-based production by the urbanization process during these years together with the disengagement of the relationship in between man and nature. Günay states that:

> "Industrial revolution which started in England in 18th century triggered vast changes in the fields of technology, socio-economy and culture. This change was in economic life which was from hand work-based to the machine-based life style. This was the result of radical changes in terms of urban space production and rural space transformation."[86]

Sert deals with the machine age development about the very beginning of industrialization and states that this was a process starting in the 17th century under "two production system". These production systems were the *decentralized factories,* in other words *home shops* and *factories*. While the former was the continuation of medieval type of production by collecting the raw materials inside the house and bringing them to their final states, the latter was necessitated large number of laborers in modern times. [87] Depending upon the production pattern, the industrialization caused disengagement between city and country. Its reason can be thought in respect to the changing production patterns. While there was no industrialization, man was not in the need of living closer to the urban environment because he was in the condition of producing his own goods by home-based production style.[88]

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[85] J. B. Foster (2001)
[86] Baykan Günay, Sanayi Kenti (Kentsel Planlama Ansiklopedik Sözlük. 2012: 381)
[87] Sert (1942: 134)
[88] L. Mumford (1961: 332)

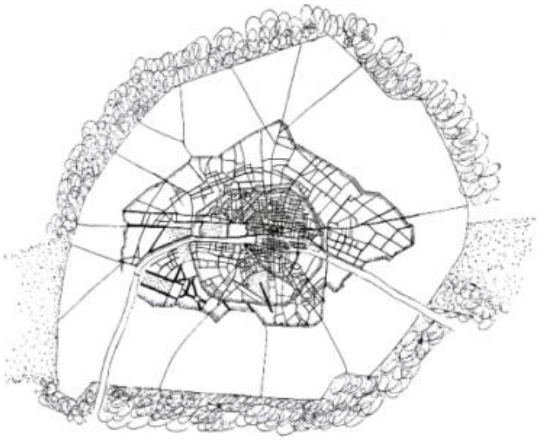

Figure 3. 1 Paris periphery with its open space and potential agricultural production area (Le Corbusier, 1929: 92)

It can be said that, these changes in the production pattern have triggered clustering of people around machine-based production zones, which was city centers. As Mumford states, factories was started to select their locations in city centers and near rivers as the key factor of transformed production relations and speedy producing. These factories were abusing the nature and reducing gardens by attracting people from rural areas to the city center.[89] According to Mumford:

> "The use of Watt's steam engine as a prime mover, changed all this: particularly, it changed the scale and made feasible a far heavier concentration of both industries and workers, while it removed the worker himself farther from the rural base that gave the cottager with his garden an auxiliary supply of food and a touch of independence."[90]

On the other hand, Sert mentions city and country disengagement in terms of the increased distance between them, which annihilated the advantages of living in a healthier environment in nature.[91] He states that there exists "death and destruction in cities" reasoning by "mechanized production, mechanized transportation, new building techniques, new ideas on health and recreation, and vulnerability from the air" which are the main features of the machine age.[92] In his book *Can Our Cities Survive,* he puts in an order the basic problematic issues of industrialized cities into categories and states that there exists an urban crisis that was mainly reasoned by overcrowding in city centers.[93]

He indicates that crowding is the dwelling condition where the number of rooms is lower than the people, whereas overcrowding is the condition where the number of people is twice or more than the number of rooms.[94] This situation explains that the low income group of the city was renting not the whole flat but the room of the flat. Sert displays these living conditions by striking photos.

[89] L. Mumford (1961: 456)
[90] Ibid.
[91] Sert (1942: 27)
[92] Ibid, p.2.
[93] Ibid.
[94] Ibid, p. 14

Figure 3.2 illustrates how poor conditions can affect human life style. As the population of the city increases, the number of the dwellings becomes insufficient. On the other hand, the number of urban poor who cannot afford for the rent of a dwelling increases, too. Then, the dwellings start to be shared by different families which means to hire the room of the house. As a result of this, industrialized urban life was started to resemble the slave kind of living that affected especially living of urban poor in urban centers.

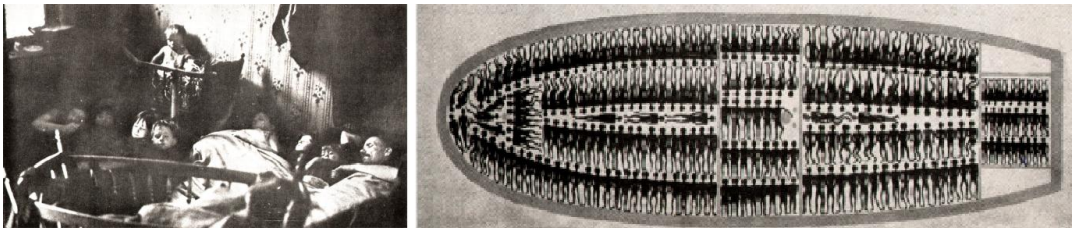

Figure3. 2 The parallelism in between overcrowding in architectural scale and plan of slave cargo (Sert, 1942: 25)

Peter Hall describes these negative conditions of industrial life in his book *Cities of Tomorrow* as follows:

> "Every room in these rotten and recking tenements houses a family, often two. In one cellar a sanitary inspector reports finding a father, mother, three children and a pig! In another a missionary found a man ill with small-pox, his wife just recovering from her eighth confinement, and the children running about half naked and covered with filth. Here are seven people living in one underground kitchen, and a little child lying dead in the same room. Elsewhere, is a poor widow her three children, and a child who has been death thirteen days." [95]

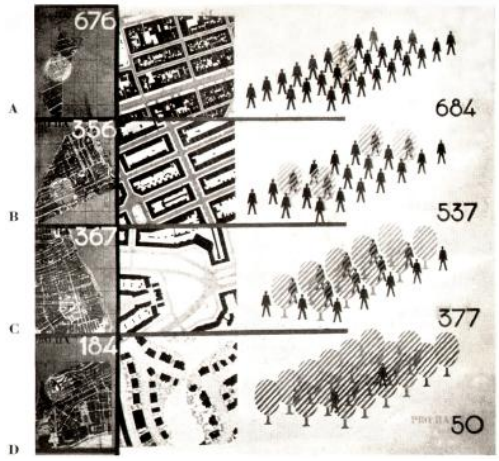

Figure 3. 3 The result of overcrowding in the city; man and tree example (Sert, 1942: 23)

[95] P. Hall (1988: 17)

On the other hand, overcrowding caused slum areas in the industrialized world which was the striking reflection of overcrowding into urban space. Sert states that slums created negative dwelling and urban conditions in terms of "lack of light, sunshine, ventilation, air and privacy" inside the dwelling and "lack of open space, play areas, plants, trees" together with the "illness, crime, poverty and lot crowding".[96] He illustrates the crowding and nature relationship by using urban form. As the city gets crowded, the problem of lack of urban land occurs, which decreases the human and nature relationship.

He described these negative conditions in the cities under the name of "Black Countries" and defines the situation of the cities after machine age; "This is the civilization of black smoke, of noise, of noxious gases, of crowded slums, and of an urban chaos such as the world had never known before."[97] According to him, even though human had developed the technology to constructs the skyscrapers, people still lived in congested cities which caused chaos.[98]

This chaos which was dragged urban life after industrial revolution was both urban and social chaos. As the man was aggregated inside the city as a result of changed economical basement, high number of people was forced to live in a very limited area, which led the urban environment and society to a disorder. At the same time, old life styles and living traditions were totally changed as the production methods changed. The human who subjected to the nature and its bringing disappeared in this process by his relying on the machine and its productions. As a result, contiguity between man and nature was destroyed. This urban chaos and unhealthy living conditions, which is far away from the nature, made human miss the nature and its healthier conditions; thus, the human has started to search for new kinds of urban regulations to turn back to the nature.[99] Hall describes that, the headings of this movement aimed "not only to produce an alternative built form, but also an alternative society".[100] That's why it can be inferred that societal chaos was tried to be solved by new urban regulations by putting society and their life styles in an order.

Günay categorizes these urban models basically into three theoretical frames, which were constituted newly and were put into practice through the end of 19th and the beginning of 20th centuries; Industrial City, Garden City and Linear City.[101] The general feature of these three urban utopias was focusing on common life style to put the society in an order. Except of this, each utopia shelters its special life style. A detailed expression about urban utopias developed after the industrial revolution can be found in Appendix B.

3.1.2. CIAM - Architecture and Urban Movement of Modern Era

Industrialization has changed the architecture notion during the 19th century which has started to get across with the urban living. This contradiction between culture and industry has been explained by Habermas basically under three changing concepts together with industrialization on urban arena that has the basic effects on the altered architectural understanding; concepts of time, space and

[96] Sert (1942: 16, 17)
[97] Ibid, p. 134
[98] Ibid, p. 4 "The skyscraper soared to heaven-but out of the narrow, congested alleys of the old city!"
[99] Mumford states that nature is beneficial for human health which gives the live style that decreases infant mortality rates and increases light, sun shine, etc. Thus, he states that human body and soul needs nature. (1961: 467)
[100] Hall. (1988: 3)
[101] Baykan Günay, Sanayi Kenti (Kentsel Planlama Ansiklopedik Sözlük. 2012: 381)

production types.[102] According to Habermas, "new interest spheres" created after the industrialization and its bringing – capitalism – has been one of the reasons of changing architectural cultures, both in Europe and United States. Basically, construction of railway system together with the other transportation and infrastructural systems developed the communication network by reasoning a change in the notion of time.[103] On the other hand, mass production for daily use, the implication of which was new scaled warehouses and market-halls, induced to remove traditional art and craft. In other words, industrial products had created a pressure on traditional production system of culture. Secondly, "new materials (glass and iron, steel and cement) and new methods of production (prefabricated elements)" has changed the traditional architectural notion by searching for new limits of volumes and planes in construction. This has started to change the sense of space as the impact of railway system on time. Thirdly, "the mobilization of labor and general urban living conditions" caused the mass production of private housing in an uncontrolled way. These had reasoned a vast change in urban life and the need of planning came up.[104]

In line with these developments, there has been an immediate need of a new architectural understanding in order to keep up with industrialization and its bringing to urban life. This new architecture understanding has found its way by The International Congress of Modern Architecture; in other words CIAM meetings starting from 1928 in Switzerland. Günay describes CIAM meetings as "an important milestone in the development of the 20th century architecture and town planning theory and practice".[105]

Moreover, Mumford mentions the main aim about architecture and urbanism of CIAM meetings as "the redesign and development of twentieth-century industrial metropolises should address the biological, psychological, and social needs of working masses".[106] At the same time, Mumford insists in his book *Defining Urban Design CIAM Architects and the Formation of a Discipline* that the term "urban design" has started to be used professionally beginning from the CIAM American context. Thus, new ideas about both architectural and urban fields have started to be expressed by some important architects and planners by CIAM meetings.

3.1.2.1. Comprising Members and Ideas of CIAM (Bauhaus & Le Corbusier)

It is important to mention about the members who constitutes CIAM and their architectural standings in the beginning. Mies Van der Rohe, Behrens, Gropius, Hilbersheimer, Poelzig, Taut, and Le Corbusier were the main participants of the meetings.[107] According to Mumford, CIAM has a two-sided structure and he explains this as follows;

> "From its founding, CIAM was divided between German-speaking and Bauhaus-centered radical architects active in German, Switzerland, Holland, and Eastern Europe, including Hannes Meyer and the more Paris-oriented adherents of Le Corbusier."[108]

[102] Habermas, Modern and Postmodern Architecture. Rethinking Architecture, edited by Neil Leach (1997: 227-230)
[103] Ibid, (1997: 228-229)
[104] Ibid, (1997: 230)
[105] B. Günay (1988: 23)
[106] E. Mumford (2009: 2)
[107] Günay. (1988: 23)
[108] E. Mumford (2009: 2)

To start with German-side, Bauhaus can be considered as both the name of the school of arts that was established in 1919 and closed in 1933 due to political reasons and architectural movement produced by this school after the industrialization process. The members of the school were famous names, such as Gropius, Hannes Meyer and Mies van der Rohe. The school achieved to combine functional design notion together with hand-made design produced by students and professors. Thus, Bauhaus was not only the place of producing object, but also producing knowledge under the universal design understanding.[109] Under this intellectual context, Bauhaus aimed to create the modern urbanism and mass housing principals by the basement of the most functional space together with the least investment. It is important to mention here that all the courses were elective except first year basic design course. This was the implication of "Bauhaus Effect" on urbanism and architecture in terms of design which would be created by the professors of Bauhaus who would move to United States in following years after the establishment of CIAM.[110]

It is important to mention that the members of Bauhaus were meeting to discuss about bringing together the industry and art under a roof long before CIAM meetings.[111] The theme of discussions of the group was generally about the new architectural style of the next era. In this respect, the language of modern movement and universal style was supposed to be determined. By creating this new language, the emphasis was on cleaning the architecture from ornamentation, bringing structural functions forefront and searching for financial solutions.[112] According to Günay, indicator of this architectural style oppositions in between old and new manifested itself during the building competition arranged for Chicago Tribune newspaper in 1922. One of the themes was constituted by Walter Gropius and Adolf Meyer, being the representatives of modern architecture and universal style. On the contrary, being the representatives of Gothic ornamentation style of architecture, Raymond Hood and John Howells won the competition.[113]

Figure 3. 4 Purism and ornamentation in competition arranged for Chicago Tribune Building (http://academic.chrissnider.com/bauhaus/pages/subpages/gropius.html (accessed on 29th November, 2012))

[109] Ayşen Savaş, Bauhaus (Kentsel Planlama Ansiklopedik Sözlük. 2012; 27-28)
[110] Ibid.
[111] Baykan Günay, CIAM Uluslararası Modern Mimarlık Toplantıları (Kentsel Planlama Ansiklopedik Sözlük. 2012: 55)
[112] Ibid (2012: 56)
[113] Ibid.

French-side CIAM, on the other hand, was generally composed of Le Corbusier's ideas. Actually, Le Corbusier combined many ideas about urbanism and created his own idea. To start with, he basically reconciled modernism with the geometry. According to him, as the city is the product of man out of nature, man uses geometry as an expression way of his own experiences. In this respect, machine age structures the relationship between city and geometry as had never been before.[114] In this point, Le Corbusier focuses on the straight lines and right angle in the urbanization in his book *The City of To-morrow and Its Planning*. According to him, human knows where his/her destination is; thus, he/she knows where to go which necessitates the straight roads.[115] At the same time, modern city needs straight line due to the speedy environment and infrastructural system.[116] It can be referred from these discussions that the straight line is necessary in modern world in order to provide human mind to work control-based which was a kind of human model aimed to be created in this era. Its second reflection on space was right angle as being another important element of geometry which was the best way of perception of the space for Le Corbusier.[117] These geometric elements were to create an order in the city as the cities were in a chaos from the beginning of industrialization age. According to him, human needs to create an order because the human had never felt intimate with the nature. This is why he/she created an environment within a geometric order which comes to the meaning of "city" from the beginning of ancient times until industrialization age.[118]

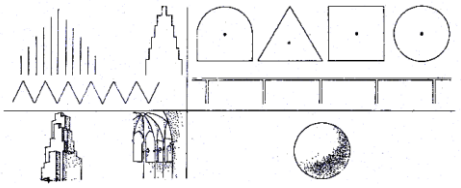

Figure 3. 5 Differentiated geometries of barbarism and classicism
(Le Corbusier, 1929: 36)

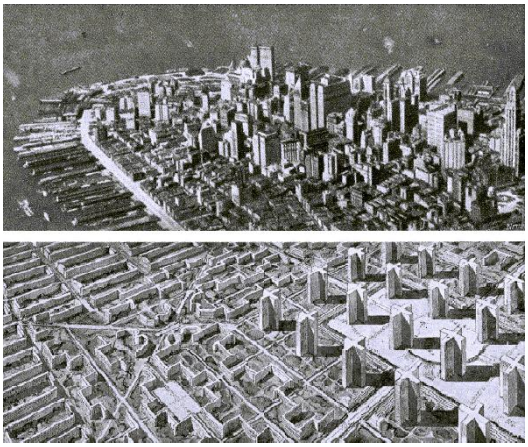

Figure 3. 6 Manhattan existing situation in 1920s together with the application of Le Corbusier's plan of Contemporary City
(Le Corbusier, 1929: 173)

[114] Le Corbusier (1929: xxi)
[115] Ibid (1929: 3)
[116] Ibid (1929: 10)
[117] Ibid (1929: 13)
[118] Ibid (1929: 24)

According to Le Corbusier, there should be a geometrical change in architecture, then it should start from the dwelling and town itself.[119] In this respect, he starts with the discussion about New York, Manhattan Island. There exists a chaotic environment where differentiated uses and height of buildings were intermingled. As the city got crowded and the language of urban height could not be determined, the question of what the future of New York City would look like emerged, as all the plots would be packed with high-rise urban elements. The reason of this concern of Le Corbusier about skyscrapers of New York was that as the building rises high, there should be an adequate distance between the buildings in order to sustain greenery and provide a ratio in scales of man and concrete environment.[120]

Under these circumstances, Le Corbusier has suggested the alteration of the cities beginning from the dwelling units based on the concepts of uniformity and simplicity in geometries under his urban concept of *Contemporary City*. At the same time, he has changed the definition of the street and rejected "corridor-street" between tall buildings by accepting the alteration of urban form from organic to rectangular with gigantic structures like skyscrapers constructed by steel and reinforced concrete.[121] In this direction, Le Corbusier has suggested the *proportional mean* between human and concrete environment made by tall building. The height of the building and proportion of greenery gained importance which would determine the relationship between human and nature.[122]

3.1.2.2. The Main Principles of the CIAM Architecture – Before the Second World War

CIAM is the congress where the discussions of western world architecture and urban problems of era were made by many famous architects and planners. There were two main directions of these discussions that occurred during CIAM meetings; architectural and urban sides. The first one was based on searching for developing universal architectural style in the fields of new technologies, construction techniques and space understanding. The second discussion, the urban side, was based on the functions of the city which was determined in four groups as "*dwelling, work, recreation and transportation*". The location selection of these functions was suggested with *zoning* understanding in urban field. This new urban idea has a new dominant urban element which is tall building. At the same time, integrity in urban environment was supposed to be supplied by urban green.[123]

The main focus of the congress about the modern architecture was that it should be sited on economic and social order of living. That kind of an aim could only be achieved in the direction of rationalization and standardization principles. Therefore, some basic principles of CIAM was determined as; architecture based on the relationship with economy; urbanization based on functionalism, not aesthetical concerns; determination of some basic functions like dwelling, recreation, work and transportation; and prevention of the separation of land.[124]

It is important to mention here that CIAM 4, in other words *Athens Charter,* which was made in 1933 in Athens acted as advisor to the rest of the meetings in terms of defining the main functions of modern architecture. Athens Charter has strengthened the idea of "functional city" with its

[119] Ibid (1929:39)
[120] Ibid, (1929: ix, 45)
[121] Ibid (1929: 74-76)
[122] Ibid (1929: 77-80)
[123] Baykan Günay, CIAM Uluslararası Modern Mimarlık Toplantıları (Kentsel Planlama Ansiklopedik Sözlük. 2012: 55)
[124] Ibid, p.58.

separating the city into functional fields; as a result, created zoning perspective. The basic accentuated concept of CIAM 4 was *connectivity*. Basic principles to achieve connectivity were determined under some topics as; linking the old and new urban segments into each other; bounding cities functionally; and integrating natural and artificial elements of the environment. These principles had affected local planning agents and high-rise buildings within open green areas were constructed in functionally separated cities. However, these environments would be criticized due to the fact that they did not take care of human's social relations in 1950's.[125] Therefore, it can be said that even though the connectivity of functions and urban segments were tried to be achieved by new urban organization, it was failed to take into consideration human and his connectivity with the others which is the basic concern theme of this thesis.

Before going on to CIAM's later meetings in order to detail the effects of the CIAM architecture on human and his connectivity in terms of socialization, one should deal with the four main urban functions determined in CIAM under the zoning principles; *dwelling, recreation, work and transportation*. According to Sert, these four urban functions were prerequisites for everyday life of modern human and rearrangement of the functions were "made in the hope of a better fullfilment of the cultural role of the city". [126] In this direction, it can be said that the main focus of determining the basis of the urban reorganization was the main needs of human which brought him/her into the focus on the urban field, but not from his/her daily life activities but from the basic needs of inhabitants of the cities in order to live and survive.

3.1.2.3. The High-rise Dwelling Approach Developed by CIAM

If we focus on the new dwelling approach of the era and its relationship with the building height as the main focus of this thesis, starting point of the idea of tall buildings within greenery was unhealthy urban conditions like gasses of the factories, urban slum and lot crowding. The corrosion in urban-rural relationship can be added, too as a result of overpopulation.[127] Sert sees these negative environmental conditions that cause "noise, vibration and smoke" not as the problems itself but the result of spontaneously built structures as a result of lack of town planning understanding. [128] Thus, there was a necessity for immense access of dwellers to "*air, sun, light, and view*"[129] living in the cities regardless to class which would be gained only by a new kind of urban form and spatial differentiation. At the same time, there should be high density in the city center in order to sustain the social needs of man which is community living. Then the question of how the high density and natural conditions can be brought together in the city centers comes to the minds. As an answer, high-rise building forms came from modernists according to whom the high-rise buildings can both sustain social and natural contact in the city centers.[130]

Sert finds the relationship between building height and location of the building paradoxically regardless to the urban rent idea. According to Sert:

> "The height of buildings is a general rule greater near the central areas, where the streets are narrower and traffic congestions and the nuisances resulting from overcrowded are greater. Lower dwellings spread out toward the suburbs, where the streets are wider and

[125] Baykan Günay, Atina Sözleşmesi (Kentsel Planlama Ansiklopedik Sözlük. 2012: 17, 18)
[126] Sert (1942: 10)
[127] Ibid, p. 27.
[128] Ibid, p.41, 42.
[129] Ibid, p. 64.
[130] Ibid, p.58-62.

traffic problems are less critical. This means that in our cities, as they appear today, there is no rational relationship between the height of the building (dwellings and others) and their spacing. This relation seems, in fact, to have been reversed."[131]

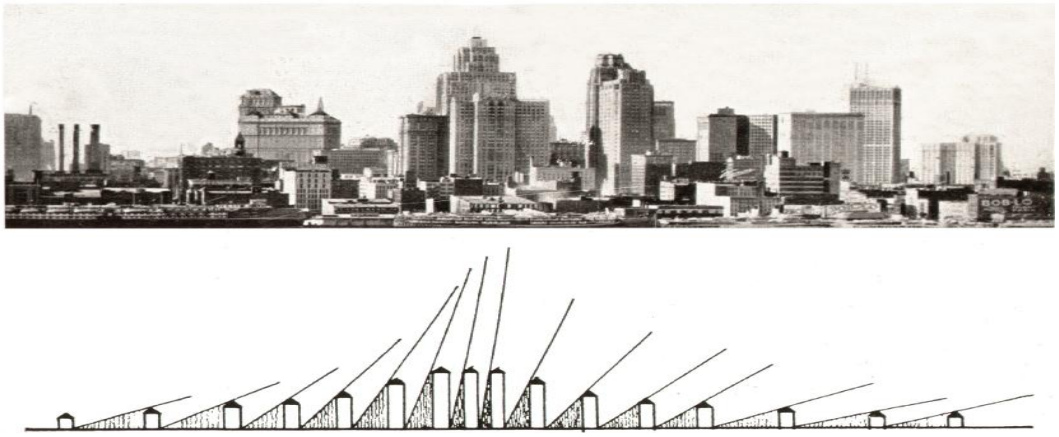

Figure 3. 7 Building height and intermediary space as a paradoxical issue
(Sert, 1942: 63)

In this respect, Sert makes an inference that the dwelling areas should be made of high-rise buildings which had never been before. Sert indicates that until the high-rise buildings will be applied to the residential buildings, total benefit of them on urban land which is to decrease structural area while increase the number of dwelling, would not be sustained. At the same time, the application of "sun, light, air and view" to the civil could only be gained by high-rise residential buildings.[132] According to Sert:

"If used for dwelling purposes, high structures would permit:

(a) A greater capacity above a given land surface than in the case of low buildings spread over the same area.
(b) The consolidation of open spaces into large areas affording a better organization of community services, an improved layout of parks and playgrounds, and greater landscaping possibilities.
(c) The reduction of road surface and convenient isolation from busy thoroughfares.
(d) The use of the best modern light, heat and power equipment and other conveniences made both more efficient and more economical by centralization."[133]

As can be understood, there were many rational reasons of applying high-rise buildings to the dwellings such as creating a healthier environment rather than the industrial city centers by letting in the biological elements to inside of the buildings, providing some basic facilities in the ground level such as park, green and landscaped area and separating man from the road which were seen as danger for modernists due to its crowdedness and dirtiness.

[131] Ibid, p. 63.
[132] Ibid, p. 64.
[133] Ibid.

Figure 3. 8 High-rise dwellings in modern era
(Sert, 1942: 59, 67)

Walter Gropius illustrates this relationship between open space and building in his book *The New Architecture and the Bauhaus* in terms of the building orientation. According to him, there is a necessity of open space between buildings in modern architecture which can only be measured and determined according to the number of floors in the building and angle of incidence of solar light (generally 30 degrees).[134] Thus, it can be inferred that the urban form determiner of modern era was some natural elements like *air, sun, light, and view*. Barlas states that Gropius is the founder of *open block* concept that provides the broadest utilizable area due to its leaving the space open by rising vertically. Thus, the open block system was a new kind of spatial arrangement rather than solely a density arrangement.[135]

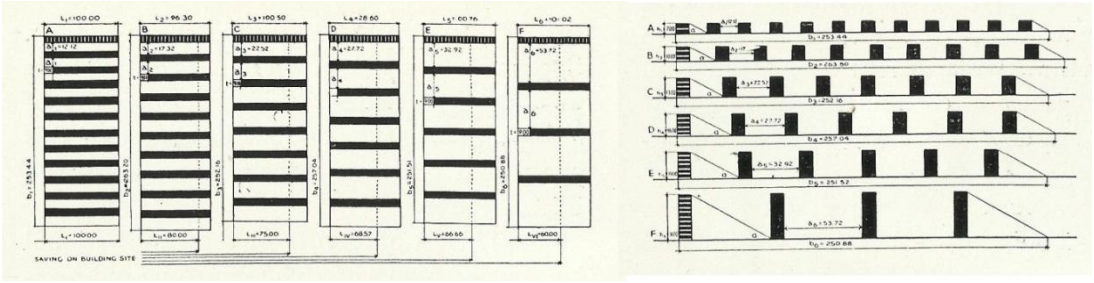

Figure 3. 9 Determination of the interval in between buildings
(Gropius, 1935: 104)

Skyscrapers as being the high rise buildings were supposed to be the element which provides the contact between human and nature on the condition that it's surrounding will be left as open spaces. In this respect, the second zoning function should be explained which is *recreation*. It was determined by CIAM in the fifth congress in Paris which is highly relevant with supplying the contact between man and nature. As the notion of high-rise buildings shelters bringing high number of people under one roof, it also forces human a kind of collective life as in neighborhoods. Thus, it can be said that high-rises provide togetherness semantically. Its reflection on neighborhood units was vast open spaces around the high-rise buildings that enable man to practice some activities. Concordantly, Gehl states that one of the most important tools of social interaction is activities.[136] Emergence of activities in modern era was supposed to occur in these open spaces which were thought to provide the social communication.

[134] Gropius (1935: 104)
[135] Barlas (2006: 126, 127)
[136] Gehl (1980)

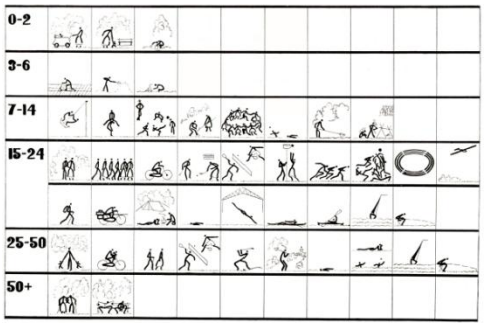

Figure3. 10 Social activities of different age groups which would occur in open spaces in modern urban environment
(Sert, 1942: 91)

Adding the remained functions which are transportation and work, the *neighborhood units* were tried to be designed composed of high-rise buildings subject to the principles of CIAM. Thus, neighborhood unit was seen as another concept to secure both environmental contact and face-to-face relations in urban environment during modernist era.[137] Sert combined neighborhood units with high-rise buildings in his *borough city* designed for Dessau, Germany. He created neighborhood units by combining high blocks and low-rise linear buildings according to the basic principles of neighborhood units which necessitate walking distance to the whole by serving institutional and recreational uses.[138]

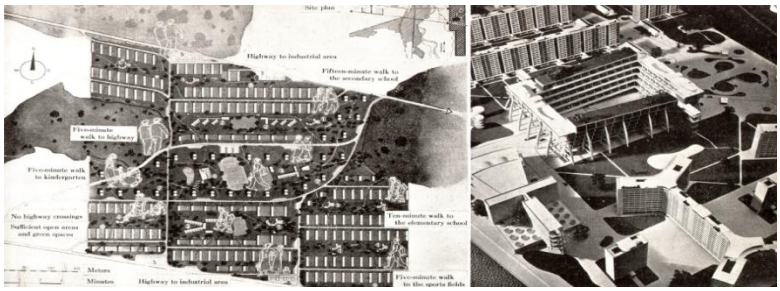

Figure 3. 11 Sert's borough city designed according to neighborhood unit rules
(Sert, 1942: 71)

In brief, the theory of Functional City was the most popular and valid urban and architectural perspective during CIAM meetings between 1928 and 1937. It can be understood that the first part of CIAM meetings was more under the influence of French-side formation. This urbanization notion which had reflected to the urban form changed after the Second World War and German-side notion of Bauhaus would come into the forefront in the second term of CIAM. The theory was getting strong with the idea of bringing individual and collective life together. At the same time, height gained importance in bringing the nature and concrete environment together.[139] However, this way of dwelling life will be criticized then in terms of its decreasing social contact in between human by dragging to the human an isolated environment while increasing environmental or biological contact.

[137] Adnan Barlas, Komşuluk Birimi (Kentsel Planlama Ansiklopedik Sözlük. 2012: 281-283)
[138] Sert (1942: 71)
[139] E. Mumford. (2009: 11)

3.1.2.4. War Break of CIAM

In this part of CIAM meetings, urban design traced on the spatial organization in a differentiated manner especially by the architects who moved to the United States due to Second World War. According to Mumford, postwar urban design principles of CIAM, which were developed together with the urban design education, can be explained in two terms; Bauhaus-based and Harvard-based ideas of design. As the former was more focused on visual communication, the latter had rationally-oriented urban design process which has reflected the American-based İdeas of CIAM emerged between the years of 1936-1946 in American Design Schools.[140]

Bauhaus-based urban design notion which was developed in The Chicago Institute of Design was explained by Moholy with these words as being the member of the institution during the aforementioned years:

> "Design is not a matter or mere external appearance and façade; it is the essence of products and institutions, it is the integration of technological, social, economic and esthetic requirements… Architecture must also be considered as the development of form, from the solid volume to the light-perforated structure… Sociologically architecture has the task of planning for traffic disposition, education, recreation and leisure for the urban as well as rural community. Finally architecture is the articulation of space."[141]

According to these thoughts of Moholy, it can be said that this part of the postwar design notion was based on the idea of process-oriented design comprising human's everyday life organization. It is highly important to mention that in this era, Gestalt psychology techniques had been arisen in urban design field. This was the demonstration of the differentiation of design understanding from environmental-oriented (as being in pre-war design process) to the human (or socialization)-based. According to Mumford:

> "It was a concept of unified vision of knowledge that drew directly from Gestalt psychology, as it developed in Germany by Kurt Koffka, Wolfgang, Köhler, and Max Wertheimer. The Gestalt psychologists began with the assumptions that things do not always appear as they actually exists; perceivers must make inferences from appearances. As a result, the Gestaltists focused on the process of pattern recognition."[142]

In line with these writings, it can be said that Bauhaus design view was based on perception with visual spaces. This was more social and psychological side of design process. As Mumford correlates this design process with visual communication, he gives the example of the book of *The Image of the City* written by Kevin Lynch in 1960 in order to clarify "perceptual form of the city" by explaining the perceptual elements of the cities into five categories; edge, path, district, node and landmark. According to him, visual quality comes to the meaning of willingness of the man.[143]

Secondly, Harvard-based design approach which was developed in Departments of Architecture, Landscape Architecture and Planning at Harvard University was more oriented to "making and doing" approach especially in training process of design. Especially the idea of Harvard-based urban design was a rational side of design which "approach was seen as "objectively valid" and based on

[140] E. Mumford. (2009)
[141] Quoted from E. Muford (2009: 21)
[142] E. Mumford (2009: 23)
[143] Ibid, p. 24.

the "scientific visual facts" of visual perception."[144] Thus, it can be said that this mixture of perception and rationality supported prewar ideas of CIAM. Bringing closer the nature to the dwelling zones located in the periphery by connecting these settlement areas to the urban cores by highways was the perspective of this design approach which was Gropius ideas before. In this rationality, high-rise buildings protected its importance as "optimal solutions" of the urban design problematic.[145]

It is important to mention here that through the beginning of the second part of CIAM after the war in the 1940s, there has been a movement in the housing heights and urban lifestyles. Actually, this was the effort of bringing differentiations into together. One of the implications of this alteration was proposed dwelling projects of ASPA members under the name of "mixed rental housing." Mumford states that "the project included housing types ranging from single-family dwellings to row houses and high-rise apartments".[146]

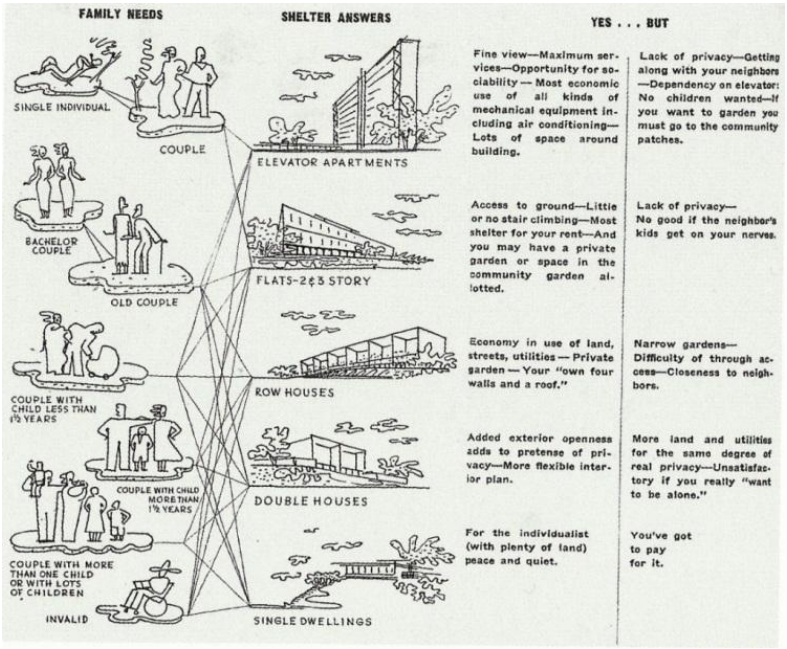

Figure3. 12 Multi height and style dwelling units developed by ASPA members (Mumford, 2009: 51)

3.1.2.5. The Main Principles of the CIAM Architecture – After the Second World War

Ten years after the last meeting in 1937, CIAM members came together in 1947 in Bridgewater. Before the meeting, Sert and his friends designed Barcelona in the frame of CIAM between the years of 1933 and 1935, but this time the height of the buildings decreased in middle-rise and high density were suggested which were the early signals of alteration movements of the main CIAM principles. Together with it, CIAM 7 meeting was made in Italy's city of Bergamo. This congress was the starting point of arguments against CIAM principles, especially by the members coming from Mediterranean societies. In this context of post-war politics the prewar principles were needed to be changed which

[144] Ibid, p.29, 30.
[145] Ibid, p. 31.
[146] Ibid, p.50, 51.

remained incapable of answering urban problems especially for the British group members. In this notion, urban form which was grounded on four main urban functions remained incapable and the need of new categories arose.[147] This debate has been propounded in CIAM 8. Banham explains that the old members of CIAM have accepted this situation but could not go beyond some main definitions like urban core and center whereas the younger members have started to criticize the principles of Athens Charter seriously by not adopting the diagrams of the charter.[148]

It is important to mention that CIAM principles of functionalism and four main functions of the cities have underwent radical change during this process of prewar. In this term, both the notion of "habitat" and the relationships in between individuals and community were tried to be reinterpreted in CIAM 9.[149] In this direction, it can be inferred that some basic constituents which was reconciled especially with modernism about spatial organization had started to be replaced by other concerns. For example, it was very striking that while CIAM principle of creating modern individuals' dwelling in modern cities was praised during prewar stages, some urban environments which were especially creating spatial organization such as squatter housing areas was started to be praised newly. The group which was called CIAM-Alger and their notions had important effects on development of that notion.[150]

CIAM-Alger had performed their research in Mahieddine squatter housing area of Algeria. As the squatter housing areas were seen as the center of poverty, infant death and tuberculosis, these areas which were not thought as having architectural and urban form in positive qualifications were intended to be destroyed by CIAM architects. However, CIAM-Alger evaluated these areas and had approached positively by realizing design teachings which were hiding back of poverty.[151] Çelik remarks that CIAM-Alger architects insisted on that the relationship between human and architecture. This was the simplest condition of dwelling areas that modernism was insisting on which reflects daily life in architecture. [152]

The dwelling units that produced urban pattern were "human cells" creating the balance between the inside and the outside. Due to this pattern based on the core unit, it caused irregular street patterns consisting on cul-de-sacs and yards. According to Çelik, the group called CIAM-Alger found this irregular pattern as meritorious system and defended that the CIAM-Grid should not be seen as the only tool of urban design. This new urban pattern could give freedom to the architects with a new sensibility, rhythm and sense of architecture that consisting harmony of volume and space.[153] This was the answer of the ideas of simplicity, slightness and geometrical elusiveness created by modern architects which was also possessed by squatter housings. Except for the street patterns and interior elements, yards were in key role by producing space of squatters. They were the common spaces of different families functioning as the cooking, eating and communicating areas.[154]

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[147] Baykan Günay, CIAM Uluslararası Modern Mimarlık Toplantıları (Kentsel Planlama Ansiklopedik Sözlük. 2012: 61, 62)

[148] Ibid p. 62.

[149] Ibid. (At the end of this congress of CIAM 9, old charter members like Le Corbusier, W. Gropius, S. Giedion, J. L. Sert withdrawed from the meetings)

[150] Zeynep Çelik (2011: 10) Gecekondu'nun Öğrettikleri: CIAM Cezayir'e Bakıyor. Dosya 27 Mimarlık ve Gündelik Yaşam. (The name of the group members: Madame J. Lambert, Pierre-Andre Emery, Jean de Maison-seul, Louis Miquel, Jean-Pierre Faurre, Ronald Simounet)

[151] Ibid, p.10.

[152] Ibid.

[153] Ibid, p.12.

[154] Ibid, p.14.

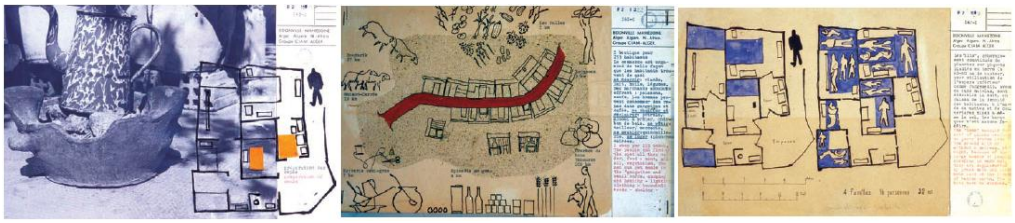

Figure 3. 13 Spatial research on squatter housings by CIAM-Alger
(Çelik, 2011: 13, 11, 12)

On the other hand, CIAM-Alger dealt with the squatters in terms of scale. Whereas the Le Corbusier's Modulor[155] was reflecting the scales of modern man in modern cities based on their modern lifestyles, the group members produced a special Modulor for Algerian squatters based on the scales of the houses, furniture and daily life activities of squatter dwellers under the name of "Algerian Modulor". There were three different men in the schemata of Algerian Modulor; standing, squatting and lying figures of man which were accepted as the main stances of dwellers. According to Çetin, opposing to the original Modulor man who has an "imperator stance", Algerian Modular has modest and obedient stance in line with the power structures of French Algeria symbolically.[156]

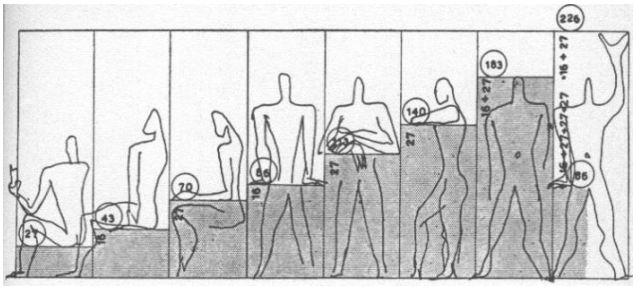

Figure3. 14 Le Corbusier's Modulor
(http://www.tumblr.com/tagged/modulor?language=tr_TR (accessed on 3th of December, 2012))

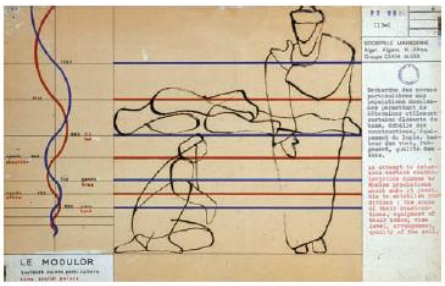

Figure3. 15 CIAM-Alger's Modulor
(Çelik, 2011: 14)

[155] According to Ostwald (2001: 146): "Le Corbusier developed the Modulor in the long tradition of Vitruvius, Leonardo da Vinci's Vitruvian Man, the work of Leona Battista Alberti, and other attempts to discover mathematical proportions in the human body and then to use that knowledge to improve both the appearance and the function of architecture."
(quoted from http://en.wikipedia.org/wiki/Modulor)
[156] Zeynep Çelik (2011: 14) Gecekondu'nun Öğrettikleri: CIAM Cezayir'e Bakıyor.

In brief, CIAM architectural meeting has started with the notion of bringing the natural elements on urban space by the help of high-rise buildings. In time, the notion has changed and humane values had come into the forefront together with localness, and architecture has been affected by human lifestyles and its reflection on space which was the opposite of strict modernist architecture promoting architects and their designs, only. Together with the changing notion to the human-based architecture, structure types have also been changed from high-rise to the middle and low-rise buildings. The understanding of human-based architecture peaked to the top with Team 10. Before touching upon Team 10, the Turkish practices of CIAM principles will be discussed.

3.1.2.6. CIAM Practices in Turkey

Günay states that one of the best examples of CIAM in Turkey was some of the neighborhoods of Ataköy in İstanbul and the TOKİ (Mass Housing Administration of Turkey) approaches all over the country.[157]

The first stages of Ataköy Neighborhoods in İstanbul can be seen as the implementation of CAIM principles with their high-rise buildings located in green area. These neighborhoods have shopping centers in the core which can be accessed by pedestrian roads passing on green areas. At the same time, it is the reflection of zoning by separating different uses from each other spatially.

Figure 3. 16 Ataköy İstanbul – Residential zone
(Personal Archive, October 2012)

Figure 3. 17 Sub-center of one of the neighborhoods in Ataköy
(Personal Archive, October 2012)

[157] Günay, CIAM Uluslararası Modern Mimarlık Toplantıları (Kentsel Planlama Ansiklopedik Sözlük. 2012: 64, 65)

Figure 3. 18 The neighborhood consists different plans and height of buildings which are the elements of vast green system
(Personal Archive, October 2012)

It is important to mention that high-rise residential units in Ataköy rise on columns which left ground open, similar to Le Corbusier's structure ideas in any function as in Unite d'Habitation and Pavillon Suise Cite Universitaire Paris in order to attribute some functions to the ground. However, this notion of providing functions to the ground of the building in order to supply any kind of contact has disappeared in time and turned to car-parking area in Ataköy.

Figure 3. 19 A functional comparison in between the ground levels of Pavillon Suise Cite Universitaire Paris and Ataköy residential buildings
(Banham, R. (1962: 120) Age of Masters A Personal View of Modern Architecture and Personal Archive (October 2012))

Secondly, some of the TOKİ practices can be looked from the perspective of CIAM principles of zoning, multi-storied buildings and green as the element that provides urban whole.[158] The high-rise residential buildings are generally spreading on the open green system where the other functions such as commercial, educational or health facilities are locating separately from the residential zone in general built environment constructed by TOKİ.

Figure 3. 20 TOKİ residential environment in Pursaklar, Ankara
(Personal Archive, December, 2012)

[158] Günay, B. (2012: 65) CIAM Uluslararası Modern Mimarlık Toplantıları.

3.1.3. Team 10

The tenth and last congress of CIAM, which will be called Team 10, has brought totally new concepts to the architectural understandings, which were *association* and *identity*. Thus, the universal design concepts have started to replace with locality.[159] At the same time, it has been understood by the term of "association" that the physical environment should not be thought without the social relations according to the principles of Team 10. In this direction, these new concepts have also sheltered the idea of social integration inside. As a result, this situation has been the reason of a change in CIAM space understanding. Whereas the prewar CIAM spatial organization was depending on togetherness of biological elements in concrete environment which was defined as the association of *sun-space-vegetation and concrete-steel* and where the high-rise buildings were located in open green areas, postwar design approach was more prone to low-rise environment in a compact urban form with attached clusters of dwellings.[160]

The whole discussion of prewar CIAM had been made and design concept of that era was accepted by the younger members. Some results can be explained as following:

> "Hence both in industrializing socialist or capitalist societies a mechanical pattern of housing estates depending on functional organization became a prime motive of design process whether high or medium or low rise, the pre-war CIAM approach to the design of housing zones was after the creation of isolated buildings within open spaces. Association between dwellers of these residential quarters was expected to take place in the vast amount of green spaces created for a "healthy environment", where this phase was considered to be identical with the idea of verdure.
>
> Various groups or personalities maintaining the CIAM ideology constructed first abstract urban forms displaying an orthogonal-mechanical order and a new space understanding, where high-rise buildings would be located in widely spaced blocks. The skyscrapers ascending from vast open spaces, served by an exaggerated vehicular system thus became the basis of pre-war CIAM ideology."[161]

Considering the space understanding of CIAM, it can be said that this was an evolution which started with the post-war design understanding, and matured in Team 10. In this direction, except *identity* and *human association* concepts, *patterns of growth*, *clustering* and *mobility* were new concepts that were brought by Team 10 in order to animate human life in the street and human synergy.[162] Later on, some architects like Van den Broek and Bakema, Candilis, Josic and Woods, A. and P. Smithson have developed these notions of Team 10 and put in practice new design principles like using street or linear space instead of vast open space, pedestrian movement sometimes in three-dimensional scale, continuity of objects instead of compositions without continuity, diversity of volume and space, and building and space structuring spreading in ground except of skyscrapers which is called as "groundscraper".[163]

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[159] Günay (1988: 30).
[160] Günay (1988: 30, 31).
[161] Günay (1988: 31, 32).
[162] Günay, CIAM Uluslararası Modern Mimarlık Toplantıları (Kentsel Planlama Ansiklopedik Sözlük. 2012: 63)
[163] Ibid.

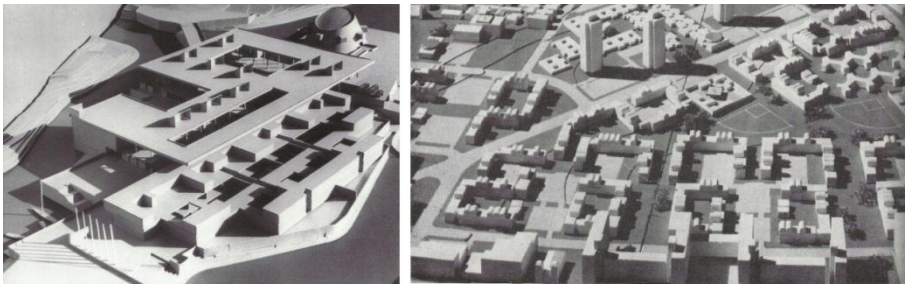

Figure 3. 21 Examples of groundscaper and clustering idea of residential areas which were the reflections as a result of the principles of Team 10 on space
(Mumford, 2009: 181, 136)

In detail, these younger members of CIAM who created Team 10 understanding had important roles on the idea of social interaction in urban space. Bakema and Van Den Broek represented the idea of association of differentiated building heights submitting differentiated uses which are gathered together in a spine. This was also the way of mixing uses into each other.[164] Thus, both low and high-rise buildings were creating togetherness in urban field by giving the opportunity of bringing differentiated life-styles in the same context. At the same time, spine which is the linear access of man could provide social interaction. This was a new spatial organization after CIAM principles.

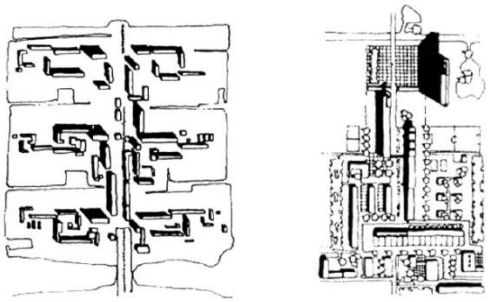

Figure 3. 22 Bakema and Van Den Broek's principles about spatial organization
(Günay, 1988:35)

One of the other younger members of CIAM was Giancarlo De Carlo. He represented mainly the *access* and *communication* terms which were in order to bring De Carlo's Mediterranean urban environment and present urbanization into together.[165] According to Van Eyck, "the way of access and communication" as being De Carlo's spatial organization can be gained in many fields as; "both open and closed; both inside and outside; both large and small and has above all, both individual and collective meaning."[166] He insists on the horizontal growth of the structures where the functional separation does not exist in a severely way, but spreading along the line.[167]

In parallel with De Carlo, Van Eyck proposed "configurative discipline" in order to combine cultural and physical environment. This concept is bringing parts and whole in equilibrium by escaping from

[164] Günay (1988: 34)
[165] Ibid, p. 35.
[166] Van Eyck (1968:157)
[167] Günay (1988: 35)

the norms of traditional architecture.[168] In this respect, Van Eyck tried to create a three dimensional urban form as a geometrical object.[169] According to Colquhoun, Van Eyck's Amsterdam Orphanage Building is the example of groundscraper by creating "configurative discipline" which "in-between spaces" were described and used as an element of gathering public and private spheres.[170]

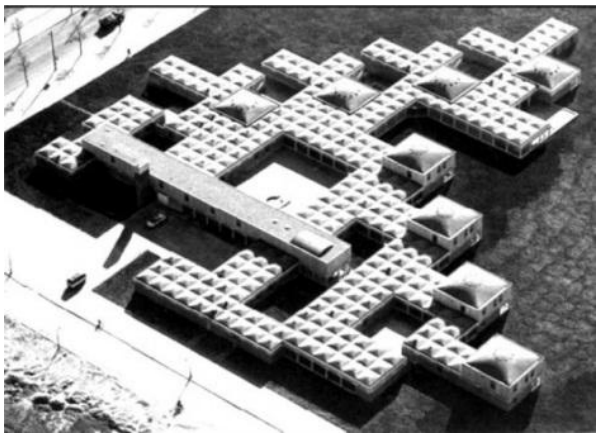

Figure 3. 23 Amsterdam Orphanage Building
(http://www.archdaily.com/151566/ad-classics-amsterdam-orphanage-aldo-van-eyck/ (accessed on 9th of December, 2012))

Alison and Peter Smithson are the other younger members of the group known as the announcers of the concepts of *association, identity, patterns of growth, cluster* and *mobility*. In these respects, Smithsons had brought local values to forefront and insisted on that every component of the cities should have specific features.[171] Together with this, multi-level pedestrian movements were suggested by Smithsons in order to sustain social contact. [172] As the most influential element of providing social contact between the principles of Smithsons, *association* term comes. In order to gain this, Smithsons describes another concept of "mat-building" which is a horizontally continuous pattern of structures. Alison Smithson describes the term as:

> "Mat-building can be said to epitomize the anonymous collective; where the functions come to enrich the fabric, and the individual gains new freedoms of action through a new and shuffled order, based on interconnection, close-knit patterns of association, and possibilities for growth, diminution and change."[173]

Alison and Peter Smithson have practiced their "mat-building" notions in Robin Hood Gardens constructed in the 1970s in London. It is remarkable that the buildings of Robin Hood Gardens are middle-rise, high density housing complex in a continuous form as distinct from vertical structures of modernism. It can be inferred from Figure 3.25 that the project provides human interaction in the corridors that continue in parallel lines in different floors. Thus, it can be said that the pattern of association is gained by pedestrian network in Smithsons' implemented project of Robin Hood Gardens.

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[168] Strauven (1992: 49)
[169] Oxman, Shadar and Belferman. (2002: 321)
[170] Colquhoun (2002: 202)
[171] Ibid, p.36.
[172] Lewis (1967: 26)
[173] Alison Smithson (1974: 573). How to Recognize and Read Mat-building.

Figure 3. 24 Robin Hood Gardens
(Google Earth (accessed on 19th of January, 2013))

Figure 3. 25 Robin Hood Gardens residential complex in London
(http://www.oobject.com/18-brutalist-buildings/robin-hood-gardens-london/7952/
http://adaptivereuse.net/2008/03/05/dont-be-brutal-to-robin-hood-gardens/
http://newsfeed.kosmograd.com/kosmograd/london/ (accessed on 9th of December, 2012))

In brief, the concept of zoning emerged with the CIAM that separated the functional uses severely in space which left the city center as an empty place especially after the working hours and decreased human synergy. Team 10 has annihilated this approach especially in city centers. This idea was possibly born from the reactions against housing principles of Athens Charter which forces man to live in "socially obsolete" and isolated housing zones.[174]

It can be said that while spatial organization of CIAM was more prone to the voids and their continuity, Team 10 necessitated the solid-oriented spatial organization and design criteria. At the same time, while CIAM believed the importance of high-rise buildings and sublimated skyscrapers as an architectural form which was the symbol of new technics and rationality, Team 10 insists on groundscrapers as an architectural element that organizes the space in ground in order to provide social interaction of human in a line. In short, CIAM emphasized on biological inputs like sun, view, air. It focused on the contiguity or contact with the nature of human whereas Team 10 focused on social communication; in other words, face-to-face contact in the field of urban design and space organization.

3.1.3.1. Team 10 Practices in Turkey

The main principles of Team 10 which are about bringing social relations in physical environment was the topic of some of the neighborhood applications of residential areas. Ataköy Neighborhood 7th and 8th stages in İstanbul as residential building complex can be given as an example of Team 10 principles practiced in Turkey.

[174] Lewis (1967: 6)

Ataköy 7-8 Neighborhoods as the continuity of first stages developed according to CIAM principles contain both social and environmental contact spaces which are both CIAM and Team 10 principles. However, Team 10 principles become prominent due to the fact that the main focal concepts was "identity, continuity of the solids, variety in solids and spaces and human association instead of vast open space" in the area. [175]

Figure 3. 26 Physical plan of Ataköy 7-8 neighborhoods
(Günay, 1995: 47, 48)

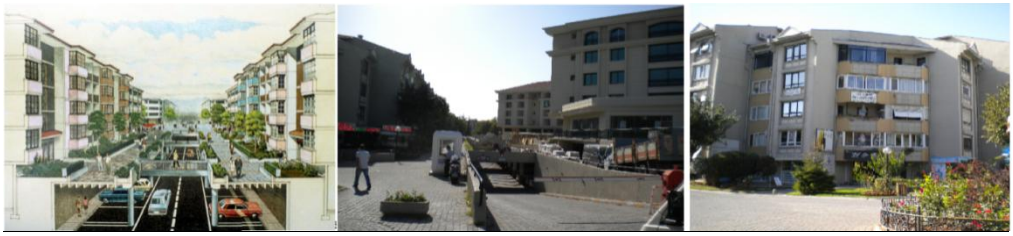

Figure3. 27 Underground transportation system in Ataköy 7-8 neighborhoods
(Günay (1995: 49) and Personal Archive (October, 2012) (last two photos))

Figure 3. 28 Inner court of building blocks
(Günay (1995: 50) and Personal Archive (October, 2012) (last two photos))

As the blocks are in middle-rise and supplies inner court in the middle of the blocks, one side of the flats faces the street side and the other faces the inner court, park in other words. Thus, it can be said that dwellers have the opportunity of having both environmental and social contact in this middle-rise environment. On the other hand, the rooms facing the interior court are bedrooms; that is why the interior court is closed by doors after midnight until early in the morning by site administration.[176]

[175] Günay (1995: 47) Ataköy 7. Ve 8. Mahalleler: Bir Tasarım Deneyimi. Mimarlık 264.
[176] This information was gained by security stuff of the neighborhood.

The main structure of the neighborhood is streets and small squares at the intersection points of the streets. Togetherness of pedestrian and vehicle has been achieved thanks to slowed-down streets. Inside of this interaction, commercial uses that locate at the corners of the buildings have important places. According to Günay, these corner commercial uses, located at the entrances of the buildings, are both increasing activities and objecting to the functional zoning of CAIM.[177]

3.1.4. Discussion of Progressist vs. Culturalist Concepts in Urban Design Considering CIAM and Team 10 in Terms of Their Creating Social and Environmental Communication Spaces

According to Günay, the differentiations in space understanding of CIAM from the beginning of the congresses till the end can be categorized into two conceptional frames; *progressist* and *culturalist* design approaches.[178] In the core understanding of the former, there exists answer to the needs of the society. It comprises excellent rationality inside. Emergence of the progressist model on urban form was as "continuity of voids, simple geometric order and straight line symbolism".[179] According to Günay, this model of urban design fits best to the pre-war industrial and capitalist cities which coincide with the ending of the 19th century and beginning of the 20th century until the end of first five meetings of CIAM. On the other hand, culturalist model supports the human synergy as a revolt against the isolated environment created by progressist model which was based on continuity of voids.[180]

Choay thinks that the principles of design should be "irregularity, imagination and asymmetry" as an explanation of culturalist model[181] where Günay thinks that this philosophical system corresponds to the post-war period of time.[182] At the same time, Bastlund explains this era with the differentiation in architecture in scales, height and style.[183]

Some of the younger members of Team 10 had produced their principles which are parallel to one another in terms of creating social interaction as the newest main principle after CIAM. As mentioned before, Günay has separated the eras as prewar and postwar in terms of culturalist and progressist movements in which the Team 10 coincides to the culturalist side of spatial organization. He states that Otterlo meeting which was arranged by Team 10 members in Holland after the end of congresses in 1956 was done in 1958 and comprised both culturalist and porgressist understandings included.[184] Even though the part of Team 10 which was explained until now can be thought as culturalist side by propagating low-rise groundscapers in urban area, Günay states that some other space understanding of Team 10 members can be categorized in progressists side even after the postwar era.[185] In this sense, Metabolists such as Kenzo Tange, Yone Frieman, Archigram, and Paolo Soleri are taking the lead who basically tried to bring human association and high-rise megastructures into together.[186]

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[177] Günay (1995: 49, 50)
[178] Günay, 1988.
[179] Ibid (1988: 25)
[180] Günay, 1988.
[181] Choay (1969: 104, 105)
[182] Günay, 1988.
[183] Bastlund (1967: 46)
[184] Günay (1988)
[185] Günay (1988: 37, 38)
[186] Günay (1988: 37, 38)

3.2. An Overall Evaluation and Criticism about High-rise Residential Buildings

3.2.1. The Distinction of High-rise Buildings From Middle and Low-rise Buildings in terms of Creating Social And Environmental Communication Spaces

As the high-rise buildings have been discovered after the industrialism, they have brought a new kind of perception on architecture. High-rise buildings have brought third dimension to the urban area which is height as mentioned in the second chapter. Together with this technological development in the construction sector, superstructures emerged in urban field which were based on economic reasons at first. And then, superstructures have become an architectural element that direct international architectural styles.

Mainly the reason of creating a differentiated urban form by high-rise buildings was that height was giving an advantage of offering a new architectural notion. As can be seen in the Figure 3.29, there exists high-rise, middle-rise and low-rise architectural forms in the same urban density located in the same size of land which have different kind of spatial orders. This image gives the basic differentiation of high-rise building form from the other forms in size. According to Cheng, firstly, high-rise building has the opportunity to create open area, which can sustain some needs of the community like library, school, etc. On the other hand, middle-rise buildings can produce courtyards which resemble to common places of that middle-rise block and sustain the total use of the land. And low-rises split open land into small and individual parcels for private use which restricts common uses of the society.[187] Thus, it can be said that the importance of high-rise building in a spatial manner is that it lefts high portion of surrounding land while it rises in vertical which was discussed in CIAM architectural notion in previous part.

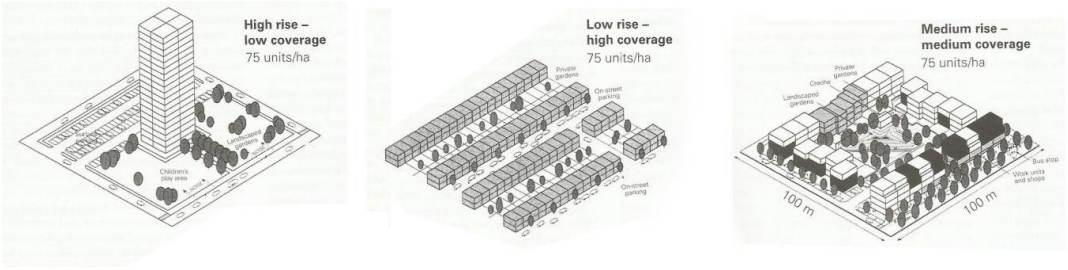

Figure 3. 29 Production of particular kind of building forms with the same densities
(Heng & Malone-Lee, 2010: 44)

In order to comprehend the spatial differentiation which was brought by high-rise buildings on urban environment from a deeper sense, Günay's words should be noted. According to Günay, the physical space can be described in two aspects depending on its evolution process, which are *Biophysical System* and *Psychosocial System*.[188] According to him, these two systems should be integrated:

> "McHale's argument covers the role of superstructure on the society; as well as the ecological context of man-environment debate. His analysis stresses on defining the *human settlements* in the frame of *technological*, *psychosocial and biophysical settlements,* which counteracted with the environ systems. McHale's framework was further consolidated by the author (Günay) to integrate the bond between settlement systems and behavioral

[187] Cheng (2010: 9)
[188] Günay (1999: 45-49)

environment. Hence the second framework in the analysis of urban design was developed: The Biophysical and Psychosocial Systems."[189]

Due to the high portion of openings around the superstructures, Günay reconciles these technological urban elements with the intimacy of man and biological system in his book *Urban Design is a Public Policy*. This consolidation in between man and nature in a physical space is described as the former; *Biophysical System.* On the other hand, *Psychosocial System* is more related to the traditional urbanization that improves societal relations without technological descriptions which can be defined in middle or low-rise buildings.[190]

Table 3.1 which was rearranged by Günay shows that high-rise buildings which locate in revolutionary side of the conceptual framework of urban design have brought new perspectives on the urban area in two respects after its discovery; *functional criteria* and *space mass* terms; when it is compared with the other side of the table as an evolutionary side of the design. When considered through the perspective of *functional criteria* of superstructure notion; in other words high-rise building keeps its functional location as the representative of futuristic ideas of architecture and urban design. Functional zoning in urban scale and designers in architectural scale becomes prominent. As a result of that, this conceptual part of urban design reflects *form follows function* notion. Accordingly, *space mass form* produced by superstructure is designed with the aim of constituting universal design in architectural form which has rigid lines generally in rectangular forms. In this direction, biological features become prominent in designing mass which was the notion generated after CIAM meetings. As the superstructures are tools of creating open areas around the mass, these areas were introduced as the public spaces in the continuing form of voids.

These ascriptions on urban design is linked directly to the urban design theory by Günay which is divided into two categories; *deductive and inductive sets*. As can be seen, deductive environment was correlated with functional environment of superstructures due to the fact that this futuristic environment was imposed by upper scale to lower scale depending on its being a universal form. On the other hand, the traditional environment was supposed to be in more inductive side of the planning with its spontaneous and fragmented basement depending on self-regulating organization of urban environment.

As a result, it can be referred that emergence of superstructures where high-rise buildings stand is a breakpoint in planning and architecture. It was produced by the emergence of technological improvements together with the economic conditions and had manifested a new kind of spatial perspective in function and form in the fields of urban planning and architecture. However, even the revolutionary features of them, modernist high-rise buildings have taken many counter criticisms especially their application on dwelling areas.

[189] Günay (1999: 49)
[190] Günay (1999: 49)

		BASIC ATTRIBUTES OF URBAN DESIGN APPROACHES*	
		MORE DEDUCTIVE SET	MORE INDUCTIVE SET
FUNCTIONAL CRITERIA	EPOCH	looking to the future,progressist	looking at the past, nostalgic
	SOCIETY	modern, reflecting its time	traditional, place community
	PROCESS	development predetermined	evolution in time
	INTERVENTION	complete, one designer	spontaneous, many designers
	WHOLES-PARTS	unchanging parts	changing parts
	CONTROL	total and comprehensive	spontaneous and fragmented
	GROWTH	by addition	through changing
	ORGANIZATION	regulation predetermined	self-regulating
	TRANSFORMATION	guided	spontaneous
	PARTICIPATION	experts	citizens
	PROPERTY	design public space	guide private property
	SIZE	design one large unit	guide many small units
	FUNCTIONS	separated	intermingled
	FUNCTION-FORM	form follows function	function might follow form
	ZONING	land use oriented	activity oriented
SPACE MASS FORM	FORM	universal, international	particular, regional
	SPACE-PLACE	anonimous space	territorial place
	PLACE	non-place community, alienation	place community, belonging
	SPACE	air, sun, greenery	enclosure
	URBAN SPACE	sterile and bureauratic	cozy and liberal
	CONTINUITY	continuation of voids	contiguity of masses
	UNITS	standard and pure	varying and ornated
	NEW UNITS	contradicting	contextual
	FORM	net and legible	ambiguous
	SHAPE	regular, rectangular,	irregular, curvilinear,
	CONSTRUCTION	technologic	conventional
	AESTHETICS	object oriented value	subject oriented judgment
PHILOSOPHICAL** BACKGROUND		revolutionary	evolutionary
		mechanistic	organismic
		rational	romantic
		rational	empricist
		deterministic	probabilistic
		semiologic	meaning oriented
		etc.	etc.
		etc.	etc.

*the characteristics denoted are tentative, they may be changed or reinterpreted, and design approaches may cover characteristics from both sets,
**the author is not competent in this field, only attracting attention to recent philosophy based argumentation, which is building up a new ideological framework

Table 3. 1 Characteristics of urban design approaches rearranged by Günay (Günay, 1999: 65)

3.2.2. The Fall of Modernist High-rise Residential Buildings

To begin with, as Team 10 caused the criticisms of CIAM, it brought the criticisms of modernism and high-rise buildings in following years. High-rise residential blocks that were produced according to CIAM principles had been subjected to many criticisms from many aspects. Some of these areas turned to slums which situation can be described as the lack of social relations between dwellers as a

result due to many reasons. Peter Hall describes these reasons by giving the example of constructed Pruitt-Igoe in 1955 by Minoru Yamasaki and dynamited in 1972 in U.S. as the symbol of high-rise slum clearance. The fall of modernist high-rise buildings has been described by Hall in three aspects; the socio-economic conditions of the dwellers, the controversial relationship between dwellers and the life style that was provided by these high-rise buildings, and urban form and architectural space created in these high-rise blocks.[191]

Figure 3. 30 Dynamiting Pruitt Igoe Housing in 1972 as the symbol of decrease of modernist high-rise buildings constructed in 1955
(http://en.wikipedia.org/wiki/File:Pruitt-igoe_collapse-series.jpg (accessed on 6th of December, 2012))

Firstly, the socio-economic condition of the dwellers especially in Pruitt-Igoe Housings was "including many welfare-dependent, female-head families" moved to the area. At the same time, homogenous structure of people from low income groups made up of the minors of the society had been produced when compared to the whole of the society.[192] On the other hand, a number of flats which constitute forty percent of the whole units stayed were left empty which created an uncontrollable zone. These were the beginning point of slumming process of Pruitt-Igoe Housing.

Secondly, the reason of high-rise slums was the contrast between the dwellers' social background who were generally from low income group of immigrants and the life style that high-rise buildings provided in order to create a new and modern human style. According to Hall, high-rise building life style was highly appropriate for middle-income groups to perform their "elegant" life style. However, these lower income groups of dwellers with rural background with high number of children could not handle these buildings.[193]

Finally, Oscar Newman explains architectural reasons of high-rise slums by using the example of Pruitt Igoe Housing in terms of whether creating defensible space inside the buildings or not. In this term, Newman states that the housing area was constructed according to the principles of CIAM which depends on high-rise buildings located in vast greenery. The first floors of Pruitt-Igloe houses were distinguished for communal activities. At the same time, long corridors on every third floor were sheltering some other communal activities such as "laundry, a communal room and a garbage room". However, these arrangements were not enough for saving the area from being slum because Newman finds this situation related with the dwellers' not feeling themselves as a part of the area due to the miscommunication between higher floors and ground.[194]

[191] Hall (1988: 235-240)
[192] Hall (1988: 235-240)
[193] Hall (1988: 239)
[194] Newman (1996: 10)

Figure 3. 31 Proposed corridors inside the buildings and the situation of the corridors after the building was opened for the use in Pruitt-Igoe Housing
(Newman, 1996: 9, 10)

The most important handicap of modern high-rise buildings was their not producing defensible spaces due to the double edged staircase system for Newman. According to him, these spaces are called as "no-man's land" where the crimes are committed in residential areas. Even though these areas such as gardens, corridors, staircases and lobbies are the common places of the whole dwellers, these places are not protected by anyone. Thus, crime is the negative consequence of dereliction of high-rises.[195] According to Newman, this is the issue of territoriality which can be gained in low and middle-rise buildings due to the existence of the hierarchies of the space such as public, semi-public, semi-private and private zones.

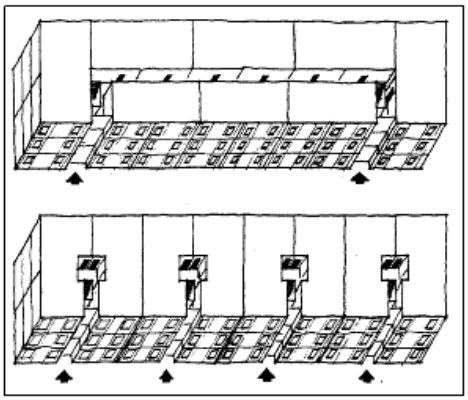

Figure 3. 32 Double loaded corridor system and proposed corridor system in high-rise buildings in order to increase the control and territoriality of the building
(Newman, 1996: 22)

Except for the double edged staircase system in modern high-rise dwellings, another explanation can be made based on the Newman's definition of Pruitt-Igoe Buildings as determining the public uses in the basement and first floors which opens the interior of the building to the public uses.[196] As a result, public has penetrated to inside of the residential building by dividing public and private in a strict way inside of the building. This is another concern of territoriality which hinders to create a transitive zone in between public and private. Even it will be discussed in detail, it can be noted that this transition area in between public and private spheres strengthens the control and sovereignty of the residential environment, and develops identity feeling.

[195] Newman (1972) Defensible Space People and Design in Violent City
[196] Newman (1996: 10)

3.2.3. Evaluation of The Criticisms About High-rise Residential Buildings in terms of Territoriality

There have been many examples of urban form comprised of high-rise buildings. Even though, high-rise buildings were a breakpoint in the field of urbanism by creating a totally new environment in the 20th century, they have been subject to many counter-views. That's why they have been criticized from many aspects by many philosophers who dealt with urbanism.

The criticisms can be divided into two: Architectural problems which are resourced by the nature of the high-rise buildings, and urban problems which are resourced by the approach of modernism in the field of public and private continuity. Both sides are highly related to the feeling of territoriality which is the main behavior of human in their sheltering areas as highly related to socialization or face-to-face interaction of human. In this part of the thesis, the criticisms of the high-rise residential building will be discussed in terms of territoriality with three sub-titles of exterior boundary, interior boundary and proximity, which are the main features resourced by both the nature of high-rise buildings and strict public and private separation resourced by modernist architectural approach.

3.2.3.1. Definition of the Territoriality and Its Impact on Socialization

Any kind of spatial control necessitates *territory* in order to limit and separate the areas for making the space explicit where activities locate. In this notion, Madanipour clarifies territory as a significant place where constituted and consistently controlled by its users or dwellers.[197] The word of territory brings along another concept again focused on controlling, which is *territoriality*. It is about environmental psychology and defined by environmental psychologists as: "a set of behaviors and cognitions a person or group exhibits, based on perceived ownership of physical space".[198]

While the territoriality instinct of animal is basically related to the "survival game", human territoriality has a featured importance on human communication.[199] In this direction even though it is a biological necessity as human is an animal, the exposition of territoriality is culturally provisioned.[200]

The reflection of territoriality on human and space emerges with the feeling of security. Security is a kind of social mechanism reveals with domination. Here, private property which is the basic degree of the sense of territoriality has important place both adjuvant and detractive of aggression. According to Freud:

> "In abolishing private property we deprive the human love of aggression of one of its instruments, certainly a strong one, through certainly not the strongest. By limiting aggression, which is an essential part of human nature, and direct it towards the outside world, humans are able to channel their instincts for constructive purposes. By abolishing private property, aggressiveness will not disappear, as the communist hoped;

[197] Madanipour (2003: 50)

[198] E.T. Hall defines territoriality as "the act of laying claim to and defending a territory is termed territoriality" in his book of The Silent Language (1959: 187).

[199] E.T.Hall, 1959

[200] Porteous (1977: 21)

aggressiveness predates property ownership, as evident from early childhood and early periods of human civilization."[201]

As the territoriality is about the control due to the sense of security in humans, then it brings the aggression with it, as in animal territoriality. This situation is the indicator of the origins of territoriality feeling, or at least where it is not originated from. According to the studies, the origin of the territoriality behavior of man could not be matched with his brain functions, but the innermost of old brain pattern like unconscious acts which still emerges in man. In this direction, it is thought that the culture should be the basic determiner of the behavior.[202]

According to Madanipour, researches about human and animal behavior have showed that if the borders are strictly lined, the aggressive behavior rises whereas if the territory differentiations are in a blurred and transitively condition, then the aggression decreases. In this case, the transition elements gain importance in the formation of physical environment. That is why divisive elements of spaces should be realized based on their psychological images on human.[203]

In spite of the fact that many thinking and categorization have been developed in territoriality, there will be discussion of the ideas of Porteous who has divided the territories around the man into three: *Personal space, home base* and *home range borders* emerged according to *microspace, mesospace and macrospace behaviors*.[204]

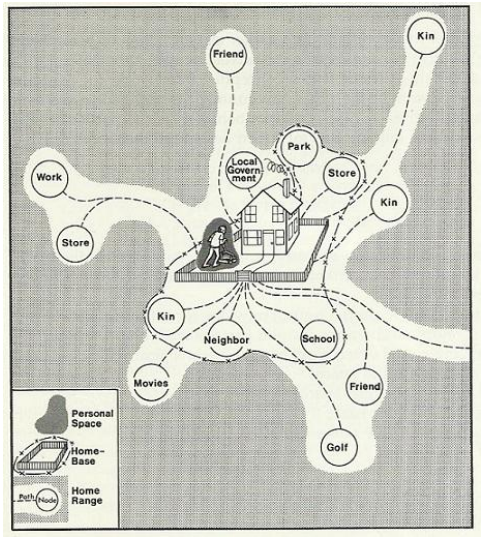

Figure 3. 33 Territorial Organization Schema of Porteous
(Porteous, 1977: 29)

Firstly, *personal space* basically refers to the space surrounding the body for both protection and communication purposes.[205] It cannot be seen and it moves as the body pulls away.[206] Every human

[201] Freud (1985: 303, 304)
[202] Porteous (1977: 21)
[203] Madanipour, (2003: 52),
[204] The book of J. D. Porteous written in 1977; Environment and Behavior: Planning and Everyday Urban Life
[205] Madanipour (2003: 26)

reacts as another one comes closer to her/him, so there is always a limit around the person which is the boundary of personal space. One example of this is the elevators; when more than one person who does not know each other enters to an elevator, they do not come start to feel uncomfortable due to their intersected personal spaces.[207]

Secondly, *home space* is the core territory of human procuring personal space. It is also the protection area from the outer world and others' beholding which is also giving position to take a part in social arena by giving opportunity of socially being known. [208]According to Madanipour, the territory composed of a small group where home space is emerged gives chance of proliferation of human, notwithstanding that a space for reassurance of psychological necessities of human kind.[209]

Considering the physical continuum of the spaces, there exist many different associations of public, semi-public, semi-private and private spaces due to the differentiated relationships among these.[210] The separation of private realm from the public is not strict because there are always some physical and social relations of householders with the public realms. That's why there is possible persistence on space in between most private and most public realms.

It can be deduced from Madanipour that home space constitutes public and private realm inside. The most private space is bathroom which suits for single user. The other dominant private space is bedroom where persons can satisfy their personal space and self-esteem because of the fact that if home is important for gaining the identity in the society, the bedroom assumes the same responsibility in the house. The gathering place is living rooms or kitchens which has more public base than the others. As these public and private spaces will be connected, the corridors act as jointer spaces of both public and private spaces, which can be also resembled to semi-public and semi-private spaces due to their capability of transition.[211] According to Madanipour, the main door of house is behaving as the junction point in between interior and exterior. In this point, some physical elements like stairs, landing platform have importance in providing continuity in between spheres. This continuity formed by physical elements rationalizes the space and creates social relations because these spaces are a kind of persistence of street in the house and continuity of house through the street. The garden or publicly owned outside space is being structured by the owners and is spying by the other dwellers in neighborhood. This kind of interaction structures the basement of socialization.[212] It is the constituent of gaining identity. As Saunders states;

> "The home is a core institution in modern society. It shelters the smallest viable unit of social organization – the household – and basic patterns of social relations are forged, reproduced and changed within it. It is the place with which individuals can most readily identify and it easily lends itself to the symbolic expression of personal identity. It offers both physical and psychological shelter and comfort. It is the place where the self can be expressed outside of social roles and where the individual can exert autonomy away from the coercive gaze of the employer and the state."[213]

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[206] Madanipour (2003: 22)
[207] Barlas (2006: 29)
[208] Madanipour (2003: 71)
[209] Madanipour (2003: 71)
[210] Madanipour (2003: 76)
[211] Madanipour (2003: 76, 77)
[212] Madanipour (2003: 76, 77)
[213] Saunders (1990: 311)

Thirdly, *home range* activities can be matched with public area. As the private space comes to the meaning of protection zone from outside and harbors everything about intimate world and privacy, private space is basically the space of revelation. Public space determines communal activities in cluster, neighborhood, or city scales. That is why public space is where human activities and social relations are usual. Neighborhood or cluster is crucial on the creation of common space which is fundamentally identified by "its limits and its focal points".[214] Through, people will live in the same place with the familiars, or with others who resembles them coming from the same background which is important for the generation of social interaction.[215]

Barlas discusses the link in between territoriality and control feelings and their reflection on urban arena in his book of "Urban Streets & Urban Rituals" from another perspective:

> "*Personal space, privacy, territoriality* and *behavior settings* are terms that refer to different types of spatial environment. The first three are closely linked. Common aspects that we can add to these four are *personalization* and *personalized space,* and they have to do with territoriality. There are different definitions of privacy. Nevertheless, all of them point to one aspect: control. This control is about a person's or a group of persons' ability to arrange his/her/their interaction with others. The purpose of privacy is fourfold: personal autonomy, release of emotions, self-evaluation, and communication (Westin, 1970)."[216]

That view of Barlas about controlling the environment by dwellers and its reflection on space with the territoriality by spatial hierarchy is highly linked to the relations of man with each other arranged by the physical order. As a result, territoriality is an issue highly related to the control of environment. One can feel belonging to a space only by controlling his/her environment. As belonging to a place is developed by territorial control, either face-to-face relations or thus socialization on space is developed thanks to the borders drawn according to territoriality.

3.2.3.2. Exterior Boundaries

To start with, Oscar Newman is one of the mostly known criticizer of high-rise building especially which has emerged after the modernism movement. Newman states basically in his book *Defensible Space People and Design in the Violent City* that the problem which high-rise buildings bring is their not creating *defensible space* as a result of decreased control feeling due to the nature of the buildings.[217] According to him,

> "Defensible space is a model for residential environments which inhibits crime by creating the physical expression of a social fabric that defends itself. All the different elements which combine to make a defensible space have a common goal-an environment in which latent territoriality and sense of community in the inhabitants can be translated into responsibility for ensuring a safe, productive, and well-maintained living space.

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[214] Madanipour (2003: 141)

[215] Madanipour (2003: 142)
"As learnt through many decades of, at times painful, experience, it is possible to create physical proximity between people but impossible to create the social bounds which are the hallmarks of a community."

[216] Barlas (2006: 29)

[217] Newman, 1972.

> Defensible space is a surrogate term for the range of mechanisms-real and symbolic barriers, strongly defined areas of influence, and improved opportunities for surveillance-that combine to bring an environment under control of its residents." [218]

In this respect, Newman states that the defensible space can only emerge in a physical environment by creating an order of the hierarchy on the space. Here, the continuity of the public and private fields gains importance in spatial term. The expression of this hierarchy and continuity of the space in between public and private is with the terms of "semi-public" and "semi-private" areas.[219] According to Newman, defense action of the dwellers exists by the existence of some transition zones like "the hallways, lobbies, grounds, and surrounding streets". [220]

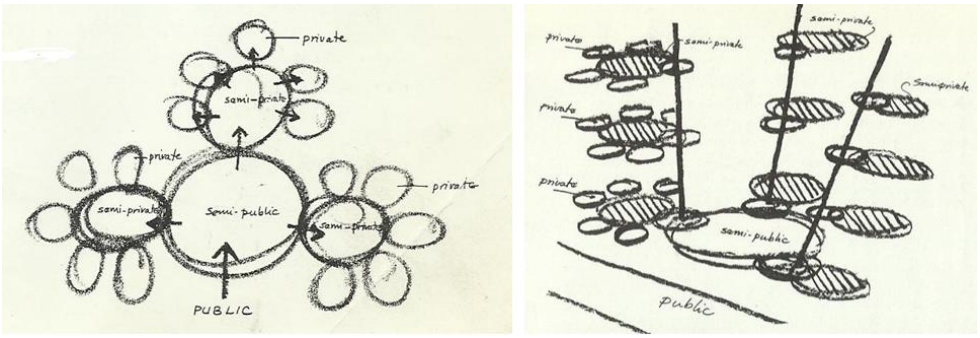

Figure 3. 34 Diagrammatic expression of semi spaces by Oscar Newman
(Newman, 1972: 9, 10)

Newman's diagram of spatial hierarchy for defense purpose is for the sake of creating a transitional zone; in other words, spatial boundary in between public and private. It can be said that this boundary provides a gradual continuity between public and private spheres, not a strict separation between them. In fact, other than defending the space, the studies relate the lines which constitute the relations between public and private with the environmental behavior of human, thus the creation of social relations in the cities. In order to explain the meanings of lines in urban environment and their impacts on socialization, we should firstly identify the public and private spheres and areas due to the fact that they are the main concepts which emerge with the creation of the city and the elements of making the sense of drawing the lines.

Public refers to the public interests, public intentions, activities or uses. The concept of "public" shelters two different identifications; public space and public realm. Madanipour mentions in his book of *Public and Private Spaces of the City* as:

> "Public space (or public place) refers to that part of the physical environment which is associated with public meanings and functions. The term public sphere (and public realm), however, has been used to refer to a much broader concept: the entire range of places, people and activities that constitute the public dimensions of human social life." [221]

[218] Newman (1972: 3)
[219] Newman (1972: 9)
[220] Newman (1972: 8)
[221] Madanipour, (2003; 4)

On the other hand, private realm is highly related to the privacy and concerns the individuals and their life own private lives, bodies, minds, even dreams. In this sense, private is the contrary side of the public. Madanipour identifies private as the relativeness of public as:

> "If the body is the private realm, the other bodies constitute the public. If private property is the private realm, what lies outside private possession and control is the public. If the household is the private realm, the larger organizations and the rest of society is the public."[222]

After the discussion of how the public and private is explained, the relationship in between these should be examined in regard to socialization. Boundary is mainly a tool acting as a divulsor between public and private realms and preserves one from invasion of the other. As a result of the boundaries, the space becomes well-defined which is thought as the manifestation of social interaction in the cities. According to Madanipour:

> "By defining space, enclosing it within boundaries which separate the public and the private, the social relations take a spatial form; a concrete and relatively fixed representation of constantly changing social phenomena…The boundary between the public and the private, as any other form of boundary, is an expression of a power that can subdivide space, give its subdivisions different meanings, and expect the others to share these meanings by believing in them."[223]

Here boundary becomes interface of spaces and mediatory for human communication. As the boundary should not be strict for increasing the communication, the public and private areas should also not be sharply extricated like white and black.[224] Thus, the main aspect about territorial control is abstract and concrete boundaries. There are differentiated degrees of territoriality which are delimited according to invisible or strict boundaries surrounding the mind, body and environment of the man.

Newman discusses that these transition zones or designed environment are intangible barriers of creating territoriality which were inherited from the traditional urban environment.[225] However, a high-rise form cannot be comprehended as an intangible form of territorial division. As Newman states:

> "A single high-rise building perceived as a unit defined by its exterior walls is itself a form of subdivision and territorial identification. Reinforced with symbolically defined grounds, and with sufficient space around it to be recognized as an entity, it can become a potent form of territorial expression."[226]

In this respect, Newman believes that the old culture of dwelling which was passing from generation to generation in years did not pass to the modern day architecture. According to him, this tradition involved "territorial definition and symbolization" which cannot be observed in modern-day high-rise and high-density environment.[227] In order to understand his criticisms about high-rise buildings in

[222] Madanipour (2003: 113)
[223] Madanipour (2003: 60, 63)
[224] Madanipour, 2003, p.66
[225] Newman (1972: 8)
[226] Newman (1972: 54)
[227] Newman (1972: 6, 7)

terms of territorial borders, firstly the traditional building and territorial border relations should be understood. Here, Barlas describes the territorial borders of low and middle-rise urban environment with respect to Newman's spatial hierarchy. According to him;

> "Front yards of single-family residential units are examples of semiprivate spaces, which may not prevent the perceptual intrusion of others. Semipublic spaces are not subject to possession by their users. Yet, the users can still create a feeling of possession. Classrooms and front yards of multifamily residential units can be given as examples for semipublic spaces.
>
> When multi-level dwelling units are considered, there is not much difference. Perhaps, configuration and territorial definition of different spaces change. For instance, the yards are still semiprivate but people who dwell in the building share the responsibility of their surveillance and control. If the visual intrusion of those who pass by is also of concern, then these yards can well be seen as semipublic too. Therefore, there is a thin line between various categories of intermediary spaces; or rather, there is no abrupt separation between them. They are nested with each other."[228]

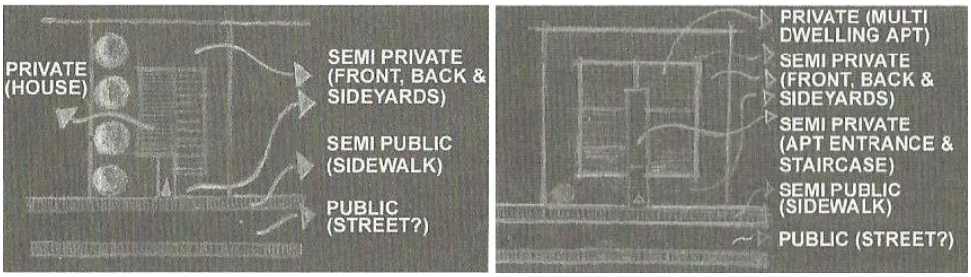

Figure 3. 35 Single and multi-family dwellings drawn according to territorial expressions by Barlas (Barlas, 2006: 32)

If one turn his direction to the high-rise buildings, it can be followed that this territorial organization does not exist in the ground level of the modernist high-rise residential buildings. Newman defines the surrounding of the modernist high-rise residential buildings as "no-man's-land". According to him, there is neither public nor private areas. That is why nobody shoulders the responsibility of the area which decreases the sense of territoriality, surveillance and belonging.[229] On the other hand, Barlas gives a parallel explanation for the situation. According to him, as the buildings rises in vertical, the intermediary spaces will be lost which means a destrcution in between the bond of street and dwelling. Thus, the continuity in between public and private spheres are broken, as a result of strict borders of building walls.[230] According to Barlas, this situation is relevant with glance of modernism on the street. Since the street was seen as the resources of all negative aspects dealing with the city together with modernism, it was tried to be ignored where the buildings were rising higher than ever before.[231] The pedestrian road was supposed to be passing through the vast green areas around the high-rise buildings while motor roads gained importance together with the rising of automobiles. As a result, as the motor roads widens, street and building turned to be

[228] Barlas (2006: 31, 32)
[229] Newman (1972: 27)
[230] Barlas (2006: 108, 109)
[231] Barlas (2006: 121-126)

unconnected which was a lost relationship by means of distance.[232] As the street is the socialization sphere, Barlas puts the relations in between high-rise buildings and street as:

> "The towering skyscrapers cut the individual off public spaces, but, then again, there is no clearly defined public space to be cut off from. Designated public spaces, the verdant parks from which the buildings jut out do not offer any territorial marker, nor do they provide any hierarchy of spaces. There are no intermediary spaces and this hinders the transition from private to public realms or vice versa. Zones of mediation are limited to those of interior hallways in buildings. This incidentially proved to be a mistake in the later Modernist schemes such as Pruitt-Igoe."[233]

In sum, the criticisms about high-rise environment which are generally based on the idea of territoriality and control issues are mainly the problems resourced by the continuity of public and private spheres in modernist blocks. Accordingly, the dealers of the issue fundamentally defends that the modernism and modernist urbanization killed the traditional division of the space which is creating intermediary or semi-spaces. The main reason was not the form of the building, but the creation of the space because as it was mentioned before, the modernism has advocated the continuity of the voids, not the solids in which the pedestrian circulation will be provided.[234] However, as (generally) high-rise buildings were swimming in this pool of voids, the space could not be defined which has created the "no-man's-land" according to the words of Newman.

On the other hand, beyond the spatial separation as a result of territorial definition, the issue of spatial boundaries is highly related to the social contact of man. The direction of the criticisms about high-rise environment that was emerged with the principles of modernism ends with the socialization problem. It is strongly criticized that this high-rise environment cannot define any street pattern. Actually, this situation is valid for the "point block" residential environment that cannot provide any linearity which brings people to contact. However, height becomes insignificant while the building is in linear form in the field of arrangement of social contact. One of the best examples of this high-building environment in linear form can be İzmir Promenade. It is high-rise environment and achieved the human interaction as a result of the letting of urban form to street layout.[235]

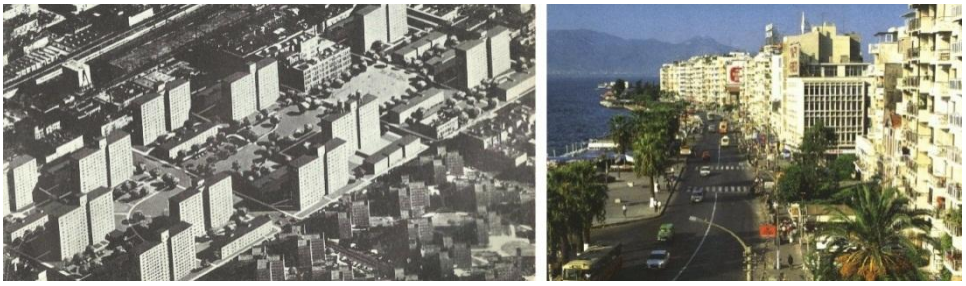

Figure3. 36 High-rise "point" blocks in New York and Izmir promenade in linear form (Newman (1972: 11) and http://www.forumalev.net/ege-bolgesi/22043-g-zel-zmirim.html (accessed on 22nd of December, 2012))

[232] Barlas (2006: 129)
[233] Barlas (2006: 132)
[234] Barlas (2006: 149)
[235] Barlas (2006: 145)

On the contrary, even the territoriality has always been reconciled with the social contact, there exists some opposite examples. For example, New York and Hong Kong city centers with high-rise buildings provide face-to-face interaction without any intermediary space and territorial markers. This situation has mainly two reasons: These areas are not residential areas but have commercial or shopping functions[236], and there exist overcrowding due to their locating in the city center which ends up with the high rate of face-to-face contact.

3.2.3.3. Interior Boundary

After the exterior territorial separation, there are many discussions and criticisms about the interior space of the high-rise buildings which were leaded by Newman. According to him, there are some specific interior spaces which are deprived of control in high-rise buildings. The first one of these is the elevator due to its being a closed box and opening to the crime events. Then entrance lobbies follow elevators in high-rise buildings. The main problem of the entrance lobby is its having a restricted visibility to control the area. Fire stairs and secondary exits are the other spatial arrangements of high-rise buildings.[237] Newman links the weaknesses of these spaces to the double-loaded corridor system of high-rise buildings and states that the main reason of the crime in high-rise buildings is this structural pattern.[238]

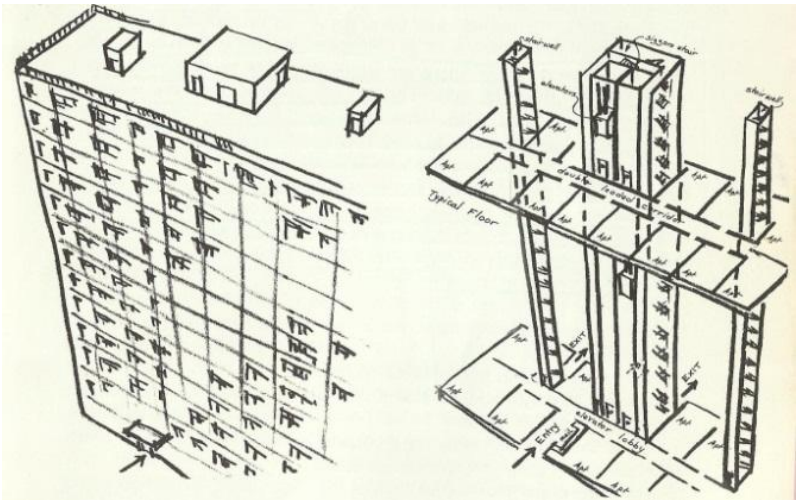

Figure 3. 37 Double-loaded corridor system of high-rise buildings with the elevator in the middle of the box
(Newman, 1972: 23)

Mainly the accessibility of these areas by public is the first reason of the crime together with its "left open" and "anonymous" features with the uncontrolled nature of these spaces.[239] As the place is both publicly used but cannot be controlled by the dwellers of the building, crime rates rise in these sections of the building.

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[236] Barlas defines the features of traditional shopiing streets as "They still mark the seperation between public spaces and private spaces, but do not restrain bodily movement from one to the other by means of physical barriers" which shows parallelism with New York city centers spatially. (2006: 99)

[237] Newman (1972: 33, 34)

[238] Newman (1972: 34)

[239] Newman (1972: 25)

Another definition of this situation by Newman is its being "no-man's-land" as previously described for the exterior area of high-rise buildings. [240] As these sections of the buildings, like lobby, stairs, elevators and corridors are being attainable by everyone while being core inside of the building and spread until where the private zones begin, these areas cannot be defined as neither public or private, nor intermediary space. As a result, these undefined zones which are accessible by public but are not used by the dwellers decrease surveillance. There is no territorial definition of these left areas.

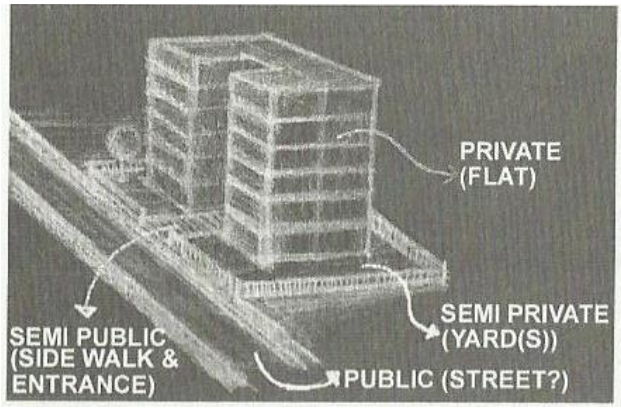

Figure 3. 38 Territorial definition of multi-family dwelling unit drawn by Barlas
(Barlas, 2006: 33)

In order to understand interior territoriality of the high-rise buildings, the drawing shown in Figure 3.38 drawn by Barlas can be examined. Except for the public space (street) as being used by everyone and private space (dwelling) as a property and its use belongs to the owners, semipublic space is defined as sidewalk and entrance hall which was commonly used by the dwellers but also accessible by public, and semi-private space that is only used by private owners of the building in a common sense like garden. Corridor can also be defined as semiprivate area due to the fact that it is commonly used. This territorial definition was made according to the level of control and property in middle-rise building. Considering the high-rise buildings, according to the criticisms of Newman, high-rise building does not shelter this territorial definition which was defined as "no-man's-land" by him. There can be two main reasons of this lack of control. First reason is double-loaded corridor system of high-rise buildings in interior space according to Newman.[241] Second reason is the penetration of public sphere inside of this "closed box" high-rise buildings which has been the reason of strict separation of public and private spheres inside the modernist high-rise residential buildings. Pruitt-Igoe Modernist Blocks were the examples of this inference which created hazardous environment basement and corridors inside of the residential building. The penetration of public inside the building has similar results with the vast and undefined open spaces outside the buildings in terms of decreasing the territoriality feeling inside by restricting public and private continuity with intermediary spaces.

Similarly, as a result of the "closed box" nature of the, the inhabitants living inside of these kinds of buildings cannot match the flat and its dwellers to each other. That is generally resourced by the restricted visibility of corridor system from the outside which Newman complains. While a dweller is living in this double-loaded corridor system of building which does not represent any view from the outside to the inside or the opposite, he/she can only be informed of the neighbors living in the

[240] Newman (1972: 27)
[241] Newman (1972: 25)

same floor by meeting in the same floor corridor if there exists no other special place or activity to bring people in these residential areas.[242]

In order to solve the problem of surveillance in high-rise buildings, Newman gives some example of interior space. According to him, in order to break the control problem, the corridor of high building should be divided into parts of which different entrances will serve for the different parts. Together with this, the number of elevators will increase as they serve for the other parts of the building. Except for these, abovementioned access core should be visible. Thus, the corridors should have openness like window or balcony. These differentiations in corridor system have illustrations shown in Figure 3.39, which shows double-loaded corridor system with its invisible core by decreasing the surveillance on the top. The other illustration named as Alternative 2 shows the corridor lying lengthwise near the window and the Alternative 1 represents the separation of the building corridors into groups which annihilates double-loaded corridor system hidden in the core of the building. [243]

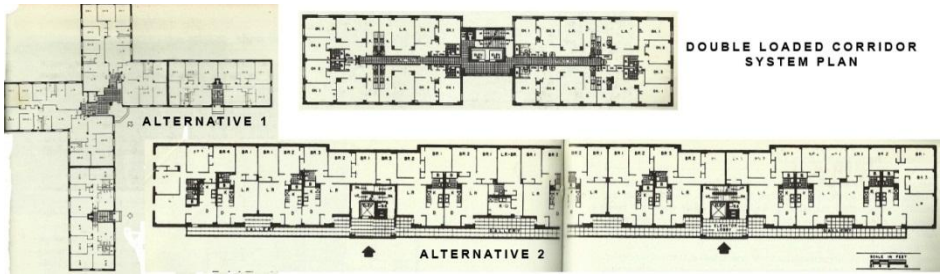

Figure 3. 39 A comparison in between double-loaded corridor system (in the top) and its alternative plans (in the left and the bottom) to increase visibility and surveillance
(Newman, 1972: 43, 94, 95)

3.2.3.4. Vertical Proximity

Height is another topic of high-rise building discussions in terms of territoriality. Referring to Gehl, Barlas states that one of the elements of territorial control is proximity. According to him, as the building rises in vertical, territorial control decreases.[244] This logic can be applied to the horizontal line. In this respect, Gehl describes the important links between proximity, activities and territoriality. According to him, the proximity can vary in different cultures in a different way but he measures and identifies this proximity depending upon people's perception of their environment in universal criterion in horizontal and vertical lines. Human's perception of others starts with the distance of 100m. From 100m to 70m, human can select the general physical features and the activities existing. Until 30m, some details can be comprehended, like age, fair style. In between 20-25m, emotions can be felt by watchers where the socializing starts. Thus, the distance from 20m to the closest is called social distance and can be categorized in 4 main groups; public distance is approximately in between 20m to 4m and valid generally for civil circumstances, and more closer is social distance nearly from 4 to 1.5 m. In this breadth, closer human relationships and interactions

[242] The author lives in a housing estate with 15-floor buildings. This result has been experienced by herself due to the fact that even though it has been one year to move this flat, it is impossible to know the other neighbores as they enter to the building and disappear, then.
[243] Newman (1972: 43)
[244] Barlas (2006: 108)

occurs like relations with familiar people. 1.5m and closer apply to closer relations like family, friends; thus, it is called personal distance.[245]

On the other hand, widening the space in between structures can also be defended as its decreasing control in order to extend the automobile road and increase the density of the traffic.[246] Even though the research made in San Francisco streets by Appleyard and Lintell in 1970-71 was practiced in order to understand the relationship in between activities and the quality of the street[247], it also shows that as the street widens and passing it gets harder by the people, it also causes the loss in control of the environment.

One can encounter with this kind of environment as a result of modernism principles generally composed of high-rise environment in order to provide some biological needs of a person; "sun, view and light". On the other hand, as a result of modernist principles, automobile was seen as the thing which the city planning will be based on. Thus, the motor roads with the highest speeds were formed by widening the voids in between structures and people.

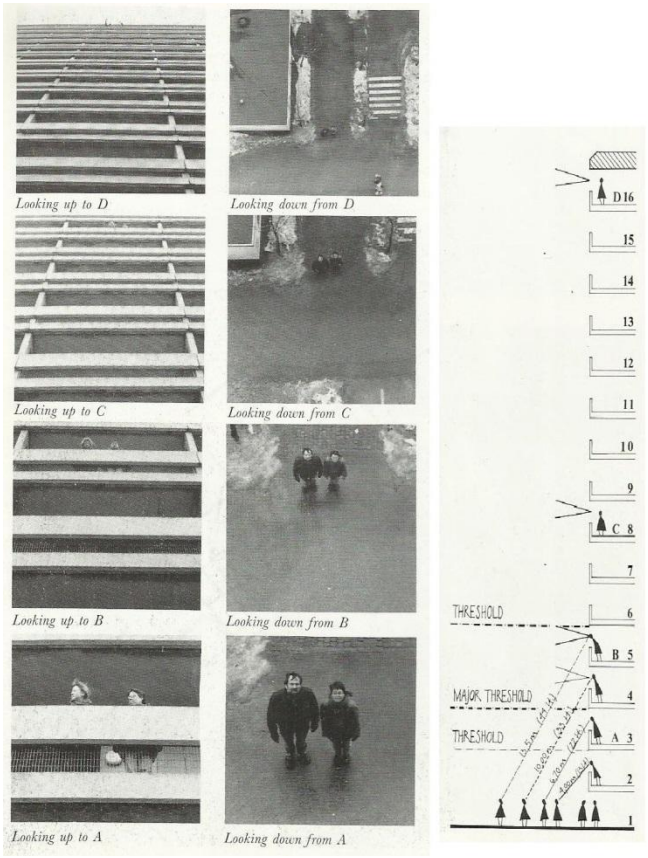

Figure 3. 40 The alteration of territorial control as rising in vertical line
(Gehl, 1987, 100)

[245] Gehl (1987: 99-101)
[246] This result was referred from the research of Barlas in his book of "Urban Strets & Urban Rituals" in order to find whether the traffic density affects socialization or not in a street. He also gives place to the interviews mad with users of this street. (2006: 118, 119)
[247] Gehl (2011: 34-37)

The vertical proximity has also important place on social reaction in between persons. Newman states in his book *Defensible Space People and Design in Violent City* that the territorial control of persons in their neighborhoods can be sustained by controlling their doorstep. This situation can be achieved easily in lower and middle rise urban blocks. On the contrary, Gehl states that as the floor number increases in an apartment, control of the persons who enter and exit from the apartment becomes harder because the objects are getting smaller and persons' faces are becoming harder to distinguish. [248] He states that:

> "Low buildings along a street are in harmony with the way in which people move about and the way in which the senses function, as opposed to tall buildings, which are not." [249]

According to Gehl, the threshold of following the entry of the block is fifth floor. After fifth floor, controlling the apartment entry is lowering. As the control of the entry is lost, the social reactions are getting decreased due to the lessened and indistinguished objects due to increased proximity.[250] Barlas explains this situation of decreased controlling after a threshold in terms of decreased sensory features of the users inhabiting in high-rise buildings. According to him, as the sensorial experiments of the people decreases, the territorial control of his/her on the space decreases, too. According to him, face-to-face interaction of human depends on his/her control of space (even it is not valid for every situation). This kind of environment which causes the loss in senses decreases the contact possibilities.[251]

In brief, the criticisms directed to the high-rise residential buildings can be grouped into two categories, high-rise residential building interpretation of modernism and the nature of the high-rise buildings which were bounded with the territoriality in this thesis. Firstly, modernist high-rise residential blocks have been criticized due to the fact that it could not achieve the development of face-to-face relations in vast open greeneries without creating any transitional spaces in the ground and it refused street by trying to bring street life around and inside of the building as being in Pruitt-Igoe Blocks or "Slums". As a result, the strict separation in between public and private spaces inside the buildings can be resulted with dangerous areas inside of the building. On the other hand, the excessive height of these residential buildings as its physical feature is causing the decrease in control feeling after a threshold which was interpreted in this thesis as the loss of territoriality in people's housing environment. These criticisms and facts have negative impacts on the face-to-face contact which was bounded with the territoriality in residential areas[252].

[248] Gehl (1987), (2010: 41-43)
[249] Gehl (2011: 99)
[250] Gehl (1987), (2010: 41-43)
[251] Barlas (2006: 109)
[252] There are other examples which this situation is not valid. For example, Manhattan with high-rise buildings may not provide a territoriality feeling whereas face-to-face contact is intensive. As was mentioned previously, by referring to the traditional city layouts, Barlas (2006: 99) states that the cities or neighborhoods with dominant shopping character have different separation in symbolicly. One and a half million people live on Manhattan Island, which increases the contact possibilities of people.

CHAPTER 4

LIFESTYLES AND THE SPACES COMMUNICATION IN HIGH-RISE BUILDINGS

General information about the evolution of high-rise buildings has been given until this point. Further discussion will follow about the kind of spaces high-rise buildings can create and shelter, which can provide face-to-face interaction and environmental contact, outside the living units as private space. In order to determine the characteristics of high-rises, the result of a comparative study will be presented based on spatial differentiation of building forms in regard to building height, density and coverage. The reason for this study is to understand how face-to-face interaction and environmental contact have been achieved from low-rise and low coverage buildings to high-rise and high-coverage buildings because every building form provides different kinds of contact, which is the hypothesis of this study. By this means, the place of high-rise buildings in urban life will be analyzed and the following part of this chapter will elaborate on the spaces of contact of high-rise buildings together with the determination of public and private continuity types.

4.1. The Hypothesis: Empirical Research about Life Styles in Differentiated Urban Spaces Based on the "Space Matrix"

The aim of this study is not to provide detailed information about all urban environment types but to offer a general idea about lifestyles of the residents of these environs and compare them with each other. This study also is important to understand what kind of lifestyle the high-rise building has brought to the urban environment and the discrepancy created by height. In this respect, to explain the lifestyles encouraged by urban types, a comparison will be made in terms of common place creation, social and environmental contact, which depends on spatial order created according to differentiated solid and void relations.

To start with, the *space matrix*[253] will be analyzed in two main groups: height and density with coverage to explain the relationship between diversifying height and main urban forms. In this respect, height is the first input of the Space Matrix which symbolizes the horizontal line (x-axis) of the chart in Figure 4.1. As discussed in the previous chapter, the importance of height in creating urban form has arisen with the increasing health and sanitation problems in overcrowded industrial cities. Hence, the importance of biological elements such as sunlight, air, view and the human contact with these elements of the city has appeared. Thus, the distance between buildings has started to be increased depending on the building height, by referring to Gropius' illustration in Figure 3.9. There are two important elements that determine the incidence angle of the sun to the dwellings, *street width* and *building height*.[254] As illustrated in Figure 4.1, these variables change with one constant, the incidence angle of the sun changes. The A-serial of Figure 4.1 represents the constant intermediary space between the buildings while increasing the building height. Going from the right of the graph, the number of the building floors increases by cutting the incidence angle of the sun. On the other hand, the C-serial of Figure 4.1 has a constant number of floor while changing

[253] The term is in reference to the book *Spacematrix Space, Density and Urban Form* written by Berghauser Pont, M. & Haupt, P. (2010)
[254] Berghauser Pont and Haupt (2010: 201, 213)

the distance between the buildings. Opposite from the A-serial, the incidence angle of sun is cut by the other building as going through right of the chart.

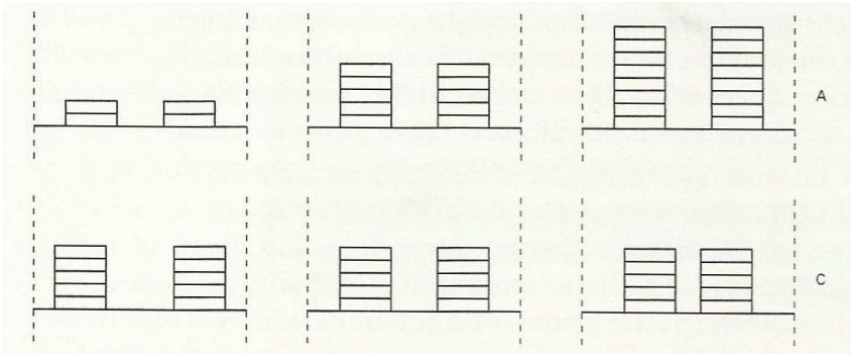

Figure 4. 1 Changing light depending on changing building height and distance between buildings (Berghauser Pont and Haupt, 2010: 214)

Although building height has been associated with biological benefits such as light, sun and view, it also has an important function for human psychology. Even though height was defended by many modernists, spearheaded by Gropius, it was objected to many others such as Christopher Alexander in terms of its mentioned negative psychological results on dwellers by referring to the Newman's studies.[255]

Secondly, it can be claimed that density is one of the important measurements of physical quality in the field of urbanization. Cheng divides the density into two main categories, *people density* and *building density* and defines them as "people density is expressed as the number of the people or household per given area, while building density is defined as the ratio of building structures to an area unit."[256] On the other hand, Berghauser Pont and Haupt describe density as "the relation between a given area and the number of certain entities in that area." They describe these entities as "people, dwellings, services, or floor spaces."[257] According to them, several kinds of forms can sustain the same density which is illustrated in Figure 4.2.[258] Accordingly, the first form represents the high-rise building and the other two represent the low-rise building while the second is a concentrated form, the third is courtyard. These are all in the same densities. Density increases when continuing to the right bottom corner of the *space matrix* chart which is arranged by the author.[259]

After density, coverage is another aspect of the vertical line (y-axis) of Space Matrix which increases as going through right of the matrix. Berghauser Pont and Haupt describe coverage as "the relationship between built and non-built land".[260] Coverage is a kind of spatial definition of the solid and void relationship. Thus, coverage is highly relevant with the building types which create a

[255] Berghauser Pont and Haupt (2010: 90-92)
"Alexander claimed that "there is abundant evidence to show that high buildings make people crazy." To protect people from becoming crazy, Alexander advocated limiting the height of the majority of buildings in any urban area to four storey or less, no matter how dense the area."
[256] Cheng (2010: 3,4)
[257] Berghauser Pont and Haupt (2010: 11)
[258] Berghauser Pont and Haupt (2010: 12)
[259] Berghauser Pont and Haupt (2010: 213, 214)
[260] Berghauser Pont and Haupt (2010: 88)

morphologic pattern. According to Martin and March, there are three basic building types: *point, strip* and *block;* in other words, "nucleated, linear and court types."[261] According to Berghauser Pont and Haupt, these three building types can exist in low, middle and high-rise buildings.[262] As can be seen from Figure 4.3, there are many clustering possibilities of these there building types. On the other hand, each of them creates differentiated spatial organization which changes radically their dwellers' lifestyles.

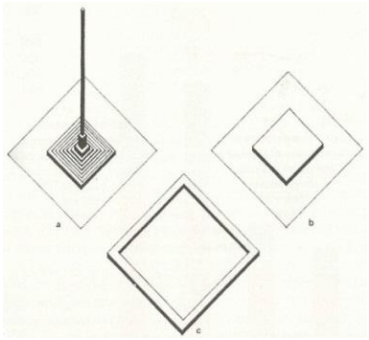

Figure 4. 2 Differentiated forms (high-rise building, nuclei blocks and courtyard) with the same density
(Berghauser Pont and Haupt, 2010: 57)

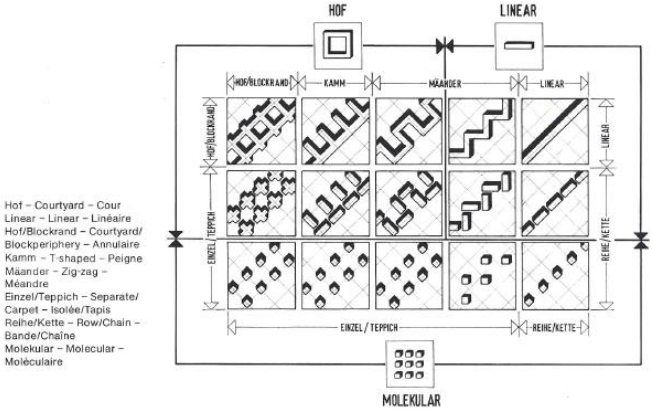

Figure 4. 3 Three basic building types and their association designed by Deilmann, Bickenb, and Pfeiffer
(Deilmann, Bickenbach, and Pfeiffer, 1977: 24)

As can be seen from the *Space Matrix* (in the next page), there are several urban lives with different forms and heights. In order to distinguish the urban lifestyles from each other based on the height and morphologies, this Space Matrix was prepared. In this respect, Space Matrix starts with the low-rise and low density and coverage urban pattern in which *Broadacre City* will be mentioned in detail in the upper left corner, and is over with high-rise and high-density and coverage urban pattern by mentioning Paolo Soleri's *Arcosanti* in the lower right corner. In between these corners, differentiated urban patterns in differentiated heights will be discussed by exemplifying some existing environs and utopias

[261] Berghauser Pont and Haupt (2010: 172)
[262] Ibid.

4.1.1. Low-rise and Middle-Rise Building Environment

4.1.1.1. Low-Rise and Low Density Urban Environment in Nucleated Building Form – American Suburbs

The best practice of low-rise and low density environment in nucleated urban form is American suburbs. *Bradacre City* designed by Frank Lloyd Wright which was submitted in 1935 laid the foundation of this type of environment. According to David G. De Long, F. L. Wright was the first important architect who dealt with the suburban development together with the issue of (auto) mobilization in a detailed manner.[263] Wright basically queried the increment in traffic congestion with raised automobile use, and states as "I believe the city as we know it today, is to die".[264]

Wright's ideal society is based on self-sustained life style. All members of the city have a big share of the land which has a hundred and fifty miles radius that they can sustain their lives by producing their needs.[265] In this sense, The Broadacre City has grid-iron plan with its sprawled private and public uses linked by high speed trains, cars and lorries in separated traffic lanes hierarchically.[266] According to Fishman, as opposed to the Garden City which was based on clustering the uses in the nature, Broadacre City spreads the uses on the natural land and explains that:

> "There must no longer be a physical separation in between urban and rural areas. Broadacre City was planned to ensure this; the houses, the factories, the stores, the office buildings, and the cultural centers are all in the midst of farmland and forests."[267]

Thus, it can be said that Wright uses car to bring nature and man closer to each other in this spread urbanization.

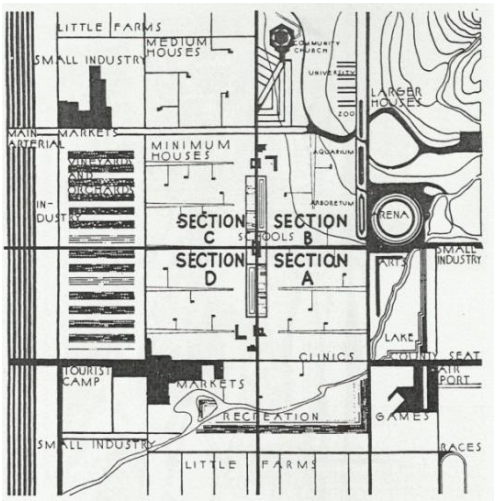

Figure 4. 4 Broadacre City Plan
(Fishman, 1989)

[263] De Long (1998: 23)
[264] De Long (1998, 24)
[265] De Long (1998: 26)
[266] De Long (1998: 31)
[267] Fishman (1989: 127, 128)

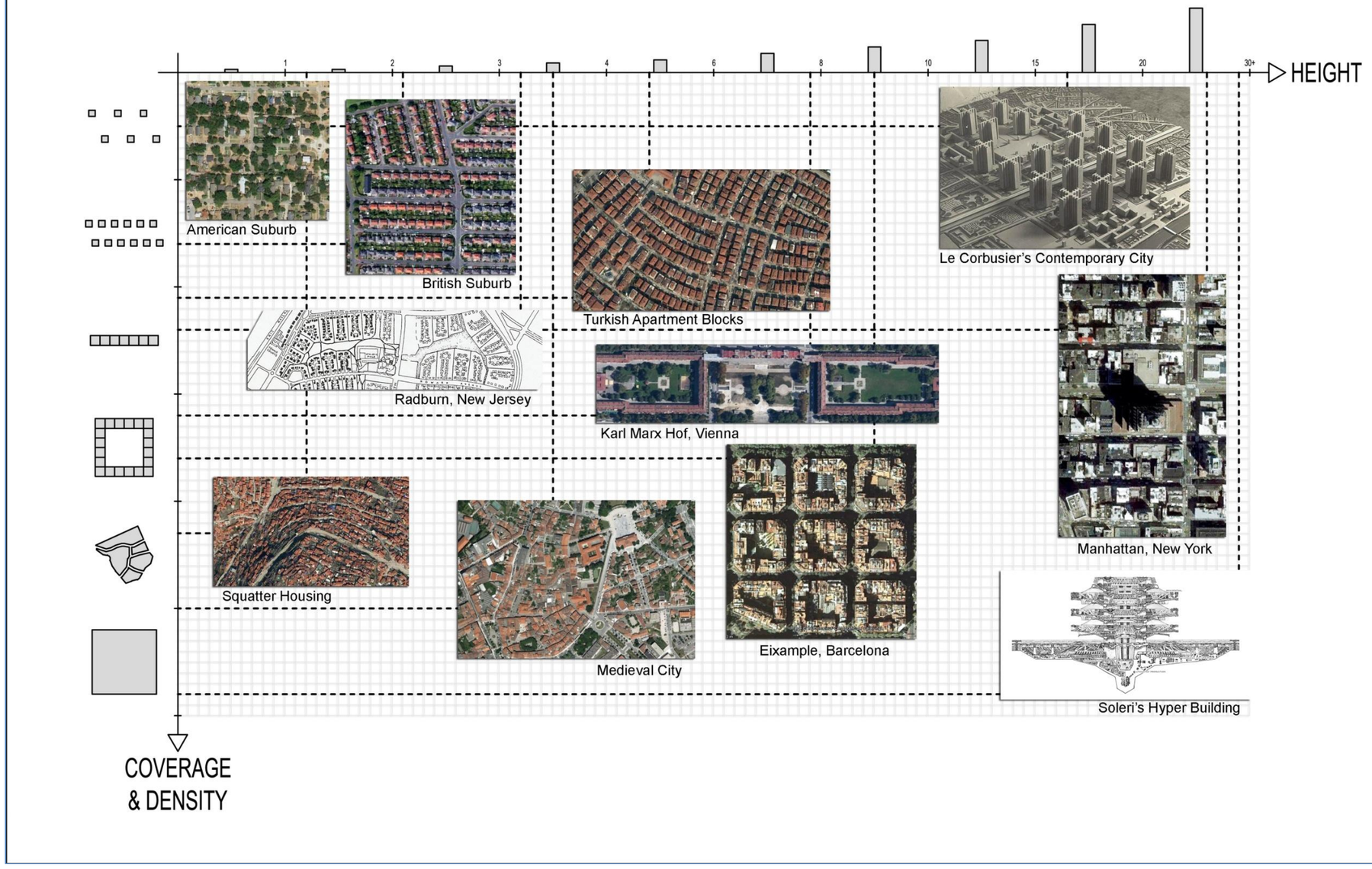

Figure 4. 5 Space Matrix
(Personal Drawing, 2013)

Wright used decentralization as a tool of gaining a differentiated life style from the urban centers. Accordingly, this new lifestyle was based on individualism which car-based system fits the best.[268] In this respect, instead of high density and high-rise cities of modern-days, Wright idealized his dwellings in the form of private detached houses in differentiated forms which has a long distance in between. Hereby, he drew the opposite line with Arcosanti of Soleri with super low density, low-rise urban environment and automobile centralism. Here Wright thinks as a result of these evolvements that:

> "There should be as many kinds of houses as there are kinds of people and as many differentiations as there are individuals".[269]

However, Wright has taken many criticisms about being passed over the physical production of public and private spaces. According to De Long, it was impossible to create any street form which is composed by clustering of houses' façades in that kind of excessively low density. On the other hand, Wright thinks that the high-rise buildings remove people from the variety and diversified urban environment. [270]

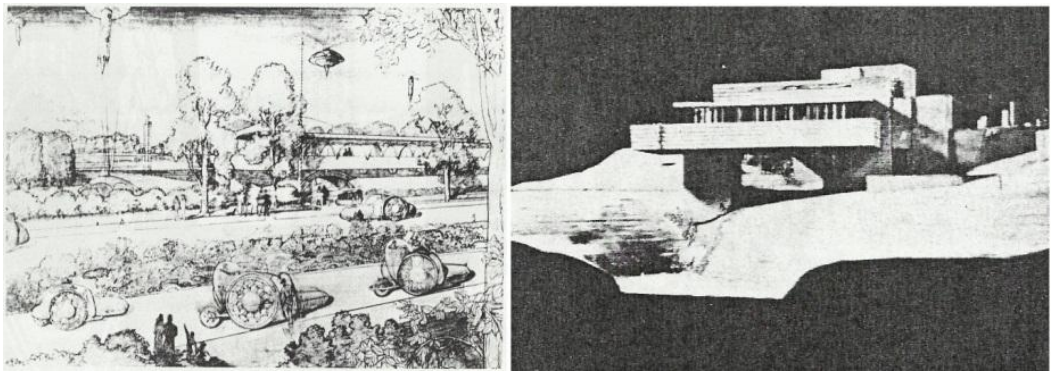

Figure 4. 4 Idealized urban environment by Frank Lloyd Wright in car-based, low-rise and low density form
(Fishman, 1989)

Broadacre City is an important example of decentralized urban macroform with very low density and low-rise urban elements. In order to explain these American Suburban lifestyles, the aim lying behind what kind of human is trying to be formed may be dealt with at first. As the idea of suburban human depends on creating him/her with having total independency, this was also promoted by scarce urban pattern. The suburban human was supposed to deal with the land and should be a skilled person who can be a farmer and mechanic.[271] It can be said that by this mean he/she can gain his/her total independence without needing others. This can be seen as a human who has turned his/her eyes to the interior of himself/herself. Macroform and dwelling units were also proposed in this logic of independent and self-contained human. The housing units locate distant from each

[268] Fishman (1989: 91-94)
[269] De Long (1998: 66)
[270] De Long (1998: 68)
[271] Fishman (1989: 128)

other with large private gardens to cultivate. Thus, the dwelling is also the working area where the family members work together.[272] As individualism grows in this pattern, privacy also develops.

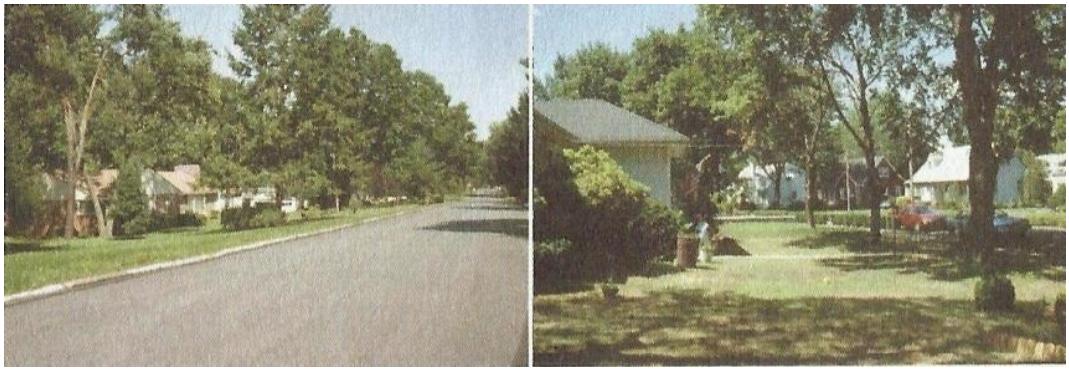

Figure 4. 5 Low rise, low density and coverage American Suburb, Radburn, Fairlawn, N.J., USA (1993) (Barlas, 2006: 85)

From the perspective of environmental contact of the dwellers in this urban morphology, the dwelling units are far away from each other by which the maximum benefit from the sun can be sustained. On the other hand, large private gardens to cultivate the needs are important in natural contact of the dwellers who can gain this benefit beginning from the exit door of the private house. At the same time, as it was mentioned above, the urban uses were spread on the land which bring rural life into the forefront. Thus, it can be said that human and nature relationship was focused on, in the American suburbs in every field of the citizens' life.[273]

Then, it cannot be said that the social contact of the persons was developed as environmental contact in American suburbs. The street pattern was not minded in scarce urban form of American suburbs. As the individuals and their own lives stand out with the togetherness of human and nature, the urban uses are spread as well as urban pattern.[274] Even though the city is in walking distance,[275] the distance between structures has increased which reduces the feeling of community. Only gathering places are markets. In this respect, the focus of the individual life is not wanted to be lost by creating a clustered spatial order.[276] According to Wright, the city cannot provide any humane relationship with its hazardous spirit; this can only be achieved in a healthier way by bringing human to the nature and supplying him/her an organic environment.[277]

In summary, it is obvious that low-rise and low density urban environment with nucleated building form is the symbol of maximum individual life. In order to supply this, the total togetherness of human and nature was provided for which can only provide social contact in gathering areas. At the same time, very low density obstructs territorial control because there should be a balance point between urban form and macroform in the manner of territoriality. Together with this, community feeling decreases because as the distance between people increase, dwellers cannot catch the chance of facing each other.

[272] Fishman (1989: 94, 130)
[273] Fishman (1989: 92)
[274] Fishman (1989: 92)
[275] Fishman (1989: 93)
[276] Fishman (1989: 135)
[277] Fishman (1989: 132)

4.1.1.2. Low-Rise, Low Density and Middle Coverage Urban Environment in Clustered Form – British Suburbs and Radburn

One step further of low-rise environment in terms of coverage can be British Suburbs. The idea of British Suburbs is based on the Garden City which was developed by Ebenezer Howard through the end of the 19th century and beginning of the 20th century. The idea can be distinguished from American Suburbs in terms of its basis of cooperation rather than individualism.[278] According to Howard, large cities are always condemned to be annihilated due to the fact that there can never be developed cooperation; only small scaled communities can survive by bringing "liberty and brotherhood" which necessitates the decentralization.[279] However, it should be mentioned that the decentralization of the Garden City means separating the community from the main crowded city, but concentrating it physically in the lower scale grips the community feeling and creating "unity" with 30.000 inhabitants in upper scales.[280] In this respect, Howard dealt with the issue by creating a symmetrical order with the aim of determining "the sign of a harmonious society".[281]

Howard tried to bring the advantages of both urban and rural areas in garden city.[282] In this respect, garden city was ought to support social interaction in the middle of nature thanks to designed environment. It is an indicator of Howard's regarding both social contact of people together with the environmental interaction. Considered from this point of view, the Garden City would be deployed on a large garden sheltering the main park in the middle. Then residential zone is located around the central garden. The industry locates out of this circle in walking distance by being separated residential area by a buffer zone from it.[283]

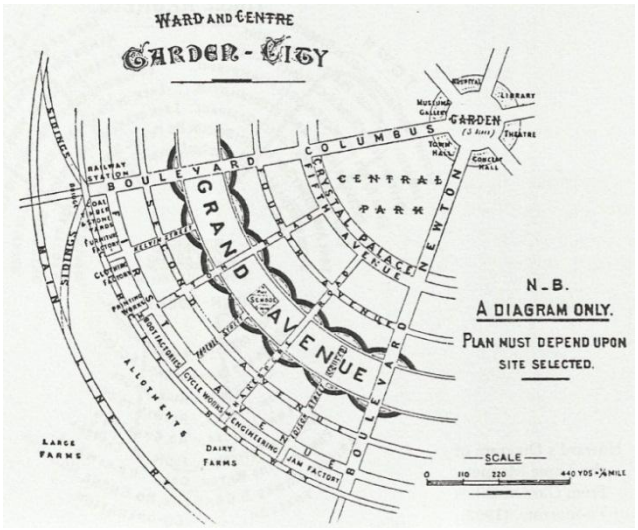

Figure 4. 6 Garden City Diagram
(Fishman, 1989)

[278] Fishman (1989: 24)
[279] Fishman (1989: 37)
[280] Fshman (1989: 40, 41, 93)
[281] Fishman (1989: 41)
[282] Hall (1988: 91-93)
[283] Fishman (1989: 40-42)

On the other hand, both the residential area and other uses were exhibiting a clustering with their own centers which is the easiest way of gathering people. There exist some urban functions in the central areas. For example, neighborhood center has "school, library, meeting hall, and religious worship". On the other side, central park was located in the center of the whole city and helping bringing people to the leisure activities. At the same time, "Crystal Palace" was located again in the city center which was actually a market place of the town.[284] In these civil zones, people were interacting with both other people and nature. Except for the common parks, all dwellings had their own private gardens and the main agricultural belt was located which gives the opportunity to the inhabitants to cultivate.[285]

Figure 4. 7 Interior and exterior views of the house and street view of Letchworth Garden City (1911) (Fishman, 1989)

Figure 4. 8 Family as the main unit of society in an ordinary day in Welwyn Garden City and street life in New Earsick designed by Unwin and Parker
(Hall, 1988: 106, 95)

This urban pattern and life style have become popular in years and winded in western world. Its reinterpretation was firstly materialized and identified by Clarence Perry in 1929 in the U.S. under the name "neighborhood unit". The reason why neighborhood unit can be the continuation of Garden City is its "including gardening and community participation."[286] The six principles that a unit should possess are the size that can enable the existence of a primary school, main arteries that surround and limit the unit, a system inside composed of parks and recreation areas, deployment of institutional centers and construction of the street inside. Clarence Stein and Henry Wright carried this concept a step forward in the same year by Radburn Project. Except the former principles, they added *super block* notion which involves residential clusters around continuous green areas with cul-

[284] Fishman (1989: 42, 43)
[285] Fishman (1989: 44)
[286] Broadbent (1990: 126)

de-sacs.[287] At the same time, pedestrian circulation and motor vehicles were totally separated from each other and pedestrians were achieved to circulate in green lines that connect all superblock groups into each other. Thus, Broadbent defines "parks as backbone of the neighborhood".[288] The interior design of the houses also was arranged according to neighborhood plan which means the living rooms and bedrooms facing the greenery and service rooms were shaped through the road.[289]

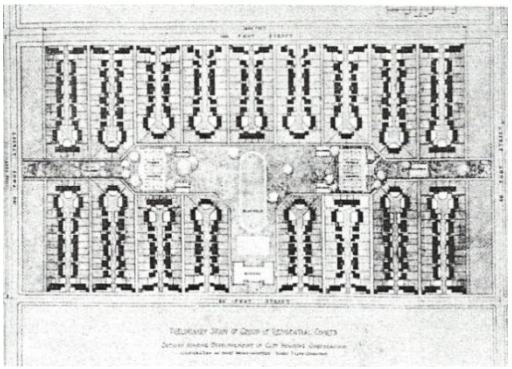

Figure 4. 9 Radburn Superblock Plan
(Broadbent, 1990: 127)

In brief, Stein and Wright aimed to provide social contact of human by separating the pedestrian road from the vehicles and locating it inside the superblocks where green line exists. So it can be said that social contact was tried to be gained together with the environmental contact spatially.

4.1.1.3. Low-Rise, Low Density and Middle Coverage Urban Environment in Organic Building Form –Squatter Housing

Except for these planned environments, unauthorized type of housing can also provide differentiated spatiality and life style which emerged during the middle of the 20th century especially in the primary cities of developing countries.[290] The reason for this spatial wealth created in the squatter housing areas as opposed to the poverty that the dwellers suffer lies behind the reasons that forms squatters. In this concern, Günay states that while the meaning of squatter is to occupy a property that belongs to someone else in English legal system, it is based on tenancy in terms of real law.[291] Thus, the space is shaped depending on the individual necessities and daily lives of the squatters, in other words, the users. This situation brings another discussion depending on the property which is about the shaping environment depending on labor force. According to Locke, if a person changes a thing with its labor, he/she adds what his/her own is, which gives the property of this thing to this person.[292] Even though, the concern of this thesis is not about the property rights of the squatter dwellers, their production of space depending on their daily lives, labor forces and

[287] Adnan Barlas, Komşuluk Birimi (Kentsel Planlama Ansiklopedik Sözlük. 2012: 281-283)
[288] Broadbent (1990: 128)
[289] Broadbent (1990: 128)
[290] Keleş (2012: 498, 499) states in his book of "Kentleşme Politikası" that there exists differentiations in *slums* of western world and *squatter houses* of developing countries which shoul bot be blended to each other. The squatter dwellers are rural-based persons while the slum inhabitants are urban-based. Squatterers are built with the aim of living there for a permanent time while the other is for temporary time. Squatters locate in the peripheries of the city but the slums are in the core.
[291] Günay (2009: 86)
[292] Günay (2009: 93)

necessities which may be a way of gaining a kind of property right is what should be mentioned. In this respect, Günay reminds the concept of "representational space" developed by Lefebvre which means that "the spaces that was produced by directly its dwellers, individuals and users in accordance with related images and symbols". This definition is parallel with squatter housing process directly which is far away from the ideals of decision-makers such as city planners, architects, technocrats, etc. [293]

As it can be in many forms and densities, squatter houses in Turkey is generally in low-rise and low density settled organically to the land.[294] Considering the architectural features, many of them has uniform appearance, single-floor, single-room shelters with garden and coop. According to Keleş, even though it has been indicated that the dwellers of squatter region has tendency to committing crimes, recent researches did not confirm these inference. This view or prejudice on human minds can be resourced by the poverty which is the main economical reason of the existence of squatter houses. Together with this, especially Turkish squatter houses are seen as the permanent shelters by their owners who has neither employed nor totally unemployed. [295]

The life style of squatter dwellers is totally based on the mutual-help and self-help[296] methods from construction of the structure to everyday activities. In fact, the space is formed according to this mutual life style. For example, there can be interior courtyards in the intersection points of different structures which serves for mutual food production space of different families which was explained in Çelik's writing about CIAM-Alger squatter region located in Algeria.[297] At the same time, as the squatter houses and their spatial divisions are constructed according to the basic necessities and life styles of the dwellers, this Algerian squatter neighborhood was based on pedestrian movement in scale. Thus, buildings were constructed in line with the slope of the land which produced a new urban style. Except for these, public and private was combined to each other by semi-elements like wall, staircase depending on users' preferences. [298]

Figure 4. 10 Spatial organization of squatters with the drawings of CIAM Alger as an example of "representational space" concept developed by Lefebvre
(Çelik, 2011: 11, 13)

In brief, it is quite obvious from Çelik's writings that squatter houses fictionalize social contact in many levels of daily lives of their dwellers. As the lifestyle is based on mutual-help principle due to the low level of income and poverty, there exists social interaction in every stage of life in order to survive. Thus, the space was sorted according to this survival game. In these respects, some private and semi-private areas such as courtyard, pedestrian line, staircases and gardens serve as tools of

[293] Günay (2009: 109)
[294] Günay (2009: 86)
[295] Keleş (2012: 499)
[296] Keleş (2012: 505)
[297] Çelik (2011)
[298] Çelik (2011: 11-14)

social contact. Hence, the life of pedestrians is passing on these public and semi-public spaces which brings feeling of community and develops identity attendantly as a result of interdependence with the neighbors.

Şenyapılı states that a family living in squatter house has important relations with the rural area which is another part of survival game. As the income of the family is very low, they cultivate in their private gardens insofar as circumstances permit and stocks coop in the garden. Either, when the income level diminishes much, children are sent to their native town or village. This is an important act because when returning from the village to the city, the family brings commodities like food in order to handle for some time which helps the family budget.[299] As a result, squatter house inhabitants maintain strong environmental contact in their living areas and life styles. As they generally have rural-based life style and cannot separate from it due to survive in their existing economic conditions, they have to cultivate their land to provide benefit. Apart from that, they spatially put their houses to any location that gain maximum sun shine and light in order to decrease heating expenditure. As a result, both man-made and organic urban pattern evolves in nucleated dwelling type.

Figure 4. 11 Squatter housing neighborhood positioned depending on the sun in Ankara, Karşıyaka (Personal Archive, December, 2012)

4.1.1.4. Low-Rise, Middle Density & High Coverage in Organic Urban Environment – Medieval City

The last part of the low-rise building type discussion is its high coverage form which increases the general density of the urban environment. This building type and urban morphology is parallel to the *culturalist* method of urbanization and architecture which was supported after the second half of CIAM as discussed.[300] As opposed to the high-rise blocks, the term *groundscraper* was promoted which resembles low rise and high coverage urban environment. In other words, low-rise and high coverage morpholgy is the continuity of solids by determining voids.

The best example of the low-rise buildings with high coverage morphology is organic urban typology which shows itself in nearly all western medieval cities. The reason of high coverage in medieval cities can be concerned with its construction in long years as a result of individual decisions. Broadbent explains the issue as:

[299] Şenyapılı (2012: 121)
[300] Günay (1988)

> "As the merchants themselves became rich enough, and their faubourgs grew, so they too built walls or pallisades. Which meant that others had to start new faubourgs outside theirs and thus the cities grew in concentric but irregular loops."[301]

Günay states that urban environment is formed from two kind of settlings; the one which is developed with interference and without interference.[302] The organic medieval city can be categorized as "without interference" because they were developed spontaneously in respect to the countries' own economic, social and cultural conditions. In this regard, it can be said that old organic cities are full of life substances due to their structuring above living experiences.[303] Brenda and Robert Vale explains the dynamic life style of Medieval cities as:

> "Medieval city and towns were based on pedestrian movement and the need for defensive capacity, such as when withstanding a siege. This meant having water and food supplies nearby; it meant having the ability to store food in appropriate buildings against siege; it meant having places to grow food within the city. The city was low rise but its use was intensive. Thus, the streets were places for trade, places for movement, places for recreation and celebration. The home place was a workshop as well as a place for family life. The gardens behind the houses were for growing food and for recreation through the presence of greenery within the urban fabric."[304]

According to Aries, home space and working area was not separated to the boundaries in the Middle Ages. The plan of the house was not divided into small units but like a large room that living and working was combined in during 14th century. Therefore, all activities such as sleeping, eating and working were occurring in the same space. Hereat, as people's living was "lived in public", the public and private life differentiation was not on the carpet in these times. In addition to this, privacy and family notion was not developed in Middle Ages as in modern era that can be understood from the division of the dwelling units.[305] The main idea of Middle Age bourgeois life was not based on private life but a good chair on society in order to develop commercial activities which can be inferred from these sentences of Aries:

> "The main thing was to maintain social relations with the whole of the group into which one had been born, and to better one's position by skillful use of this network of relations. To make a success of this life was not to make a fortune, or at least that was of secondary importance; it was above all to win a more honorable standing in a society whose members all saw one another, heard one another and met one another nearly every day." [306]

Hence, it can be said that society feeling is developed in the members of the Medieval city because the city is produced by the members and their preferences, cultural features and socio-economic conditions. On the other hand, the spatial division between public and private did not exactly emerge. For this reason, there was a street life reaching up to the interior of the houses and home life existing on the street. The social contact was a tool of social status in Medieval times which means the humane interaction was holding even inside the house depending on the economic relations. As a result, it can be said that there was not any spatial differentiation for face-to-face

[301] Broadbent (1990: 26)
[302] Günay (1995: 47)
[303] Günay (1995: 47)
[304] Brenda Vale and Robert Vale (2010: 19, 20)
[305] Aries (1973: 354, 392)
[306] Aries (1973: 363)

interaction; both inside and outside of the houses were providing this in Middle Age. Also, it can be referred that the environmental contact of human was provided by the private gardens, backyards or agricultural land inside the city as it could be founded.

Figure 4. 12 Some of the environmental contact types in low density environment; productive private yards, community gardens, urban farming
(Scott and Ben-Joseph, 2012: 66)

4.1.1.5. Middle-Rise, Middle Density & Low Coverage Urban Environment – Apartment Houses in Turkish City Layout

Low, middle and high buildings can create resembling space in case they are similar in terms of building type (pavillon, street and court), coordination of the houses and solid & void ratios in scale. However, they do not have the same similarity in urban morphology;[307] as a result, lifestyle they produce.

Barlas defines the territorial markers of middle-rise buildings which can create semi-public, semi-private and private space differentiation as similar to the low-rise buildings.[308] According to him, semi-public space of middle-rise building is sidewalks and entrances which is passing zone between street and building to access the flats, and semi-private space is the garden that only opens for the dwellers' use. This was the spatial and territorial definition of middle-rise building. On the other hand, middle-rise buildings are differentiated from the low-rise buildings in terms of sheltering more than one family. This feature of middle-rise buildings brings a kind of communal life in vertical line. According to Delimann, Bickenbach and Pfeiffer, there exists an important relationship between height (number of the floors) and number of the dwellings (residential units) which is a classification method of the housing groups for them.[309]

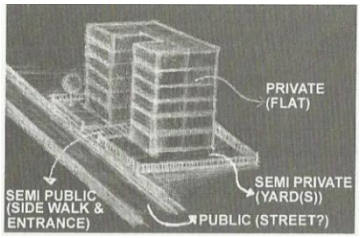

Figure 4. 13 Territorial differentiation of middle-rise buildings
(Barlas, 2006: 39)

[307] Berghauser Pont and Haupt (2010: 172)
[308] Barlas (2006: 39)
[309] Delimann, Bickenbach and Pfeiffer (1977: 25)

To begin with, middle-rise buildings in middle density and coverage in nucleated building form can be exemplified with the general Turkish city layout. This pattern by creating general urban morphology in all Turkish cities has received many criticisms in many times in terms of its incapability for spatial differentiation. Even though it cannot be defended that the construction legislation of Turkey does not give any other spatial order, this form may be developed as a result of construction legislation of Turkey changed in 1957 with Yücel-Uybadin Plan which brings new construction rules and this evolved prototype cities all over the country after the beginning of demolition and reconstruction process. Accordingly, Yücel-Uybadin Plan proposed an urban design based on rectangle urban blocks in detached order which increases the density of the cities depending on the population increment.[310]

Figure 4. 14 Urban environment constituted according to new construction rules (Günay, 2005: 84)

Without giving detailed information about the development process of apartment houses, the figure will be discussed in terms of social and environmental communication. Delimann, Bickenbach and Pfeiffer state that whether the building serves for single or multiple families, nucleated buildings create "spatially separated" environment when compared to the other building types.[311] In this respect, the corridors and gardens are the common areas of the dwellers, especially gardens can be gathering areas for the dwellers even in restricted conditions. Only gardens are environmentally contact spaces in this kind of structuring especially if the distance between buildings is short together with residual density. The physical environmental contact of human decreases when compared to the former pattern examples as the density in a specific area increases while urbanization is increased. This situation is photographed by Günay in order to illustrate urban transformation from rural-based squatter houses to the higher density apartments in Ankara. Also, greenery can be gained in this kind of housing pattern by parks and green lines. Moreover, the buildings stay in the shadow of each other due to the short distance between them which decreases the daylight access to the dwellings.

[310] Günay (2005: 81)
[311] Delimann, Bickenbach and Pfeiffer (1977: 24)

Figure 4. 15 Comparison between apartments and squatter houses - Increased urbanization and decreased environmental interaction as a result of urban transformation in Ankara, Balgat-Öveçler (Günay, 2009: 107)

Figure 4. 16 Example of walking road located in middle-rise and middle density urban pattern which creates both social and environmental contiguity in Kuyuyazısı Street, Etlik, Ankara (Personal Archive, December 2012)

Except the gardens as common gathering area of apartment inhabitants, streets are independently social contact areas together with increased density and coverage by determining the street space. Especially some commercial uses in central areas which are spread in the street locating entrance floors direct individuals to the street activities which is an important tool of face-to-face interaction for Jan Gehl.[312]

Figure 4. 17 Street life and back gardens of middle-rise and nucleated building form in Etlik, Ankara (Personal Archive, December 2012)

[312] Gehl (1980) Life in Between Buildings

4.1.1.6. Middle-Rise, Middle Density & High Coverage Urban Environment – Karl Marx Hof and Barcelona Courtyards

After the physical environment that was based on nucleated buildings located in short distance, another type will be discussed in terms of its differentiated presentation of lifestyle in middle-rise environment. Karl Marx Hof, constructed for the workers in 1930s and located in Vienna, has an important place in forming a kind of both individual and communal life in itself which achieves this in courtyard building type that sprawls in land nearly one kilometer long distance in a spine which is courtyard string in different forms. According to Sudaş,

> "Not only its physical qualities, which allowed accommodating nearly five thousand people in a single continuous structure, or its social facilities, ranged from kindergartens to libraries, but also the relationship that the building established with the environment, a part of the city labeled this exemplar as significant."[313]

According to her, Karl Marx Hof building is comprised of many common places sheltering daily activities of people which has importance in bringing people together in the courtyard with their necessities such as "communal laundries, libraries, clinics, child-care facilities, kindergartens, public baths, parks, playgrounds, swimming and wading pools, theaters, lecture halls or exhibitions".[314]

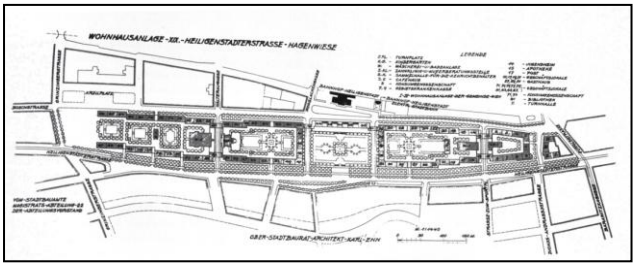

Figure 4. 18 Karl Marx Hof plan and functional uses
(Blau, 1999: 323)

The building is constituted by courtyard series as a spine line; thus, the courtyards have hierarchies in themselves one of which serves as the square of the building that hosts meetings and the others serve as the sphere of the activities.[315] In this concern, the building complex serves as a miniature city with its square as meeting place, courtyards as both social and environmental contact spaces, and public and private spheres. At the same time, large area in courtyards separates reciprocal buildings from each other in sufficient scale to let the sunshine inside the dwellings.

The courtyards of Karl Marx Hof are both serving to the inhabitants of the building complex and to the whole city. Thus this courtyard style provides the needs of its inhabitants and serves a life style that continues inside the courtyards and buildings which opens for the whole public. As parallel to the political stance of this period, Karl Marx Hof created not a totally closed community life but a community life sharing the same ideals which may sustain the same affects in the recent times, as a result of the form and activities it comprises.

[313] Sudaş (2011: 46)
[314] Sudaş (2011: 43, 44)
[315] Sudaş (2011: 48)

Figure 4. 19 Karl Marx Hof Courtyards as both meeting and greenery spaces in terms of contact (1930)
(Wiener Wohnraum p.19, Quoted from Sudaş, 2011, p. 91)

Another example is the Eixample district of Barcelona with courtyard building type which represents a different lifestyle when it is compared to Karl Marx Hof. The main difference of Barcelona courtyards is their representation of life out of the courtyards as opposed to Karl Marx Hof. Eixample is a prime example of providing high density even without high-rise structuring with its high urbanization rates on land such that it has more population density with nearly 36000/km2 when compared to New York Manhattan with 26900/km2.[316] Thus, the density of the area is very high with courtyard urban type with orthogonal grid-iron pattern. While this pattern comprises high rate of person with high density, this apartment type in courtyards has the disadvantage of not having private gardens. The courtyards are neither private, nor public spaces but common spaces that the function of which changes according to the common decision of the dwellers. Thus it can be said that courtyards exists as urban form in different functions as garden, car-parking, sports area, etc. which cannot be reconciled with the publicness as opposed to Karl Marx Hof which lets public to the inside of the courtyard. The publicness is held in the streets of Eixample.

Figure 4. 20 Courtyard as building type in Barselona, the Eixample Region
(Google Earth, accessed on 5th of January, 2013)

[316] Websites: http://www.mbpo.org/ and http://w110.bcn.cat/portal/site/Eixample
Manhattan has population of 1.600.000 people (2011) and 59.5 km2 land without water. On the other hand, Eixample district has 266.800 people (2009) with 7.48 km2 land.

Figure 4. 21 An interior courtyard as private garden taken from the roof of Casa Mila (Personal Archive, May, 2011)

According to Delimann, Bickenbach and Pfeiffer, even though the private gardens cannot be mentioned as being in low-rise-one-family buildings, apartments provide "mutual social control" thanks to the interior common spaces and street life, as long as the number of the people is sufficient and balanced. Such that if the number of the families is not very high (between 3 and 12 families), this situation will develop the identification feeling.[317] In the Eixample district, the street life can be mentioned which is constituted by the courtyards, not linear building form. As the building fronts the street, it develops street life which was also stated by Jacobs. She criticized the high-rise buildings that existed with modernism and very low-density in low-rises in terms of creating "dull areas". According to her, the city must be minimum in 250 dwellings per hectare in order to sustain the street life.[318]

As a result, the Eixample example is showing the increased urbanization level with increased population. This means that, the population is multiplying together with the probability of social contact. On the other hand, as the advantage of privacy is decreased in this multi-family building, the social control is developed together with the feeling of identity as people know each other in an apartment. The street life comes into prominence as a result of lifestyle which turned its face not to courtyard, garden or other semi-spaces but to the streets that develop the sense of society without belonging to any exclusive group or community. However, as the level of social contact is developed, the environmental contact is degraded to the parks, streets as urbanized areas or private gardens. Besides, only the façades facing the street take the advantage of benefiting from sunshine, but not the windows looking at the courtyard.[319]

In brief, before proceeding to the high-rise environment discussion, the main difference between the life styles of the habitants of low and middle-rise buildings in general is that the former creates more private life but together with the community feeling and have the advantage of environmental contact, while the latter creates society feeling and more control of the land with high level of social contact depending on the common life in multi-family houses and develops identity feeling with medium level of density. The common aspect of the low and middle-rise environment is the street where the societal and public activities take place. Barlas deals with the urban streets and explains

[317] Delimann, Bickenbach and Pfeiffer (1977: 32)
[318] Berghauser Pont and Haupt (2010: 11)
[319] Delimann, Bickenbach and Pfeiffer (1977: 36)

that the streets are important social gathering places due to its "not only public nature, but also its physical and spatial attributes".[320] In this sense, he states that according to Jung, the street is the production of unconscious in every culture but can be in differentiated forms and features, even it seems as it produced as a result of conscious acts.[321]

Barlas relates the territoriality with streets, and states that the human forms its physical environment as a result of sense of territoriality,[322] the street is also a product of territoriality which was the topic discussed in the previous chapter about the criticisms of high-rise building. In this sense, it was discussed that the territorial markers were produced in low and middle-rise building environments, but hardly in modern high-rise buildings due to the height, interior and exterior spatial formation features. Newman has explained this issue as the history of architecture is full of symbolism and territoriality in old dwelling environment which disappeared with the "high-rise prototype" of environment.[323] At the same time, Barlas states that both low and middle-rise building environment existed in the history, creating territorial markers.[324] From these statements, it can be referred that old architecture of dwellings which is succeeding in creating territoriality and street life are the residence built before the modern high-rises which are low and middle rise buildings creating dwelling and street relationship.

Here, Goffman's statement about the street as a public space should be mentioned. According to him, "the development of self and the process of socialization depends primarily on face-to-face interactions"[325]; in other words social contact which is highly relevant to the street. As the self-gaining has important place in the socialization and publicness, this is highly related to the human and his/her relations with the others. In this respect, the definition of self and its development in different periods can be mentioned together with the differentiation of social and environmental contact areas where the low and middle-rise buildings took place. The detailed information about the process of gaining self from the first human groups and settlements to the beginning of industrialization are given in Appendix A.

4.1.2. High-Rise Building Environment

4.1.2.1. High-Rise, Low Density & Low Coverage Urban Environment – Modern Urban Environment; Contemporary City and Unite d'Habitation

The high-rise building environment with low coverage and nucleated urban form will be discussed under the modernist high-rise residential blocks which can be thought as one of the prime examples of this kind of environment by many of the urban philosophers. Le Corbusier's Contemporary City in

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[320] Barlas (2006: 6)
[321] Barlas (2006: 10)
[322] Barlas (2006: 12)
[323] Newman (1972: 6, 7)
[324] Barlas (2006: 51-100)
Except for the low–rise buildings as an old traditional dwellings of nearly all cultures, middle-rise buildings were Mesapotamian residential culture which brought many families into together. "The Typcial spatial organization of the residential quarters of the Ancient Mesapotamian peoples comprises of multi-family development around courtyards. Multi-level residential buildings are also common features of some peoples such as Assyrians or Romans. Yet, the hierarchy of spaces is still there. Courtyards and the apartment buildings opened to the street by means of doors." (Barlas; 2006: 65)
[325] Barlas (2006: 11)

city scale and Unite d'Habitation in architectural scale will be discussed here as low density, high-rise environment.

To begin with the city, Le Corbusier has determined main principles for his Contemporary City which were "decongesting the city centers, increasing the density, and increasing parks and open spaces." This was named by Le Corbusier as *Vertical Garden City* and he explains the main design principles of his ideal environment as follows; [326]

> "At the base of the sky-scrapers and all around them we have a great open space 2400 yards and by 1500 yards, giving an area of 3600000 square yards, and occupied by gardens, parks and avenue. In these parks, at the foot of and round the sky-scrapers, would be the restaurants and cafes, the luxury shops, housed in buildings with receding terraces: here to would be the theaters, halls, and so on; and here the parking places or garage shelters (171)… The City: Here we have twenty-four skyscrapers capable each of housing 10000 to 50000 employees; this is the business and hotel section, etc.; and accounts for 400000 to 600000 inhabitants. Density of population: The Skyscrapers will provide 1200 inhabitants to the acre. Open Space: Of the area composed of skyscrapers, 95 percent of the ground is open (squares, restaurants, theaters (172))."

If we look at the structures, Le Corbusier's idea about skyscrapers as the architectural form of modern era was not appropriate for family life because it was a form that could only be afforded by business. In that way, dwellings were being restricted from the urban centers due to the fact that only commercial uses were located there. [327] This may be the beginning point of new kinds of system in dwelling that was designed by Le Corbusier.

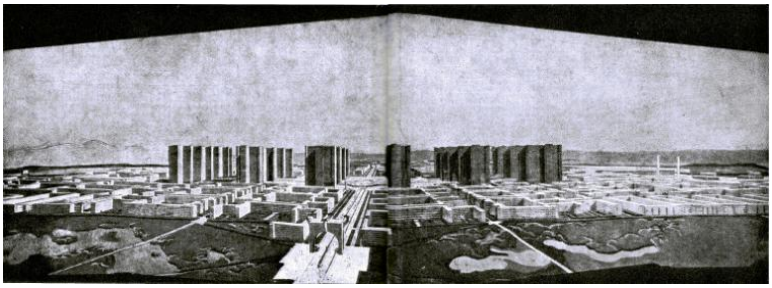

Figure 4. 22 The Contemporary City
(Le Corbusier, 1929: 178-179)

Le Corbusier's Contemporary City was composed of three urban elements; "the skyscrapers for commercial and office use with 95 percent open area, the residential blocks with set-backs (for high income group) with 85 percent open area, and the residential blocks on the cellular system with 48 percent open area in the grounds." [328] These buildings with vast open areas were aimed to construct vertical garden city of modern world. The picture below illustrates the old urban center with highly constructed areas versus modern skyscrapers and set-back residential areas with their vast open areas in proportion to Le Corbusier's Contemporary City. It is quite open that Le Corbusier has been affected by Ebenezer Howard's Garden City approach and designed it according to the needs of city

[326] Le Corbusier (1929: 170-172)
[327] Le Corbusier (1929: 101)
[328] Le Corbusier (1929: 172)

centers, but not with suburban approach. He aimed to increase buildings in vertical line with proportional distance and leave the ground open in order to sustain human and nature contact.

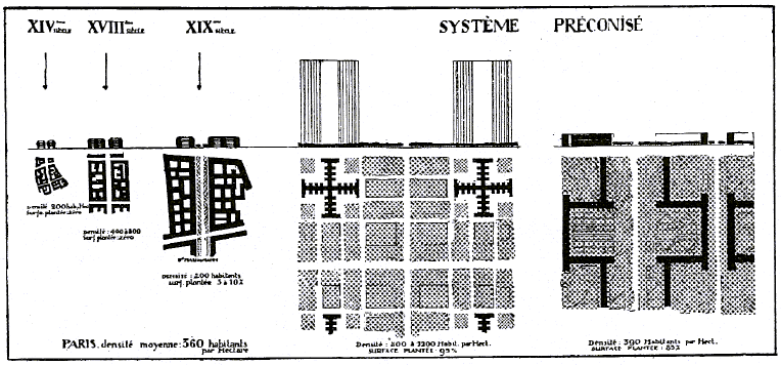

Figure4. 23 14th, 18th and 19th century urban form versus Contemporary City skyscraper and set-back residential area urban form
(Le Corbusier, 1929: 177)

Moreover, Le Corbusier introduced cellular system as another dwelling solution of Contemporary City except for set-backs. He criticizes the present-day dwellings, which were houses with gardens, in terms of their garden's being out of control especially on late afternoons. At the same time, low-rise garden city houses covers big portion of land which can be spent for other common uses such as sports and culture.[329]

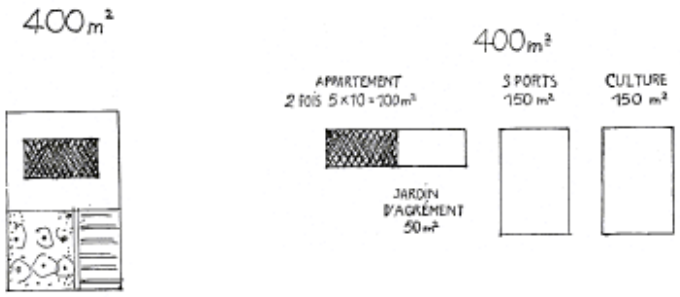

Figure 4. 24 Comparison of detached house with its garden and apartment with other uses which are in the same size
(Le Corbusier, 1929: 203)

According to him, cellular dwelling systems can provide more uses than detached houses in the same size of garden city such as sport and cultural activities.[330] This dwelling design can be thought as an alternative of traditional "closed-box houses" with its openings and gardens in every floor and roof. At the same time, cellular system is based on the idea of apartments composed of two-storied flats. When considered from these points of views, it supplied vertical terraced houses. At the same time, it provides semi-public areas in terms of ground left for common uses and semi-private areas in terms of vertical gardens. Le Corbusier uses his cellular system idea in both low and high-rise residences.

[329] Le Corbusier (1929: 202, 203)
[330] Le Corbusier (1929: 203)

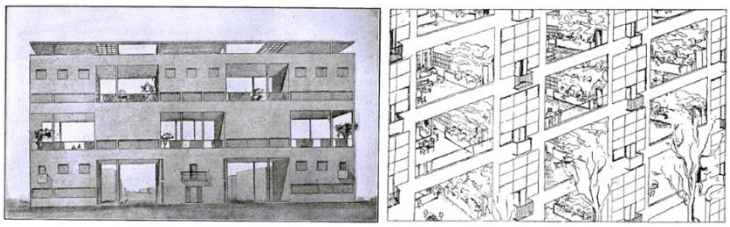

Figure 4. 25 The cellular system housing under the principles of vertical garden city in both low and high-rise buildings
(Le Corbusier, 2007: 268, 264)

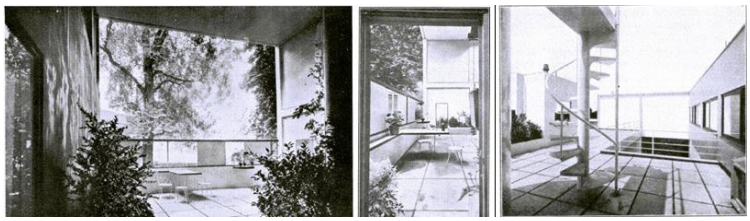

Figure 4. 26 Roof gardens and terrace gardens of Contemporary City
(Le Corbusier, 1929: 225, xvi, xvii)

Under these principles of dwelling developed by Le Corbusier, *Unite d'Habitation* had essential place which should be analyzed in detail and be involved in this part of the thesis. The architectural concern of Le Corbusier may be creating a new architectural style with new life style specialized for modern human. In this respect, Unite d'Habitation; in other words The Marseilles Block has importance which was constructed in 1952 with its 337 dwelling units.

According to Sherwood, the main focus of Le Corbusier was creating "individual family unit, the grouping of the units and the city itself" in Unite d'Habitation which was the ideas that he developed in thirteen years.[331] In this sense, it can be understood from the plan section (Figure 4.29), resembling the high-rise blocks of The Contemporary City dwellings, Unite d'Habitation is formed of two-storied flats with private terrace gardens which can gain the sun light, air and view easily from building's having large windows and vast open spaces around building.[332]

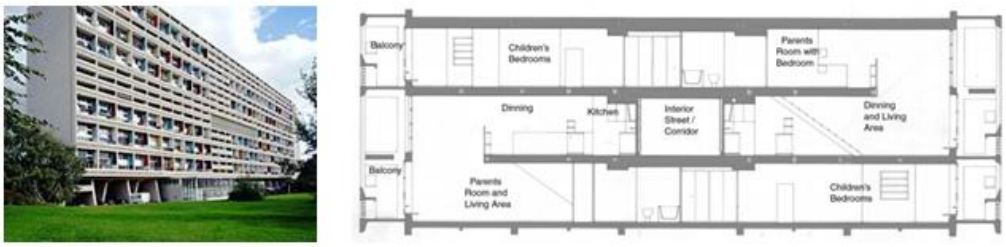

Figure 4. 27 Unite d'Habitation with lateral section
(http://en.wikipedia.org/wiki/Unit%C3%A9_d'Habitation (accessed on 12th of December, 2012) , http://www.architecture.uwaterloo.ca/faculty_projects/terri/226_residential/unite.pdf (accessed on 12th of December, 2012))

[331] Sherwood (1978: 120)
[332] Sherwood, p. 125.

On the other hand, the roof of the building was designed as communal meeting area with its pool. At the same time, the building has involved such other functional uses as restaurant, hotel, nursery, educational and sportive facilities that a community can need and a neighborhood should shelter.[333] Even though it had criticized by many in terms of the ground turning into non-usable area or the area which was designed in supermarket purpose had never been used with its functions and turned to architectural office flats[334], it may be said that Le Corbusier has achieved bringing private life together with communal activity areas by inserting public uses into the high-rise building. In this sense, trials of creating social and environmental contact inside the building which rises in vertical was also achieved in many aspects by Le Corbusier who implemented CIAM principles to his project with his ideas of creating communal life. The indications of these claims are the building's area never turning to slum by maintaining the special life style for the dwellers and construction of its variation projects in many other cities and countries.[335]

Figure 4. 28 Common spaces of Unite d'Habitation (http://melisaki.tumblr.com/page/322, http://spaceframed.blogspot.com/2010/03/interim-review-references-09.html (accessed on 12th of December, 2012))

In brief, life style that Le Corbusier aimed to provide in his city is both individual and community life which was the combination of individual life in Broadacre City and cooperative life of Garden City. Fishman states that the aim of Le Corbusier was a society life.[336] The evidence of this combination is double floor houses with terrace gardens in vertical apartments which provide collective life. At the same time, inserting public uses into vertical route other than the residential units is an effort of connecting dwellers with public in the vertical building. This has marked an era in connecting people with each other in vertical buildings and may pioneered different design approaches in vertical line. Fishman explains the vertical life style with communal services as:

> "Le Corbusier dwelled lovingly on the communal services that each apartment block would provide the industries who lived there. There would be twenty-four hour maid service and a private laundry. A special purchasing service buys the resident's food; a gourmet kitchen stuff is available to cook it; and waiters will serve it at any hour to any number of guests either in the resident's apartment or in a communal dining room."[337]

This was a communal life style of which designed the limits earlier by the architect. Nobody had the permission of constructing their individual houses as opposed to the Broadacre City of Frank Lloyd Wright that was fed by the individualism. The structures of Contemporary City were elements of the whole "architectural and social complex that together forms a unified structure of beauty and

[333] http://hotelswelove.com/category/hotels-we-love/Marseille/ (video shoot in Unite d'Habitation)
[334] Sherwood (178: 125)
[335] Sherwood
[336] Fishman (1989: 164)
[337] Fishman (1989: 197)

grandeur."[338] This was the sign of special collective order in Le Corbusier's work of architecture as had never been exemplified before in this thesis.

On the other hand, it can be inferred that Le Corbusier who has implemented CIAM principles in his many of the projects has aimed firstly to bring environmental contact in the spatial order by providing daylight access to all of the dwellings with locating dwelling units on green area by not blocking daylight of each other. The reason why Le Corbusier demanded on vast greenery was that he correlated a relationship between *freedom (individual life)* and *health*.[339] This was a kind of communal open space when compared to the private dwellings of Broadacre City. The way of providing environmental contact was passing pedestrian roads on this vast green system. Thus, it was aimed by Corbusier that both social and environmental contact would be held in these areas. In this respect, as Le Corbusier correlated *health* and *freedom*, he also bounded these concepts with *speed* which was the way of *success*. According to him "The city that achieves speed achieves success."[340] Thus, he structured the order of his city speed-based systems as highways by ignoring the traditional street life.[341] As the streets were reduced to access to destination (which is the interior of the buildings comprising communal activities), street's function of provision social contact by gathering people was not cared. The street was in vertical line anymore based on elevators.[342]

Thus it can be said that the high-rise building environment of Le Corbusier is parallel with a neighborhood by including the main uses that a neighborhood ought to involve. However, it is then apprehended that the street is an essential part of the urban pattern which affects urban life and socialization. Thus, Modern Movement has been accepted as the fader of socialization by ignoring the street.[343] Barlas insists on the redefinition of the street in modern times not only with the basic elements of it, but also with the transportation by answering the man's psychological and social needs.[344] It can be said that even though the street does not provide any social contact in modernist blocks as being in organic pattern, it does provide social contact in the upper sides of the ground, which is the communal function areas such as laundry, restaurant or swimming pool that were created in order to bring people inside the building. However, Barlas advocates that the semi spaces had been lost with modernism which is one of the ways of providing territoriality and which is the natural feeling of dwelling zones. According to him;

> "Among all attributes that modern urbanism have affected, it seems, the most affected is the intermediary between private and public realms. In almost all cases that we have reviewed, intermediary spaces were wiped out from the street. As intermediary spaces are physical manifestations of the mediation between the self and the others, their absence will adversely affect both individuation and socialization."[345]

This is an important determination of modernization on urbanization which can be linked to the economical and humane features. However, it can be said that the modern buildings which are isolated and located in the open green area has changed the traditional urban environment totally in terms of territoriality feeling as an instinctive behavior of human.

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[338] Fishman (1989: 199)
[339] Fishman (1989: 191)
[340] Fishman (1989: 191)
[341] Fishman (1989: 190, 191)
[342] Fishman (1989: 192)
[343] Barlas (2006: 5)
[344] Barlas (2006: 14)
[345] Barlas (2006: 149)

4.1.2.2. High-Rise, High Density & High Coverage Urban Environment – Manhattan Island

Manhattan is an extreme example different than Le Corbusier's Contemporary City by means of land coverage. As it was mentioned before, urban form of Manhattan Island in New York City is the result of economic reasons; the reflection of rent on urban land. At the same time, the vision of the city was to hold the highest buildings in the world in the past century which provided a market place for the city by itself. Due to these reasons, Manhattan district has been developed in both horizontal and vertical lines by increasing the number of people, rate of density and coverage which made Manhattan's location in the right bottom corner of *space matrix* (see Figure 4.4) as opposed to Broadacre City which places in the left top side with its low number of people, low rate of density and coverage features. By these features of New York, it is one of the lowest ranked cities of the United States in terms of resource and energy cost which can be depending on compact urban form that increases urban density and decreases transport and heating energy.[346] Ahead of New York, there are some Asian cities such as Tokyo, Singapore and Hong Kong, in terms of urban density and energy cost issues with their higher rates of coverage and density.[347]

After the general discussion about New York, the life style in these vertical buildings will be discussed independent from the location. Families maintain their individual lives inside their private dwellings in differentiated styles from each other existing inside the high-rise buildings which were illustrated in Figure 4.32. It can be explained that even though it seems high number of people are living together resembling to a communal life style, they sustain their individual lives in their private spheres.

Figure 4. 29 Different individual life styles in a twenty five-storied high-rise residential building in Seul, South Korea
(Yeondoo Jung, National Geographic Türkiye, December 2011: 104, 105)

[346] Berghauser Pont and Haupt (2010: 72)
[347] Ibid.

The lifestyle in high-rise buildings has important relations with the human features formed after the capitalism in the 19th century. According to Sennett, as the industrialization has developed machine-made goods, this has made the buyer as the main focus in market economy in order to sell the goods. As a result, *personal character, private feeling* or *individuality* was focused on in public arena described by Marx as "commodity fetishism".[348] Together with this, nuclear family gained importance rather than extended families in the same era in order to adapt the capitalist order as being another element of individualism.[349] The individuals started to be accepted by public as not a social being like in ancient times, but as having a personality and something secret like privacy.[350] The public space has been formed depending on these changes in self after 19th century. According to Sennett:

> "In public, especially males at least to witness what life was like outside the rigidities of the property they experienced in the family. In silence, watching life go by, a man was at least free. Thus, the survival of a public realm on the new terms set up a fundamental antithesis of modern life: the modes of free personal development as opposed to, at war with, the modes of social interaction, as embodied in the family. This survival of public life, ironically, permitted personality and sociability to become mutually hostile forces."[351]

The irony that Sennett mentions in public life may be that before the capitalist mode of production, the self was being developed by socialization while the self has turned into intimacy as a result of alteration of production change depending on personality features of the individuals.[352] The mentioned intimacy in societal order had two principles for Sennett; *narcissism* and *community feeling (gemeinschaft)*. The former is a character highly related to the ego which puts forward the individual and his/her benefit in any circumstance, the latter is "full and open emotional relations with others" which is depending upon the development of personality in a society.[353] The community sense is born from the collective self by an alternative way of externalizing the other who is out of the community.[354] Thus, it is a kind of demonstration belonging to a group which can be opposed to the territoriality idea of *society (gesellschaft)* that deals with the individuals as one without degrading to the categories as being in community.[355] Hence, it can be resembled to non-territory or local territory in terms of its decoding characteristic which conducts social relations without any action but on silence depending on human psychology.[356]

The reflection of the capitalism on society (also on land) is "division, separation, isolation". On the other hand, the societies and cities becoming more and more crowded which does not give any chance to people comprehending and distinguishing each other. As a result of these spatial separations and overcrowding, people chose to ignore the others as opposed to control feeling (and territoriality) of ancient times. Actually, Sennett may see these "local territories, communities or ghettos" as the result of the process started with capitalism.[357] According to him:

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[348] Sennett (1976: 142-146)
[349] Sennett (1976: 177)
[350] Sennett (1976: 195)
[351] Sennett (1976: 196)
[352] Sennett (1976: 219)
[353] Sennett (1976: 220, 221)
[354] Sennett (1976: 222, 223)
[355] Sennett (1976:221, 222)
[356] Sennett (1976: 238, 239, 259)
[357] Sennett (1976: 294, 295, 298)

> "The bourgeois man in the crowd developed in the last century a shield of silence around himself (…) Unlike his ancient regime counterpart, who also new the anxiety of crowd life, he did not try to control and order his sociability in public; rather he tried to erase it, so that the bourgeois on the street was in a crowd but not of it."[358]

As a result, it can be said that the human of capitalist era is isolating himself/herself from the society for many reasons and creates his/her own community and territory by being purified from the control feeling. It has parallelism with the high-rise residential building life which is generally a closed community. As a result of mentioned features of capitalism like separation, division and isolation, the buildings are also separated from the whole city in many examples. At the same time, the high blocks shelter the persons who resemble each other which provide community feeling by its nature. As a result, it can be said that isolated individual life styles are conducting inside the private spheres of the families in the high-rise buildings along the city itself under the presence of community. At the same time, the territoriality feeling is not developed as being in middle or low-rise buildings because the building system brings community feeling inside without any need to control.

Considering the environmental and social contact of the high-rise residential blocks by referring to Manhattan example, the focal point can be coverage. The point in here is that the relationship and respect of the city for the nature. As the city is highly covered in horizontal and vertical lines by increasing the rate of density and number of people it comprises, the urbanization does not spread on land when it is compared to other cities with lower coverage rates.[359] In Manhattan case, which was bought from American Indians in return to twenty five dollars[360], Central Park was created which is now the origin of a natural life in between high-rise blocks without any trace or urbanization. This strict differentiation in between urbanization and natural life creates an opportunity of benefitting the environmental contact in the middle of the city. Thus it can be said that there is a balance between overly covered urban life and natural habitat as can be seen from Figure 4.32.

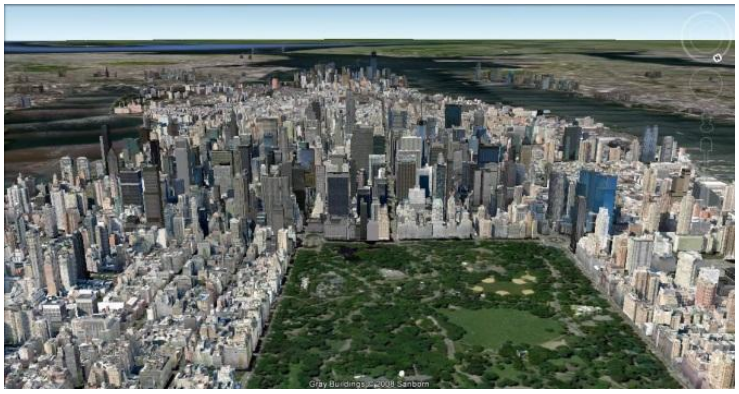

Figure 4. 30 Manhattan view
(Google Earth, accessed on 12th of December, 2012)

On the other hand, as the district is highly covered with high number of population more than one and a half million of people and high number of activities, it shelters a dense crowding in its avenues which brings vitality to the street and increases social contact. Even though the contact may not be in verbal form, it harbors mimics or jests which may be tools for the development of the self of

[358] Sennett (1976: 298, 299)
[359] National Geographic Türkiye, December (2011: 101)
[360] Broadbent (1990: 60)

individuals in the society.[361] Thus, it can be said that this highly covered urban streets may bring the feeling of society.

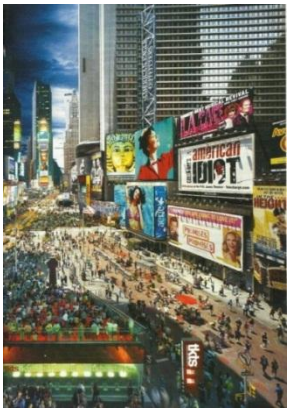

Figure 4. 31 Broadway streets in Manhattan, New York
(Stephen Wilkes, National Geographic Türkiye, December, 2011: 113)

4.1.2.3. High-Rise, High Density and Extremely High Coverage Urban Environment – Not a Vertical Building But a Vertical City, Soleri's Urban Utopias

Next, Paolo Soleri, who is an Italian architect dealing with the urban form and its relations with nature under the concept of "arcology". According to Soleri:

> "We need a new social nexus in which each individual can be aware not only of him – or herself, but also of others and of inanimate objects in order to encourage a system of beneficial relations that reconnect man with the environment – with space, air, sun, light, atmosphere, land, people.. as well as with a great vision."[362]

Basically Soleri has been the supporter of nature and man coupling because he was finding world extremely materialized after Second World War which has brought urban sprawl, solitude and selfishness. At the same time he is a kind of extreme supporter of the nature. For that reason, he promoted urbanization, nature and human relations, but not from the decentralist side. On the contrary he established over urbanization without damaging the nature.[363] In this respect, he idealized highly dense huge human environment with excessive population. He created his Arcosanti and Babel which was a kind of three-dimensional urbanization with its strict boundaries by the concept of "arcology"; the syntheses of nature and architecture. Soleri mentions that;

> "Since the surface of the earth is a two-dimensional configuration, the natural landscape is not the appropriate frame for the complex life of society. As a result, man must create a metropolitan landscape in his own image. It should not be a tenuous film of organic material, but energetic lump that is physically compact, dense, and multilevel; it should be a solid of three compatible dimensions." then goes on "the city must be a solid, not a surface… Three-dimensional city is respectful of the earth's sensitized skin. It does not

[361] National Geographic Türkiye, December (2011: 101)
[362] Lima (2000: 13)
[363] Lima (2000: 13)

> spread on inorganic crust (megapoly – ecumenopolis – suburbia) over the vital green carpet of the earth".[364]

Because of caring nature, Arcosanti grows in both positive and negative vertical lines which mean object shaped three-dimensional city grows both under and above the earth. Due to these features as opposed to Broadacre City, Soleri's urban utopias locate in the right bottom corner of the Space Matrix (see Figure 4.4).

Soleri saw the city environment as a living organism just like bacteria; and wanted to base his idea on the mutation process of the urbanism in a range of time with its own features of "complexity, miniaturization and duration".[365] Hence, he brought together these ideas by his machine-like creature which changes and mutates according to the needs.

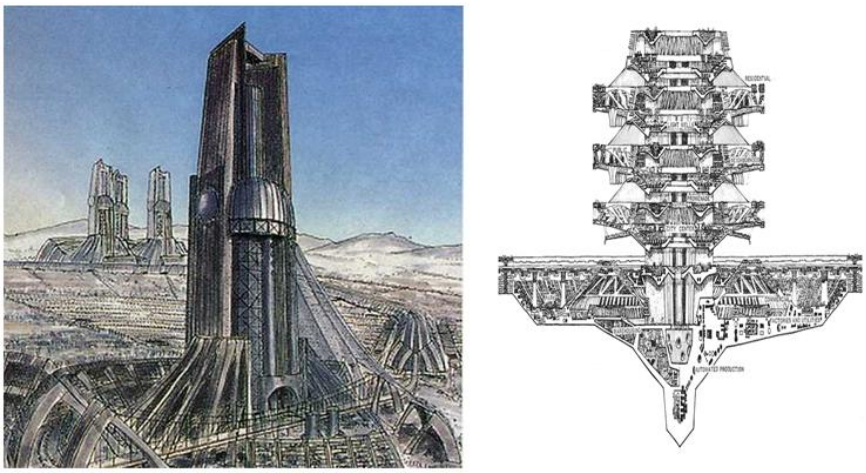

Figure 4. 32 Soleri's hyperbuildings (Tokyo Tower and Babel)
http://utopies.skynetblogs.be/archive/2009/02/15/paolo-soleri-arcology-babel-et-hyperbuilding.html (accessed on 6th of September, 2012) and
http://www.iamanangelchaser.com/files/art/art_i_like.html (accessed on 6th of September, 2012)

Soleri saw the compactness as a way of achievement of nature in the living environment. In this way, as the city is denser, the distance to the nature will be smaller. In order to enjoy the maximum density, Soleri represents the idea of three-dimensional city.

> "Since the surface of the earth is a two-dimensional configuration, the natural landscape is not the appropriate frame for the complex life of society. As a result, men must create a metropolitan landscape in his own image. It should not be a tenuous film of organic material, but energetic lump that is physically compact, dense, and multilevel; it should be a solid of three compatible dimensions."[366]

As the city become vertical and three-dimensional, it becomes more considerate to the nature and the surface of the earth, so it does not scatter through the land as being in megalopolis or suburb.[367]

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[364] Lima (2000: 210, 214)
[365] Luke, 1994.
[366] Lima (2000: 210, 211)
[367] Lima (2000: 214)

Soleri minds the nature and its preservation such that his Arcosanti and Babel is highly dense three-dimensional object. As opposed to Wright, the found "to be closer to the nature" by living in more compact form very near to the nature which is vertically rose and descended urban form comprises 1.5-6 million of population, not scattering the human through the land.

In the light of these information, Soleri's immense urban blocks creates very well-defined urban territory such that it restricts to go out of the border. He creates very strict spatial boundaries in order to give a shape to the city and not to damage the natural environment by sprawling on land. By this means, superstructures of Soleri create very well defined urban territory and provide total control of the urban environment. At the same time, it can be said that he planned to bring every aspects that make inside of this shaped territory such as any kind of infrastructure or urban functions. Thus it can be said that social contact will be created inside this three-dimensional city in pedestrian roads, gathering places, etc. as being in compact city streets but in vertical line.

4.1.3. An Evaluation about Urban Life styles in Respect to Height, Coverage, Building Type and Density

This study of *Space Matrix* the urban life determines the changings depending on building type and urban form. To start with, it can be referred that the common spaces of the urban area is changing in respect to building height. While the gathering places such as common spaces, squares, courtyards or streets are developed as areal in horizontal line in low and middle-rise urban blocks, high-rise blocks can host the gathering spaces inside in point forms or can bring these in the ground level of the blocks as being in modernist buildings which tried to gather people in vast open spaces. In these vertical buildings, the streets are elevators of the buildings, the lobbies are small gathering areas in point form. On the other hand, Manhattan Island is the example different from the previous statement by gathering people in the streets as being in low and middle-rise building form. At the same time, high-rise residential buildings are also sheltering the functional uses except the dwelling units which are another form of gathering people, not horizontal streets but in vertical line.

The territoriality feeling changes from low and middle-rise residential buildings to high-rise residential environment. On one hand, low and middle-rise buildings hold the control of the environment in their survival games of living areas by defining their dwelling areas with some semi-spaces. As a result of this, the dwellers have the information of the environment due to control instinct which becomes the reason of development of socialization and community feeling. On the other hand, high-rise buildings which are more than six storeys (as the threshold of vertical control feeling) cannot create semi-spaces in the buildings which provides entrance of public without any control in the entrance doors and forms "no-mans-land" as uncontrolled areas in the double-loaded corridor systems. In the cases which provides controlled environment without letting the entrance to the building does not create need of control in their dwellers which is the reason of exceeded survival game in residential area of the dwellers as a result of the benefits of community life. This is another example of loss of territorial feeling in high-rise buildings. As opposed to the low and middle-rise individual life within the survival game which creates community feeling in its dwellers, even though high-rise buildings can be seen as the place of community life, it does not develop social relations between its dwellers due to the loss of control feeling. Thus it is a contradiction that while high-rise provides a kind of communal living, it does not develop social relations and drags the dwellers to the individualized life. Nevertheless, it cannot be defended that the high-rise residential environment drags human to a totally intimate life due to loss of control. It is a two-sided issue due to the fact that the high-rise buildings have a kind of administration unit which divides the costs of whole high-rise building between the number of dwellings or which solves the issues regarding the

building.[368] That is why, it can be said that high-rise buildings shelter a kind of collective life with collective concerns of the whole building which is hardly described as a collective survival as being in low and middle-rise buildings.

The discrimination between urbanization and nature can be mentioned in respect to the coverage of the building form. Human's spreading or compactness in land determines urbanization level and environmental contact which can be explained by coverage, building type or density as correlating elements. In order to arrange in an order briefly by using the *Space Matrix*, the American Suburban life with its highly spreading pattern of residential areas puts a direct relationship between individual and nature starting from the large private gardens of double-floor houses till the common parks. As the families can produce their survival directly from what they cultivate, it forms a spatial adjacency between human and nature. However, this leads to a spreading urban form which is a dilemma by opening more natural lands on human use. This direct relationship depending on possession, usage or cultivation in American Suburbs starts to change its shape through the British Garden Cities. Except the private usage of the land as gardens, Garden Cities provided common green areas in the middle of building blocks as one of the premiums of community life aimed in Garden City approach with its higher rate of coverage when it is compared to the former. This situation changes as the coverage increases as in the Medieval City which has the highest form of urbanization and societal life in compact form by moving the green area around the compact city. This kind of urban form is aimed to meet the demands of citizens in order to produce their food and survive. Then, the motive of greening changes in the middle-rise and highly covered urban forms. Any building form (nucleated, linear or courtyard) in middle-rise with middle density example is the reflection of communal life in every stage of the urban life; the common garden of multi-family buildings and the parks all belong to the community and society life style. As going through the high-rise environment with low coverage, the description of green area is again based on the use of community which provides high rates of greenery in order to provide daylight access inside the dwellings. Thus this system of high-rise buildings with low coverage is highly resourced by the idea of meeting people with nature both in their dwellings by daylight, air and view and their common grounds by green. Next, high-rise residential form in higher coverage produced an exact distinction between nature and urbanization. Manhattan Island is the example of totally urbanized space purged from the nature in the residential side whereas the Central Park is functioning in the opposite side by giving the highest motivation of green and natural life strictly separated from urbanization. This can be followed by Soleri's Utopias which have the maximum coverage by bringing people inside the three-dimensional space as functioning like a city which has the highest coverage. This utopic environment is the way of separating human and nature in space while protecting the nature without any touch of human. As the nature is not only green but also sunlight, view, and air, this totally closed and territorially well-defined environment does not have any trace of these.

As a result of these, it can be said that every building height, coverage, density and building type makes its dwellers to live different modes of social and environmental contact in accordance with several lifestyles.

4.2. The Spaces of Communication of Contemporary High-rise Residential Buildings in Urban Design Scale in terms of Categorizing Public and Private Space Continuity

As mentioned in previous part, the high-rise residential buildings have brought discrepancy in the formation of gathering spaces by comprising differentiated functions inside as being in the

[368] As the author is dwelling in a high-rise residential block, these statements are resourced by the experience of her who is informed about the administration issue depending on the communiy life in these blocks.

Contemporary City and *Unite d'Habitation* of Le Corbusier. Except the functional variety, high-rises have started to create the spatial variety in interior design. Soares Gonçalves and Umakoshi explain that the changing interior design in high-rise office buildings in western world was resourced by some necessities.[369] Besides, high-rise building as the new building type is important by creating vertical neighborhood after the 20th century. According to Yeang:

> "Because of the hugeness and intensiveness, the skyscraper is analogous to the city itself. It is virtually a city in itself, that is a "city-in-the-sky"."[370]

The evolution from the simple office door design of 19th century to the contemporary high-rise buildings in many functions and differentiated spatial interior and exterior order can be the reason of many implications in changing urban spatial relations emerged in capitalist era. In order to understand this evolution of high-rise buildings, the urban conditions created after the capitalism should be determined here because the high-rise building has direct relations with capital as it needs high level of capital in order to exist and evolved in the city by selecting location inside the capitalist relations.

By inferring to Marx's ideology of capitalism, Harvey describes the alteration on spatial order in the cities in postmodern era with some concepts as *separation, disintegration, impermanence, discrepancy, otherness*.[371] He describes the reason of the emergence of these concepts in the city as "time and space press". According to him, as the capital accumulation is always interested in the increment of production level which is the only way of the survival of capitalism, this situation requires essential attacks in transportation and communication fields in order to reduce spatial barriers. With the development of these fields, the experience of space and time has passed radical changes in this sense which are the carriage of the burdens by airplanes, the improvement of technologies in telecommunication, electronic banking system, and development of motorways for carriage. These changes which are described by Harvey as "time and space press" have decreased the scale of the world.[372] [373]

As the opponent of this spatial melting, different spatial structures emerge which is not a contradiction for Harvey. According to him, capital exhibits itself in these spatial structures as being its own physical appearance and as being value of use about its gradually growing accumulation. As a result, the spatial structures and geographical territories exist. The spatial structures are fixed,

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[369] Soares Gonçalves and Umakoshi (2010: 6)
[370] Yeang, K. (1997: 13)
[371] Harvey (2012: 155)
[372] Harvey (2012: 157)
[373] Marx (1967: 385) (1973: 524, 528, 539) quoted from Harvey (2012: 294, 295)
This process of improvement in communication and transportation has been described by Marx as an obligation which resulted in the necessity of exceeding spatial boundaries. These improvements which are reflected to physical conditions are the tools of decreasing the costs of the circulation. As the capital exceeds the spatial barriers depending on its nature, the conditions for physical change become indispensable. As a result, Marx states that as the capital can exceed the spatial boundaries, the spatial distances become insignificant but the speed contributes to the process of capital accumulation. According to him, "under these circumstances, even the spatial removal reduces itself to the time. Thus, the important thing is not the range of the market in space but the speed of access to it." Marx explains this as on one hand the capital needs to annihilate spatial boundaries, on the other hand it achieved this aim by using time which means as the capital is developed, space is being destroyed by the time in parallel.

motionless and are not provoked such as transportation facilities or factories.[374] From the perspective of capitalist environment high-rise buildings can be matched with it. First of all, it has been explained how capitalism behaves in spatial manner in terms of its segmenting the space into parts, dividing and isolating the parts from the whole. This is basically made up of the aim of increasing speed in order to accelerate the economic relations and increase the rate of profit. The tool of this acceleration is speedy environment elements such as motorways inside and outside the urban space. As a result of these developments in physical environment, the cities are breaking up with the tears which can be explained as the splitting of public sphere. The isolated, separated and disintegrated parts need to sustain the persistence of themselves by creating closed communities. The reflection of this survival in physical appearance can be explained as indestructible vertical buildings by sheltering lots of different functional needs under one complex. This physical creature is either the answer of the human type created by capitalism in the meaning of character and life style, or the reflection of capitalist accumulation on space with its features of tallness, hugeness and stableness in form.

Except the form itself, fragmented public space with the development of capitalism tends to be limited around or inside the building which is an opposing situation to the old city centers where the public sphere is in an integrated condition in the whole city. Barlas defines this fragmented environment with the evaluation of *land speculation* in modernism as follows:

> "As urban land gets scarce and population increases, attempts to make the most profit out of the available land stock become a prevailing theme in the urban stage. It becomes more profitable to expand the built-up area into every vacant land available for the value return of buildings is always greater than vacant spaces. There is a tendency to continue this expansion until the private domain is entirely built-up. In the vertical space, construction technology and economic feasibility are the factors limiting such an expansion. In the horizontal space, the public domain becomes the determining factor of the limits of expansion."[375]

By giving the example of Manhattan in New York, Barlas explains that as the private realm that increase its value by land speculation widens in scale in urban area by turning the whole space to the private space and by covering the whole plot, the public realm narrows down which causes a reduction in semi-spaces to the entrance halls or make it disappear as can be seen in Manhattan.[376] According to him:

> "In essence, therefore, the inner city land speculation usually results in higher building densities, eventually causing the abrupt separation of private and public spaces. When buildings consume their entire site, the buffering intermediary spaces that are essential for territorial control inevitably vanish from sight. Intermediary spaces forming frontal buffers (as in the case of frontal yards and/or porches) are lost together with other types of intermediary spaces, such as courtyards and backyards."[377]

Thanks to these explanations, it can be referred that public and private gradual continuity has been destroyed by high-rise blocks construction of which is based on capitalist aims and has narrowed down the public zone.

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[374] Harvey (2012: 297)
[375] Barlas (2006: 104)
[376] Barlas (2006: 105, 108)
[377] Barlas (2006: 108, 109)

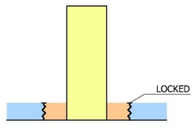
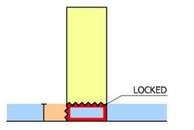
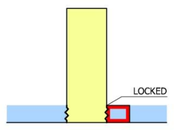
After these specifications about high-rise buildings emerged with capitalist aims and its effects on building prototype and public order, the types of spatial continuity between public and private in high-rise buildings will be tried to identify, based on observation. It should be note that there are several kinds of meeting between public and high-rise residential buildings; either they can take place in the middle of fragmented urban space by themselves without noticing the pattern around them which was a contemporary issue after the reflection of capitalism on space by constructing gated community, or they can rise in vertical responsively with the surrounding by creating the pattern. All these environments create a relationship between public and private zones in a differentiated way. Hence, this part of the thesis will deal with the general public and private continuity discussion, depending on territoriality. That is why it should firstly be identified that the residential zones create control mechanism for the survival of their inhabitants as mentioned before. Thus, this instinctively controlled environment depending on territoriality feeling necessitates a kind of control mechanism in high-rise buildings, too. In this direction, the contemporary high-rise residential buildings are forming control mechanism in areal or point scales. This controlled zone is tried to be created by restricting the entrance for the public by constructing fences as creating gated communities which is an areal solution or by bringing security staff or officer to the entrance halls who controls the entrances as a point solution. Thus it can be said that the high-rise buildings in residential use bring locked environment after the modernism.

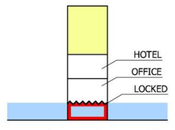
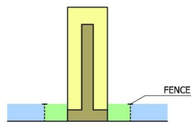
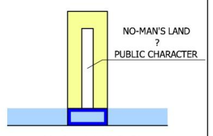
After these explanations, a general categorization to determine the degrees of public and private continuity in high-rise buildings will be made depending on the empirical and literature study. Except of the public and private continuity models, there will try to be explained the spaces of communication and their differentiations subject to the life styles formed depending on the public and private continuity. In this sense, some contemporary high-rise residential buildings will be analyzed generally locate in Ankara and İstanbul some of which are still under construction. Except for these examples based on observations, mixed use examples will also be discussed which are not based on observation but literature study.

4.2.1. Gated Community

As an areal solution of control, by surrounding the building group with fences or walls, the access of the public inside this territory is being hindered strictly with lines. This is a kind of small sovereignty area which strictly breaks public and private area from each other. Thus, the continuity between public and private space, or semi-spaces cannot be mentioned.

An important thing in these gated communities comprising high-rise residential blocks is the definition of common areas inside the building complex which is not a public area in terms of not allowing public to the inside of the territory. They also do not have a strictly private character in terms of being common area for the inhabitants. When it is thought from the public side left out of the walls, gated communities narrow down the public sphere by surrounding the building complex with insuperable obstacle. The result is generally the reduction in the public space nearly just to the road and pavement. As a result, the contact of the dwellers nearly burns out with the public. This causes a community life sharing with the other inhabitants who live inside the wall which is the reason of isolation from public life. The life style gained as a result of strict public and private separation by hinders is a good example of intimate society created after capitalism which was mentioned before by Sennett. Thus, the results of the public and private separation can be destructive by isolating inhabitants from the public.

	TERRITORIAL DEFINITION	URBAN PATTERN	EXPLANATION	BUILDING TYPOLOGY	SOCIAL CONTACT AREA	ENVIRONMENTAL CONTACT AREA
①	 Gated Community	 Yaşamkent, Ankara	• Fragmented living environment • Totally isolated "community" • Areal solution of territorial control • Dominant Private Character	 Besa Karina Housing Complex	• Gathering spaces inside the walled space in private character: "Community Gathering Area" or "Exclusive Public Space" • Common space inside the building: "In-between Space" • No spatial contact with the public and street	• Gathering spaces inside the walled space around the building: "Community Gathering Area" or "Exclusive Public Space" • Environmental contact space inside the building: "In-between Space"
②	 Half-Gated Community	 Zorlu Center, İstanbul	• Fragmented living environment • Semi-isolated "community" • Areal solution of territorial control • Public penetrates into the area under control	 Zorlu Center	• Social contact with public in the ground: "Public Space" • Dwellers contact with each other in designated spaces in the upper levels of the building: "In-between Space" or "Community Gathering Space" • "Half public" character in the environment	• Environmental Contact in the ground or in-between spaces which can be either open to the public or only to the dwellers: "In-between Space" or "Community Gathering Space"
③	 High-Rise Residential Building Attached to Commercial Function	 Levent, İstanbul	• Fragmented pattern as a result of the reflection of capitalism to the space • Facilities located near the building which are in contact with the public in order to sustain the being of the fragmented land and isolated building from the whole urban pattern	 Levent, İstanbul	• Social contact of dwellers with public through the facilities • Dwellers in contact with each other in designated spaces inside the building: "In-between Space"	• Environmental contact inside the building in designated spaces: "In-between Space"

	TERRITORIAL DEFINITION	URBAN PATTERN	EXPLANATION	BUILDING TYPOLOGY	SOCIAL CONTACT AREA	ENVIRONMENTAL CONTACT AREA
④	 Mixed-Use High-Rise Building	 La Défense, Paris	• Fragmented pattern as a result of capitalism • Facilities located inside the building in contact with the public in order to sustain the being of the fragmented land and isolated building from the whole urban pattern • Not a dominant residential character inside the building	 Relience Tower	• Gathering spaces of dwellers inside the building: "Exclusive Public Space" • Contact with the public inside the commercial area in the ground	• Designated spaces inside the building for environmental contact; in façades, floors with the dwellers • Contact with public and environment in ground space of the building which have commercial function
⑤	 High-Rise Residential Building Complex with Territorial Markers	 Mesa Koru Housing Complex, Ankara	• Territorial markers around the building • Not a strict separation or division with wall but a gradual public and private continuity: "Semi-spaces" • Integrated to the city in different typologies (with fences or walls, with or without gatekeeper)	 Mesa Koru Housing Complex, Ankara	• Intermediary space which can create social contact inside the building: "Semi-private Space" • Intermediary space outside the building which provide contact with public: "Semi-public space" • Not an exclusive character	• Open spaces surrounding the building: "Environmental Contact with Dominantly Public Character" • Not an exclusive character
⑥	 Modernist High-Rise Residential Blocks	 Ataköy, İstanbul	• Public penetrates inside of the building without any hinder due to public facilities • Different results not only depending on architecture but also depending on economic situations and life styles	 Unite d'Habitation	• Gathering places inside the building in facilities which brings both public and private inside; "In-Between Spaces" • Social contact with public around the building	• Open areas inside and in the ground level of the buildings: "Environmental Contact with Public Character"

LEGEND: Private | Semi-Private | Community | Public | Semi-Public | Public Facility | Commercial

Figure4. 33 Public and Private Continuity Models in High-rise Residential Buildings
(Personal Drawing, 2013)

As an example of the gated communities, a development area in Ankara can be given; Yaşamkent. As can be seen from Figure 4.36, the land is fragmented into different building complexes many of which are high-rise residential areas. At the same time, the land prices is getting high day by day as a result of land speculation. Therefore, the aim of the construction of high-rise buildings is getting the maximum profit from this speculated residential zone. At the same time, in order to increase the selling rates, these building complexes are turned into gated zones in order to provide so-called "prosperous life" to its inhabitants.

Figure 4. 34 A view of Yaşamkent, Ankara
(Google Earth, accessed on January, 2013)

Figure 4. 35 Besa Karina Residential Complex as an example of gated community in Yaşamkent which creates its own life style inside of the walls
(http://www.besakarinaevleri.com.tr/ (accessed on 12th of January 2013))

As a result of these developments, a new kind of urban life exists which are formed by fragmentation and isolation. The common spaces such as greenery, playground, sports area or car parking are created inside these walled areas in order to provide contact area in the building complex. As the common spaces are open only for the use of the dwellers of the high-rise building complex, these areas takes a new description as "exclusive public spaces" or "common to the users of the building" which are the spaces that social and environmental contact can be gained.

4.2.2. "Half-gated" Community

One step forward of gated community which can be named as "half-gated community" is the residential building complex which can let the public inside the building to a limit. There still exists public and private separation in spatial aspect, however the design permits the penetration of public. In this sense, the ground and first floors are in commercial, social or office uses other than residential. This is actually a strict separation in between public and private zones but not in visual and areal meaning as being in the previous example. This is letting the penetration of the public until

some parts and floors of the residential zone by design, which can also be called as mixed use. However, the aim of this thesis is not determining mixed use urban environment but to determine the continuity in between public and private zones in different residential areas in spatial and functional aspects.

As an example of this high-rise residential project, Zorlu Center in İstanbul in Levent district can be given which is still under construction. As a highly complex architectural project, Zorlu Center comprises many functional uses in itself such as residential, office, commercial and social uses. The project reveals itself mainly with the concept of "shell" which envelops the high-rise residential and office buildings. The ground floor of the shell is composed of retail, plaza and concert halls.[378] Then the residential floors with terraces locate in the upper floors of the shell and in high-rise buildings. It is important to mention that the shell behaves like semi space by bringing public and private zones together in visual aspect but with strict hinders. Thus, it can be said that there does not exist such a territorial marker in any degree to create the continuity between public and private spaces. Except that, concave-shaped shell has important place in dividing its own interior and exterior parts into different life styles which is highly relevant with where public space starts and finishes. In this sense, the public is let into the interior part of the concave-shaped shell with the capitalist aims providing the continuity of that urban part by sustaining different functions in itself that was supported by the public. As a result, interior of the shell holds an urban vitality and increases social contact. On the other hand, the exterior part of the concave does not permit public to enter which is dominant with the green character. As a result, this part is reduced to common use of dwellers for environmental contact.

Figure 4. 36 Zorlu Center with "shell" concept (http://www.emrearolat.com/2008/01/01/zorlu-center-istanbul-turkey-2008/?lang=tr (accessed on 13th of January, 2013))

Figure 4. 37 Interior and exterior sides of the shell (http://www.emrearolat.com/2008/01/01/zorlu-center-istanbul-turkey-2008/?lang=tr (accessed on 13th of January, 2013))

[378] http://www.emrearolat.com/2008/01/01/zorlu-center-istanbul-turkey-2008/?lang=tr (accessed on 13th of January, 2013)

As a result, as being the element of intersection point of public and private spheres in differentiated layers, shell concept located in the ground of the high-rises combine the entrances of the buildings. On the other hand, due to the layered combination of public and private realm, the degrees of public and private continuity cannot be mentioned in space. On the contrary, the public and private are still separated from each other strictly due to the layered approach in vertical line. The vertical separation cannot contain any degree of control in space as being in horizontal line due to its nature. For that reason, the terms "exclusive public space" and "common to the users of the building" are still valid for social and environmental contact spaces. In addition to those, originally private space in "semi-private space" character which locate inside the concave shape is also a social and environmental contact space.

4.2.3. High-rise Residential Building Attached to Commercial Function

Next stage of public and private space continuity in high-rise buildings is locking residential area by point solution of control which is security staff or officers. Here, the effort of providing public and private spheres together is trying to be gained by penetrating public closer to the building. This can be an area or a structure as functional public area which can locate near the high-rise building. Under the reflection of capitalist system in the urban land, the fragmented areas are trying to survive thanks to the functional differentiation inside the complex or land as the way of catering for the needs of inhabitants. The other reasons of penetrating public to the inside of the building which is functioning as shopping mall, commercial area or other uses can originally be not only trying to join inhabitants with the public, but also letting the use of the public in order to provide capitalist circulation. Thus, this can be one further step from the gated communities by providing inhabitants of high-rise residential building to gather with public in a closer sphere.

Figure 4. 38 Kanyon Building Complex with residential, shopping and office uses & public street created in mall
(http://www.tabanlioglu.com/KANYON.html (accessed on 12th of January, 2013) and personal archive (October, 2012))

Kanyon shopping mall in Levent district of İstanbul is one of the examples of this association. This is a complex of residential, commercial and office uses which means public and private uses came together. The residential area is separated from the near shopping area by some corridors like passing area from one zone to the other. In residential side, there are officers waiting, who are controlling the entrance of the residence. On the other hand, shopping mall as commercial use is located distinct from the residential units by creating a public street inside. The corridors between residential and shopping buildings are opening to this street inside the shopping mall. As a result, it

can be said that the continuity between public and private zones is gained spatially by linking them with a corridor between residential and commercial area and bringing both public and inhabitants in a mall.

Another example for this category can be given from İstanbul again with İstanbul Sapphire building. Sapphire building has provided public and private continuity with the similar method which is a corridor from the entrance hall of the residential area to the shopping mall, but this time with controlled passing by dividing the corridor into two parts with a door which is opening with the permission of security staff of residential zone. Thus, public and private spheres are spatially brought into together in Sapphire example, too. The reason why the control is increased in Sapphire can be its being a more "famous" project with its height.

Figure 4. 39 Istanbul Sapphire Building with residential area in higher floors and commercial area in the basement
(http://www.tabanlioglu.com/SAPPHIRE.html (accessed on 12th of January, 2012))

The common features of these residential environments are the spatial features of social and environmental contact spaces. The contact is gained in public spaces which is actually a private space turned to the pedestrian road and commercial zone open to the public. On the other hand, the contact can also be gained interior of the buildings thanks to "in-between spaces" that common for the uses of the dwellers.

4.2.4. Mixed-use High-rise Building

Next, public and private space continuity type in high-rise building can have a different version in mixed use buildings comprising many functions in itself. Under the mixed use building conditions, public can penetrate into building in vertical line due to the functions and activities rising in vertical. However, the description of public is needed here which means the user of the building like the officers working in the office or hotel customers. As an example for this kind of buildings, Signal Tower which is proposed for Paris La Defense region can be given. As can be seen from Figure 4.42, the building was divided into functional zones limited by floors such as "shopping mall, offices, hotel, apartment and restaurant"[379]. It can be said that the residential units are located at the top of the high-rise building which can be restrictor of the access of the public. These apartment floors in high-rise building can have gathering places which is open for the dwellers. Even though the access limit of the public is not determined, it can be said that the general characteristics of zoning high-rise buildings can have the mechanism of controlling the entrances of residential floors as being the

[379] Broto (2010: 100)

easiest way of restricting the strangers to the floors rising through vertical line. From this perspective, public and private space continuity is also breaking strongly due to the zoning in high-rise mixed use buildings. As a result, it can be said that the principle contact area between public and private is the ground level of the building. “In-between spaces” inside the building is the other social and environmental contact spaces in mixed use high-rise buildings.

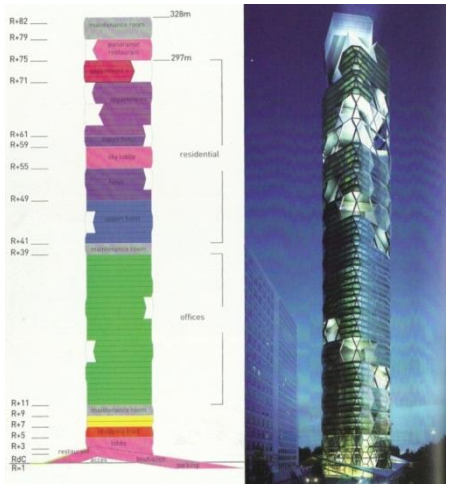


Figure 4. 40 Functional and spatial presentation of Signal Tower
(Broto, 2010: 100)

4.2.5. High-rise Residential Building Complex with Territorial Markers

The control over the high-rise residential building is provided in point scale in these cases. Here, the harmony of the high-rise building with the city can be mentioned. In fact, as the inhabitants of these high-rise buildings enter the building by using the key, the voids between buildings do not limit the entrance of the public or can be the contact area of inhabitants with public. For example, Yeşiltepe Blocks in Emek district of Ankara provides the control in the high-rise building in that sense. As the greenery of the blocks is defining the territory of the building complex, the continuity between public and private is in progressive stage when compared to the previous examples thanks to semi space perception which is gained without the need of strict walls. On the other hand, a consolidation of the building complex can be seen with the public in space. It also can be reflected to the human life. The intimate community life cannot exist in this case of high-rise buildings as being gated communities which strictly surround building complexes with walls.

Figure 4. 41 View of Yeşiltepe Blocks in Ankara
(Google Earth, accessed on January, 2013)

Except the exterior spatial order of Yeşiltepe Blocks, the interior space also represents the example of semi-space by providing common space which is a controlled area by being located in the middle of the buildings with vertically rising window. The common space of the building can be defined as semi-private space which is used by the whole inhabitants in common until entering the private flats. The indicators of the common area as a contact space which is not only used by passing zone is tables and chairs, or some objects like plants or bicycles that were functioning as a meeting or cellar place inside the building. The reason of this change in the use in halls may not be depending totally to the dwellers' own desires but the space is turning to the social contact area as the design permits to it. As a result, it can be inferred that this example of high-rise building represents the differentiated degrees between public and private zones which provide semi-public space in the voids as greenery area and semi-private space inside the building as common area of the dwellers.

Figure 4. 42 Yeşiltepe Blocks floor plan and interior view
(Bediz, R. & Kamçıl, D. (1969: 6) and Personal Archive (December, 2012): last two photos)

Figure 4. 43 Corridors as common spaces and meeting areas
(Personal Archive, December, 2012)

Secondly, Koru Sitesi comes as an example of practiced principles of Team 10 in Turkey. Koru Sitesi is located in Ankara on Eskişehir Road as an important residential zone linked to Çayyolu suburban area of the city. The importance of the area is sheltering differentiated kinds of dwellings forms, heights and densities and different kind of life styles. For example, there exist at least three different low-rise buildings forms, two different middle-rise and high-rise dwellings which provide different life styles for the users like increasing privacy in low-rises by spreading the population while increasing communal life in both middle and high-rises by bringing a huge population to the specific locations.

On the other hand, Koru Sitesi has also achieved the environmental contact of the dwellers with the whole by balancing constructed and green area without being separated from the city by using the gates or walls. The dwellers of this neighborhood remains the control over their residential area by some territorial markers like car parks, fences, or the gardens of the low, middle and high buildings.

Figure 4. 44 Territorial markers of low and middle-rise dwellings in Koru Sitesi
(Personal Archive, October, 2012)

Figure 4. 45 High-rise dwelling and entrances in Koru Sitesi
(Personal Archive, October, 2012)

Figure 4. 46 Google Earth view of Koru Sitesi
(Google Earth, accessed on 24th of January, 2013)

4.2.6. Modernist High-rise Residential Blocks

The final category in determining public and private continuity in high-rise residential buildings is Pruitt-Igoe Modernist Blocks. As it was discussed before based on Newman's arguments, Pruitt-Igoe was designed with the opinion of letting "ground and first floors free for community activities".[380] Except for these, community areas were placed in every three floor like "laundry, communal room, and a garbage room". On the other hand, vast open space was thought as the place to gather people. Newman explains the results of the penetration of public inside this high-rise residential building as follows:

> "Occupied by single-parent, welfare families, the design roved a disaster. Because all the grounds were common and dissociated from the units, the residents could not identify with them. The areas proved unsafe. The river of trees soon became a sewer of glass and garbage. The mail-boxes on the ground floor were vandalized. The corridors, lobbies, elevators, and stairs were dangerous places to walk. They became covered with graffiti and littered with garbage and human waste. The elevators, laundry, and community rooms were vandalized, and garbage was stacked high around the chocked garbage chutes. Women had to get together in groups to take their children to school and go shopping."[381]

Figure 4. 47 The result of community activities open for in the first and ground level; vandalism inside the building
(Newman, 1996: 11)

It can be referred from the explanations of Newman about Pruitt-Igoe, the basic reason of the vandalism is uncontrolled areas inside the building. While the public space starts to penetrate into the building especially in closed areas without window such as staircases or elevators, some areas are started to be vandalized due to loss of control. Newman explains these areas as "no-man's-land" that generates danger for dwellers when they take a step out of their private area to the corridors of the buildings. As a result, the penetration of public into high-rise dwelling zones until a limit can be dangerous as opposed to the gated communities which restrict the existence of public not only inside the building but also inside the building complex.

On the contrary, Unite d'Habitation which is another modernist block example with similar physical features does not show the same results. As it was adverted, Unite d'Habitation shelters some functional uses inside it such as restaurant, hotel, nursery and sports facilities. However, as opposed to the Pruitt-Igoe case, it has not turned to slum. In fact, it is a still very famous house in terms of life style it provides. As a result, it cannot be said that every modernist blocks ended with the same fate. Already, it has been stated by Newman that there exists three main reasons Pruitt-Igoe's

[380] Newman (1996: 10)
[381] Newman (1996: 10)

destruction; physical problems in urban design and architectural scale, the socio-economic conditions of the dwellers, and incompatible life styles of dwellers and life style provided by high-rise buildings.[382] Thus, it is open that these environments should be considered with the economic conditions without giving an environmental determination. Correspondingly, social and environmental contact spaces and their features change.

In brief, level of continuity between public and private spheres in high-rise residential building changes in many projects depending on many factors. These factors can be the type (areal or point) and level of control, the activities that the building comprise or the penetration level of public in and around the building. As a result of the continuity types between public and private spheres, different life styles are emerging in different high-rise buildings with different spaces of communication.

4.3. Categorization of the Spaces of Communication in Contemporary High-rise Buildings in the Scale of Architecture

As the human is a biologic and social living creature, their existence and life comprises biological and social needs which are to be provided during lifetime. Due to the fact that the high percentage of modern-day human lives in urbanized areas, they welcome their social and environmental (as biologic) needs in these urbanized areas which are cities. As it was discussed in the first phase of this chapter, every living environment shelters their own life styles for human regardless their height, density or coverage. Thus, it can be said that any kind of human settlement like houses with gardens, apartment buildings, or skyscrapers can represent the lifestyle in different shape. However, the most essential differentiation in these areas in terms of gaining social and environmental contact is the way of gathering people. Depending on the discussions made, it can be inferred that low and middle-rise dwellings represent a horizontal life by spreading the functions in the street. In fact, the street is a gathering area in itself in horizontal line. Together with this, courtyards, semi spaces or squares are the elements of horizontal life as social arena. At the same time, parks, private and common gardens are the other horizontal elements of gathering people for environmental contact. An environment with high-rise dwelling pattern represents social and environmental needs of human both in horizontal street pattern in urban scale in accordance with changing coverage levels as explained in vertical line in architectural scale which will be dealt in detail.

The basis of the discussion constitutes CIAM and Team 10 differentiation in this topic. While CIAM supported the environmental contact in focal point with high-rise development, Team 10 provided the urban environment with low-rise buildings in *groundscraper* form which scatters in land to sustain social contact. As a result, it can be said that a kind of logic was developed in the field of urbanism and architecture that high-rise buildings does not support social relations locating in vast open spaces while low-rise buildings can sustain it with *groundscraper* form of buildings by directing the movement and gathering places of people in a direction.

This part of the thesis seeks for how the vertical environment can create the spaces of communication in vertical line. In this point, some trials of contemporary high-rise buildings will be represented in terms of creating social and environmental contact spaces; in other words spaces of communication.

[382] Referred from Hall (1988: 235-240)

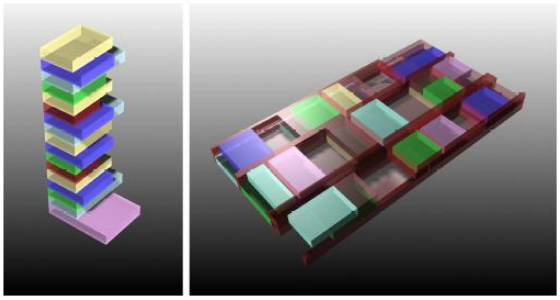


Figure 4. 48 Functional and physical division in high-rise buildings and continuity in low-rise environment which brings "isolation" in high-rises and "association" in low rises due to continuous red transmission areas
(Yüksel, 2005: 73)

Figure 4.50 represents the phase of the high-rise building categorization in interior architectural design in creating the spaces of communication. This is also the example of an ordinary high-rise building design which has entrance hall as socially contact or meeting area while corridors in the floors and elevators can be passing zones. On the other hand, environmentally contact area is the open space around the building in architectural scale.[383]

Contemporary approaches in new high-rise buildings shelter new spaces of communication distinctively depending on new urban movements. *Sustainability* as the heading concept, which is determined for many branches beyond urbanization, was propounded in 1987 with the definition of "meeting the needs of present generations without annihilating the chance of meeting the demands of next generations" in Brundlant Report.[384] According to Özügül:

> "The actions aimed at sustainability concept are prepared in four degrees of scale; national, regional, settlement and structural scales, last three of which have taken the lead in the production of operational tools. Here, the green building certification system is inside of these tools."[385]

Under the sustainability concept, the structures are tried to be designed distinctively by respecting many titles such as; *green infrastructure and building, smart location and linkage, neighborhood pattern and design, innovation and design process, regional priority* in LEED certification system of America, and *climate and energy, place shaping, community, ecology, transport, resources, business, buildings* in BREEAM certification system of England.[386] As it is seen from the titles of the certification systems which is derived from the sustainability concept, the concern of resource consumption which interest the world as a whole was reduced to a point scoring system in buildings. In this respect, private companies which use the certification system in construction have diversified the interior design of the buildings in order to maintain the standards. Considering the titles of the

[383] This sentence is the author's acception while there can be extraordinary examples. One of them is TUBİTAK research conducted by Tahire Erman. According to the study, the use of corridors in TOKİ Karacaören (Ankara) is changed by the dwellers as standing, chatting and storing area. As a result, the corridors have gained function as social contact space. This is the reflection of rural-based old life styles of the dwellers who moved from the squatter houses to the high-rise buildings under the urban transformation project. (Erman, 2011: 25-31)
[384] Özügül (2012: 507)
[385] Özügül (2012: 507)
[386] Özügül (2012: 510)

certification systems, it can be seen that the perpetuity of social systems has also been added to the list except the environmental systems as the focal point of sustainability concept. On the other hand, it should be indicated that the certification system has been a prestige elements in selling the flats of buildings. It is aimed by the private companies to construct the buildings in order to increase the prices of the flats or other sectors of the buildings by creating social and environmental communication spaces without dividing the whole structure into the private spaces.[387] From this perspective, it is clear that the interior design of the high-rise buildings is being shaped in contemporary buildings in order to maximize the profit coming from the sales by applying the concept of "sustainability" in the structural scale.

As can be understood, the new architectural design approach has been developed in the buildings especially in contemporary high-rise buildings as being highly rentable type in present times under the development of some concepts. On the other hand, as a result of sustainability concerns, the architectural design of high-rise residential buildings were affected from this, which was started to rely on creating some contact areas inside the buildings. These in-between spaces inside the buildings will be explained in terms of their creating social and environmental contact.

4.3.1. In-between Spaces on the Floors

Newly constructed high-rise residential buildings have started to hold these spatial arrangements on the floors which can be both in open and closed types depending on the functions it shelters. These areas are tools of providing both social and environmental contact for the dwellers of the building.

To start with, Sapphire Residence in İstanbul has special space for gathering people, bringing some activities inside the buildings. Fifth floor of the building was designated for sport facilities like swimming pool and studios for gym, and sixth floor is designated for gathering area under the name of "Lounge Floor" which has a bar, a play room for children, multimedia and meeting rooms. These are communication areas of the dwellers designed to bring them together in these spaces. Except for these, there exists a golf course inside the building in thirty-ninth floor which is the indicator of addressing income level.[388]

Figure 4. 49 Gathering Places in Sapphire Residence; respectively lounge, sports, golf floor and entrance hall
(http://www.istanbulsapphire.com/index_satis.html (accessed on 15th of January, 2013))

[387] The officers who work in sales office of Saphire Building in İstanbul specifies the prices by giving the information about the certificates that the building has.

[388] http://www.istanbulsapphire.com/index_satis.html (accessed on 15th of January, 2013) when the author interviewed with the sales office of the Sapphire Residence (October, 2012), it was indicated by the officer that these floors divided as common space for dwellers have users in any hour of the day by attracting the dwellers without being an incommodious space.

Other example of the space of communication in contemporary high-rise buildings is Dumankaya Ikon Residence Building in Istanbul. The difference of this project from Sapphire is providing open area in the floors in order to provide environmental contact such that it is used as a marketing tactic;

"You can make your morning walking ninety-meter rise above the city."

"Some buildings have views, some buildings are views by themself." [389]

The building is formed of togetherness of three high-rise buildings with forty and forty-one floors in elliptical shapes. The floor gardens are associating three buildings in middle floors of the intersection points of these buildings.[390] The gathering idea is tried to be achieved by using environmental communication space both for the three buildings and the whole dwellers of the buildings.

Figure 4. 50 Dumankaya Ikon views (http://www.yapihaberleri.com/emlak-haberleri/dumankaya-ikon-konutlari-satislari-devam-ediyor/ (accessed on 15th of January, 2013) and http://www.konutsitesi.com/dumankaya-ikon.html/dumankaya-ikon-7 (accessed on 15th of January, 2013))

The last example can be given from Madrid; Mirador Building. The common space is formed as an open gathering space of roof terrace which can be aimed to provide both social and environmental contact. In this respect, the space of communication was created by forming a large empty hole in the middle floors of the building. Thus, this example is becoming dissimilar from the first examples in terms of creating an areal communal space, not floor-based in-between space.

[389] http://www.dumankaya.com/projeler/proje-anasayfa.aspx?SectionID=bDCMCYyo0YMq5b43bdNzow%3d%3d&ContentID=4oEu6KjEmU33gGZTiL4GkQ%3d%3d (accessed on October, 2012)

[390] http://www.dumankaya.com/Sayfalar/Projeler/Satisi-Tamamlanan-Projeler/Dumankaya-Ikon.aspx?PageID=2&MenuID=18 (accessed on 15th of January, 2013)

Figure 4. 51 Mirador Building, Madrid
(http://eng.archinform.net/projekte/15027.htm (accessed on 15th of January, 2013), http://archidialog.com/tag/mirador-residential-building/ (accessed on 15th of January, 2013) and http://www.designbuild-network.com/features/feature2166/feature2166-4.html (accessed on 15th of January, 2013))

4.3.2. Vertical Streets

The second step of providing space of communication in architectural form is the vertical bound which associates horizontal spaces and floors into each other. In other words, vertical streets or ramps are tried to be provided in high-rise residential buildings. Ken Yeang gives the example of these vertical connection systems in his book *Eco Skyscraper* in many buildings with differentiated functions such as office, residence, commercial, etc.[391] One of these examples is Reliance Tower which is a residential building in Mumbai.

Figure 4. 52 Reliance Tower
(Yeang, 2007: 143, 140)

As can be seen from Figure 4.54, the connections between horizontal contact spaces from bottom to top is actualized by the vertically rising ramp. These functional spaces are explained by Yeang as *reception area, skybar, forest level, squash courts, fragnence garden, lake garden, relax pavillon, formal lounge, swimming pool, play room, master suite and panorama platfrom of helicopter*.[392] It can be said that both social and environmental contact areas scattered in this high-rise residential building are conneted to each other by the vertical rampa and elevator system.

[391] Yeang, 2007.
[392] Yeang (2007: 144)

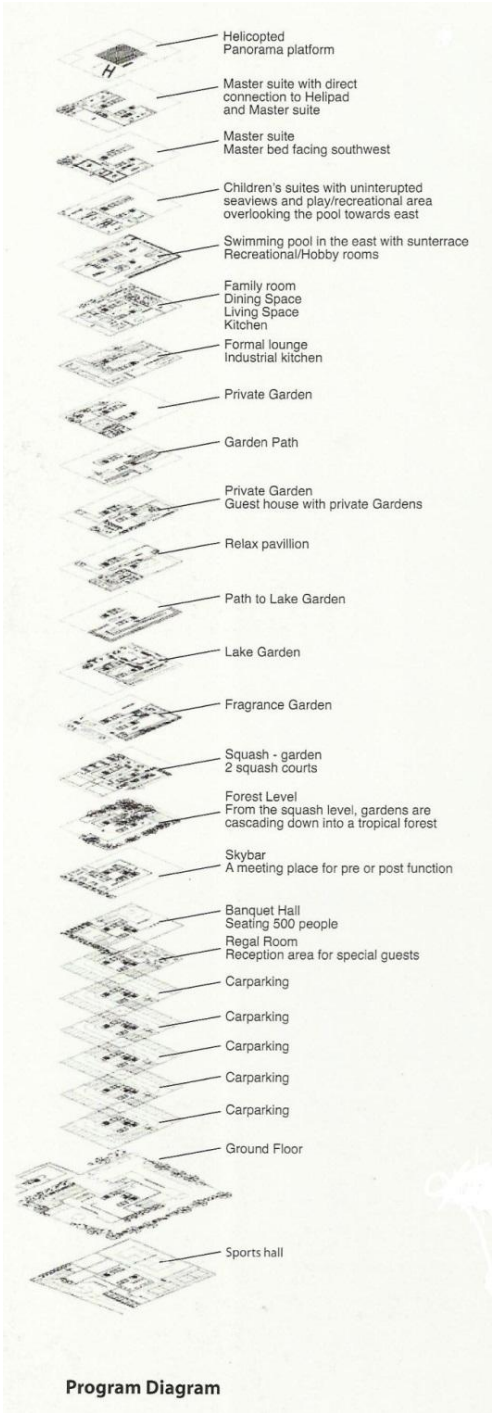


Figure 4. 53 Functional explanation of Reliance Tower
(Yeang, 2007: 144)

Another example of vertical association of high-rise residential buildings is Premier City Project in Almaty, Kazakhstan in a progressing green line circulating in the façades of the buildings. This continuous green line associates not only horizontal spaces on the floor but also connects different high-rise buildings by creating a schema. According to Yeang:

"The schema comprises a series of green-linked towers clustered around a curvilinear lush landscaped garden space which opens to a tree-lined boulevard."[393]

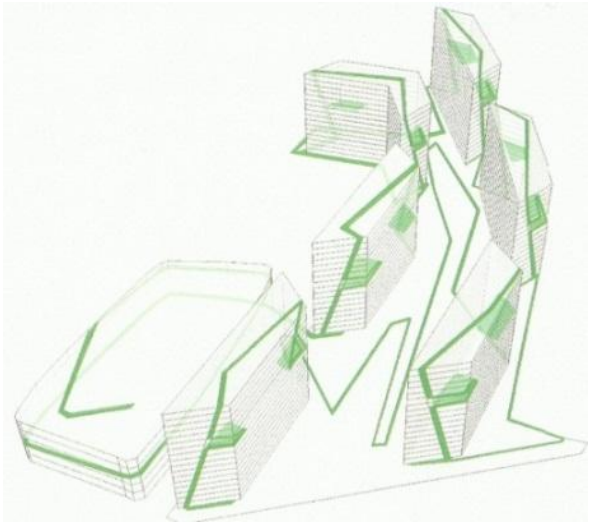


Figure 4. 54 Association of different high-rise buildings by greenery
(Yeang, 2009: 209)

The green route of Premier City Project has narrowing and widening character. In some parts of the building, it turns to thin line as green continuity without providing pedestrian passing. Then, some parts are broadening and retrieving areal form by letting pedestrian passing and gathering features which are illustrated in Figure 4.57.

Figure 4. 55 Premier City Site and structure view
(http://www.skyscrapercity.com/showthread.php?t=603441 (15the of January, 2013) and Yeang (2009: 208))

[393] Yeang (2009: 208)

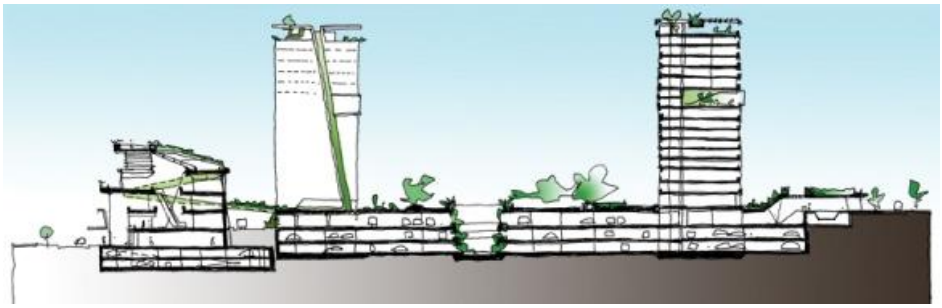


Figure 4. 56 Site Section of Premier City
(http://www.skyscrapercity.com/showthread.php?t=603441 (accessed on 15th of January, 2013))

Vertical urban farming or afforesting is the other example of environmental contact type in high-rise residential blocks. At the same time, this can give the advantage of agricultural production in the vertical line to the dwellers in a communal way except of the private gardens of garden roofs in vertical.

4.3.3. Private Spheres (Façade, Garden)

Both social and environmental communication spaces can be provided not only in common areas explained until here but also private areas in high-rise residential buildings with some special design approaches both in façade and gardens. Firstly, the façades are started to be designed like gathering or controlling areas. The façade of the Sapphire Residence can be given as example under this part.

Figure 4. 57 A comparison between ordinary high-rise building in Koru Sitesi, Ankara and Sapphire Residence in İstanbul
(Personal Archieve: the first photo, and http://www.istanbulsapphire.com/index_satis.html (accessed on 15th of January, 2013))

Compared to the ordinary high-rise residential building façade (first photo in Figure 4.59), Sapphire building façade was designed to create an environment resembling the middle-rise multifamily houses with its life style as illustrated in the second photo in Figure 4.59 or to create a circulation system with pedestrian movement in the façade as reflected in the third photo in Figure 4.59. Firstly, it is clear that as every floor has distinct flats, the gardens of the houses face the same part of the building which means that a kind of controlling space or semi-space was created there, thanks to double-glass system. In-between space located in two glass façades are as a result can be an

interaction space where the neighborhoods can see and receive information from each other. At the same time, the resembling space can be designed in order to create vertical parks and greeneries in the high-rise buildings. Thus, both social and environmental contact can be provided in façade arrangements in architectural scales.

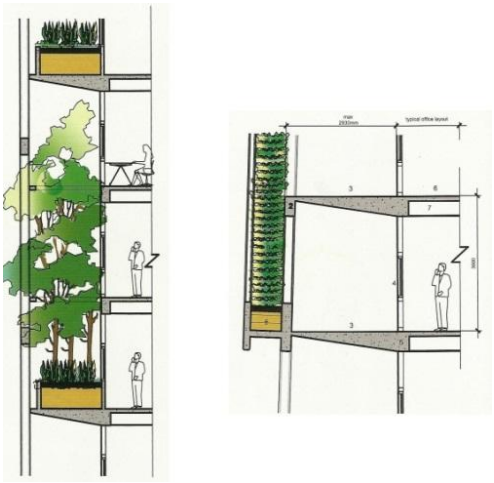


Figure 4. 58 Façade arrangements for environmental contact in non-residential high-rise building, Chongqing Tower
(Yeang, 2007:42)

Secondly, terrace gardens confront when the spaces of communication are mentioned in private zones. This is an important tool by the architects as being demanded by the customers that it has been reflected to İstanbul Construction Regulation. In fact, roof gardens are not added to floor space ratio as long as they do not exceed ten percent of the floor which they belong to.[394] From this perspective, it can be said that terrace gardens of roof gardens are important environmental contact area which is applied by many private construction companies in İstanbul.

Figure 4. 59 Ağaoğlu My World Europe and My Tower Land High-Rise Residential Building Projects with terrace gardens
(http://www.myworld-europe.com/galeri.asp (accessed on 15th of January, 2013) and http://www.mytowerland.com/galeri/detay.aspx?SectionID=WEKZNfXlTb8WB0BToALrFw%3d%3d&ContentId=MH32b%2fhjK38hJkUOlnXGeg%3d%3d (accessed on 15th of January, 2013))

[394] İstanbul Büyükşehir Belediyesi İstanbul İmar Yönetmeliği (2007: 20)

The spatial separation of green brings the topic of food production on terrace gardens. Is this a need in urbanized life? Nowadays, it is obvious that the floor area ratio increases as the need for land increases especially in the city centers. It is indispensable that people living in cities are in search for green areas both for their physical and psychological health. Ultimately, the need of land is tried to be satisfied by the vertical gardens. Thus, vertical gardens are not only thought to be the private environmental communication spaces of high-rise residential buildings, but also the issue of production in vertical line. Another example is Lotus Dwelling Project in Ankara. There exists an effort to provide the users private gardens in the vertical line. At the same time, these buildings bring together two different dwellers who stay in different buildings with the help of terrace gardens and creates a kind of common place which belongs solely to these two families. This also provides a new kind of territoriality not mentioned before in vertical axis.

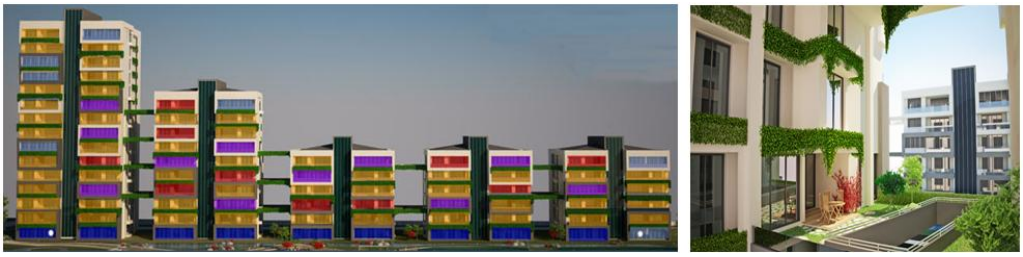


Figure 4. 60 Lotus Residential Project where a territoriality is trying to be explained (http://www.lotuscayyolu.com/pages/proje_hakkinda.html (accessed on June 2012))

In brief, the first step of providing the spaces of communication in vertical line is tried to be searched in contemporary high-rise buildings. Here the important thing about the contact which is aimed to be gained is the contact of the dwellers with each other due to hindering the entrance of public for controlling reasons in the living environment. Being distinct from the horizontal gathering places like streets, squares or gardens, first phase of creating the spaces of communication in high-rise residential buildings should be explained and redefined. In fact, as the building is a private sphere, it provides a common space inside the private sphere but not a public space. Thus, it has exclusive character addressing these common spaces only for the dwellers. As a result, these exclusive spaces neither belongs to the public sphere, nor private sphere by being more inclined to private logic and behaves as transition area or in-between space providing passing from one to the other.

CHAPTER 5

CONCLUSION

This thesis has analyzed and reconsidered a criticized issue about high-rise residential buildings. The criticisms about high-rise buildings were in terms of their not creating social contact between people whereas providing environmental contact between human and nature from the beginning of the use of high-rise buildings in residential areas. The starting point of criticism about high-rise residential buildings was the Team 10, as opposed to the CIAM, architectural approach. According to Team 10, high-rise buildings which have linked with the residential uses firstly in CIAM meetings could not provide social contact whereas providing environmental contact. Thus, Team 10 propounded low-rise groundscraper rather than high-rise residential buildings.

There exists a great difference between high-rise office buildings before modernism which emerged as a result of capitalism, and high-rise residential buildings, which emerged after capitalism in terms of urban form. The former established the urban form in the 19th century in New York and Chicago, which had effects in creating negative environmental conditions with high density and overpopulation. The latter was born as an urban element which was a reaction against these negative environmental conditions by providing a high-rise and low-density urban form in order to sustain a healthier environment by improving environmental contact of the residents. In other words, high-rise buildings underwent a change while passing from the 19th century office blocks to the 20th century residential building stock in terms of spatial organization. As a result, it can be inferred that the former improves social contact possibilities due to the high density and coverage; however, its results were negative environmental conditions. Thus, the latter had a dominant environmental contact feature. It means that there was an attempt to create a different kind of urban form with the same urban element – the high-rise building. At this point, face-to-face contact in the 20th century residential buildings has shifted to differentiated spaces. For example, the previous social contact areas in cities such as streets or squares were ignored with modernist high-rise residential blocks and moved to vast green areas around high-rise residential buildings or social facilities inside these buildings. The main criticism is that these vast open spaces were not social contact spaces as streets, which have the feature of gathering people in terms of its being linear, and having starting and end points in order to gather people and direct them. Apart from that, the other issue was the transformation of these open spaces and interior public spaces into slum areas. Of course, this does not mean that every modernist residential block had turned to slum areas. Except for the architectural and urban conditions, there are several reasons for high-rise slums such as economic, social and cultural causes.

This thesis did not aim to address the high-rise buildings in terms of “not to create social contact spaces” but to deal with them as accepting their creating “distinctive social and environmental contact areas”. Furthermore, the search for contact spaces in high-rise residential buildings was not handled only in terms of social contact but also environmental contact in the thesis both of which can be sustained spatially together. Thus, these two concepts were gathered under the term in order to consider them jointly as the spaces of communication. The thesis supported the existence of the spaces of communication not only in and around the high-rise buildings but also in other building types with different heights in different forms as the hypothesis. This approval was demonstrated with an observation and literature based study under the name of Space Matrix. By eliminating

social, economic and cultural background of the residents (except squatter housings), the contact spaces of architecture forms which create an urban pattern was explained with regard to height, coverage and density.

The Space Matrix illustrates that the low-rise and low coverage environment which is placed in the top left corner of the table provides one-to-one environmental contact for the residents with nature in a physical dimension owing to produce their needs in their private gardens. This environment is addressing individuals in their dominant natural environment while providing weak social contact due to low coverage, low population density and scattered urban form without forming the street pattern as a gathering place. While moving through the bottom of the chart, in a low-rise building environment, the individual life transforms into more collective life, which is also reflected to the spaces of communication. For example, environmental contact is provided not only in private gardens but also in common gardens where cultivation is done by the whole community. The coverage rate increases, which resolves the street as a gathering area and increases social contact. The social contact in the streets peaks in the bottom of the chart in the medieval city by maximizing coverage and gathering features of the street which means maximizing solids and gathering people in the voids, in other words in the streets.

There were similar inferences made with middle-rise examples with an important difference, which is providing dwellings for more than one family as opposed to the former example. As a result of this, individual life style as in the low-rise and low-density urban environment is destroyed. The collective life becomes inevitable inside the building for the families living in the same apartment unit. In this collective life, the common spaces are shared in semi-spaces such as entrance hall, corridors, elevators, staircases, gardens and courtyards which can be locate both inside and outside the buildings without noticing the coverage of the building in nucleated, linear or courtyard building typologies. If it is looked from the perspective of urban pattern, societal feature comes into the forefront. Thus, the spaces of communication are gathering places which addresses the entire public, such as streets and parks in a horizontal line.

Resembling the low-rise and middle-rise urban environments, the high-rise urban environment also represents from environmental character to social character from a low coverage to high coverage urban pattern. As in Unite d'Habitation, the high-rise and low coverage urban pattern provides environmental contact for the residents in the vast open green areas around the high-rise buildings which were also considered as the places creating social contact. On the other hand, the social contact also was intended to be procured inside the buildings with facilities. On that point, the individual lives of the residents with providing the social contact inside and around the building and environmental contact inside the dwellings was aimed to be provided. In other words, the needs of the dwellers were intended to be met by the building. Besides individual life, collective life also was aimed to be provided in these high-rise buildings by supplying community feeling. Then high-rise and high-density urban form brings social contact to the forefront, which parallels the low-density and high coverage case. The voids around the solids had important gathering character while high-rise and low density urban form represents the opposite in which the solids are spread in void based urban environment. Societal character was also created by providing social and environmental communication spaces not in a physical way of contact but in a communal way. These spaces of communication are not privately owned areas anymore but belong to the whole society. The maximization of the social contact with the minimization of environmental contact by coverage in a high-density form was exemplified in Soleri's hyper buildings.

Based upon this study, it was accepted that different urban forms can create social and environmental contact in different ways. In consideration of the problem definition and hypothesis study, contemporary high-rise residential building discussion was made which are constructed in

different typologies depending on some different principles like modernist and Team 10 architectural approaches or emerged as reflection of the capitalism. In the next step, the spaces of communication which emerged as a result of different building typologies were tried to be revealed. This was an effort of constituting typology based on empirical study. Here, social and environmental communication spaces were defined with regard to public and private space continuity; in other words, territoriality as the human behavior of control in residential areas. As a result, the proceeding of the typology categorization was structured from the dominant character of the private sphere to dominant character of the public sphere in the spaces of communication. In this respect, high-rise residential building typology changes from gated community to the popular modernist high-rise residential buildings, which were generally observed in areas in İstanbul and Ankara, except for mixed use and modernist residential building. The topics of the categorization were gated community, half-gated community, high-rise residential building attached to commercial function, mixed-use high-rise building, high-rise residential building complex with territorial markers, and modernist high-rise residential blocks.

The first category of the building typology is high-rise residential gated community which breaks public and private integrity of the buildings by surrounding the walls around the building group. Thus, the contact style of the residents inside and outside the building can only be practiced in the spaces with dominant private character. As such, contact can only be achieved with the other dwellers living in the same residential environment. In brief, these common spaces around residential building environments do not show any public characteristic which belong to an exclusive group.

The second category of high-rise residential typology is the “half-gated community” which shows spatially the same features as the gated communities. However, the public can enter this fragmented urban section in a limited way. The reasons for this can be explained as increasing the activities and vitalizing this isolated life inside, and providing the perpetuity and being of this urban segment by some functional tools such as hotel, other commercial entities and office space. Here, the spaces of communication show two characteristics; the contact with the public in the space with dominant public features and contact with the exclusive group in the space with dominant private features which resemble the previous case.

The next case was not a walled but again an isolated example of high-rise residential buildings which shelters a commercial area open to the public by physical contact. This was also an effort of perpetuity of the isolated building environment. Here, the control is not gained by areal solutions but in point scales. The spaces of communication are provided both inside the building designated in-between spaces with only the dwellers or located along the exterior side of the building which is commercial area with the public.

Mixed-use residential building environment is the next category. The building has other functions such as commercial, hotel and office use beyond the residential character. Here, the contact with the public is limited in the commercial area inside the building. The spaces of communication of the residents can be either in designated spaces inside the building as in-between spaces with the other residents or in the commercial area with the public.

The next case brought neither areal nor point control to forefront, but focused on the territorial markers around the high-rise residential buildings which are semi-spaces. The spaces of communication exist in gradual public and private continuity. Semi-private space inside or outside the buildings have the characteristic of gathering residents in terms of social contact without possessing any exclusive character. Also, the semi-public sphere can be considered as the sphere where dwellers are in contact with the public.

The last category is the modernist high-rise residential blocks with their dominant public character in social and environmental communication spaces. The walled environment cannot be mentioned around the buildings that the public can penetrate inside the building. However, the strict separation between public and private spaces can be discussed here due to the alteration of public and private spheres inside the building by wall. This situation has resulted differently depending on several reasons. Unite d'Habitation which became a popular building with its produced life style and Pruitt-Igoe as the symbol of high-rise residential slums is the products of the same architectural design principles. The reasons for this differentiation were attributed to changing economic, social and cultural background of the residents. The common features of the spaces of communication in these residential buildings are formed by public areas penetrated the inside of the building due to some social and commercial facilities. Thus, there can be no mention of exclusive contact spaces. Except for the interior social contact spaces composed of facilities, the exterior green areas of the building are environmental contact spaces.

Employing the high-rise building typology was to explain that social and environmental contact spaces can be formed in high-rise residential buildings in diversified types in urban design scale. Additionally, it was considered that these diversified forms of contact spaces could be defined differently depending on their dominant public or private characteristics. Some of these researched building typologies are of modernist high-rise types that offer high-rise and low density urban environment. The outcome of the study shows that highly different contact areas also can be created in this urban pattern with different characters. On the other hand, it was identified that capitalism uses the public space as a tool for sustaining its own continuity in the residential area. This is the dilemma of capitalism; while it smashes the public space by creating a fragmented and isolated area, it also needs the public space in order to sustain its own existence.

By the help of a drawing, the illustration of the spatial differentiation in social and environmental contact areas in high-rise buildings can be achieved. According to Figure 5.1, the categories of the spaces of communication is simply demonstrated which explained in the first dimension of the study in urban design. According to the figure, the high-rise residential environment with territorial markers (without strict separations) pioneers in the formation of semi-spaces like semi-public and semi-private spaces which are made of from a gradual continuity between public and private sphere. In this respect, if the road is accepted as the public sphere, pavements can be observed as semi-public sphere which is generally used by the residents of the neighborhood. The semi-private spaces can be thought as gardens and interior corridors of high-rise residential buildings. From the public to the private spheres, there are no strict divisions in spatial organization. These semi-spaces are the social and environmental contact spaces of both the residents and public until a degree.

In contrast, the second illustration in the Figure 5.1 shows the gated community environment which divide public and private by strict boundaries. Here, different spatial formation can be observed in terms of social and environmental contact spaces formation. The point here is that as opposed to the first illustration, gated community environment creates spaces which are "common to the users of the high-rise buildings". Thus, gradual penetration of public cannot be discussed here. When a wall as a strict separator locates, the continuity of public and private spheres changes form if it is compared with the high-rise building environment with territorial markers. Thus, after the semi-public spaces (pavement), the semi-private space transforms to "exclusive public space" or "common spaces for the users of the building complex" in the private garden without allowing the public inside. This strict separation is also valid for the inside of buildings which were described as "in-between spaces" in the thesis. Only the residents can enjoy their contact needs in these spaces.

Even though the common spaces open for the users of the buildings are accepted as the spaces of communication, it can be seen as problematic issue because it creates a fragmented and isolated

urban pattern rather than integrate one in whole. As an urban planner, the author's own position about these formations in urban land is that there should be some solutions to bring the residents and public in urban land. However, it should not be forgotten that this kind of fragmented urban form created in residential areas are highly demanded by the citizens due to its providing strict control. This is why, a solution in high-rise residential buildings for creating social and environmental contact spaces should be based on both allowing the public and control the residential zone. This can be seen as a dilemma because while the residential zones highly need control feeling, this feature of the residential zone also distances the public. In this respect, vertical urban utopias can be proposed which are both in urban design and architectural scales. The importance of these high-rise urban utopias is that they are the steps of bringing public into vertically rising urban environment.

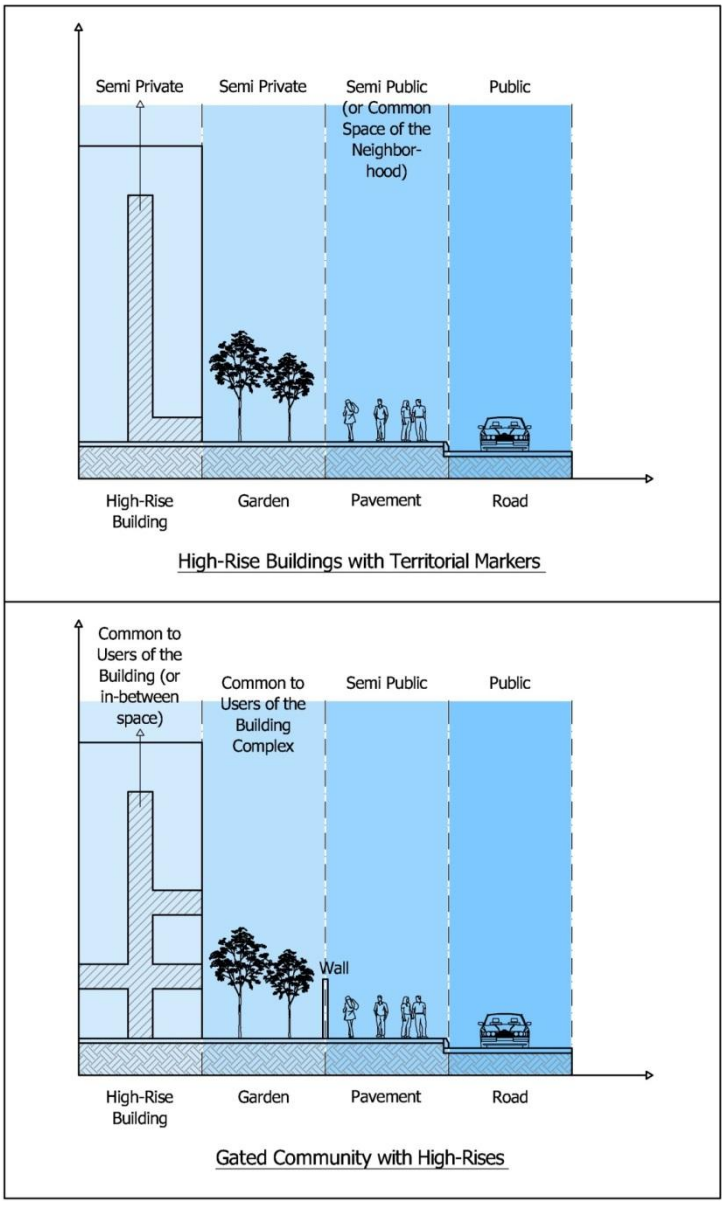


Figure 5. 2 Explanation of different spatial formations of the spaces of communication in different high-rise residential building environments
(Personal Drawing, 2013)

The next point the thesis had aimed to explain the differentiated contact spaces in architectural scales from dominant exclusive common feature. In this direction, applied contemporary high-rise building was grouped in terms of creating the spaces of communication in architectural scales.

The applied contemporary high-rise buildings have been studied to determine interior spaces of communication of the buildings with their dominant exclusive characters. The point is that the certification system which is applied in high-rise residential buildings is a tool of forming contact spaces which are turned into a selling strategy and cause increases in the flat prices.

As a proposal, one step forward for the architectural contact spaces in terms of more public character than the contemporary cases are exemplified in urban utopias. In this sense, Plug-in City forms the spaces of communication in architectural scale by accepting plugging capsules. The capsule is plugged into the utopic architectural pattern in case of the need. These capsules can be the social and environmental facilities which can create the spaces of communication. It can be deduced that these plugged-in capsules may have private, community and/or public characteristics. Similarly, Plug-in City aimed to create horizontal and vertical lines in order to unite the buildings. In this way, the bound lines can be viewed as public spheres used by all citizens or exclusive spheres which can only be used by the residents of the vertical structures.

Archigram was a group of young architects founded in 1960s whose architectural thinking was based on not an end product but a process of the expression and communication. Hence, the last form which is the constructed form was only one of the statements between millions of expression styles.[395] Accordingly, architecture is a process changing and maturating constantly. In this respect, the last product is not the ideal itself but the process that has been passing during the attainment of the necessities is the ideal. Thus, Archigram architecture resembles the organism from the birth till the death. In this sense, according to Steiner:

> "Archigram was the medium thought which the group would advertise ways in which architecture could be subject to an alternate logic of flow, rather than representing building as foregone conclusion." [396]

After its basis of continually changing formation in the fields of both architecture and urban form, Archigram developed its idea of "City Interchange". There was a discussion of continual currency and conversion in this notion both horizontally and vertically. As a result of this transformation, both architectural and urban forms are changing accordingly.[397] While achieving it, there is a need of high technologies which is strengthening basically transformation, communication and circulation of urban form in urban area which was like a machined environment. [398]

Archigram represented their Capsule Home as both the smallest and self-governing part of the whole urban environment.[399] It was designed by Warren Chalk in 1964 in order to create a new kind of dwelling notion.[400] It was explained by Steiner as "the ultimate in self-existent, conditioned mini-environment with man as extension of machine." The logic of Capsule Home was a detached and

[395] Steiner (2009: 11)
[396] Steiner (2009: 11)
[397] Steiner (2009:79)
[398] Steiner (2009: 106, 107)
[399] Steiner (2009: 138, 139)
[400] Cook & Chalk & Crompton & Greene & Herron & Webb (1973: 44)

mobile agent of living space which can be plugged if needed from part to whole, but actually the detachment did not mean total independence in a physical aspect but self-sustained agent without the need of megastructure. The capsule was determined definitely by human's requirements and therefore it reveals a kind of interactive relation between man and machine (machined environment). As a result of this, an environment totally dependent on human and his/her preference emerges which is the basic notion of the metabolism movement. On the other hand, under favor of plugging in capsules to megastructure, the space can be controlled and strictly determined. If needed, the space can be changed which is hardly possible in our living environment due to today's end product notion in architecture. Weekend Telegraph Magazine summarized the Capsule Homes in 1990 as:

> "Their design treats space as a series of events…It is what happens in the space that determined design… The enclosure of the living area are no longer rigid rectilinear fixtures but adjustable, programmed to move up and down, in and out. It is envisaged that owners will interest in as many living areas as they need. They can also enlarge the living areas they have, by means of inflatable sections of the outer skin."[401]

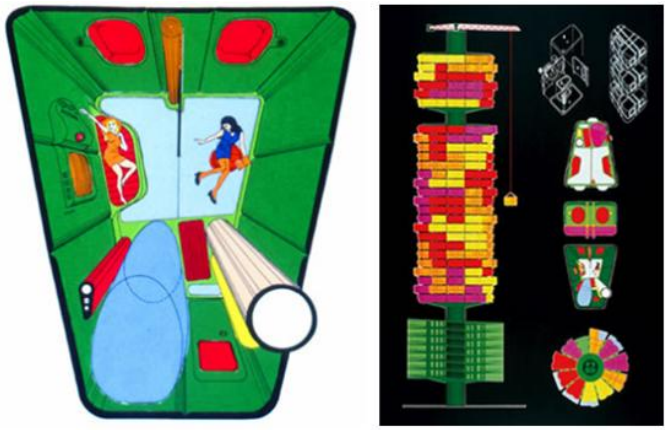


Figure 5. 2 The capsule and plugging-in megastructure designed by Archigram (http://www.archigram.net/index.html (accessed on 9th of December, 2012))

According to Cook, Chalk, Crompton, Greene, Herron and Webb, capsule was a totally new understanding of dwelling compared to the present building prototypes. Together with the dwelling notion, it brings a new kind of life style for the users. For example, the life style that Archigram members provided for capsules is like living in a hotel. On the other hand, these capsule dwellings fit best to the Plug-in City which is the metabolist utopia of Archigram that composed of capsule elements.[402]

The logic of Archigram's city was based on constructing a system, not a structure, with specific urban elements to accept all potential chances.[403] Thus, Figure 5.2 reflects how the capsules will be plugged-in to the megastructure in case of necessities of its dwellers which can be also called as an experimental and adaptive design process.

[401] Steiner (2009: 142)
[402] Cook & Chalk & Crompton & Greene & Herron & Webb (1973: 44)
[403] Steiner (2009: 190)

The Plug-in City was described by Cook as:

> "A total project was the combination of a series of ideas that were worked upon between 1962 and 1964. The metal cabin housing was a prototype in the sense that it placed removable house elements into a megastructure of concrete."[404]

In this sense, Plug-in City offers a programmable and replaceable urban environment. Cook explains the image of Plug-in City above as a "futurist" form with some opposite adjectives like "craggy but directional, mechanistic but scaleable". The plan of Plug-in City is based on grid pattern with the monorail route that brake the grid pattern with angles of 45 degrees in order to attach with the existing urban pattern.[405]

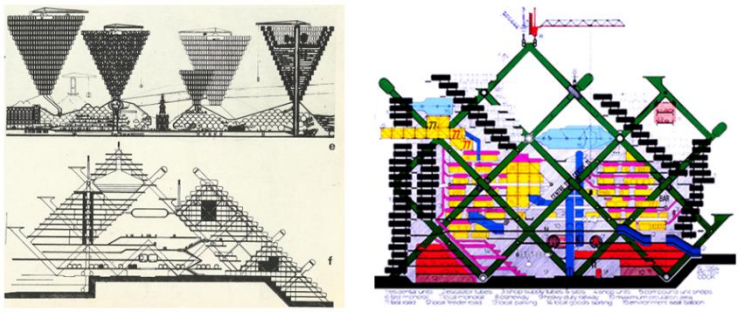


Figure 5.3 The stages of constructing Plug-in City
(Cook & Chalk & Crompton & Greene & Herron & Webb (1973: 38) and http://www.archigram.net/projects_pages/plug_in_city_8.html (accessed on 10th of December, 2012))

The first stage of constructing Plug-in City is the dwelling; in other words capsule, and megastructure where the capsules will be plugged-in. As can be seen in Figure 5.3 (left), V-shaped housing area is the primary element as consolidating the capsule elements and creating the basement of the megastructure. Then, a "frame" is constituted as a secondary structure surrounding the megastructures which shelters the community space in the middle of the grids as a socialization arena. This "dotted line" as secondary structure gives the opportunity to be articulated if other elements are needed in the future. The third and last stage can be perceived in Figure 5.3 (right) which shelters the needed services. They are plugged-in to "large scale-network structure" by machinery and electronic infrastructural systems. It is important to mention here that these services are articulated to the whole system depending upon the obsolescence rule. For example, bathroom, kitchen and living room floors are changed in every 3 years or living room and bedrooms are altered with the newest ones in every 5-8 years. As a result of this changing environment, Plug-in City treats as a living organism.[406]

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[404] Cook & Chalk & Crompton & Greene & Herron & Webb (1973: 36)
[405] Ibid, p.36.
The last architectural proposal of the spaces of communication was another urban utopia, Pro Domo, which was aimed not to create a high-rise building prototype but to create an integrated vertical pattern rising above the present city. By this way, an urban environment which shows parallelism with horizontal characteristic of the spaces of communication in low and middle-rise building environment was propounded. Here, the spaces of communication with public characters are created in horizontal lines in different floors by this vertically rising urban pattern. The last two

In this respect, Plug-in City can be explained as the united condition of Smithson's idea of human association with technology and utopia in vertical line; such that, under favor of plugging-in notion, the need of community such as common and environmental spaces can be gained by infilling and slotting in the urban system. For example, a function that serves for the common uses can be plugged-in to the system or an in-between space which will function as a common space can be constituted inside of this system of urbanization. In other words, spatial organization in this grid pattern can be achieved according to the changing needs and behaviors of the dwellers. Thereby, the spaces of communication can be gained in vertical system of urbanization.

When it is compared to the spaces of communication in contemporary high-rise buildings, it can be said that Plug-in City creates its contact spaces oriented to the directions which is open to the whole public life. Contemporary high-rise examples were representing the spaces of communication inside or façade of the buildings which are accessible only for their dwellers; nevertheless, Plug-in City is for individuals and their needs which means the environment is shaped according to. In case of any need of any space, the capsule which has needed functions is plugged into the whole urban environment. Thus, Plug-in City is more oriented to the vertical and horizontal spaces of communication.

Secondly, Yona Friedman as another founder of metabolist approach illustrates his utopic ideas in his book *Pro Domo,* which is an urban environment based on unpredictable human behaviors. Together with it, as the human behaviors are generally depending on human's being mobile and having "erratic character", utopic urban environment of Friedman is based on the mobility of the human. Thus, he developed the idea of *Mobile Architecture* in 1958.[407] Here the infrastructure of the urban area and dwellings are changed by the dwellers themselves through plugging-in principles without changing some fixed elements like sewage, electricity and telephone infrastructure.[408]

Even though the reflection of mobile architecture on space may sound as disorder depending on random behaviors of human, Friedman states that there should be an order in his metabolist utopia.[409] By introducing his *The Spatial City* which has a parallelism with Mobile Architecture, Friedman has also introduced a new kind of spatial organization in urban arena.

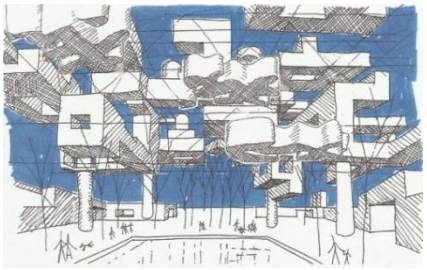

Figure 5. 4 Vertical dwellings of The Spatial City
(Friedman, 2006: 53)

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metabolist utopias were the examples about how progressist buildings can provide culturalist life style.

[406] Cook & Chalk & Crompton & Greene & Herron & Webb (1973: 38, 39)
[407] Friedman (2006: 14, 15, 22)
[408] Ibid, p.32.
[409] Ibid, p.30.

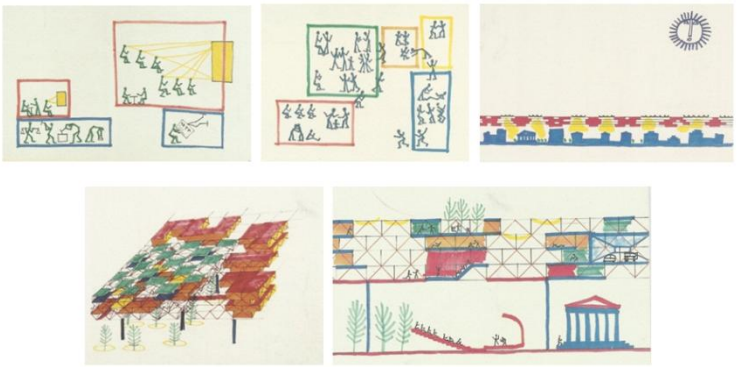

Figure 5. 5 The process of self-determining urban planning by dwellers in The Spatial City from the photo left above to the photo right below
(Friedman, 2006: 65-68)

It can be understood from Figure 5.4, The Spatial City rises in the vertical columns above the existing city. It is important that the dwellers construct their dwellings with a free will. As illustrated in Figure 5.5, the process of planning in The Spatial City starts with a new group of citizens cleaned from the planners' influence, scattered in vertical land to find their ways of constructing their dwellings according to their needs. In this notion, as public and private gardens, open spaces, green areas and agriculture is the main source of living, The Spatial City is supposed to provide these elements also by conditioning to the climate changes. Thus, gaps or in between spaces provide openness that let the sunshine and other climate conditions to the lower grounds of the existing city. Beside the environmental contact of the dwellers in The Spatial City, social contact was gained by grouping houses and creating differentiated neighborhoods in vertical line. At the same time, spatial hierarchy designed by dwellers and citizens by protecting both privacy and community comparison can help creating social contact in any degree by randomly creating courtyards, courts, in-between spaces and common spaces.[410]

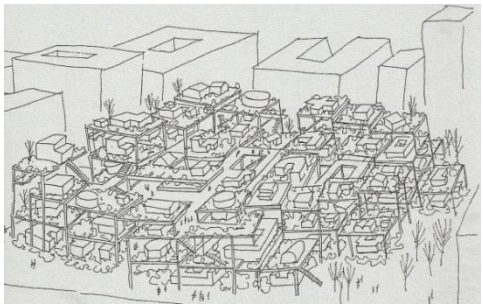

Figure 5. 61 Nearly last product of The Spatial City
(Friedman, 2006: 201)

As the last product of The Spatial City will be shaped depending on human's necessities, there can be millions of possibilities of it. One of them was illustrated by Figure 5.6 which composes private houses in vertical line possessing their own gardens, common areas or streets that are any degree of spatial hierarchy.

[410] Friedman (2006: 65-68)

The main differentiation point of these three examples (from contemporary high-rise residential buildings to urban utopias) is their providing styles of the spaces of communication; from the privately dominant character of the spaces of communication to the public character. The first step which can be comprised of contemporary high-rise residential buildings provides social and environmental contact interior of the building; such as in floors, vertical farming, private terrace gardens or façades. It can be explained as this is an effort of bringing quasi of low or middle rise spaces of communication into the public space by these arrangements without bringing public inside of the building as opposed to these quasi examples. Even though these spaces of communication were provided by semi-spaces in low and middle-rise buildings by creating contact between the dweller and public, high-rise spaces of communication were provided only contact in between dwellers who lives in the buildings. Thus, in many case, high-rise residential buildings provide contact space for the dwellers no matter inside or outside the buildings.

The Plug-in City example, which is accepted as the second step of bringing together residents and a public space in a vertical line, aimed to demonstrate another spaces of communication types that can be created in a more "public" way as opposed to the contemporary high-rise buildings. Plug-in City contains two focal points in terms of spaces of communication. Firstly, the logic of plugging-in environment depends on the needs of the individuals. In this respect, if necessary, the capsules that will serve as social and environmental facilities can be plugged into the vertical environment. Secondly, the axis which will exist as a result of plugging-in is the determining factor for the location and residents. The vertical and horizontal development lines are identified before the structure is in public use. Thus, these development lines can also be inferred as the potential spaces of communication. As a result, the lines and capsules bring the advantage of creating social and environmental contact spaces.

Thirdly, neither the interior spaces of the contemporary high-rise buildings, nor the capsules and horizontal-vertical development axis can be mentioned. The vertically rise and folded urban pattern of Pro Domo was discussed. This can be interpreted as moving the horizontal urban pattern into the air by keeping the present city onsite. By this means, the living environment and its relations in low and middle-rise buildings are brought into the vertical level but again with folded horizontal relations. Thus, the spaces of communication such as semi-spaces, streets or parks which are created in horizontal living spaces of low and middle-rise buildings as being in the present-day urban plane can be provided in the vertical level.

The progressist urban utopias of Plug-in City and Pro Domo can be used in creating an environment that is connected to the culturalist urban environment and living. Consequently, the thesis' main question can be answered, which is whether social and environmental contact can be provided in vertical buildings.

As a result, high-rise buildings, which are urban elements rejoined to the residential buildings with modernism, can create social and environmental contact spaces both in urban design and architecture scales in distinctive ways. The reason for this alteration of the spaces of communication changes depending on social, economic, and cultural factors of the era. Intended control level also comes to forefront when the residential environment is considered. This control level in residential buildings also is an important factor in the formation of the urban living environment. Returning to the philosophical discussion located at the beginning of this thesis, as a human is a social and biological being, he/she always needs social and environmental contact. Its evidence is that even though there have been societal and individual transformations which have reflected the life style, architecture and urbanization, the social and environmental relations of human have never disappeared, but suffered a change.

REFERENCES

1. Ali, M. & Armstrong, P. (1995) Architecture of Tal Buildings. Council on Tall Buildings and Urban Habitat Committee, McGraw-Hill Book Company, New York.
2. Aregger, H & Glaus, O. (1967) Highrise Building and Urban Design. Frederick A. Praeger Publishers, New York-Washington.
3. Aries, P. (1973) Centuries of Childhood. Penguin Books, Middlesex.
4. Banham, R. (1962) Age of Masters A Personal View of Modern Architecture
5. Banham, R. (1966) The New Brutalism. Karl Krammer Verlag, Stuttgart.
6. Barlas, M. A. (2006) Urban Streets & Urban Rituals. METU Faculty of Architecture Printing Workshops, 2006.
7. Barlas, A. (2012) Komşuluk Birimi Kentsel Planlama Ansiklopedik Sözlük, Melih Ersoy. Ninova Yayınları.
8. Bascomb, N. (2003) Higher a Historical Race to the Sky and Making of a City. Broadway Books, New York.
9. Bastlund, K. (1967) Jose Luis Sert. A Praeger Publishers, New York.
10. Bediz, R. & Kamçıl, D. (1969) Yeşiltepe Blokları: Kent İçinde Farklı Yaşam Biçimleri. TMMOB Mimarlar Odası Ankara Şubesi Bülteni 55: 76-77.
11. Berghauser Pont, M. & Haupt, P. (2010) Spacematrix Space, Density and Urban From. NAi Publishers, Rotterdam 2010.
12. Blau, E. (1999) The Architecture of Red Vienna 1919-1934. The MIT Press, 1999.
13. Bowler, P. J. (2002) Doğanın Öyküsü. İstanbul: İzdüşüm Yayınları, 2001.
14. Broadbent, G. (1990) Emerging Concepts in Urban Space Design. Van Nostrand Reinhold (International).
15. Broto, E. (2010) High Density: Architeture for the Future. Barcelona, Spain: Carles Broto i Comerma, 2010.
16. Burat, S. (2000) Green Belt As a Planning Tool and Green Belt of Ankara. METU Thesis.
17. Carcopino, J. (1940) Daily Life in Ancient Rome: The People and The City at the Height of The Empire. New Haven and London Yale University Press.
18. Cheng, V. (2010) Understanding Density and High Density. Designing High-Density Cities For Social & Environmental Sustainability. Ed. By Edward Ng. Earthscan publishing for a sustainable future. London – Sterling, VA.
19. Choay, F. (1969) The Modern City: Planning in the 19th Century, George Braziller, New York.
20. Collins, G. R. (1966) The Linear City. The Pedestrian in the City. Edited by David Lewis. D. Van Nostrand Company, Inc. Princeton, N.J.
21. Colquhoun, A. (2002) Modern Architecture. Oxford: Oxford University Press.
22. Cook, R. & Chalk, W. & Crompton, D. & Greene, D. & Herron, R. & Webb, M. (1973) Archigram. Praeger Publishers New York – Washington.
23. Çelik, Z. (2011) Gecekondu'nun Öğrettikleri: CIAM Cezayir'e Bakıyor. Dosya Dergisi Mimarlık ve Gündelik Yaşam. Aralık 2011. Sayı: 27.
24. De Long, D. G. (1998) Frank Lloyd Wright and the Living City. Weil am Rhein, Germany: Vitra design Museum; Milan Italy, Skira.
25. Deilmann, H. & Bickenbach, G. & Pfeiffer, H. (1977) Wohnbereiche Wohnquartiere & Housing Groups & Zones d'habitat. Karl Kramer Verlag Stuttgart.
26. Erman, T. (2011) Kentsel Dönüşüm Projesi ile Dönüşen/Dönüş(e)meyen Yaşamlar: Karacaören-TOKİ Sitesindeki Günlük Yaşam Pratikleri. Dosya Dergisi Sayı: 27. TMMOB Mimarlar Odası Ankara Şubesi.

27. Finniston, M. & Williams, T. & Bissel, C. (1992) “Skyscraper” Oxford Illustrated Encyclopedia of Invention and Technology. Oxford University Press.
28. Fishman, R. (1989) Urban Utopias in Twentieth Century. The MIT Press, Cambridge, Massachusetts.
29. Foster, J. B. (2001) Marx’ın Ekolojisi Materyalizm ve Doğa. Epos Yayınları.
30. Freud, S. (1985) Civilization, Society and Religion. Penguin Books Ltd.
31. Friedman, Y. (2006) Pro Domo. Barcelona: Actar.
32. Gallion, A. B. & Eisner, S. (1963) The Urban Pattern. 2nd ed., Van Nostrand Co. Inc, USA.
33. Gehl, J. (1980) Life Between Buildings Using Public Space.
34. Gehl, J. (1987) Life Between Buildings Using Public Space. New York: Van Nostrand Reinhold.
35. Gehl, J. (2010) Cities for People. Island Press.
36. Gehl, J. (2011) Life Between Buildings Using Public Space. Island Press.
37. Goffman, E. (1967) Interaction Ritual; Essays on Face-to-face Behavior. Garden City, NY, Anchor Books, 1967.
38. Gropius, W. (1935) The New Architecture and the Bauhaus. London Faber and Faber Limited.
39. Günay, B. (1988) History of CIAM and Team 10. METU JFA.
40. Günay, B. (1995) Ataköy 7. Ve 8. Mahalleler Bir Tasarım Deneyimi. Mimarlık Dergisi, Sayı: 264.
41. Günay, B. (1999) Urban Design is a Public Policy. METU Faculty of Architecture Press, Ankara.
42. Günay, B. (2005) Ankara Çekirdek Alanının Oluşumu ve 1990 Nazım Planı Hakkında Bir Değerlendirme. Cumhuriyet’in Ankara’sı. Derleyen: Tansı Şenyapılı. ODTÜ Yayıncılık.
43. Günay, B. (2006) Forum. Mimarlık Dergisi Sayı: 327. Mimarlar Odası.
44. Günay, B. (2009) Gecekonduya Ne oldu? Zilyetliğe Dayalı Kentten – Sahipli Kente. Gecekondu Dönüşüm, Kent, Tansı Şenyapılı’ya Armağan. ODTÜ Mimarlık Fakültesi Basım İşliği, 2009.
45. Günay, B. (2012) Bahçe Kent. Kentsel Planlama Ansiklopedik Sözlük, Melih Ersoy. Ninova Yayınları.
46. Günay, B. (2012) CIAM Uluslararası Modern Mimarlık Toplantıları. Kentsel Planlama Ansiklopedik Sözlük, Melih Ersoy. Ninova Yayınları.
47. Günay, B. (2012) Sanayi Kenti. Kentsel Planlama Ansiklopedik Sözlük, Melih Ersoy. Ninova Yayınları.
48. Habermas. (1997) Modern and Postmodern Architecture. Rethinking Architecture, edited by Neil Leach. Routledge, London.
49. Hall, E. T. (1959) The Silent Language. Garden City, N. Y., Doubleday.
50. Hall, E. T. (1969) The Hidden Dimension. Anchor Books, Doubleday & Company, Inc. Garden City, New York.
51. Hall, P. (1988) Cities of Tomorrow An Intellectual Histoy of Urban Planning and Design in the Twentieth Century. Basil Blackwell Ltd.
52. Harvey, D. (2012) Sermayenin Mekanları Eleştirel Bir Coğrafyaya Doğru. Sel Yayıncılık.
53. Heng, K. H. & Malone-Lee, L. C. (2010) Density and Urban Sustainability: An Exploration of Critical Issues. *Designing High-Density Cities For Social and Environmental Sustainability*. Ed. Edward Ng. Earthscan Publishing, London.
54. Ilgın, H.E. (2006) A Study on Tall Buildings and Aerodynamic Modifications Wind Excitation. METU Thesis.
55. İstanbul Büyükşehir Belediyesi İstanbul İmar Yönetmeliği (2007).
56. İzmir Büyükşehir Belediyesi Yüksek Yapılar Yönetmeliği.
57. Keleş, R. (2012) Kentleşme Politikası. İmge Kitabevi Yayınları. 12. Baskı.
58. Kılınçaslan, İ. (2012) Arazi Rantı. Kentsel Planlama Ansiklopedik Sözlük, Melih Ersoy. Ninova Yayınları.

59. Kipling, R. (1894) The Jungle Book. Garden City, New York, Doubleday and company, inc., c1894.
60. Le Corbusier. (1929) The City of To-morrow and Its Planning. Dover Publications, Inc. New York.
61. Le Corbusier. (2007) Bir Mimarlığa Doğru. YKY İstanbul.
62. Lewis, J. (1967) Urban Structuring – Studies on Alison and Peter Smithson. Studio Vista, London.
63. Lima, A. I. (2000) Soleri Architecture as Human Ecology. The Monacelli Press.
64. Lin, Z. (2010) Kenzo Tange and the Metabolist Movement: Urban Utopias of Modern Japan. New York: Routledge.
65. Lucas, R. (2002) Lectures on Economic Growth. Cambridge: Harvard University Press.
66. Luke, T. (1994). The Politics of Arcological Utopia: Soleri on Ecology, Architecture and Society.
67. Madanipour, A. (2003) Public and Private Spaces of the City. London; New York: Routledge, 2003.
68. Maddison, A. (2003) The World Economy: Historical Statistics. Paris. Development Center, OECD.
69. Morison, E. (1966) Men, Machines and Modern Times. Cambridge, Ma and London, UK: MIT Press.
70. Morris, B. (1994) Anthropology of the Self: The Individual in Cultural Perspective. Pluto Press, London.
71. Mumford, L. (1961) The City in History. New York, Harcourt, Brace & World, 1961.
72. Mumford, E. (2009) Defining Urban Design CIAM Architects and the Formation of a Discipline, 1937-69. Yale University Press.
73. Newman, O. (1996) Creating Defensible Space. US Department of Housing and Urban Development Office of Policy Development and Research.
74. Newman, O. (1972) Defensible Space People and Design in Violent City. Architectural Press, London.
75. Ochshorn, J. (2002) Steel in 20th Century Architecture. Encyclopedia of Twentieth Century Architecture.
76. Oxman, R. & Shadar, H. & Belferman, E. (2002) Casbah: A Brief History of a Design Concept. Architectural Research Quaterly 6 no:4.
77. Özügül, M. D. (2012) Yeşil Yerleşim Değerlendirme Sistemleri. Kentsel Planlama Ansiklopedik Sözlük. Derleyen: Melih Ersoy.
78. Panerai, P. & Castex, J. & Depaule, J. C. & Samuels, I. (2004). Urban Forms The Death and Life of the Urban Blocks. Architectural Press.
79. Porteous, J. D. (1977) Environment and Behavior: Planning and Everyday Urban Life. Reading, Mass: Addison- Wesley Pub. Co.
80. Redford, A. (1976) Labor Migration in England, 1800-1850. Manchaster University Press, Manchester.
81. Saunders, P. (1990) A Nation of Home Owners. Unwin Hyman, London.
82. Savaş, A. (2012) Bauhaus. Kentsel Planlama Ansiklopedik Sözlük, Melih Ersoy. Ninova Yayınları.
83. Scott, A. & Ben-Joseph, E. (2012) Renewtown: Adaptive Urbanism and the Low Carbon Community. Routledge Taylor &Francis Group. London and New York.
84. Sennett, R. (1976) The Fall of Public Man. W. W. Norton & Company New York, London.
85. Sert, J. L. (1942) Can Our Cities Survive? The Harvard University Press.
86. Sherwood, R. (1978) Modern Housing Prototypes. Cambridge, Mass: Harvard University Press.
87. Smith, C, M. (2006) Verbivore's Feast: Second Course: More Word & Phrase Origin. Farcountry Press.
88. Smithson, A. (1974) How to Recognize and Read Mat-building. Architectural Design 44. no:9.

89. Soares Gonçalves, J. C. & Umakoshi, E. M. (2010) The Environmental Performance of Tall Buildings. Washington, DC: Earthscan.
90. Steiner, H. A. (2009) Beyond Archigram The Structure of Circulation. New York: Routledge.
91. Strauven, F. (1992) The Dutch Contribution: Bakema and Van Eyck. Rossegna 14 no:52.
92. Sudaş, İ. (2011) An Inquiry On Bourgeois Conception Of Social Housing Program For Working-Class: Karl Marx Hof In Vienna. METU Thesis.
93. Şenyapılı, T. (2012) Gecekondu ve Evrimi. Kentsel Planlama Ansiklopedik Sözlük. Derleyen: Melih Ersoy.
94. Vale, B. & Vale, R. (2010) Is the High-Density City the Only Option? Designing High-Density Cities For Social & Environmental Sustainability. Ed. By Edward Ng. Earthscan publishing for a sustainable future. London – Sterling, VA.
95. Van Eyck, A. (1968) University Collage in Urbino, Urban Structure. D. Lewis, John Wiley and Sons Inc., New York.
96. Vindler, A. (2003) Toward a Theory of Architectural Program. October 16.
97. Willis, C. (1995) Form Follows Finance Skyscrapers and Skylines of New York and Chicago. Princeton Architectural Press.
98. Yeang, K. (1996) The Skyscraper Bioclimatically Considered A Design Primer. Academy Group, Ltd.: London.
99. Yeang, K. (1997) Designing the Green Skyscraper. Multi-purpose High-rise Towers and Tall Buildings. Editted by: H.R. Viswanath, J.J.A. Tolloczko, J.N. Clarke. Taylor & Francis.
100. Yeang, K. (2007) Eco Skyscrapers. Images Publishing.
101. Yeang, K. (2009) Ecomasterplanning. Chichester, West Sussex: Wiley, 2009.
102. Yetişkul Şenbil, E. (2012) Yer Seçimi Kuramı. Kentsel Planlama Ansiklopedik Sözlük, Melih Ersoy. Ninova Yayınları.
103. Yüksel, M. (2005) Relevance of Team 10. METU Thesis.

Documentary

1. Batıya Doğru Akan Nehir. Part 1.

APPENDIX A

DEVELOPMENT OF SELF TOGETHER WITH THE DEVELOPMENT OF RATIONALISM IN URBANIZATION PROCESS IN THE HISTORY IN TERMS OF FORMING THE CHARACTER OF HUMANS AND THEIR LIFE STYLE

The improvement of face-to-face relation is highly dependent on the evolution of self in the history. Hereupon, the process of gaining the individual self should be considered with the progress of science and emergence of belief (and religion) and spatial organization all together on the settlement or the city. That is why the relationship between city-human-nature from the beginning of the urbanization until this century should be determined by the help of the question, how the urban environment as a reflection of human's creativity has been developed both spiritually and materially. All the same, the development of human ego and its effects on the perception of nature in history of urbanization will be mentioned.

Ancient Times – The emergence of the cities

Before 10.000-10.500 years ago, human had settled with the agricultural revolution. First settlement areas and fist cities have started to develop after that. The city, actually, has been invented by human toward to provide the needs of him/her such as to guarantee his survival by the production of surplus, or to continue his generation easily. In order to do that, human needed the nature and the productions of nature. According to Marx, human produces his/her historical relationship with the nature mostly by producing his/her means of existence[411]. Briefly, the human has started to its one-to-one relationship with the nature directly by producing it. In this era, the economic activities depended not only on agriculture but also on trade. However, according to Mumford, the physical survivorship of the settlements was being gained by some essential directions different than economic items which were the sacred things because the man could not rationalize everything in that age. Mumford continues with this sentence;

> "… They (settlements) relate to a more valuable and meaningful kind of life, with a consciousness that entertains past and future, apprehending the primal mystery of sexual generation and the ultimate mystery of death and what may lie beyond death. As the city takes form, much more will be added: but these central concerns abide as the very reason for the city's existence inseparable from the economic substance that makes it possible."[412]

Thus the city was seen as a sacred place where ceremonial meeting was done like pilgrimage. Here the important thing is during the process of the creation of the city, human has been affected by the city and interacted with it in a mutual way. Namely, the human has started to undergo change thanks to his/her own invention-creation. Thus, the city mirrors the process of human's own development, individuation, and his promotion and reproduction of his environment from the beginning. "The domestication of plants and animals, the domestication of man, and the

[411] Foster, J. B. 2001
[412] Mumford (1961: 9)

domestication of the natural landscape all went hand in hand. In short, the shaping of the earth was an integral part of the shaping of the city."[413]

As it is mentioned before, the city was assigned as sacred places and human symbolized its environment. The reason of this was the lack of the knowledge of nature even though human had vital relations with the nature for the production of his/her living. Thus, the human had not been associated with the nature, yet. Without the personalization of human and the emergence of ego, the relation between human and nature would not be structured.

At the beginning of the urbanization process, there was an order that the one who has more power than the rest gains the strength of taking control of clan. After the emergence and strengthening of him/her, chieftain started to have the cosmic authority. He/She became a divine character to be adored because of the changed roles of him/her in time. According to Rosenau;

"The man is the shadow of the god/the slave is the shadow of the man/but the king is god"[414]

Here the human was seen as a part of the heaven and belongs to the god, but according to Rosenau he/she had no rational link in the cosmos. This situation had the reflection on the urban space. The emergence of the castle and its promotion shows parallelism with the human's perception of king as the god. The establishment of the castle had a spiritual reason and it was like a symbol of paganism. According to Mumford[415], the citadels and walls are established primarily for religious reasons, but not defensive purposes. The walls seem as the blessed boundaries of the city and it is thought as the repellent of the evil spirits out of the town rather than the enemies of real life. At the same time, the first examples of monumental architecture emerged for expressing the power of the king in these times.

According to Bairoch, the first cities of Mesopotamia would have been bounded by its population and size which was surrounded by agricultural land for food production in accordance with the Old Testament.[416] As it is mentioned above, the lines that constituted the borders of the city were accepted as sacred. It could be either a wall or just an abstract line that shows the end of the agricultural land. Also, it can be said that the borders constituting the city was limiting a sacred territory.

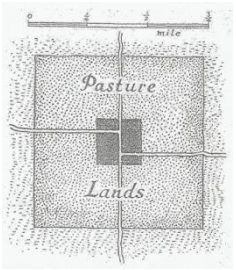

Figure A. 1 An illustration of urban core, agricultural area and nature from the Old Testament as the basic territorial definition
Burat (2000)

[413] Mumford (1961: 17)
[414] Burat (2000: 9)
[415] Mumford (1961: 36)
[416] Burat, S. 2000.

According to Sennett; "As knowledge of nature was absent, cities were seen as the protector of believers who are promised to be taken care of."[417] The thing that the human thought to be protected was especially the nature that could convert into the god's punishment.

As it is understood, at the beginning of the urbanization process, being individual had not been developed. Everything was trying to be expressed by heavenly side and the human was not associated with the world, as a result, with the nature. Living in the city was perceived as living in the shadow of the god and being protected from the external threats. On the other hand, the nature was observed as the place where the human lives temporarily.

In ancient world, city-human-nature relationship was not interlaced. They were diverged with not only physical but also mental borders. Except the agricultural production, the human did not think that he/she could not have intercourse with the nature and he/she could have any tie with the nature.

Through the end of the ancient world, a change started in the city. The evolution was about the decline in the reinforcement of the king, human's coming to the prominence and his/her coming closer to the rationality, and the production of new values and customs.[418] In other words, human started to ask questions and discover the system of the universe. In this process, the development of the city and alteration of its values were important. Changing environment made the human ask questions about the cosmos. As a result of this, human also started to change and this evolution of human helped to gain his/her personality by himself/herself by defining the system and his/her environment. Through, the knowledge brings materialism with it; in this way knowledge and materialism has started their own evolution. This shows that, this was a point on the production of knowledge. Thus it is open that the city played as the function of materialism[419]. As a result of this, human pulled away from the king and became the possessor of this own "shadow". This signifies the creation of the human's own ego-individualism that when human was searching for his/her roots, he/she started to turn his/her face to the nature.[420]

Hellenistic Era

From the beginning of 6th century, the city became the image of god itself and the creator of the city was none other than human. In that expansion, even the individual ego cannot be mentioned, collective ego and its rising can be discussed. So that Socrates mentions in his Phaedrus that when he tries to find an answer to any question; the nature, the stars, the stones, the trees, tell him nothing but the behavior of "men in the city" does. At the same time, even though the people was not aware, the beginning of the narcissism can be firstly mentioned because according to Mumford[421],

[417] Burat, S. 2000, p.15
[418] Mumford, 1961, p.110
[419] Mumford (1961: 113)
[420] During this era, the division of philosophy and dogmatism finds place. Thales from Miletus was the first man who tried to search for the reasons of natural events by looking at the nature itself, not by linking them to the gods. He tried to describe the nature by combining the matter of facts, so he bridged between myths and rational explanations. Consequently he is thought to be the first philosopher in the world. Moreover, as a coincidence, Miletus where Thales lived was the first city which was designed by Hippodamus toward some rational concerns. (http://tr.wikipedia.org/wiki/Thales accessed on July, 2012)
[421] Mumford, (1961: 146,170)

the city which the human had produced and reflected was his/her own combination of beautifulness and mind.

The Hellenistic Era had basically brought the citizenship concept. During this era, the citizen concept was so much focused on that even Socrates claims the nature cannot teach anything, solely the behaviors of citizens can teach what is searched for as mentioned before.[422]

Through the Hellenistic Era, there was a reduction in disconnectedness between city-human-nature. The sacred line which killed Romus because of his passing over to the other side which belongs to his brother Romulus loses its figurativeness. There are still the rituals discussed, however between 5th and 8th centuries the municipal system emerged in the city as an indicator of rational mind.[423]

> "One aspect of the order we find in the Greek mind was indeed passed on to the city during the later Hellenistic Age; but what we find in the city of the 5th century was something more deeply organic, closer to the quick core of human existence. That order had emerged as idea in the 7th and 6th centuries BC, a wild union of opposites, restriction and exuberance, Apollonian discipline and Dionysian delirium, rational intelligence and blind intuition, skyward flight and muddy tumble: the very opposite of all that one would now characterize as classical. The highest production of that experience was not a new type of city, but a new kind of man."[424]

Here, the human started to be separated from both heaven and collective ego, and play the role in the development of rational intelligence. At the same time, the separation of human and cosmos was destroyed which was the first step to get human come closer to the nature.

> "In the division that had taken place during the 6th century between natural philosophy, which considered the cosmos as a thing or a process apart from man, and humanistic wisdom, which considered man capable of existing in a self-contained world outside the cosmos, the oldest insight into man's condition, truer if more confused, had been largely lost."[425]

The Birth of Christianity – Heavenly City and Medieval Times

After the birth of Christianity, human was totally responsible from himself/herself in heavenly city; he/she was responsible for his/her own sin and could be recovered from his/her burden by confession. Briefly, the human had avoided from being sacrificed for god and escaped from his "shadow". The human gained his/her independence against god and became an individual.[426] At the same time, some concepts, such as freedom, corporate equality, democratic participation, autonomy appeared which had never been heard together with the changing lives of Western human by the Christianity.

Between 11th and 13th centuries, the quantity of agricultural area increased owing to the industry and trade, and some proper methods emerged for husbandry. At the same time, the population had

[422] Mumford (1961: 170, 206)
[423] Burat, 2000
[424] Mumford (1961: 159)
[425] Mumford (1961: 170)
[426] Mumford (1961: 243, 252)

sharply increased which caused to the construction of new houses on the gardens of the buildings by breaking the healthy environment. Together with these evolvements, the right of possession started to come into existence in middle age. One was free to sell his possession and go elsewhere [427]. In that case, it can be understood that there was improvement of ego depending on possession.

Through the end of the middle age, "free human" was there as had never been in the past urban culture. As Mumford states; "External control had now became internal control, involving self-regulation and self-discipline, as practiced among members of each guild and corporation". [428] That shows the human had come to his/her individual development level nearly as being in present and constituted his/her personality. Thus, he/she had more power of control over the earth and nature when compared to the past. On the other hand, trade and agricultural methods had developed, which comes to the meaning of the development of the economy which has a link to the money and country life due to the fact that there was a need much more to the agricultural area because of the extending economy and increased population. Thus the land which the human controlled over was getting bigger.

Throughout 12th century, the scholastic idea started to disappear and the philosophy, religion and natural sciences dissociated from each other with the help of renaissance movement. Therefore, the connection between human and heaven was destroyed totally and the human started to be correlated with the nature. Even if its reason was to abuse the nature by discovering it, then the human would prove that he/she belongs to the nature especially thanks to Darwin in next centuries. According to Roger Bacon the knowledge of nature intended to constitute the control of nature by human. This designated the route of modern science and the innovations guided to industrialization. [429]

Baroque City

In Baroque Times, the cities were transformed physically, and science and technology came into prominence. In Renaissance the general focus was on freedom and dignity of man. Mumford states this development as "from the absolutism of God and the Holy Catholic church to the absolutism of the temporal sovereign and the national state." Baroque city had the entity of rent and horizontal expansion. As a result the slums can be observed in the empty parcels of the city. Accordingly, the esthetic concerns which emerged and this era was generally based on the idea of "getting under control". [430]

In baroque city, the nature attracted human's interest so much that he/she reflected his/her interest on urban area. That situation can be exemplified by zoological gardens and royal parks inside the city. Mumford, actually, advocates that it was an illusion. He thinks the human forgot that he/she had already conquered the nature, and now he/she was again interested in the thing conquered once again but that attention could not go beyond seeing the nature as an entertainment place in that period. [431]

The mostly important scientific theory propounded in these times was Darwin's Theory of Evolution. Until this, the origins of the species were explained in terms of religion and were relied on the

[427] Mumford (1961: 263)
[428] Mumford (1961: 316)
[429] Burat (2000: 20)
[430] Mumford (1961: 345)
[431] Mumford (1961: 381)

heaven. Theory of Evolution raised a totally different idea that the origins of the species were formed and proceeded through natural selection. According to Bowler,[432] Darwin's theory emphasized on the interaction of the organisms and their relations with their environment, also if the atmosphere of the species changes insuperably, he proves that they can disappear. Bowler also emphasizes in his book that the nature replaced with the god who shaped the human by Darwin's theory. However, the human would continue to exploit the nature even the duality of preservation-exploitation of the nature of that era. The natural selection was prevailing of the one who is outstanding and skillful. That's why the universe became a complicated system where all the creatures were struggling to survive. The human race became a product of a materialistic nature and did not shoulder any responsibility for the rest of the world as there was no place for the mercy in the process of the development of the humanism and there was an encouragement for looking after one's own benefit.[433] Darwinism is straight-forwardly relevant with the philosophy of advance as a result of struggle, yet the principle of advance oriented to the moral aim of the universe was not cared during the Victorian Age (1837-1901). The religion of Protestant was believed to let the human control the nature. Thus conquer of the universe and the advance of the human encouraged industrialization, entrepreneurship and individual development, accordingly.

Industrial City

This era coincides with the beginning of industrialization together with the discovery of steam power. The base of this system was "atomic individual" according to Mumford[434]. The right and freedom of the individuals started to be protected by the government. When the freedom is compared with the same of Middle Age, " freedom had meant freedom from feudal restrictions, freedom for the corporate activities of the municipality, the guild and the religious order in the Middle Ages; freedom means escape from protection, regulation, corporate privilege, municipal boundaries, legal restrictions, charitable obligations in the capitalist age." [435]

The impact of the capitalism on urban area was profit-oriented excessive growth in vertical and horizontal axis. As a result of this, there was no easy access of human to countryside anymore. The city centers converted to the working places -or factories- and the pollution increased enormously inside the city. The alienation to the nature was on the top in capitalist stage's beginning because human and nature relationship was established based on the relationship between production and technology, not based on the moral issues. According to Marx, the alienation of the human is because of moving him/her away from the active roles of his/her own activity and transformation of nature. That alienation breaks off the human from his own body, from the nature and from the humane essence.[436]

In this context, the city has changed as a result of the reflection of altered production relations on space. Firstly, the population has increased enormously. This led to the high density urban environment. In addition to this, technology has developed and the production relations accelerated. David Harvey thinks that accelerated relations have been reflected to the cities as speedy road and high buildings, containing every kind of uses inside, which damages the city life and spatial organization. As the gathering spaces receive a decrease, then the people are ruptured from the others, and collective self. They became introverted and individualized as they have never been before. This has corrupted the self and emerged some psychological disorders like schizophrenia

[432] Bowler (2002: 14)
[433] Bowler (2002: 28)
[434] Mumford (1961: 448)
[435] Mumford (1961: 415)
[436] Foster (2001: 111)

together with the decrease in face-to-face relations. As a result, over individualization became the point in capitalist era. Tocqueville specifies how an individual cannot become a part of the society as it turned into himself as follows;

> "Each person, withdrawn into himself, behaves as through he is a stranger to the density of all the others. His children and his good friends constitute for him the whole of the human species. As for his transactions with his fellow citizens, he may mix among them, but he sees them not; he touches them but does not feel them; he exists only in himself and for himself alone. And if on these terms there remains in is mind a sense of family, there remain no sense of society.[437]

As the human reduced his/her face-to-face relations with the others, he/she starts to be separated from the society; as a result, the development of a self which emerged with the existence of others becomes impossible. Alternatively, relations reduced to market level shapes in present times. As the commodities reciprocated finished, persons get bored and parts company with the other. Sennett describes this kind of relationship style as narcissist based which are reduced to market level based relations.[438]

If we turn back to the beginning of Mowgli discussion, it can be inferred that human has emerged and formed as a result of the nature, both in religious and materialistic notions. Nevertheless, he/she gained his/her personality in the city where the others take place. The human has won his/her ego under the other's existence. So, he/she became a self in the city which is his/her own creation, and in this direction, the discussions about whether the human should be closer to the nature becomes meaningless.

In sum, individuals have handed their personality during the process of civilization, accumulation of knowledge and development of natural sciences. In the beginning, the human was nothing more than the shadow of the god under the power of absolute king, then won his/her collective ego with the power of plurality but he/she still could not distinguish himself/herself from the heaven. The process has been accelerated with the enlarged knowledge of human which emerged in the city itself. The own product of the human had started to change him/her and accumulate the knowledge. On the other hand, this knowledge has been shared and grown by only human interaction. The interaction, the "mirror of the other", was only one way of the definition and creation of self because person exists as long as the other exists; otherwise, it does not mean anything of his/her physical existence just like being in the basic design process, defining the frame of reference and creating inside of the frame with black and white elements. As black define white or solid defines void, human is also defined by the other human. As a result, individual human had his own personality as a result of understanding himself/herself being a part of the nature by socialization.

[437] Sennett, R. The Fall of Public Man.
[438] Sennett (1976: 10)

APPENDIX B

Post-Industrialization Urban Utopias as Solution of Urban Chaos Developed By Industrial Capitalism

Firstly, laying the foundation of Industrial City occurred through the end of 18th and beginning of 19th centuries by some philosophers. One of them was Charles Frourier. The aim was a new kind of societal organization and creation of its space prepared by industry. By this way, the property was consolidated by entrepreneurs and the industrial production was spreading through rural agricultural lands.[439] Here, the aim was to create new kind of life styles and society. Thus, Charles Frourier who developed Phalanstere in 1850's, proposed a collective living of proletarian. Under the principle of mass production, the living unit for 1500 people was based on the common benefits of participants. In this sense, dining halls, libraries and working spaces were planned together with the ateliers in this communal life. This spatial model is thought as the pioneer of some latter architectural models such as Le Corbusier's Unite d'Habitation.[440]

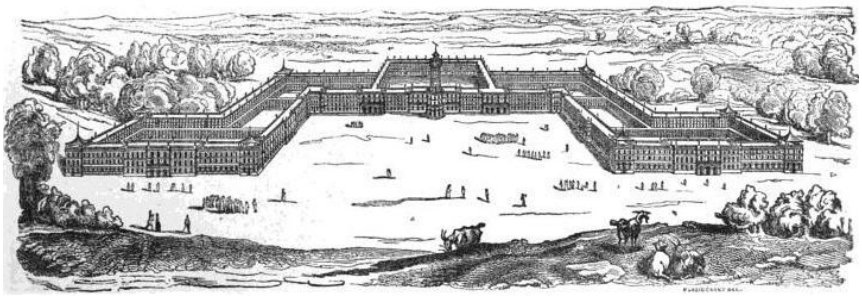

Figure B. 1 Charles Frourier's Phalanstere
http://dolusozluk.com/?b=falanster (accessed on 23th of November, 2012)

It is important to mention the gigantic structure of Phalanstere, which was developed in horizontal line. It comprises public needs as mentioned within the structure like public uses and represents a system based on equality by this way to its users inside the horizontally developed mass.

Secondly, Robert Owen constructed the philosophical substructure of the Garden City in England in 1816 by proposing a plan for society by starting from the problems of workers who were living in unhealthy residential areas constructed after industrialization. In this respect, he proposed that industrial society would be structured in the rural area. The buildings of each society were located in the common green areas in the middle of the settling. Next, the residential areas which were located in the periphery were surrounded by large gardens.[441]

After Robert Owen, Ebenezer Howard, being an important urban philosopher advanced the idea of Garden City in 1898 in order to find a solution for the tension between city and nature. As capitalism divided nature from the city, people's demand on natural and clean environment rose. Howard pointed this demand and advised bringing the advantages of nature and city together in Garden City.

[439] Baykan Günay, Sanayi Kenti (Kentsel Planlama Ansiklopedik Sözlük. 2012: 382)
[440] Ibid, p. 382
[441] Gallion, 1963

When considered from any point of view, Howard actually targeted to limit the borders of the city. According to Mumford, Howard's Garden City was an example of stabilizing the growth of the city and the number of the population living in the city in order to stabilize social relations.[442] Thus, Garden City approach arose from the concern of decreased social relations and human health due to the negative conditions of urban form and urban environment created after capitalism. In this respect, the social limits of Garden City was tried to be lined as 32000 people in 6000 acres (2400 ha.).[443] It was indicator of an effort to provide a territoriality based social needs. According to Howard, the ideal city should be restricted in demographical and areal, and there should be many Garden Cities that connect each other without going beyond determined population. By this means, Garden Cities have their own centers without having a need of central city.

As it is commonly known, Howard aims to bring together the positive sides of both town and country in garden cities. In order to explain his thought of developing the contacts of human (with other human and nature), he uses three magnets that were written the positive and negative aspects of both towns and countries. He combines positive sides of both sides in the third magnet which implies the features of garden cities. Here, third magnet starts with primary features of town and country; "Beauty of nature and social opportunity" which comes to the meaning of social and natural contact.

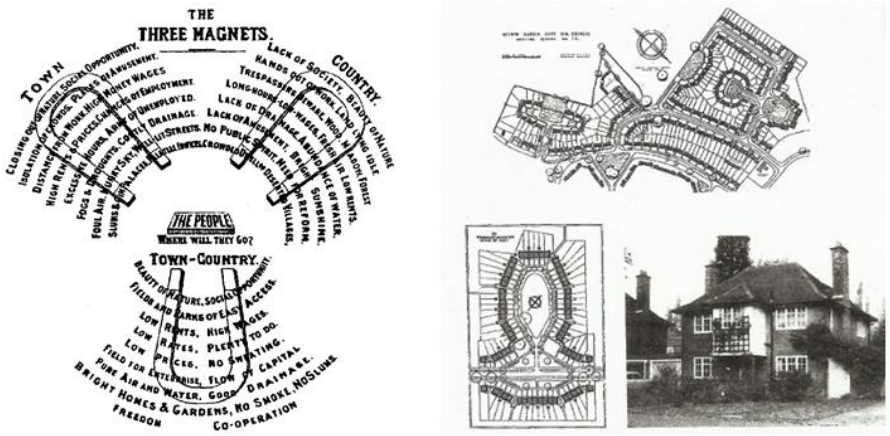

Figure B. 2 Three magnets of Garden City & Low-scale design of Welwyn Garden City http://architectureandurbanism.blogspot.com/2010/10/ebenezer-howard-garden-cities-of-to.html (accessed on 4th of September, 2012) and Panerai, P. & Castex, J. & Depaule, J. C. & Samuels, I. (2004: 52)

If we deal with the life style that Garden City brought, it can be said that Garden City idea was based on low density urban environment. Howard and his team supported low-rise urban blocks with low density which was reflecting the British life style best according to them. The physical plan of Garden Cities was, thus, creating public, semi-public and private spaces. That's why he insists on the physical borders and their creation of territoriality in lower scale. At the same time, the idea of generating clusters was also the definition of lower-scale territorial control by increasing the sense of belonging and social contact in the urban area. On the other hand, low-rise dwellings with their gardens and sovereignty of dwellers on streets and green areas bring the contact in between human and nature. Thus, it can be said that Garden City movement aimed to create social and natural contact of human, and can be defended that it realized its own dream.

[442] Mumford (1961: 180)
[443] http://en.wikipedia.org/wiki/Garden_city_movement(accessed on 4th of September, 2012)

Thirdly, as the competitor of English Garden City, Linear Industrial City shows itself.[444] Through the end of 19th century, Soria y Mata suggested an idea of Linear City. Starting point of this idea was the need of solving transportation problems. Thus, he proposed this emphasis on urban form which is a development on straight line. According to him, "the form of the city is, or must be derived from the necessities of locomotion."[445]

It was the new shape of Industrial City through the 20th century. Under ASCORAL (Assembly of Constructors for an Architectural Renovation), one of the suggested human habitats was the linear city. With the leadership of Le Corbusier, linear industrial city model was developed outside the current urban centers.[446] In these studies, circular gardens and linear city in line-shaped was tried to be integrated. Open spaces acted like buffer zones which was around the cluster of industry.[447]

An example of Linear City development is Cullen and Mathew's ALCAN Linear Circuit Town. Differentiated uses such as low-rise or high-rise residential areas, industry, town center, playing fields or village combine each other along the linear development line. Industry is separated from the continuous urban functions by green areas. This movement enables the development of high-rise and low-rise buildings along a straight line.[448]

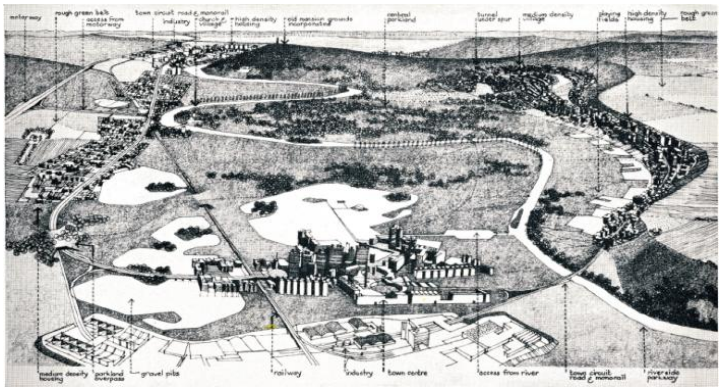

Figure B. 3 Mathew's ALCAN Linear Circuit Town
(Collins, 1966: 214)

It can be inferred that linear city movement was focused on bringing industrial city on countryside. By this way, the dwelling zones with other functions where the workers would live near this industrial zone were tried to be created both in high-rise and low-rise residential areas. It was an urban model of creating modern industrial society of 20th century according to the needs of it.

[444] Collins (1966: 204)
[445] Baykan Günay, History of CIAM and Team 10. (1988:25)
[446] Baykan Günay, Sanayi Kenti (Kentsel Planlama Ansiklopedik Sözlük. 2012: 384)
[447] Gallion, 1963
[448] Collins (1966: 212, 214)