An Analysis of Privacy Through Plan Organization in North Cyprus Mass-Housing Apartment Units

Anahita Ghadir

Submitted to the
Institute of Graduate Studies and Research
in partial fulfillment of the requirement for the degree of

Master of Science
in
Interior Architecture

Eastern Mediterranean University
June, 2016
Gazimağusa, North Cyprus

Approval of the Institute of Graduate Studies and Research

_____
Prof. Dr. Cem Tanova
Acting Director

I certify that this thesis satisfies the requirements as a thesis for the degree of Master of Science in Interior Architecture.

_____
Assoc. Prof. Dr. Uğur Ulaş Dağlı
Chair, Department of Interior Architecture

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Master of Science in Interior Architecture.

_____
Assoc. Prof. Dr. Banu Çavuşoğlu
Supervisor

Examining Committee
_____

1. Assoc. Prof. Dr. Banu Çavuşoğlu   _____

2. Assoc. Prof. Dr. Kagan Günçe   _____

3. Asst. Prof. Dr. Afet Çeliker   _____

ABSTRACT

This study analyzes a new phenomenon known as mass housing in the Northern part of Cyprus from examples chosen among well-known construction companies to determine the role and degree of considering privacy of the occupants in apartment blocks. Mass housing in Northern Cyprus started recently from 1960 through efforts of governmental and Union bodies followed by private companies and the expansion of the construction firms. Mass housing seemed to be the way of submitting the high demands and needs of the population of the country.

Privacy in housing is one of the most important issues to be considered. Regardless of the individuals, cultural background, every person needs some sorts of privacy at their home for relaxation and comfort. Privacy plays the vital role in satisfaction of the occupant. Providing privacy is possible via considering different aspects of interior designs. Among these, floor plan, zoning, circulation and relation of those are seems to be the basic to improve the demand and satisfaction of the individuals within home interior environment.

The current study is based on the collected data and analysis via plan organization. It is seen that interior design of the houses as home to variety of people bought from mass-housing projects needs urgent upgrade and consideration based on the occupant privacy and needs at the design process. Size and number of rooms has no significant relationship with privacy whereas the place and site of the bedroom and kitchen are more important for the occupants. Further recommendations are presented at the final chapter of the study.

ÖZ

Bu çalışma Kıbrıs'ın Kuzeyinde toplu konut olarak bilinen yeni fenomenide analiz mahremiyet sakinleri ediyor. Bunu yaparken çok iyi bilinen inşaat şirketlerinin örnekleri seçilmiş, ne seçilen apartmanlardaki dairelerde kalan kişilerin mahremiyetini düşünme derecesini ve rolünü belirlemek için yapılmıştır. kıbrıs'taki toplu konut olgusuna ba bulduğun da bunun. 1960'tan itibaren hükümet ve Sendika kuruluşlarının gayretleriyle ve onlardan sonra da özel inşaat şirketlerinin çoğalmass ile devam ettiği görülür. Toplu konut, ülke nüfusunun taleplerini ve ihtiyaçlarını karşılama yolu olarak bir yöntemdir.

Konutta mahremiyet düşünülmesi gereken en önemli konulardan biridir. Bireylerin ve kültürel geçmişlerine bakılmaksızın her insanın rahatlamak ve dinlenmek için evlerinde bir çeşit mahremiyete ihtiyaç duymaktadır. Mahremiyet, evde kalan kişinin memnun kalmada çok önemli bir rol oynar. Mahremiyeti temin etmek ancak iç tasarımın değişik yönlerini düşünmekle mümkün olur. Bunların içerisinde kat planları, bölgelendirme, dolaşım ve benzeri, bireylerin memnuniyetini ve talebini geliştirmek için esaslar olarak gözüküyor.

Bu evin içindeki ortam için geçerlidir. Bu çalışma, plan organizasyon aracılığıyla toplanmış veri ve analiz üzerine dayandırılmıştır. Çeşitli insanların Toplu konut projelerinden satın aldığı evlerin yuva olması için iç tasarımlarının acil olarak daha da geliştirilmeleri gözüyle bakılmaktadır. Bu da ikamet mahremiyeti ve tasarım sürecine dayandırılmıştır. Odaların büyüklüğü ile sayısının mahremiyet ile ilgili önemli bir

ilişki bulunmamaktadır fakat yatak odası ve mutfağın yeri evde kalanlar için daha önemlidir. Bu çalışmanın son bölümünde ek tavsiyeler sunulmuştur.

Anahtar kelimeler: Mahremiyet, Plan Organizasyonu, İç tasarım, Toplu Konut, Kuzey Kıbrıs.

DEDICATION

I dedicate that I awe my master thesis to my dear parents and my supportive brother.

They encourage me in the hard time and push me forward. I especially thank my lovely

mother who supports me in my tough times and encourage me in every single step.

To My Family

ACKNOWLEDGMENT

I also acknowledge the full support of my dear supervisor Prof. Dr. Banu Çavuşoğlu for endless help, assisting and guidance during this way. I would like to thank those who have the colorful role in giving me courage to do this work. I appreciate the comments of my dear jury members for improving my master thesis work.

TABLE OF CONSTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter 1

INTRODUCTION

1.1 Background of the Subject

'Home' offers one of the best examples of environments in which to view the relationship between people and their places; as a place where daily activities occur. Therefore, interior architecture in the field of housing has important role in finding meaning of whom they are and who they become. One of the most popular choices for their homes in today's society is mass housing. Most of people in various societies are living in an apartment which is designed for a variety of people with similarities. Architecture in parallel to the development of population, there is a need for constructing and providing appropriate and suitable housing for everybody. Mass housing has its own particular identity and image in the society (Onal Hoskara, Tevfikler Cavusoglu and Ongul, 2009).

Mass-housing is the construction of numerous residential buildings in a specified area within relatively a short period of time due to high demand. In Mass-Housing the design of each unit according to the unique requirements of each particular occupant cannot be the main concern. Mass-Housing is referred to the design of whole housing environments including accommodation, education, health, food section, safety, accessible, aesthetics, and such issues where privacy is one of the most important aspects that should be fulfilled within each and every unit of the housing. One of the

1

main issues for Mass-Housing should be to keep the privacy regardless of time, space and location for every person in the house (Kwofie et al., 2014). That is, every individual can have sorts of privacy in their preferred extent time and space in their homes. Therefore, it is seen to be pretty useful to mention and discuss about the privacy in mass housing as an outstanding issue in recent decades.

The term 'privacy' described as early as the 15th century to be referring to the quality or state of being apart from company and/or observation. Privacy provides a sense of freedom out of unauthorized intrusion. Privacy also denotes a place of speculation (Britannica Encyclopaedia, 2006).

Irwin Altman and Westin suggest that one of privacy's major functions is to serve the individual's self-identity by creating personal boundaries which provide it (Altman, 1975, Westin, 1970). According to Westin "Privacy is the claim of individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others" (Westin, 1967, Pg. 7).

Privacy makes boundary and it doesn't mean separation. Privacy affects the condition, social relation and interior design of the house. Various studies and approaches have concerned about privacy as the definite analogous consequences in designing process (Hertzberger, 2005, Pg. 12). Privacy in individuals is regulated through controlling interpersonal limits and boundaries (Altman, 1975, Pg. 12-13). Many of the concepts used in environment behavior research have been developed specifically to describe the relation of person and place. But while these models are often carefully tried to conceptions of behavior, the link to existing architectural conceptions is not clear

(Burnette, 1980). Therefore, in this study, reading of privacy through plan organization is aimed to find relation of places and people in their homes can determine the rule of planes in interior architecture for each unit. Plan organization is the relation of different functional of places of buildings; and looking at the subject like this within home environments similar functions in units of Mass-Housing for different type of people may not provide privacy of each individual member of the home (Tonkiss, 2005). This is explored within the content of this study.

1.2 Problem Statement and Research Significance

The role of architect and interior designers as major factors in constructing the mass housing is most important rule. Due to this, there should be considerable attention by design to provide the privacy of every person along with their basic needs (Marcus and Francis, 1997). Unfortunately, it is common to see these basic needs are ignored in countenance of profit; however, it is known that privacy as the definite need of every person plays important role in their life (Rachels, 1975). Most of the current mass housing examples, especially apartments miss this point and result in further social instabilities. Lack of appropriate design has caused costly problems for house owners, clients and eventually constructors as well (Hendrickson, 1989). Based on the natural resources, local facilities and general housing needs individual or group buildings affect and change the living standards which in turn defined the quality of residence's life (Onal Hoskara et al., 2009). Therefore, shortage and land, natural resources, high demands of housing, development of infrastructures lead to development of housing. Unfortunately, mass housing units are more or less in the same style and interior design which cannot meet the needs of every occupant. Every individual has some priority in use of interior space; therefore, constructing same floor plan for design of units makes problems in terms of residence privacy and usage. (Altman, 1975).

Lack of appropriate plan organization, especially in terms of privacy of members left great numbers of apartment units empty, which in return constituted huge amounts of cost of investment for construction companies. Therefore, this study tries to focus on the role of privacy through plan organization of mass housing units.

This study tries to refer to previous theoretical studies and direct the concentration on the subject of privacy in the units of apartment blocks in the North Cyprus. It is unique, based on different reasons and empirical justification. Previously, Investigation has been done by Fitch (2004) where concentration was mostly placed on the design of kitchen and dining room with their different features. Scheerlinck (2010) on the other hand evaluated the territorial boundaries in urban projects generally. Saarikangas (2006) studied the relationship between genders with kitchen area for 1990s and 2000s. Mustafa, Hassan, Baper (2010) considered the space syntax between modern and traditional housing in detection of privacy in Iraq. Jacobson (2009) developed the phenomenological account as a developed nature in experiencing homes. Koman and Erden (2010) did a closer attention to the development of mass housing and their flexible design in Turkey. Stahl (2013) studied the role of privacy and innovation in civil society. Donohoe and Knechel (2014) evaluated place as the theoretical and powerful concept to provide more general experienced of lifeworld.

Based on previous studies, the lack of attention to the privacy of mass housing units in apartment blocks as the study focus is oriented to the cases in Northern Cyprus. Therefore, this study is significant in researching the role of privacy and interior development for providing better places for majority of people in mass housing construction. This study is just considering the role of privacy in units of mass housing

at Northern Cyprus as its focus. This study evaluates the role of privacy with examples of places belonging to fifteen major construction firms in three main cities of the country.

1.3 Aims and Objectives

This research intends to provide useful information for the sake of following aims and objectives.

- Definition of variety and similarity of apartment units,

- Providing complete information about privacy and plan organization through selected examples,

- The role of privacy in mass housing in general and Northern Cyprus in particular,

- Providing different factors of spatial design in support of privacy,

- Improving the interior architecture via plan organization at units of housing for better living for each member.

- Evaluating the building's design to determine the function and uses of the units.

- Presenting some of the well-known mass housing project around the world for better understanding and justification.

1.4 Limitations of the Study

The scope of this study is limited to privacy of each member of apartment units and individual territoriality. Design issues which effect on privacy of residents in each units of mass housing are considering. Individual or each member privacy is due to activity and lifestyle of residents which made this reason to limit the research on factors of similarities and varieties in apartment blocks.

Limitation of case study are apartment blocks as the most common mass housing type in Northern Cyprus. For this purpose, fifteen private construction companies as main

source of today's constructions of North Cyprus for developing mass housing projects as apartment blocks over here were asked to provide the needed samples as 5 companies from each three main cities and 2 types from each company; these are selected from Nicosia, Kyrenia, and Famagusta as main cities of north Cyprus with majorities of resident and mass housing project. This study evaluates the state of privacy through plan organization. Also, by having interviews, observation, plan organization reviews, and collection of data will be analyzed.

1.5 Methodology of the Study

In this chapter, the process to reach the results and outcomes provided. This qualitative study will use several methods to evaluate the significance of the phenomenon of privacy in units of mass housing. Firstly, by interviewing each member of selected samples of main cities of North Cyprus is done in terms of definition and explanation of privacy by the individual members. Summaries of collected data of interviews of each cities are going to read with diagram of level of satisfaction which is based on psychological qualitative studies .Then reading plan organization of each unit with analysis of level of privacy based on study of H.Okhovat and G.Michael about degree of individual privacy of each member of home by focusing on zoning and circulation and relation of planning , supported by photographs and observation, is used as a combined method of analysis supporting interviewing and data analysis. By these, the existing situation will be tried to be determined. These will later be used to provide the facts for discussion and recommendation for relation of satisfaction of residents with designing and planning of each units of apartment in mass housing projects.

1.6 Scope of the Study

This study is analyzing the effects of privacy at mass housing apartment type in private construction companies in north Cyprus. This study is outlying to arrange the information accordingly. Privacy in housing is one of the most important issues to be considered. Regardless of the individuals, cultural background, every person needs some sorts of privacy at their home for relaxation and comfort.

The first chapter is including problem statement, significance of the study, methodology, aim and objectives, providing an introduction to the study. Second chapter is providing all the relevant information about mass housing, privacy, similarities and varieties factors of privacy and etc. Third chapter is about mass housing in North Cyprus and common plan organization types in relation to privacy issues where residents' thoughts are presented in the selected samples. Fourth chapter is data analysis of the study with information about the collected data, results, and result of data analysis. Last chapter as the conclusion chapter is including the study justification, and recommendation.

Chapter 2

PRIVACY IN MASS-HOUSING

In this chapter, detailed information about the currency of mass housing and the importance and role of mass housing trough issue of privacy with its related matters is presented. The term 'privacy' is conceived as the essence of home, and two-way modus operandi that determines and controls accessibility between a person and others. These subjects start with providing brief history of mass-housing. After that, detailed information is provided, mainly through literature review to have a closer look to factors which make similarity and variety among mass housing units to provide main reason of considering to privacy issues thorough plans. This part of the thesis can be used as the theoretical background of the empirical studies, pictures, and tables to justify better the meaning.

Satisfaction of residents in same type of units of mass housing for varieties of people can be considered through interior architects with various elements to act as regulators of privacy. In other words, a space and its elements should provide the ability to increase or decrease privacy according to the custom needs of its occupants. Following this direction Nathan Witte suggests that "The environment needs to be supportive of the user's privacy regulation, supporting control over contact with others and supporting the behavioral processes used to regulate privacy" (Witte, 2003, Pg. 28). Each member has their own privacy and they have their contact with others in same

time in same environment which make collective boundary and same zone for users (Petronio, Jones and Morr, 2002) (Figure 2.1).
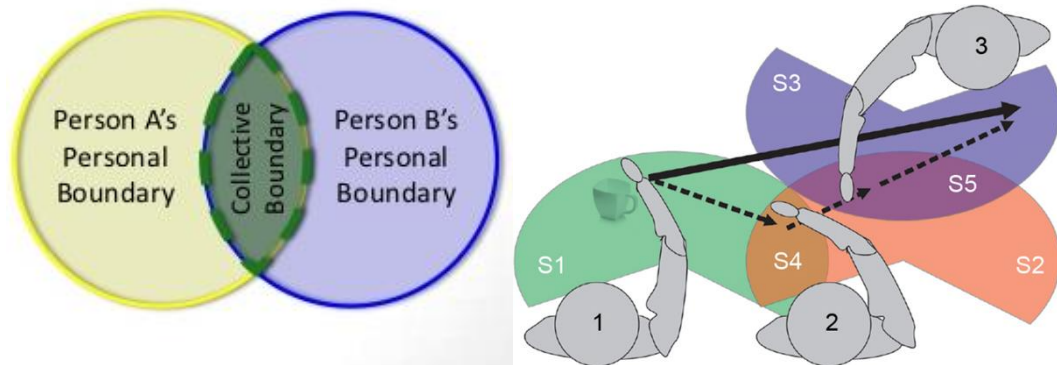
Figure 2.1. Personal Privacy and Collective Boundary (Petronio et al., 2002)

According to environmental psychology, each person is perceived as an individual surrounded by an invisible shelter, or even a series of shelters, extended beyond its epidermis. These personal protective spheres, by which privacy is controlled, vary from person to person and from culture to culture (Figure 2.2).
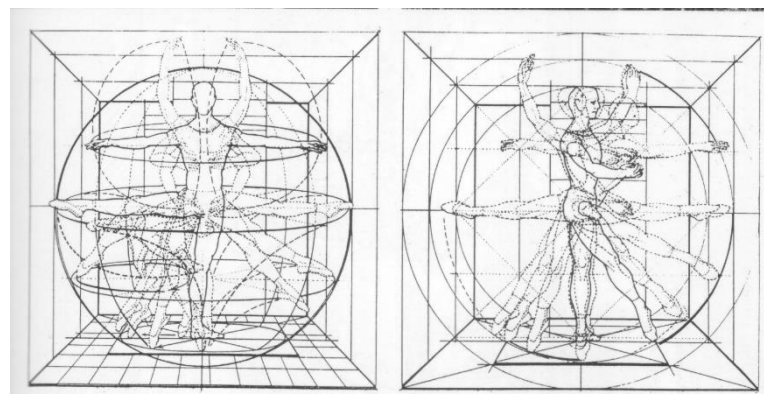
Figure 2.2. Individual surrounded or Personal Sphere

They also differ from period to period as society and social bonds are continually transformed and reconstructed. Hall defines in four spheres; intimate, personal, private and public. When the most intimate of these private areas is intruded by other

9

individuals, the person starts to act defensively or to say at least extraordinarily. A typical example of the above fact is indicated by the abnormal behavior of people when standing in an elevator (Hall, 1969, p. 112) (Figure 2.3).
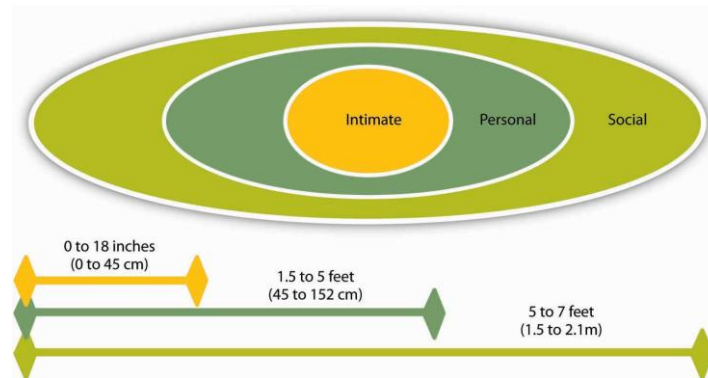
Figure 2.3. Intimate, personal and social zone (Hall 1996)

The proposed idea is that the built environment often acts as to materialize such zones. The above concept is also proposed by Hall. "Man has created material extensions of territoriality as well as visible and invisible markers" (Hall, 1969, Pg. 97). In addition, Colomina Beatriz, comments on Loos architecture, "The spaces of Loos' interiors cover the occupants as clothes cover the body (each occasion has its appropriate "fit") (Colomina, 1992, Pg. 92). Adolf loose described sphere in every space have their external and internal body and private and public zone. In such context, the exterior shelter of a space can be seen as the realization of a personal sphere surrounding the individual. So through the follow facts needs to privacy its one important hidden factors of satisfactions for each members of houses in mass housing and that makes importance of interior architect in mass housing design by needs to focus on all elements which have direct and indirect effect on members of each units.

2.1 The Issue of Mass Housing

Housing as the most important of the basic needs of every individual refers to ensuring every member of the society to have a shelter or home to live in. Housing can be as dwelling, lodging, and any sorts of shelters (Egidario, 2011). But main reason which developed housing based on two important events was World Wars (1 and 2) and second was Industrial Revolution as the total social aspects of life changed. In present, architects have shifted from building to manufacture, where building parts can be industrialized and standardized, buildings units and layouts can be reclaimed and reproduced. This assembly line of mass development of housing has vastly implemented in general architectural practice, promises a better solution of problems for economic and community planning. However, along the assembly line of mass production housing, imagination and connection between the creator and the user has faces distance and gaps. Architects designing without a clear knowledge of future user, understanding of inner desire and needs of individual resident becomes a challenge. This challenge has brought a quest to the present architectural practices on designing mass production house, where creators and occupants could achieve an equivalent state of mind (Hudson, 2000). Le Corbusier's Towards a New Architecture has stated that mass production is based on analysis and experiment. This essay further explores his ideas of having three states of mind in mass production housing, with further explanation and exploration in order to find the equation of bridging the gap between Architects and user to achieve the right state of mind (Han, Kamber and Peri, 2011). When mass production houses became the main development of houses in present days, the understanding and relationship between architect and occupants has formed a greater challenge.

Le Corbusier (1987) had first discussed his idea of mass production houses, through a programme demanded in France by MM. Loucheur and Bonnevay, which was for a law authorizing the construction of 500,000 dwellings to be built well and cheaply (Figure 2.4) also has discussed in relation to mass producing houses in his book Towards A-New Architecture. He conveyed the idea that there was no right state of mind in designing mass production houses. "It is a process where an architect goes through different states of mind, from the spirit of creating (architect + planner), spirit of living-in (inhabitant), to the spirit of conceiving (architect + inhabitant) all in same time." (Le Corbusier, 1987).

Figure 2.4. Mass Productions Houses (Quartieres Moderne Fruges, le Corbusier)

With adaptability of inhabitant, human often leave behind traces of possession, emotion and sensational perception in their given space to live. Senses received provide alertness to inhabitant that soon becomes inseparable to the community. Senses released by way of living of inhabitant become an instrument for imagination and sensory appreciation (Han, 2011). In this case, mass housing projects has become an immense challenge in order to design for mass producing houses, not just having an intimate connection with one user; it shall mean to internalize the entire community.

Furthermore, it seems to be impractical to have an imaginary connection with mass production housing community before it is even built (Hounshell, 1985).

Peter Zumthor (2005) has once asked himself, ''How I would have to go about the design in order to feel happy with so many people. These level of intimacy that are still so important to me. ''The answer has gone to the most origin of architecture, by having an intimate mind of user. Creativity of architect shall come with a sense of deep personal desires of understanding towards the user where Pallasmaa mentioned 'The architect needs to internalize the client, the other, and develop the design for his altered self' (Zumthor, 2005).

2.1.1 General History and Evolution

The requirements for the style and types of building in different part division based on social, economic and cultural background had divided the street into different zones. This idea was following the garden city movement of United States that integrated the city into different suburbs' landscapes (Kazaz, and Birgonul, 2005). So providing different public zone with requiring mass housing projects for people of each zone for better accessibility was one of the important goals (Figure 2.5).
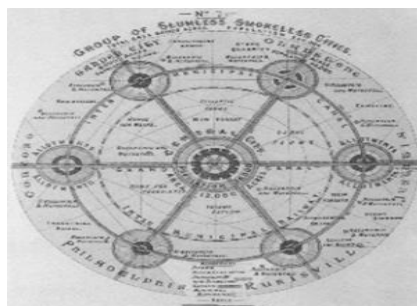

Figure 2.5. Garden City (E. Howards A peaceful path to real reform 1898)

The first mass housing was built with more than 2000 units in Berlin by Bruno Taut called as Horseshoe Estate (Figure 2.6). This building accommodates hundreds of population in close relationship with occupying less space in compare to villas and normal houses.

Figure 2.6. Horseshoe Estate, Berlin (Bruno Taut and Martin Wagner, 1925-1933)

During the interwar period (19th Century), architecture had tried to build large scale numbers of apartments cheaply for middle class and poor population mainly at European countries' cities such as Frankfurt, Berlin, Vienna, and Rotterdam (Rowlands, Musterd and Kempen, 2009) (Figure 2.7).

In the severe economic situation, it was impossible and unaffordable for low income citizens to buy villas, houses or any privately financed house due to the inflations. At the same time, the immigration of people from country sides to the city for the need of work and better life increase the mass housing demands. So that there was a need to find new state-initiated housing constructions implementing the passion to help others starting from 1920s on accompanying local and regional reformation (Kazaz and Birgonul, 2005).

After World War II the Congrès Internationaux d'Architecture Moderne(CIAM) was a force in shaping modernist urban planning, and consequently the design of cities and the structures within, from 1928 to 1959. Its 1933 meeting resulted in the basis of what became the Athens Charter, (Figure 2.8) which would drive urban planning practice for much of the mid-20th century based upon Le Corbusier's Ville Radieuse. (Calderwood, 1964) (Figure 2.9)

Figure 2.7. Unité d'Habitation of Berlin Le Corbusier

Figure 2.8. Athens Charter   Figure 2.9. VilleRadieuse (Radiant City, 1935)

Following its principles, in the late 1950s the entirely-new city of Brasília (Figure 2.10) was built as a new capital for Brazil, designed by Lucio Costa, with prominent works for it designed by Oscar Niemeyer. Le Corbusier applied CIAM's principles in his design for the city of Chandigarh in India (Reis, 1992) (Figure 2.11).

Figure 2.10. Brasília was Planned and Developed (Oscar Niemeyer, 1956)

Figure 2.11. Chandigarh City Plan with Le Corbusier in India (Reis, 1992)

The Athens Charter (French: Charte d'Athènes) was a document about urban planning published by the Swiss architect, Le Corbusier in 1943. The work was based upon Le Corbusier's Ville Radieuse (Radiant City) book of 1935 and urban studies undertaken by the Congrès International d'Architecture Moderne (CIAM) in the early 1930s.The Charter got its name from location of the fourth CIAM conference in 1933, which, due to the deteriorating political situation in Russia, took place on the S.S. Patris bound for Athens from Marseilles.

As the new urban areas developed, town and cities rapidly changes their faces alongside of industrial revolution (Paeley et al., 1971). So the need for cheap housing near to the working places such as factories increased. Although there were some good employers like Robert Owen who was willing to create good housing for their employees but some were not (Hagbert et al., 2011). Most of the rural people migrate

from houses and villas in rural areas to small apartments as mass housing in urban areas for working and living social (Golland and Blake, 2004). For industrial revolution, house-building came as an excellent idea to house the urban poor class by the factory owners.

So mass housing was developed based on two important events. First was World Wars (1 and 2) and second was Industrial Revolution as the total social aspects of life changed; The form of urban area had undergone inconsistently through evolutionary process during 250 years ago due to the rapid changes of urbanization and industrialization (Reis, 1992). Eighteenth century as the start of industrial revolution began in Western Europe, central Europe and UK (Landes, 2003). The explosion of technological advancement provided rapid expansion of new machine invention in more efficient ways to produce products (Jones, 2003). This process increased the manpower's demands and raw material requests which were drew more people to migrate into cities and towns to work and live (Pitts, 2004).

The industrial revolution transformed the goods' production and agriculture into industrial way to agricultural society shifted to the industrial one. So that goods were produced in the factories rather than houses (Hutchison, 2000). Before industrialization 90 percent of the population was living in rural areas but after that it decreased to less than 10 percent (Hutchison, 2000).

The devastation of WWII in Asia, Europe, and Pacific resulted in housing shortage and lead to constructing vast buildings and restructuring the cities through variety of techniques to create mass-housing (Atkinson, 1960). After the war, there was the high

demand to mass-housing for people were migrating to safe areas for searching shelters. Mass housing took the prefabricated panel form of buildings and flats such as panelak czechoslvakia and khrushchyovka in Russia (Reis 1992) (Figure 2.12).

Figure 2.12. Panelak Czechoslovakia and khrushchyovka in Russia (Reis, 1992)

The Second World War (1939-45) was the period of rapid house-building construction. In this time house-building was diverted to military works (Urban, 2013). After 2nd World War, governments of England looked at the architectural industry to find the solution for many problems (Serageldin, 1989). After that time mass housing in shape of high rise residential buildings came to the architectural topics, so urbanism is encouraged the development of high rise mass housing (Urban, 2013). Therefore, nowadays mass housing develops in different types such as apartment blocks and high rise, to meet the social, economic, functional and cultural needs of the population.

Technological interventions, innovative building materials, fast construction methodologies, quality products and industrialized housing can go a long way to fulfil the need for affordable housing (Duarte, 2001). Along with the need to look into ways to cut costs, there is also an additional need for the housing stock to be eco-friendly (Jusan, 2010). The growth of population and land value alongside of increasing the cost of housing motivate developers to build and develop the high rise mass housing

for all group of people including elite, upper class, middle class and poor class of people (Kazaz and Birgonul, 2005). Regarding to all what mentioned before, providing the security and safety of high rise building have become so important to attract the attention of all these groups (Archibald, Medby, Rosen and Schchter, 2002).

The mass housing apparently seems less worth fulfilling, and somewhat satanic due to some of the negative points of view; Some of negative features include architectural monotony, aggressive exhibitionism vs. traditional horizontal housing that would merge into the landscape. Small towns, in particular, lose a certain ambience of intimacy and modesty. Mass housing blocks have something loud and aggressive about them (Aregger and Glaus, 1967). The mass housing is capable of causing tenant isolation and even depression (Qureshi, 2004). It is one of several masterpieces by Le Corbusier, who has long been portrayed by conservationists and traditionalists as a kind of dictatorial monster, condemning millions of people to life sentences in 'concrete horrors 'and was as one of the main sample of depression for residents (Khajavi 2008).

With current market trends indicating a distinct customer preference for affordable homes that also fulfill their aspirations for a better lifestyle, integrated township projects offer the perfect solution to both the customer's requirement as well as the builder's need for assured demand (Vossoughian 2008).

2.1.2 Definitions and Categories

Mass housing is defined as any system of housing which contains multiple domiciles for separate and discrete family units within one building. Mass housing can be

categorized in different forms and types mainly as high rise buildings including apartment blocks, blocks of flats, and tenement buildings (Christian, 1991).

The mass housing is "a means of organizing the shambles of a huge city without increasing its spread, of improving living conditions and traffic flow, and creating open spaces for recreation at the same time (Aregger and Glaus, 1967, Pg. 33). Moreover, as suggested by writers such as Dewi Cooke, urban sociability can be promoted by mass housing since it encourages meetings with neighbors through the sharing of mutual facilities (Cooke, 2012).

A mass housing is also capable of transforming an older, but well-preserved district into a visual slum. As a result of its height and mass, it tends to overpower its surrounding not only by its size, but all the other aspects of its appearance (Aregger and Glaus, 1967). As Earnest F. Burckhardt states due to the height of a high rise, people are relegated to an ant-like existence referring to accommodating hundreds of individuals in one block to spend their daily life.

Every individual has different perception from home. Various parts of the home can be to some extent more important for residents (Speare and Demography, 1974). The word 'home' has a broad definition and history. It is describing a building as a sociological concept. Home is the first place for experience the architecture and it influences the idea of a dwelling (Proshansky, Fabian and Kaminoff, 1983). There is usually only one place that associate with home and it is an integral part of identity (Proshansky, Fabian and Kaminoff, 1983). In the English language unlike other

European languages, a word home appears with more empirical meaning than the word house (Proshansky et al., 1983).

Collective or mass housing is defined primarily by quantity and it acquires its spatial quality through grouping. This type of dwelling houses large numbers of people with varying degrees of housing quality. Within it the housing units are closely grouped, according to rules of horizontal or vertical assemblage, generating spaces with public, semi-public or private character in which certain social practices of housing unfold. Collective housing draws its name origin from the way in which the building is accessed, namely by a common path serving all the units.

In an attempted typological classification of contemporary collective housing models of high-density as mass housing, based on the studies of Mozas J and Per AF from the "Density Series" books. Each of the typologies uses as starting point the individual housing unit, the apartment, which is consequently multiplied in an identical or variable pattern of configuration. The typological categories vary according to composition principles based on the housing unit, on size and by the way in which the building relates to the urban tissue:

- *Houses: Starting* from the singular and abstract typological unit represented by the individual house, the first category is driven by multiplying, joining or overlapping multiple units. The configurations generated by those operations are either classical attached or row houses, either contemporary types of folded row or stacked houses. The individual unit is usually related to the terrain, benefiting of a court or a terrace and of direct individual or paired access from

the ground level. This category makes the transition from individual housing to collective housing of a higher degree of density (Figure 2.13).
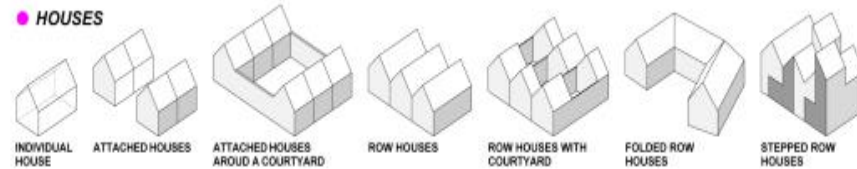
Figure 2.13. Density New Collective Housing (Mozas and Per, 2004)

- **Blocks***:* The second typology represents a quantitative increase in size, in number of individual units and scale compared to the "house" typology. The block height is moderate, usually ranging between 3 and 5 levels; this height is traditionally justified by the number of levels convenient for walking. Its relative low configuration, its flexible footprint on the ground and its scale allow the object to enroll organically within the context. The block can be freestanding on the plot, it can have free sides or it can continue an existing building by cleaving onto a party wall (Figure 2.14).
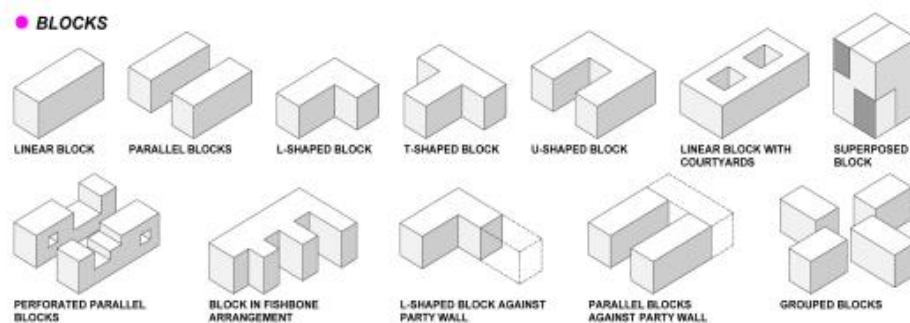
Figure 2.14. Density: New Collective Housing (Mozas and Per, 2004)

- **City Blocks***:* The city block is an urban building flanked on all sides by streets in relation to the urban fabric. Its scale is directly related to the scale of the city. The city block generally involves a large spatial diversity and a relatively high privacy degree. It can have the same height as the block typology or higher, depending on the context. Buildings ranging between 4 to 7 levels are ideal in terms of energy footprint, which is lower than taller buildings (Figure 2.15).
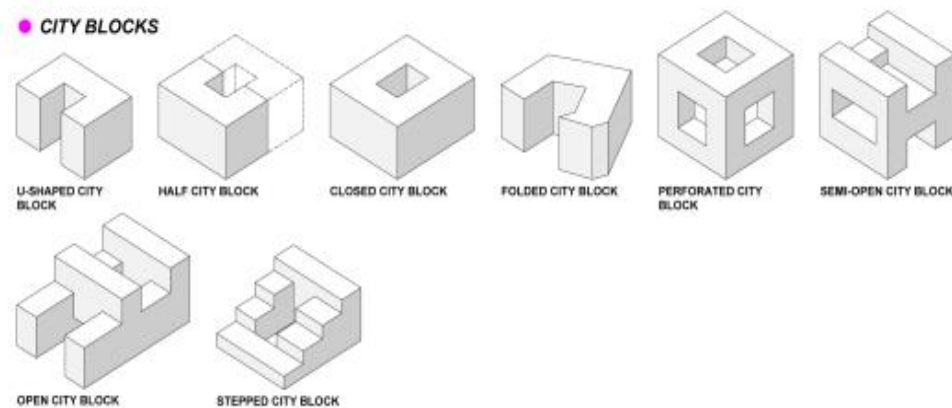
Figure 2.15. Density: New Collective Housing (Mozas and Per, 2004)

- **High-Rise Buildings:** The high-rise type, also known as tower block, is represented by tall buildings with multiple levels. There is no universal definition for the number of levels that determines a building to gain this status; this height is variable according to different geographic areas. This typology is justified by economic considerations, not only in relation to construction costs, but also in relation to urban infrastructure and land resources. Their impact on the neighboring urban tissue is high and the main disadvantages are excessive shading and energy consumption. The stacked units block is the most interesting type from my point of view, being able to generate spatial quality and diversity. It derives from additive processes of small scale units or overlapped uneven floors (Figure 2.16).

23
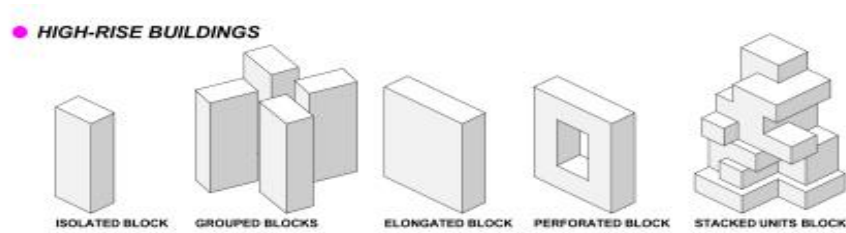
Figure 2.16. Density: New Collective Housing (Mozas and Per, 2004)

Various types of reasons (Rapid population growth, in accordance with gathering people under the one unit etc.) are considered as the causes of development of housing form vertically and horizontally. While mass housing form is classified into two groups (vertical and horizontal), there exist variety of typology of horizontal mass housing types which will be explained now.

- **Detached Houses/Single-Family House:** Detached house or free-standing house is one of the mass housing types. This type of houses is free standing on the urban area. For this reason, they are called freestanding houses as well (Hoşkara, at all, 2009). A detached home, also called a single-detached house, single-family residence (SFR) define as a free-standing residential building. It is defined in opposition to a multi-family residential dwelling (Kalamees, 2007) One story residential houses, duplex houses and triplex houses are examples of detached houses. They are typically surrounded by gardens (Figure 2.17).

Figure 2.17. Detached Houses/Single-Family House

24

Semi Detached house: A semi-detached house (often abbreviated to semi or semi-D) is a single family dwelling house built as one of a pair that share one common wall. Often, each house's layout is a mirror image of the other. This type of housing consists of pairs of houses built side by side (Figure 2.18).

Figure 2.18. Semi Detached House

- **Attached or Multi- Family Residential:** Multi-family residential is a classification of housing where multiple separate housing units are contained within one building. The most common form is an apartment building. An attached home is a structure which shares a common wall or walls with another unit. Some examples of attached dwellings are; townhomes, condominiums, row houses, apartment buildings and high-rise residential towers. Many of this style of dwelling features common grounds either shared or jointly owned (Pfeifer and Brauneck, 2008). Multi-user residential is the housing classification where multiple separate residing units are contained in one structure. For example: an apartment building with providing different housing in one structure (Brauneck, 2008). Multi-dwelling accommodation is divided into three main categories as follow: 1. Small detached buildings with

2-8 units in 1 up to 4 floors (Duplex, Triplex and Multiplex big house); 2. Large

attached row buildings with several units in 1-4 floors (Side attached and

Stacked Row house); 3. Large detached buildings with huge amounts of units

in many floors (Small Apartment, Low-Rise Apartment, Mid-Rise Apartment,

Apartment over Commercial, and High-Rise Apartment). (Figure 2.18)
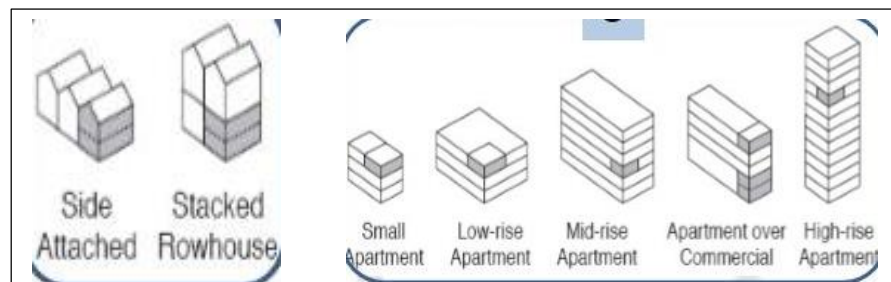
Figure 2.19. Attached or Multi- Family Residential (Residential study, Patrick Whitt)

2.2 From a 'Unit of Mass Housing' to 'Home'

Most of the plan organizations are trying to improve their design to build houses for

individuals to make them accept the units as their home to stay and live with providing

those required facilities the recent living standards are asking for (Cuba and Hummon,

1993). Most of the people nowadays are looking for houses with different facilities

and spaces to feel connected to the houses (Tuan, 1977). Most of the plan organizations

are careful about the needs of the users and attached behavioral connection between

individual and a home (Saunders and Williams, 1988). This issue is apparently

observable in the construction of buildings with customized houses' units to meet the

needs and finding a main gap from mass housing projects to a unit as home.

Recently in most of the developing and modern cities, mass housing plays vital role in

well-being of the community. Due to lack of developable land in urban areas, most of

the countries make multi-unit housing to provide the availability of living for vast majority of residents (Chan and Yung, 2004). To help growing economic restrains and decrease the risk of new novel and modern design, both public and private sectors prefer to use standardized design rather than individualized ones for development in many parts (West and Emmitt, 2004). However, the layout of the rooms and units are different to satisfy the needs of the users (Sullivan and Chen, 1997). Before moving in, users should make alterations to their units in the spatial layout of the unit based on their requirements and priority by knocking down some of the walls and making new ones to change the size and shape of the interior parts of the units (Atlas and Ozsoy, 1998).

Understandably, certain aspects of a building may become obsolete over time as the needs of the users also change. In this case, however, valuable resources – material, energy, time, money, manpower – are rendered obsolete before they are even put into use. Such immediate obsolescence is unacceptable in the light of the international direction towards a sustainable community. Flexible housing design can help to reduce the impact of this problem because with adaptability in layout configurations there is a better chance for the users to find a unit that can fulfil their respective spatial requirements (Atlaş And Őzsoy, 1998).

As the function of housing shifts from provision of shelter to serving multiple purposes, the spatial capacity of plan organizations to support various user activities has become as important a quality parameter in mass housing designs as other more traditional evaluation criteria such as gross area, materials used and detailing (Őzsoy, Atlaş, Ok and Gökmen, 1996).

Generally, the life-cycle of a unit in a mass housing development is considerably longer than time-span of user tenancies that circulate through the unit. Each successive tenant undoubtedly makes changes to the unit to suit their immediate spatial needs upon moving in and would continue to make incremental changes throughout the period of their stay in the unit as their own spatial needs evolves over time (Whitchniul, Morton, and Carr, 1999). To achieve this, the configuration of the unalterable elements of the unit – envelope wall, structural components, pipe ducts, etc. – must be composed and dimensioned to allow for adaptation to a wide variety of room/space arrangements to fulfil different user spatial requirements (Saari, Kruus, Hämälainen, and Kiiras, 2007). In mass housing there are varieties of forms and types of units to shape the overall design and meet the needs of members. Sense of home in mass housing depends on the degree of congruity of the environment with the residents' motivations. The congruity depends on spatial personalization achieved by end-users' participation to bring sense of home in houses in units of mass housing (Stanek 2006).

Amos Rapoport (1987) mentioned that housing is a system of settings that particular sorts of activities occur. Based on his definition, housing quality can be categorized toward set of attributes named as "*environmental quality life*". Based on this concept number, kind and configuration of the relation of rooms is provided. Housing is culture-specific due to the fact that everyone won't use the spaces in the same way. Rapoport (1986) stated that housing needs should be discovered not assumed based on equation and analysis but should take place through consideration of activity systems, values of household, and lifestyles. These are all understandable through user's interviews and user-needs analysis through planning procedures.

Units have different types based on the interior spaces they embraced. Modern mass-housing should have the open design with percentage of user involvement during design stage to serve the future users' needs (West and Emmitt, 2004). The concept of space is mainly a human construct through notion of position, dimension and orientation. Space is used for analyzing the physical entities and psychological and social problems of human. The spaces made as human environment have been called as existential space, conscious space, pragmatic space and logical space, which all of them depending of the consciousness of human from them (Norberg-Schulz, 2011). Below there are different factors define the varieties and similarities in indoor space of mass housing units in more detail.

2.2.1 Varieties Between Units

 Varieties between units in same apartment blocks can be considered through design issues and through users. People are categorizing by variety of identity in many ways through behaving and speaking, their interests and activities, and the physical environment. Residents are often judged on the basis of visible clues that are interpreted as signs of identity by outsiders (Gullestad, 2002). "The spatial world in which we live tells us who we are. We find our self within it, we respond to it and it reacts to us. By manipulating it we affirm our identity" (Robinson, 2006, Pg. 23).

A detached dwelling contains more visible signs of lifestyle and identity than an apartment in a block where the residents have no influence on the exterior of the building. Still, people interpret residents' life stages, family situations and social status from the fact that people live in apartments and not in detached dwellings, and through the choice, or limited choice, of neighborhood. Rapoport (1985) argues that a home reflects identity due to the fact that house and interior are chosen. If they had not been

chosen, they are not "home". An imposed setting is unlikely to be "home". Many people are too poor to buy or choose their physical environment; however, they may still experience having a home.

Home ownership may offer better opportunities for self-presentation through housing, but Paadam (2003) argues that strong home identities are not restricted to owners. If you own your dwelling, you have the greatest freedom to choose your surroundings, and this may be some of the explanation as to why people in general prefer to own their dwelling (Agnew, 1981). In most western cultures, a freestanding single house serves the function of reflecting identity best, and may therefore be related to the strong preference people in many western countries have for this type of house (Cooper, 1974, see Saeggert, 1985). This is, however, dependent on social, geographical and historical context; "home" is predominantly associated with apartments (Blunt and Dowling, 2006). People communicate identity both on a conscious and subconscious level. The conscious and active way people communicate identity can be referred to as "self- presentation". People want to present a desired image both to an external audience (others) and an internal audience (ourselves) (Myers, 2002). People may then express themselves and behave in ways designed to create a favorable impression that corresponds to one's ideals. Some people are more conscious about self-presentation than others, and there are situations where people are more self-conscious than other situations. Self-presentation can be seen from a dramaturgical perspective, where the environment is a collection of stage sets and props for social performance. People select and manipulate symbols in their environment in an attempt to influence an external audience. The communicative perspective on housing can be seen according

to symbolic interactionism (Blumer, 1962). People's belongings and environments carry meanings that are interpreted during social interaction (Brooks, 2005).

2.2.1.1 The Role of Design: Interior Environments

One of the most usual and well-known strategy is to find the planner in order to make the desired changes before the construction. Numerous changes should be done at the construction time such as larger doors, and having level door hardware instead of re-grading and knobs are inexpensive and easy to apply. Some of the constructor and plan organizer allow the users to customize the interior environment and layout based on their interest such as enlarging foyers, widening the hallways, reorganizing the bathroom facilities and space, and etc. to improve the accessibility.

Custom-designed interior environment and layout need the professional designer in order to increase both the flexibility and accessibility of the house alongside of visibility. Although finding the professional interior designer who knows everything about accessibility issues is a challenge.

Designers should realize the changes in the people's need and requirement along technological changes to serve better floor plan to household at the time; therefore, designing flexible floor plans that are adaptable to the changing need professional works. Generally, a floor plan is rarely met every needs and requirements of the users. Based on White (1986), equation and analysis never define all aspects of the project requirements and design synthesis cannot always solve all the needs and requirement of the individuals. In every floor plan, there are some issues that are ignored for the sake of other important issues.

Selecting appropriate housing depends on many factors as Zoning, Circulation, Element of design, the most important one is floor plan that is the essential way of arranging rooms and acquiring spaces for the interior environment. This factor has important role in user satisfaction of the residing individuals. Floor plan can be evaluated and analyzed in different ways. Following there is some important criteria apply to all types of structures regardless of the residing type (Wedin, 1979).

A- Zoning

There are three zones within house as follow:

1. The public zone including the area those non-family members are allowed to use.

2. The work zone including the area for work activities depending on lifestyle of household.

3. The private zone composing of rooms where exclusively used by household members and known as private area for private activities.

    The public zone may vary based on lifestyle as an example, the kitchen, the dining room and family room can be considered as public zone.

The concept of zoning is based on three rules: All three zones (public, private and work) should be recognized in the floor plan. (Figure 2.20)
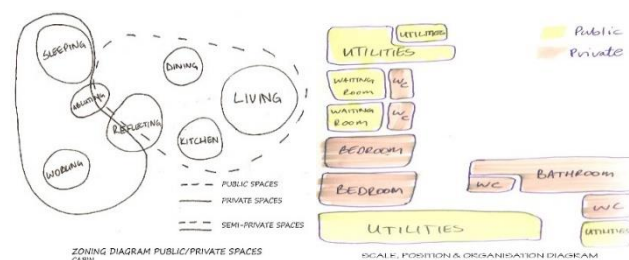
Figure 2.20. Public and Private Zone in Floor Plan (Weiner, 2007)

Zones should not be separated or split from each other. Locating one bedroom far from others and mixing the zones may lead to the privacy of one bedroom and ignoring the role of the other one while it also creates the confusing circulation pattern lead to unsuitable atmosphere for household.

Household should not have to go across the middle of one zone to get to another one. Rooms should be designed in a way that one can get easily from work zone to the private zone without crossing from the middle of public zone (Figure 2.21) demonstrates a good example of well-designed zoning within home.
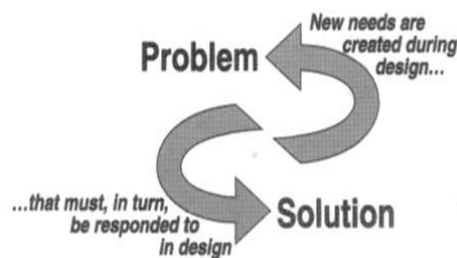
Figure 2.21. The Cycle of Housing Needs and Planning Process (White, 1986)

B- Circulation

Circulation paths in the home should be short and direct as it is possible (Kicklighter and Kicklighter, 1986). A circulation pattern in home utilizes the interior space based on the needs of the occupants. Long hallways and lengthy circulation through rooms, and other zones make high expenses without providing good usable environment for occupants. A central entrance next to hallway creates good circulation pattern in house.

Zoning and circulation composition together complement the house design. Generally, good zoning plan have good circulation and vice versa. Based on Figure (2.21) a floor plan with good circulation and zoning is shown. The central entrance leads to hallways and then opens to each zone of the house. The rooms are next to each other with separate doors. The public zone is on another corner of the home with slight circulation. There is a short way from work zone to private zone without crossing from public zone.
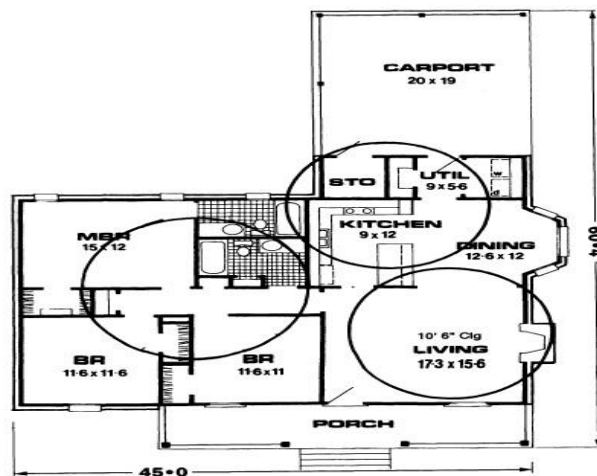
Figure 2.22. Floor Plan with Good Zoning and Circulation (White, 1986)

Having clear understanding of design issues and elements is the principles and ingredients for professional outcome. This information is useful all over the time for decorating or even landscaping the home and its interior space. Space planning is one of the important issues in design process. Agan and Luchsinger (1965) stated the importance of space planning. They mentioned that the house whether it is decided to renovate or construct the new building should facilitate the essential activities such as minister the privacy of the residence, foster harmony in the family private life, and fit the scale of occupants' living.

Housing with well-design in terms of space planning and arrangements of the rooms enhances the quality of the occupants' life. The philosophy of space planning has changes over the recent decades considering the dramatic changes in the lifestyle. Housing is not static is a process of equation which is never solved or balanced (Morris and Winter, 1978).

The house for new couple may not meet the needs of an elderly couple who need accessible housing. However, a well-designed house can satisfy and serve the needs of the residents for many years or even their entire lifetime.

Accessible house design is the most useable design accommodates and serves the needs of everyone especially people with some disabilities. Accessible housing is related to those houses with even minimal accessibility, or the possibility to make it accessible with providing different elements such as large bathrooms and electronic door openers. (Figure 2.22). There are different types of accessible housing such as visitable, Adaptable, Accessible and universal (Imrie2003).
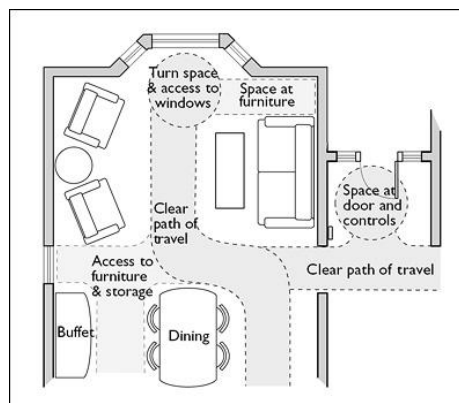
Figure 2.23. Accessibility Example in Floor Plan (Imrie 2003)

A visitable house has basic accessibility characteristics such as a level entrance, minimum ½ washrooms on the ground floor, and a wide door throughout the main entrance level. These elements allow the most of the visitors as well as wheeled mobility devices or even group of people to enter and visit the house.

An adaptable house is designed to provide the adaptable space for users with disability. Adaptable housing has some features such as removable cupboards in kitchen, or knock-out panel in ground floor for installing elevator.

An accessible house embraces the features for persons with disability. This type of housing is including open turning spaces with all of the rooms, kitchen area with knee space and wheel-in shower space.

A universal house design explains that every user has different sorts of usage and abilities in a house which can be changed over time. Some elements are such as level door handles, lighting levels to make the house visible, stairways with handrails to grasp and easy use appliance.

Also elements of design can make important rule for designing variety of plan for variety of user, there are five elements of design such as line, texture, shape or form, space and color. Each of these elements will present in detail.as definition of Pierre von Meiss in 1990.so related to issues of role of design in variety of units and effect on privacy some general information are considered:

Line: line in interior design gives a feeling of movement. Line has important effect on the eye of the residents. Lines define the size of the room proportions; for example, if

two identical rectangles are in half that one vertically and another horizontally; they will seem to have different sizes. The vertical rectangle appears to be taller and thinner than horizontal one. (Figure 2.23) Another rectangle is shorter and wider.
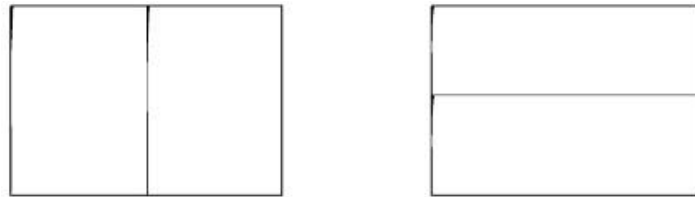
Figure 2.24. Lines in Design

Texture refers to the surface quality of the objects and their feeling. Velvet looks soft, warm and napped while tweed is rough and warm and marble is cold and smooth. Textures also convey feeling in room. Use of plush carpet with soft fabrics produce comfortable sense while metal, glass and stone transfer the sense of coolness. In general, nubby and rough materials give stability and ruggedness while smooth velvets suggest luxury. Having clear understanding of texture brings character and feeling to the interior space of home and especially rooms (Bradley 2005).

Shape or Form is the contour of an object. Shape has two dimensions. Whenever one more dimension adds to the shape it becomes form because of the depth. Different shape can make different zone and accessibility.

Space is another important element in interior design beside color. Space is an empty room. Efficient home is the one have well-designed and well-planned space with rooms free of clutter for more restful feeling. Different spaces transfer different types

of feeling; big spaces produce feeling of freedom and luxury while empty spaces cause sense of loneliness and comfortability (Meiss, 1990).

For having the well-designed house, the user should think about the facilities works well based on their needs and budgets. Starting from big issues to the smaller details let the user understand the requirement for designing the project. Designing the interior environment is based on the space, need and expenses which the interior designer, architects or architectural technologist provide the assistant for professional remodeling (Webb, 2003).

Privacy is the high valued aspect of floor plans in todays' life. Privacy is the most vital needs of every individual (Maede, 1979). The emphasis on the satisfaction and importance of the individual is aimed to achieving autonomy and privacy.

In addition, cultural uphold of multi-cultural countries increase the importance of private spaces for doing private activities at home such as private studying area, private bath. Private zone next to others still is the vital and important element in design. Private zone should be secluded from public area.

2.2.1.2 Variety of Residents

The residential mass housing, offers acceptable and suitable accommodation for a certain part of the population: single people, couples and the smaller families. Occupants has the vital role in designing and constructing the units in mass housing. Considering the general and special needs of users in units is the necessary point in architecture. The expectation of young generation is different from the old generation in use of the housing units and priorities. For example, young generation care more

about private zone while old generation is careful and sensitive about the public zone. The mixture of colors, texture and interior plan is different between different types of residence based on age, cultural background, daily routine and life style (Knevitt, 2013).

Below two types of residing house plan is cited to demonstrate the difference between one bedroom and triple bedrooms houses and the number and kind of residing in these houses as well. Nowadays most of the houses residing singles, or couple with one baby but in the past most of the houses were residing family of at least 5 members. There are different sorts of activities observed in all houses regardless of type, size and environment (Figure 2.33).

Entertaining	Sitting with guests, talking, being hospitable.
Meals	Breakfast, lunch, dinner, formal dinners.
Snacks	Drinking tea, alcohol, eating sandwiches, cookies, etc., all non-meal eating and drinking.
Preparing Food	Cleaning, preparation, cooking, serving.
Dish washing	Washing dishes.
Sleeping	Sleeping.
Hygiene	Washing, excreting, brushing teeth, shaving, shower, bathing, etc.
Laundry	Washing and drying clothes.
Dressing	Changing clothes, dressing, undressing, make-up, beautifying self.
Leisure	Listening to music, radio, reading papers or books, writing letters, knitting, small talk.

Figure 2.33. Various Human Activities in All Houses (Marcus.C 1997)

There are also some activities should be considered in interior design which are approximately happening in some houses (Figure 2.34).

Studying	Reading, writing, drawing, numerical exercises, making models.
TV	Watching TV alone or in groups.
Games	Playing chess, backgammon, checkers, cards and other games.
Ironing	Ironing.
Work	Giving lessons, reading, writing, calculating, drawing.
Sewing	Sewing, fitting, altering.
Hobbies	Photography.
Baby Care	Dressing, changing diapers.

Figure 2.34. Human Activities in Some Houses

These activities may seem so regular and general but in design process should be considered to attract the satisfaction of the occupant. Interior design should have some sort of flexibility in structure to embrace the needs of all types.

Cultural Background

Cultural background constitutes the ethnic, religious, racial, gender, linguistic or other socioeconomic factors and values that shape an individual's upbringing. A cultural background can be shaped at the family, societal or organizational level. Examples of different cultural groups include Vietnamese, English, African American and Irish Catholic. Cultural background is an important way to define an individual's identity.

Daily Routine

Daily routine contains sorts of activities an individual does during a day. Daily activities include fix set of actions which are different between persons. Personal characteristics, type of work, individual interests and age. effect on activities priority and setup. Daily routine explains the individual favorite interior style and preference in setting the interior design of units.

People communicate in many ways through behaving and speaking, their interests and activities, and the physical environment. Residents are often judged on the basis of

visible clues that are interpreted as signs of personal identity by outsiders (Gullestad, 2002). The associations buildings create do not only tell us who other people are, but also who we are. "The spatial world in which we live tells us who we are. We find our self within it, we respond to it and it reacts to us. By manipulating it we affirm our identity" (Robinson, 2006, Pg. 23). Surroundings and possessions people have say something about them, even within restricted choices of objects or surroundings. This means that identity communication is a process people are able to control to different degrees; it is impossible to stop others from interpreting information through physical clues.

Life Styles

A lifestyle typically reflects an individual's attitudes, way of life, values, or world view. Therefore, a lifestyle is a means of forging a sense of self and to create cultural symbols that resonate with personal identity. Not all aspects of a lifestyle are voluntary. Surrounding social and technical systems can constrain the lifestyle choices available to the individual and the symbols she/he is able to project to others and the self. A detached dwelling contains more visible signs of lifestyle and identity than an apartment in a block where the residents have no influence on the exterior of the building. Still, people interpret residents' life stages, family situations and social status from the fact that people live in apartments and not in detached dwellings, and through the choice, or limited choice, of neighborhood. Rapoport (1985) argues that a home reflects identity due to the fact that house and interior are chosen. If they had not been chosen, they are not "home". An imposed setting is unlikely to be "home". Many people are too poor to buy or choose their physical environment; however, they may still experience having a home.

People may use home, interior and neighborhood to mark distinctiveness from other people and other groups. Twigger-Ross and Uzzel (1996) found support for the way places act as references to past selves and provide links between past and present. Breakwell (1983) (Twigger-Ross et al., 2003) has also stated that places become elements of identity, subject to the pressure to maintain self-esteem, self-efficiency, continuity and distinctiveness. Breakwell proposed (1983, 1986; Twigger-Ross et al., 2003) guiding principles for identity. Breakwell's Identity Process Theory (Breakwell, 1983, 1986; Twigger-Ross et al., 2003) does not separate between personal and social identity.

Age and Others

Age as the important factor in interior design and architecture plays the important role in design. Young, adult and old occupants have different perception, use and priorities from home. The house which is useable for young occupant cannot be used for the old ones. This situation is same for adults and vice versa. Robert Kronenburg takes the position that buildings today have long complicated lives. During this time their parameters of use can change widely and diversely (Antic, 2012). He argues that if the building's essential purpose does not change, how it operates can develop beyond recognition. This may result in the destruction and replacement of buildings to accommodate new requirements (Russell-Clarke, 2010).

Bernard Leupen, Jasper Van Zwol and René Heijne take the position that architecture is not a timeless medium in terms of use (Leupen, Heijne and van Zwol, 2005). In the introduction to their 'Time based Architecture' they write that today's society is changing so fast, buildings are now faced with new design issues which the architect

has to be in a position to meet by designing the building accordingly (Leupen, Heijne, and van Zwol, 2005). Stephen Kendell (2012) shares this position but states;

> "This may not sound so difficult, but it is exactly opposite to the modernist/functionalist tradition. We have learned to define function and then design the building to fit" (Pg. 69).

Steward Brand believes that this idea had also misled a century of architects into believing that how a building functioned could be anticipated, but he believes this in reality is not the case when change through time is taken into consideration (Horsley, 2005). He also argues that almost no buildings adapt well but all buildings end up having to adapt to new constantly changing ways of functioning, and that this action continually reshapes how buildings operate. For him it is a 'double reality' in which architecture tries to be permanent but it is always being reshaped (Horsley, 2005). Kronenburg takes a similar position and believes this is a costly process as most buildings have been designed in a way that requires destruction before construction (Kronenburg, 2003).

Leupen believes this is a continuous process and the building remains a permanent but has the capacity to accommodate change within it, by being able to process changes without changing itself as a whole (van der Voordt and Wegen, 2005). For Leupen, polyvalence in the public buildings is different than in the private dwelling. In the public building it means that the space is capable of accommodating different activities and changes at the same time or in sequence of each other while providing service rooms. In the private dwelling it is geared towards the interchangeability of activities between different rooms (van der Voordt and Wegen, 2005). This means that spatial

organizations are different for both. For the public building it is achieved by providing generous dimensions. For the private dwelling it is the relationship between the spaces. He argues that a room accessible from another is less capable to adapt to different patterns of use but if a spatial system allows each room to be accessed from a central point or number of different routes it can adapt for changes of purpose (van der Voordt and Wegen, 2005).

Hertzberger argues that overtime a building can be influenced or interpreted in different ways by the occupants and they can also be influenced by it (Hertzberg, A., Ekman and Axelsson, 2003). He argues that the building order of a building provides a framework for this interpretation and is achieved through spatially organized structure creating freedom within it. For him the building order enables the freedom of use to which it will be put, now and in the future (Hertzberg, Ekman and Axelsson, 2003).

2.2.2 Similarities between Units

Units have so many differences from each other, but all of them should have provided sorts of same facilities and considerations in the interior design process (Atkin, 1974a; 1974b). In designing the architectural space three factors are important such as:

- Physical properties,
- Function in use,
- Human perception

Using these three factors, architectural spaces can be defined in terms of measure, connectivity, and dimension physically. One person can enter and use all of the architectural spaces for various purposes based on the time. It means that the space for

user is habitable. So that water tanks or silos of media other than air cannot be useful and qualify for this space. (Alderton, 2007)

All architectural spaces are bounded by forms of the base of the space. This form of spacing allows occupant's movement with minimal changes in the potential energy. In this way, spaces provide neutral equilibrium in line with gravity.

Architectural spaces have boundaries, either material; physical or none that let the man have the interior environment design different from exterior. Occupant perceives these boundaries as space schemata. These schemata are mainly visual phenomenon. Thus, architectural space needs to be centralized and compact to be possible to see whole space environment from central focus point. Based on the boundaries, spaces may be positive or negative, open or closed. (Relph, 1989)

Architectural space size varies between definite limits. The lower limit is a single human entrance. The upper limit may be inside of the large domed mosque, public open space or sport hall.

Architectural comprises the choices men need to select from nature in order to serve his needs and build it to the end. Therefore, architectural spaces make the favorable conditions for humans through providing shelters, meaningful place and privacy (Bullock, 1997).

The relationship between space and activity in the houses is also the same approximately. Kitchen is for washing the dishes; food preparation and making snacks, bedrooms for sleeping and dressing while bathroom and toilet for hygiene and laundry.

2.2.2.1 Physical Composition

Many factors determine fix physical composition in each unit. Location of the structure walls inside the house, space availability for constructing an addition, usability of the available spaces, and the structure of serviced for concept of unit's plan are the factors as examples for defining similarities of the house.

Size of each zone of units in same type of apartment blocks and structures of fix walls and basic material which used with constructions as main and same material for all units and general form of the plan is same for all units.also as a function and general needs of users for each zone there are some same similar point which have be considered for each units like as same function and expections from entry and kitchen or storage .

Entryways describe the situation and way one enters and exits the home which has direct effect on arrangement of spaces in the housing units. Entryways should be accessible for member and guest while provide the safe and secure buffer between the exterior and interior spaces. Useful ideas about the entrance design in home are as follow:

1. The front entry should be separated from the other parts of the home.an entry closet should be placed next to entry to accommodate the guest coats and shoes (Wedin, 1979).

2. The service entry as an additional entry to home should be next to detached garage. The service entry is mostly for service providers for maintenance of the home (Kicklighter and Kicklighter, 1986).

3. The entryway from and to the backyard should be next or from public zone. Placing the backyard entryway next to other zones make disruption to the family members who are seeking some privacy at their zone.

Work Areas is the known for the activity centers of home mainly refers to kitchen as the primary work area at every home. Recently, the design of the kitchen provides the great deal for designers in order to place more than one cook and a place for accommodating new dining and cooking facilities. There are four vital steps in planning the kitchen space efficiently as follow:

1. Plan the kitchen location and arrangement for convenient work area and easy accessibility to other zones.

2. Plan kitchen configuration with minimizing traffic flow at the work area. Kitchen has mainly four basic shapes such as U-shaped, L-shaped, Corridor/tow-wall and Broken U-shaped (House Planning Handbook, 1988). (Figure 2.32)

3. Selecting suitable standardized space for adequate counter space and storage near major appliance and sink. Understanding the unique needs of the individuals and determining the required space accordingly.

4. Design for particular and efficient operation. Locate the appropriate place for storage, counters, and appliance in the kitchen space. Evaluate the efficiency and maintenance configuration of the area (Building Research Council, 1993).
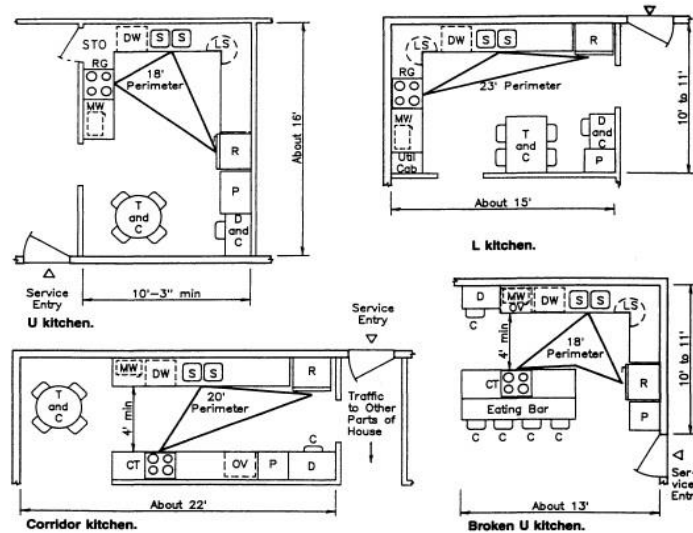
Figure 2.32. Four Common Kitchen Types (House Planning Handbook, 1988)

Storage space is the integral and vital part of todays' housing in every room. Bedroom closet should be placed near to the bedroom entrance. Recently walk-in closet is a popular feature in modern housing while two-feet-deep wall closet is more efficient for use of space. This type of closet can be considered as the buffers between private zone and others. Closets should be placed in a way to filter noise and sound of outside to the rooms as distractors and vice versa.

Mentioned information about same expectations and requirements of each unit supporting analyses part by focusing on effective factors for individual privacy of residents through interview and plan evaluation.

2.2.2.2 The Plan Organization

A successful interior planning begins with building a strong foundation, good planning, and effective program. Organizations must realize that utility, space, and financial requirements are also important in interior planning. Facilities that is contributing to an efficient and well-organized environment, tends to be effective and

highly productive due to all architectural principal. Researchers say that a successful strategic interior plan can help an organization achieve its fiscal performance and productivity goals by integrating near- and long-term interior planning with the interior business plan. The requirements for a successful plan consist of many different things. However, regulatory requirements, budget planning and cost are key components in interior planning. Interior planners say every organization is different, but all organizations strive to become more competitive, effective and provide the best possible zone for its residents (IFM, 2009).

Idealized scenarios and strongly-held individual preferences must be balanced against mandatory requirements, actual functional needs, and the financial status of the organization (Carr, 2010). Interior planners should consider the wide range of services that must be accommodated. To handle all renovation projects including colors for different levels or units, flooring, ceiling, carpeting, and other architectural materials. The committee should have a plan for addressing regulatory issues, and focusing on problem-solving strategies and other methods during the process. The committee may include an enhanced interior image and identity, better controls over short- and long-range planning, enhanced control over patient safety, and more efficient processes in selection of finishes and furnishings (Carr, 2010).

A well thought out and documented interior design master plans allow interior expansion or remodel projects and respond in ways that permit flexible, cost-effective solutions. By having a committee for interior design could be an important tool, which could help with project budgets, schedules, and help with patient safety and other regulatory issues. Noise issue should be controlled by people who are knowledge of

the equipment that is being used during the design stage process. Understanding noise issues are important in interior planning, because excessive loud noises or vibrations could be a problem or have an effect on treatment and care within the interior (Snow, 2009).

There are two types of plan in Figure (2.35) the right one is the American plan organization and the left one is the European plan organization and their special styling and designing.
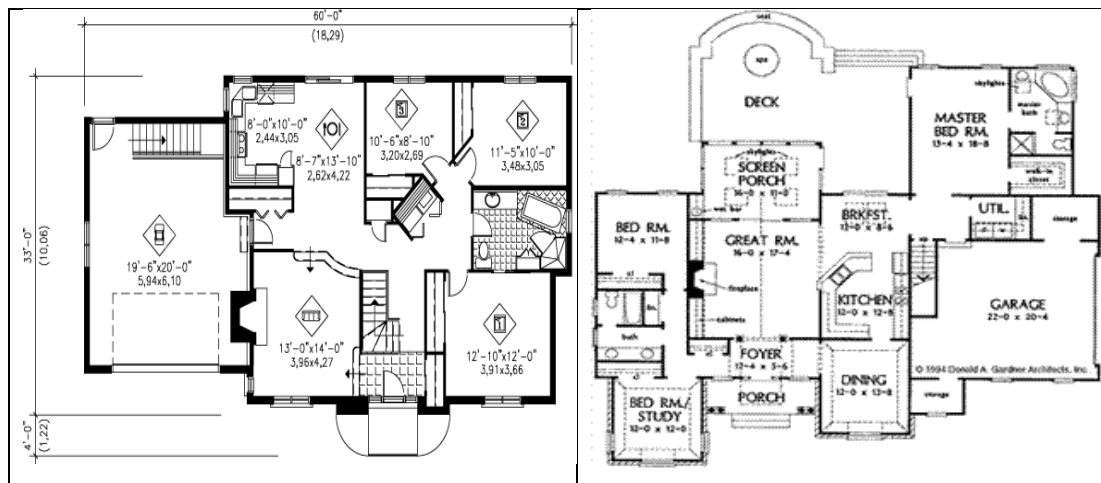
Figure 2.35. Plan Organization in Design

2.3 Concept of Privacy

Privacy is an important phenomenon that each individual wants to achieve on a daily basis. There are many laws that have been established regarding the individuals' privacy, such as the right to privacy, allowing individuals to have their own level of privacy. The level of privacy is measured in relation to the other social processes of environmental psychology namely; personal space, territoriality and crowding (Gifford 1997; Veitch and Arkkelin 1995, Bonnes et al 1995). In addition, according

to Harris et al (1995) and Altman (1975) people use complex combinations of verbal, Para verbal, nonverbal and spatial mechanisms to attain a desired level of contact and degree of privacy. Faulkner et al. (1994) stated that the level of privacy is physical (sleeping and dressing) and psychological (for development and renewal).

According to Demirbas and Demirkan (2000), the definition of privacy varies for each individual due to the different personal characteristics, cultural backgrounds, gender, age, economical, educational, and social backgrounds. Ding (2008) defines privacy as the personal control over interactions and/or communications with others.

However, Gritzalis et al (2009) state that privacy can generally be defined as the right "to be left alone", meaning that it represents a sphere where it is possible to remain separate from others, anonymous and unobserved. Therefore, it is evident that privacy refers to the manner in which individuals control or regulate other individuals' access to themselves. However, privacy does not necessary mean withdrawing from people (Pederson, 1999; Marshall, 1972), instead it involves controlling the amount and type of contact one has with others.

Gifford (1997) further declares that it is not easy to assess privacy because of its complex nature; as it has been measured in terms of preference, behavior, need and expectation of each individual. Bonnes et al (1995) also state that the major interest of empirical research has been to study and measure the more strictly motivational and evaluative aspects such as; needs, expectations and values that individuals variously associate with privacy. Harris et al. (1995) stated that the universal aspects of privacy

regulations are suggested by the apparent relationship between privacy, place attachment and quality of life.

Cassidy (1997) pointed out that not everyone will react in the same way with regard to privacy. According to Altman (1975) and Westin (1970) there are certain characteristics that influence privacy such as:

Individuals' need for privacy is a continuing dynamic of changing internal and external conditions:

- External and internal conditions are affected by privacy achieved,

- Individuals effort to control privacy may be unsuccessful at some times,

- Privacy can take different forms as it has many dimensions.

Privacy has different types. Demirbas and Demirkan (2000) also state that there are four types of privacy namely; solitude, reserve, anonymity and intimacy. Solitude refers to being alone and unobserved by others, which is either a neutral or desirable condition. Reserve, in turn, means that individuals form barriers between themselves and their environments which regulate intrusion. Anonymity is a type of privacy that gives individuals a chance to move around in a public environment without other people recognizing them. Intimacy refers to an individual's aspiration to encourage close personal relationships with only preferred individuals. Additionally, Pederson (1999) identifies two more types of privacy; intimacy with family (being alone with family) and intimacy with friends (being alone with friends).

According to Harris et al (1995) social functions of privacy and privacy regulation are central to psychological well-being. Privacy regulation refers to selective control over access to the self or to one's group (Altman 1975). Thus, making it clear that regulation of the types of privacy, mentioned above, is a function of both personal and situational factors. Personal factors refer to the individual's need for privacy, personal attractiveness, interpersonal skills, personality variables and ability to utilize privacy control mechanisms (Pederson, 1999).

Situational factors may be social or physical. Social factors are presence, willingness and personal characteristics of others who have the potential for social interaction. Physical factors entail aspects such as barriers, location, layout and distances (Pederson, 1999).

The psychological benefits of privacy reflect the function of privacy. Privacy supports social interaction which, in turn, affects our competence to deal with our world, which affects our self-definition (Altman, 1975). Therefore, the benefits of privacy arise from achieving its functions. According to Margulis (2005) the benefits of privacy are:

- Privacy is a basis for the development of identity,
- Privacy protects personal autonomy,

Privacy supports healthy functioning by providing needed opportunities to relax, to one's self, to emotionally vent, to escape from the stresses of daily life, to manage bodily and sexual functions and to cope with loss, shock, and sorrow.

However, Keenan (2005) identifies other categories that capture the kinds of benefits privacy holds for people:

- Natural and psychological benefits: privacy provides physical, psychological and spiritual benefits to individuals. Individuals have certain needs, such as security and connectedness, that they want to satisfy, but invasion of privacy destroys one's sense of connectedness;

- Creative benefits: many people see privacy as conductive to creativity. Individuals have the need to have their own rooms where they are away from other people and regulate their privacy;

- Protective benefits: this refers to physical invasion of individuals' sense of being safe and secure such as, the protection of one's home from burglary;

- Social benefits: individuals have the ability to regulate their own invasion of privacy and allow people they know or do not know to invade that privacy on a social basis;

- Democratic benefits: privacy is self-determining each individual has the "right to be left alone".

According to Veitch and Arkkelin (1995) the functions of privacy are: the achievement of a self-identity and the management of interactions between oneself and the social environment. According to Margulis (2005), privacy is important because it provides us with experiences that support normal psychological functioning, stable interpersonal relationships, and personal development.

In literature home is often described as a haven or refuge. It is depicted as a place and/or space where people can retreat and relax (Moore, 1984). This view on home is based on several related ideas like the distinction between public and private, and the inside and outside world (Wardaugh, 1999; Altman and Werner, 1985). The inside is

a limited space and represents a comfortable, secure and safe space (Dovey, 1985). The outside however is more diffused and seen as a dangerous space. Here there are different rules of engagement with people places and things (Mallett, 2004).

Another view of home is the distinction between public and private. As a refuge a private home is a familial realm, clearly differentiated from public space and removed from public scrutiny and surveillance (Mallett, 2004). The public is associated with work, political engagements and non-kin relationships. In contrast, the private realm of the home is typically understood as a space that offers freedom and control (Darke, 1994), security (Dovey, 1985) and scope for creativity and regeneration (Allan and Crow, 1989; Bachelard, 1969; Korosec-Serfaty, 1984; Cooper, 1976; Finighan, 1980).

It is an intimate space that provides a context for close, caring relationships (Mallett, 2004). Saunders and Williams (1988) argue that our understanding of home as a distinct private sphere is informed by three related concepts: privacy, privatism and privatization. In this context privacy at home refers to freedom from surveillance and external role expectations. Privatism is the process whereby people are increasingly withdrawing from communal life and centering or orienting their activities around the home. Privatization refers to the shift away from public or state owned housing towards owner occupied housing and privatized consumption.

- Privacy: freedom from external role expectations
- Privatism: increasing process of withdrawal from social/communal life, centering around home activities
- Privatization: shift away from collective arrangements towards privatized forms of production and consumption (Ronald, 2013).

Individuals have a definite desire to a certain level of privacy in their homes' design. Privacy, in an architectural manner, can be defined as; the ability of individuals and families to lead their own lives without either interfering or being interfered by the lives of others (Goodchild 1997). According to Faulkner et al. (1994) a home provides privacy from outsiders with walls that protect the individual from physical, visual and various degrees of acoustical intrusion. Furthermore, Goodchild (1997) identifies three types of privacy in designing a house, whether in the house or outside the house:

- Firstly, privacy means circumventing problems with neighbors. Problems could arise when the layout of the resident and the type of housing is not correct such as; the walls of the enclosed area of each person's house are not high enough, which influences privacy.

- Secondly, privacy means a sense of seclusion. It means freedom from overlooking and freedom form invasive noise. This could be achieved by using noise insulation techniques and higher walls to increase space between neighbors.

- Thirdly, privacy means freedom from disturbance from other people, either guests or members of the same family, within the home. The level of privacy inside the home is determined by the number of different rooms in relation to the family size. Faulkner et al (1994) also states that the floor plan sets the privacy levels at which the home functions such as; open floor plan or closed floor plan.

Four aspects of privacy regulation mechanisms have been identified through data by Westin (1970) and Kent (1993). Firstly, privacy controls provide standards of behavior for individuals and groups. Secondly, privacy creates an option between isolation and interaction, and can create the perception of being by you. Thirdly, individuals, groups, and societies tend to enter the privacy of others; curiosity is an example of this aspects. Fourthly, as society moves form primeval to contemporary, the physical and psychological opportunities for privacy increase.

According to Bonnes et al (1995) and Altman (1975) personal space and territorial behavior are used by individuals primarily to regulate privacy and to maintain their openness/closeness towards others at optimal levels. Additionally, Harris et al (1996) suggest that when individuals are confronted with negative privacy experiences, they will use a variety of privacy regulation mechanisms including verbal and nonverbal behaviors, cognitive, environmental, temporal and cultural mechanisms. Altman (1975) further suggests that the effectiveness and ease of implementing privacy regulation mechanisms may vary considerably across individuals and across social, physical and temporal context. Consequently, by combining these mechanisms individuals can efficiently express their needed level of privacy to others in order to attain the optimal level of privacy.

Altman (1975) developed a framework for understanding the mechanisms of privacy regulation. This framework can be used as a summary of all of the above mentioned aspects of privacy. This figure indicates that privacy is a central concept that links the different phenomenon of environmental psychology (personal space, territoriality and crowding) with privacy regulation mechanisms.

2.3.1 Reading Privacy of Famous Examples through Plan Organization

Interior design is a multi-faceted profession in which creative and technical solutions are applied within a structure to achieve a built interior environment. The interior design process follows a systematic and coordinated methodology, including research, analysis and integration of knowledge into the creative process, whereby the needs and resources of the client are satisfied to produce an interior space that fulfills the project goals. Designing is not expensive anymore if plan organization setting as main factor of owner's satisfactions and every class of people should have their ideal home as their "Home" no matter how big the home is. Now new theme for Interior Designing scheme with plan organization has been developed.

Home has the broad meaning and history. During the history numerous changes has been done into the interior construction to improve the living experience of the residents. An interior designer is able to customize the interior environment based on the need of the customers such as widening the hallways, bathroom or bedrooms.

Amos Rapoport (1987) mentioned that housing is a system of settings that particular sorts of activities occur. Zoning in floor plan is important based on the allocation of the interaction areas of the home such public, work and private zones. In a floor plan all three parts should be included and designed wisely. Zones should not be separated or split from each other. Members should not have to get across the middle of one zone to get to another one.

A circulation pattern in home utilizes the interior space based on the needs of the residents. Zoning and circulation complement the interior housing design. Good zoning plan have good circulation and vice versa. Space planning is one of the important issues in design process. The philosophy of space planning has changes over the recent decades considering the dramatic changes in the lifestyle. Housing is not static is a process of equation which is never solved or balanced (Morris and Winter, 1978).

Throughout this chapter the model sequentially assembled in the previous sections will conclude by defining different parameters affecting architectural privacy via plan organization. Follow this fact other researcher analyses, relating to plan organization and privacy considering for definition of this topic. In this section several studies relevant to the notions of privacy and space are going to be presented. This endeavor aims at placing the present work within a wider range of relevant academic works and denoting its contribution.

Hall analyses accessibility, visibility, proximity, vocals and olfactory are the five parameters directly proposes that "Man's relationship to his environment is a function of his sensory apparatus plus how this apparatus is conditioned to respond" All five factors affect the way human beings perceive their surroundings and accordingly the mechanism by which they control privacy (Hall, 1969, p. 59).

Spatial boundaries act as additional means for regulating (limiting or increasing), the communication of the individual with its surroundings. In the following figure the gradient of architectural privacy is presented (from public to complete isolation), in respect to the five factors. Public space is defined as the space which applies no restriction to communication, whereas an isolated space is the one which completely constrains communication. In between all other intermediate levels of privacy exist (Figure 2.36.).
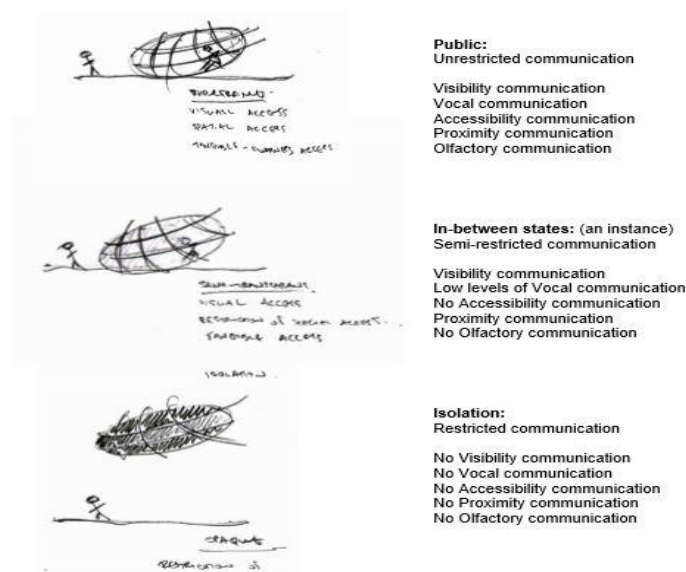
Figure 2.36. Degrees of Privacy (Hall, 1969)

Eric Sundstrom et al suggest that "Architectural privacy refers to the visual and acoustic isolation supplied by an environment. A work area completely is enclosed by soundproof walls with lockable doors embodies a high degree of architectural privacy" (Eric Sundstrom et al., 1980, Pg. 2). In addition, they suggest that "Privacy showed correlations with the number of enclosed sides, distance from users, having and not being visible to others" (Eric Sundstrom et al., 1980, Pg. 10).

Nathan Witte regards privacy as an implicit dynamic property while it is suggested that space should be supportive to the user's desire for privacy. "The environment must allow for one's dynamic closed and open permeability, creating options or places of release from contact and observation" (Witte, 2003, Pg. 31). He supports in a complimentary way the existence of a privacy gradient in space by attempts to verify (by using accessibility graphs) the existence of such categorization but only at a primal stage.

In a paper which is titled as "An intelligent assistant for conceptual design" Kimberle Koile describes the development of software able to explore possible design solutions which satisfy specified abstract goals (visual openness, privacy, paths between two design elements). According to the author the program "evaluates a design with respect to a set of goals, uses an explanation of the evaluation to guide proposal and refinement of design repair suggestions, then carries out the repair suggestions to create new designs" (Koile, 2004, Pg. 1). The above method is illustrated as a decomposition hierarchy of characteristics shown in the following diagram (Figure 2.35).
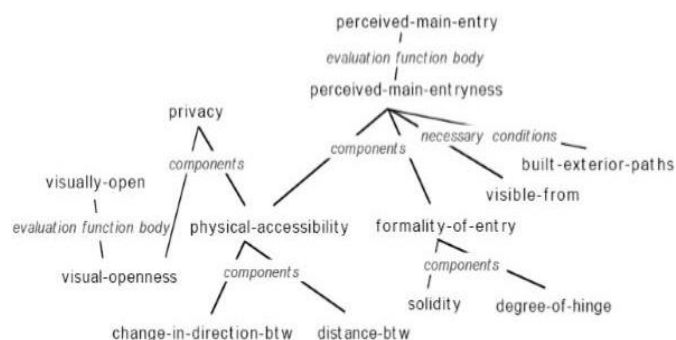
Figure 2.37. An Intelligent Assistant for Conceptual Design (Kimberle Koile, 2004)

The authors Benachir Medjdoub and Bernard Yannou (2000), in "Separating Topology and Geometry in Space Planning", present an architectural CAD approach. By setting a variety of constraints they use a specific enumeration heuristic to reach a set of consisted conceptual designs which they name topological solutions. Initially these solutions do not presume any numerical features like distances or dimensions, but they are based on relations imitating the first sketching steps of the architectural process. On a sequential level, certain geometrical constrains minimize the set of possible solutions and providing a controllable set of optimum solutions. The above process is illustrated in the following diagram (Figure 2.37).
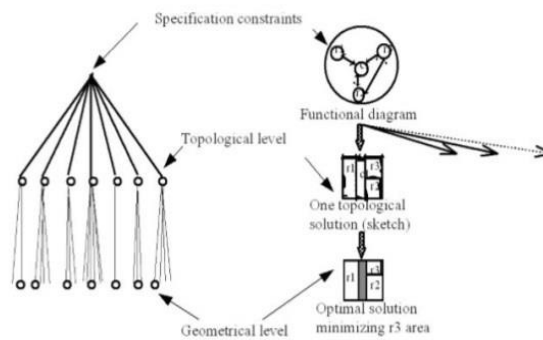
figure 8: *topological and geometrical solution diagram*

Figure 2.38. Separating Topology and Geometry in Space Planning (Yannou , 2000)

All research provides a variety of approaches within which the current work aims to be established. The present paper seeks to refine the gap which exists between theory and practice; to verify and provide an elaborated measure of architectural privacy before being able to implement it as a valid design tool. A more systematic analysis of the property of privacy is needed as to be able to understand and implement it as a conceptual design tool. Further discussion on the above works will be carried out in chapter 4.

This study has been based on physical boundaries as the spatial elements affecting and regulating privacy. These boundaries were tested against their ability to filter the different factors affecting privacy and therefore against their capability to control communication between two zone. Privacy was therefore initially approached as a one-one relation.
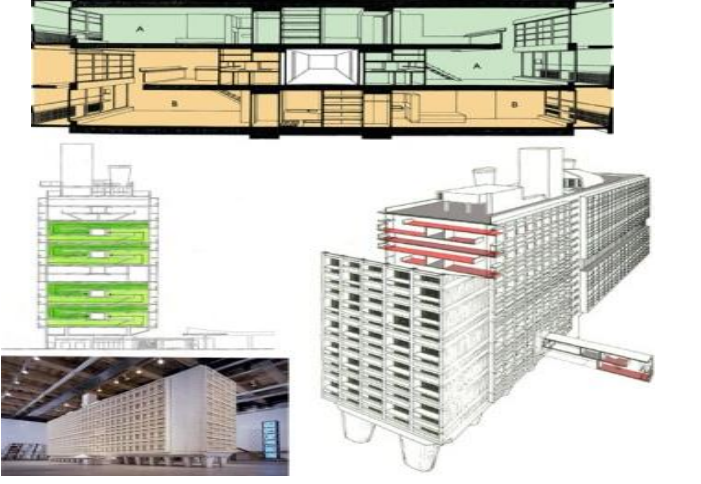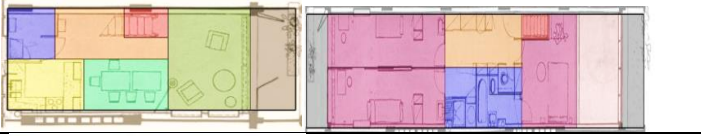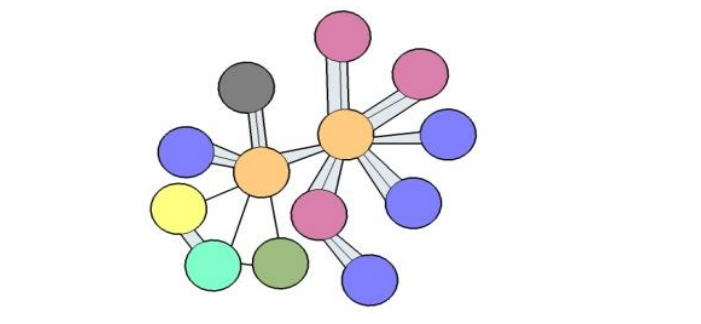
The above scheme was directly translated into a simple diagram relating two nodes (zone) with an edge (boundary) (Figure 2.38). In a subsequent phase and since this thesis has adopted the idea that the environment should support the user's need for privacy, it has been attempted to include changes transformations of the zone and circulation. These relations where predetermined by analyzing the plans and creating the relative graphs. Finally, all sets of graphs were superimposed in the program as to produce the final topological diagram.

In this part, the study has been tried to focus on famous architecture mass housing plans to find out how plan organization of each units of apartment in mass housing around the world can be as definition of reading privacy trough plan to analyze different effect of plan organization on privacy of individual of each home.For this purpose with similarity of each units in every mass housing apartment type projects it is observed how similar factors considered from Architects to set plan of each mass projects.in this purpose relation between each zone of units due to public or private zone with relation to barrier and circulation between zones represented.

The Unite d' Habitation le Corbusier

The Unite d' Habitation le Corbusier in Marseille, France was the first large scale project and new housing project of Le Corbusier. In 1947, Europe was still feeling the effects of the Second World War and the need for housing was at an unprecedented high, which was completed in 1952, focused on communal living for all the inhabitants to shop, play, live, and come together in a "vertical garden city. In the design of L'Unité d'Habitation, Le Corbusier offered ordinary families architecture of the highest and most inventive order and even what may yet become, and confounding his critics, a World Heritage Site. What local authorities around the world asked for instead from the 1950s was a form of low-cost, quick-build mass housing that, although superficially influenced by Le Corbusier, was nothing like this gifted architect's work; it was like wanting a Picasso for the price of a picture postcard. Le Corbusier designed the community that one would encounter in a neighborhood within a mixed use, modernist, residential high rise. Certainly, Le Corbusier believed the house should be "a machine for living and, from the publication in 1923 of his radical polemic, towards a New Architecture.

Table 2.1. Unite D' Habitation Le Corbusier/Privacy Throgh Plan Organization

1.The Unite d' Habitation le Corbusier	
Entrance ■ Hall ■ Living room ■ Dining room ■ kitchen ■ Bedroom ■ Bathroom, ■ Dressing room ■ Staircase ■ Storage ■ Door Partition No physical separation	
1.2Floor Plan/zoning/	
1.2Floor Plan/circulation	
1.3 Plan organization	

Privacy Issues through Plan Organization:
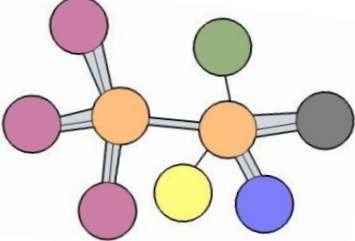
- With considering in Table (2.1) and definition of privacy through plan organization on this plan is described that:

- Separation between public and private zones in indoor with two separate hallways

- Private zone is in second accessibility and public zone are in first accessibility

- Relation among public zone (living room, dining room, kitchen, and public hallway) with new ring

- Stronger barrier between dining room and kitchen while there isn't any partition between living room and dining room or dining room and hallway

- Equal barrier between private hallway and private zones of home

Habitat 67

Safdie explored the possibilities of prefabricated modular units to reduce housing costs and allow for a new housing typology that could integrate the qualities of a suburban home into an urban high-rise. Reflecting on the project's significance in "A look back at habitat '67" Safdie stated that "Habitat '67 is really two ideas in one. One is about prefabrication, and the other is about rethinking apartment-building design in the new paradigm." Habitat 67 echoes a little known post-war Japanese architectural movement called Metabolism, whose proponents believed buildings should be designed as living, organic, interconnected webs of prefabricated cells. The influence of Le Corbusier, especially the French master's love affair with concrete, on Habitat 67 is also clear. But Safdie set his own course, attempting to balance cold geometry against living, breathing nature (Table 2.2).

Table 2.2 Habitat 67 Moshe Safdie/privacy through plan organization

2. Habitat 67 Moshe Safdie	
Legend: Entrance ⬛ Hall 🟧 Living room 🟩 Dining room 🟦 kitchen 🟨 Bedroom 🟪 Bathroom, 🟦 Dressing room 🟥 Staircase 🟧 Storage 🟥 Door Partition No physical separation	
2.2 Floorplan/zoning	
2.2 Floorplan/ circulation	
2.3 Plan organization	
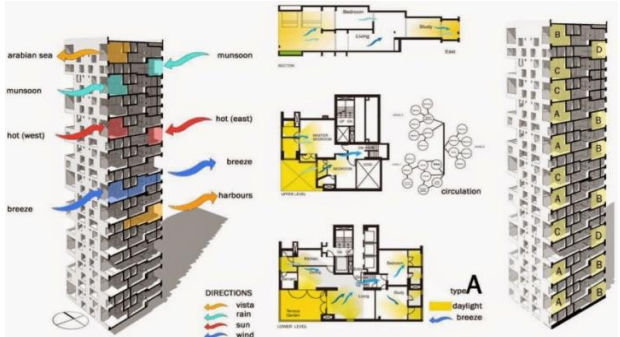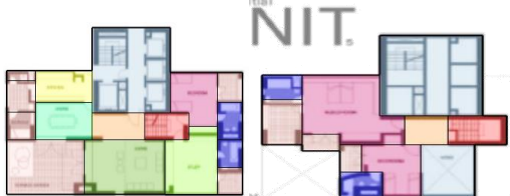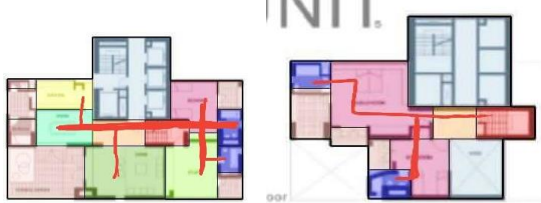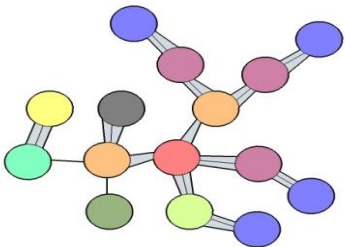
Privacy Issues through Plan Organization

- Its separation between public zone of indoor and private zone of indoor with two separate hallways

- Private zone is in second accessibility and public zone are in first accessibility

- Public hallway work like barrier between living room and kitchen

- Its equal barrier between private hallway and private zone of home

The Kanchenjunga Apartments

By developing climatic solutions for different sites and programs by Indian architect Charles Correa designed the Kanchenjunga Apartments. Located in Mumbai, the U.S. equivalent of New York City in terms of population and diversity. The basic concept behind the design and structure was to give its residents the sense that they were living in a bungalow, a luxury unheard of in Mumbai (Table 2.3).

Table 2.3. Kanchenjunga Apartments /privacy through plan organization

3. Kanchenjunga Apartments	
Entrance ⬛ / Hall 🟧 / Living room 🟩 / Dining room 🟦 / kitchen 🟨 / Bedroom 🟪 / Bathroom, 🟦 / Dressing room 🟥 / Staircase 🟧 / Storage 🟥 / Door / Partition / No physical separation	
3.1 Floorplan/zoning	
3.2 Floorplan/ circulation	
3.3 Plan organization	
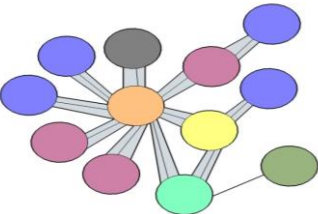
68

Privacy Issues through Plan Organization

- Its separation between public zone of indoor and private zone of indoor with two separate hallways and stairs

- Its three separate main space as accessibility

- Its strong separation about privacy of zone for bedrooms

- Private zone is in second accessibility and public zone are in first accessibility

- It's not any relation among public zone (living room, dining room, kitchen)

- Its stronger barrier between dining room and kitchen and hallway is separation of living room and dining room.

Rokko Housing

The building is composed of a group of units which was designed by Tado Ando and in plan, it is symmetrical. In ascending the slope, gaps are intentionally created. The gaps relate to each other and unite the entire building; at the same time, they serve as a plaza. A total of 20 units are mounted along the slope creating exclusive terraces facing various directions overlooking the ocean. Ando expect that life in these diverse units will concentrate around the terrace and the opportunity to communicate with nature. The Creator's Words Architecture represents an autonomous system of thought. Architects must train themselves to ask fundamental questions, to give free rein to their individual architectural imaginations, and to consider human beings, life, history, tradition, and climate. Architectural spaces in which man can experience—as he does through poetry or music-surprise, discovery, intellectual stimulation, peace and the joy of life. (Table 2.4).

Table 2.4. Rokko Housing, Tadao Ando /privacy through plan organization

4.Rokko Housing Tadao Ando	
Entrance ■ Hall ■ Living room ■ Dining room ■ kitchen ■ Bedroom ■ Bathroom, ■ Dressing room ■ Staircase ■ Storage ■ Door Partition No physical separation	
4.1 Floorplan/zoning	
4.2 Floorplan/ circulation	
4.3 Plan organization	
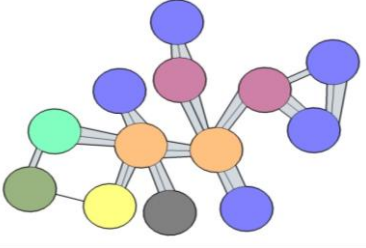
Privacy Issues through Plan Organization

- Except living room all Private zone and public zone have same accessibility

- Its relation among public zone (hallway, dining room and kitchen) but also its door as separator among all this zones.

- It's not any direct accessibility to kitchen from living room while isn't any partition between living room and dining room or dining room and hallway

Albion Riverside

Sir Norman Foster designed this mass housing project in the site which is located on a south-facing 60-degree slope. From the site, it is possible to have panoramic views; Also housing complex typology makes maximum use of site conditions (Table 2.5).

Table 2.5. Albion Riverside Sir Norman Foster/privacy through plan organization

5.Albion Riverside /Sir Norman Foster	
Entrance ■ Hall ■ Living room ■ Dining room ■ kitchen ■ Bedroom ■ Bathroom, ■ Dressing room ■ Staircase ■ Storage ■ Door Partition No physical separation	
5.1 Floorplan/zoning	
5.2 Floorplan/ circulation	
5.3 Plan organization	

Privacy Issues through Plan Organization

- Its separation between public and private zone of indoor with two separate hallways

- Private zone is in second accessibility and public zone are in first accessibility

- Relation among public zones (living room, dining room, kitchen, and public hallway)

- Its stronger barrier between dining room and kitchen while isn't any partition between living room and kitchen

- Except living room, seems equal barrier between private hallway and private zone of home and public hallway and public zone.

2.3.2 Points to be considered in the analysis of privacy: a commentary

In this part trying to have ideas and present comments through plan organization of famous designers around word to define meaning and definition of privacy through their design with mentioned aspects which were as explanation and solution of privacy of housing.

The Unite d' Habitation /le Corbusier

- Separation between public and private zones with two separate hallways with two floors as duplex home made good privacy for both private and public zones to have this alternative for residents to have their private zone in upstairs and public zone in downstairs.

- Private zone in second floor is in second accessibility and public zone in first floor in first accessibility

- Living room, dining room, kitchen, and public hallway made circulation in planning also each two of them with hallway have their own circulation so seems considering privacy by important of zoning and circulation made possibility of good accessibility.

Habitat 67 /Moshe Safdie

- Stair made Private zone in second accessibility and public zone in first accessibility with different level in floor.

- Public hallway is divider, like barrier between living room and kitchen so from entrance to hallway then hallway to living room or kitchen user have cross among it to reach to kitchen or living room.

Kanchenjunga Apartments

- Its three separate main space as accessibility and as private zone semipublic zone and public zone and its definition of level of privacy by functions

- Private zone is in second accessibility and public zone are in first accessibility in different floor to provide privacy of users in up stair and down stair due to functions.

- Living room, dining room and kitchen hasn't any circulation or ring and this seems strong barrier and difficult accessibility.

- To passing to kitchen user have cross hallway and dining room and that show isn't direct accessibility for users to reach to their kitchen if they don't want pass dining room.

Rokko Housing/Tadao Ando

- One hallway with strong barrier among all zones with doors show definition of designer for each zone as close zone with door

- All zones have same accessibility and equal privacy so it's not due to function or maybe designer wasn't considering about privacy.

- Circulation among hallway, dining room and kitchen with door again make this question why all zone has strong accessibility with high level of filtering with door.

- Indirect accessibility to kitchen from living room while isn't any partition between living room and dining room made force behavior for users to pass from maybe inessential zone.

Albion Riverside/Sir Norman Foster

- Public and private zone of indoor with two separate hallways and door between them made plan organization with well setting planning for privacy

- Also all zones related to hallways with door as strong barrier which again showing the quality of high privacy for each zone.

- Private zone is in second accessibility and public zone are in first accessibility so its mean the consideration of level of privacy.

- Living room, dining room, kitchen, and public hallway made ring among separate circulation but with different level of barrier as kitchen have direct accessibility to living room and indirect to dining room while it could be opposite as functional issue.

- Equal barrier between private hallway with private zone of home and public hallway with public zone maybe could be in better accessibility and circulation

by semi private zone as hallway or with partitions but of course it's up to distances of each zones to others too.

So at the end by analyzing all of those famous architects plans tried to use zoning and circulation based on H. Okhovat study as describtion of ring (which make separate main zone among at least 3 zone) and steps (which can make level of barriers between zones by door or partition or different material or textures)due to distance among zones and function of those to have different accessibility based on residents activities in their units different level of privacy will be focus of analysis. In addition, mostly in famous mentioned examples used different hallways as public and private and some as semipublic and using staircase it's for this purpose, but about relation of public zones like as living room dining room kitchen was not so clear as privacy issues seems was just as important of shape and form of zones not consideration of privacy in public zone of home.

 Privacy is a hidden aspect of planning and housing design which can be more thoughtful trough analyzing all spatial elements of housing design with attention of resident's requirements and satisfactions .in following chapter in chapter 4 with analyzing privacy of north Cyprus housing plan and with regards of information and comments of this chapter recommendation and suggestion on plan organization by concept of privacy will be discuses.

Chapter 3

PRIVACY IN MASS HOUSING APARTMENT UNITS OF NORTHCYPRUS

In order to be able to analyze the privacy in the existing situation, the history of mass-housing; the majority type of mass-housing as apartment blocks as the common plan organizations of the flats of these blocks and the variety of plan organization schemes in North Cyprus will be issued in this chapter. Cyprus as multi-cultural country with people from different countries with different categories of residents as local people, foreigner student and foreigner residents so considering about mass housing projects is considering of different type of members in same flats who have different definition about their privacy in their home as their requests and needs from zones and their daily activity and life style, their average daily hour which they spend their time in home , or in public zone of home or private zone, their main activity in their zone so plan organization can be as main factor for analysis. Interior design is a multi-faceted profession in which creative and technical solutions are applied within a structure to achieve a quality in the built interior environment.

The interior design process follows a systematic and coordinated methodology, including research, analysis and integration of knowledge into the creative process, whereby the needs and resources of the client are satisfied to produce an interior space that fulfills the project goals.

Designing is not expensive and every class of people can have their homes designed for them no matter what type of the house is. The most important aspect of a house to be a home is privacy so that analyzing the role and consideration of privacy in mass-housing among apartment units which are more common and have majority of constructions in North Cyprus is the focus of this chapter.

3.1 History of Mass Housing and Apartments Blocks in Northern Cyprus

After the industrial revolution in the world, the rapid industrial changes were also started in the Island due to the need. British period was the starting point for the Northern Cyprus mass housing. In that period the first mass housing project developed which is called Samanbahçe Urban Dwelling in Nicosia. Along with this project William Caruana's Row Houses for Subsidized Workers in Nicosia, Police Public Row Mass Houses in Kaymakli and CMC workers' housing was built in Lefke (Hoskara et. all, 2009).

Social, economic and cultural change needs to understanding of housing differences in society due to changes in needs of users caused housing need in North part of the island. Therefore, in 1978 government was forced intervene in housing market and introduced a 'Mass Housing Law' in this period. After 1980's there are many Mass housing project constructed as mentioned before. Mass housing projects in Nicosia, Famagusta, Kyrenia and Güzelyurt are significant examples of the mass housing developments in the island. In addition, with the 'Mass Housing Law' more than 3,000 mass housing units have been constructed by both government and housing cooperatives in the North part of the island (Gazioglu,1996) (Table 3.1). Development of housing has become second turning point of mass housing development after the

Social Housing Law which is enacted in 1978 in North Cyprus.After establishment of Turkish Republic of North Cyprus (TRNC) in 1983, government tried to recognize the social, political, and economic context for its part so they made some changes in social, economic and political phenomenon. All of these changes caused the increase in the housing need in society. Mass housing built for low income people and new couples to help them start their life (Gazioglu, 1996) (Table 3.1).

Table 3.1. Houses Built in 1996 for Refugees (Gazioglu, 1996)

Districts	Units
Nicosia	901
Famagusta	33
Kyrenia	111
Total	1045

Next to these, numbers of universities also were built in major settlement cities such as Famagusta, Nicosia, and Kyrenia for economic development of the island, social improvement and political stability. This also has affected the housing phenomena and housing construction in cheap prices for students as well (Yorucu and Keles, 2007).

It was clear that mass houses constructed in each district especially main cities of the Northern part of the island. During the periods the great number of mass houses constructed in Nicosia from 1984 until 1996. As it is understood from Figure (3.1), the numbers of mass houses are almost redoubled in Nicosia when it is compared with other region in North Cyprus.
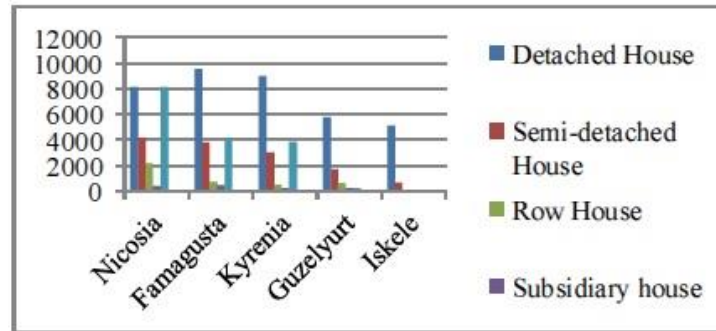
Figure 3.1 Mass Housing in Major Cities of TRNC (Gazioglu, 1996)

Due to a change in occupation or the dynamic nature of people's lives over time, housing design requires a variety of interior arrangements such as flexibility, freedom, and important one privacy. However, this nature of the individual occupant is usually not considered in mass housing developments, which create a tension between the general and the individual requirements. The recent housing patterns and trends reveal the need for particularization at certain degrees and consequently the importance of designing adaptable housing. When the recent 'construction boom' in the island of Cyprus is considered, hundreds of mass housing units denote the range of changes to adapt the housing units during the pre and post occupancy periods.

In 1960, Republic of Cyprus was established the first planning rule for construction of mass housing and mostly apartment blocks in the Island. Due to necessity of cheap housing, student based accommodation, land use, immigration and population need mass housing was the essential reply to the society needs (Ozderen, 2001).

Due to war, between 1963-1968 construction activities was decreased in the Island. People started to immigrate to north part of the island demanded housing. For solving homeless issues in 1965 Refugee houses which are known Göçmen Houses are constructed (Orçunoglu, 2006).

79

In addition to this, according to data from Gazioglu (1996) during this period (war period) some people immigrated to other countries. Although some of them stayed in the island and immigrated to Nicosia, Famagusta, Kyrenia, Larnaca, Limassol, or Paphos. This situation appeared housing demand in the island. Refugee houses started to constructed for upgrading living conditions between 1965-1971 at Nicosia, Famagusta, Kyrenia, Larnaca, Limassol and Paphos for refugee families. There are 1,513 units constructed; 247 of them have one bedroom while the rest have two bedrooms (Gazioglu, 1996).

After the two wars (1963 and 1974) island was divided into two (Greek-Turkish Cypriot). The political division of the island is caused immigration again. While Turkish Cypriots have immigrated from south to north, Greek Cypriots have immigrated from north to south. This situation has caused population movement and housing is needed on both sides. The number of Turkish Cypriots (immigrants) is less than number of the Greek Cypriot immigrants and thus, little new construction was build late 1970 and early 1980. Turkish Cypriots are settled in North part of the island in time (Gazioglu, 1996).

Main mass housing construction started after 1974 during the time that Turkish Cypriot established their independent government in 1983. Many mass housing units were constructed during that period of time in the northern part of the island (Hoskara et al., 1999). It can be said that the apartments have been the type of mass-housing. So due to the political, economic and social revolution at Northern Cyprus the need for mass housing felt and this phenomenon has started its growth up to now.
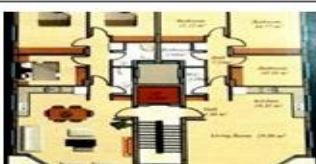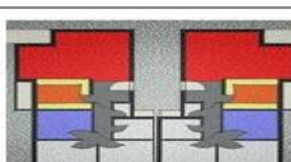
Apartment buildings have technical and economic advantages in areas of high population density, and have become a distinctive feature of housing accommodation in virtually all densely populated urban areas around the world. In contrast with low-rise and single-family houses, apartment blocks accommodate more inhabitants per unit of area of land and decrease the cost of municipal infrastructure (Waite, 2011).

3.2 The Variety of Plan Organizations in Apartments Blocks of North Cyprus

Nowadays there are numerous companies operating in construction sector in Northern Cyprus. Most of them try to update their design and plans toward the European and American style to increase their customers around the world. Development of constructing companies is one of the main results of economic growth in the island regarding mass housing phenomenon. But mainly there are some same plans which are repeating and using for different cities of north Cyprus and different companies.

In north Cyprus mostly housing type in mass housing categories are apartments blocks in 2 bed room and 3-bedroom. Also one bedroom or studio types are existing but as our analyses are about family house with 2 or 3 bedroom so our focus is on this type of masshousing.2-bedrooms mostly have open kitchen and living room and one same bathroom for guests and members. 3bedroom majority have open kitchen and private bathroom but some old one have close kitchen and some of them considered about dining room too. So by considering on general planning of each construction companies in selected cities of Northern Cyprus, planning through different companies listed to general looking to plans before analyzing in next chapter (Table 3.3).

Table 3.3. Variety of Floor Plan in Apartment Units of of North Cyprus

Floor Planning	Floor Planning	Floor Planning

However, some apartments are in duplex categories with public zone in downstairs and private zone in upstairs with private bathroom and open kitchen. Mostly have open accessibility from entrance to living room without any border or separate corridor, mostly have one main corridor to relating private and public zones so in general from information of all plan of apartment blocks of mass project of Cyprus we can have 5 categories by plan organization.

First type is the apartment type which have just one hallway and same level of accessibility from entrance to each other zone public or private some same as group A have not dining room and hallway is divider of all zone some same as group B have accessibility to kitchen from dining room and other zone related to hallway and some same as group C have separate circulation from living room to ding room and kitchen (Table 3.4).

Table 3.4. First Type of Plan Organization of Apartment Units of North Cyprus
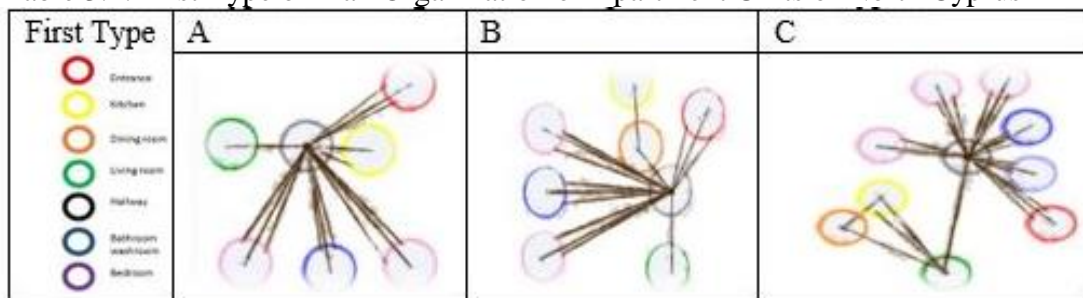
Second type is the apartment with just one hallway and different levels of accessibility from entrance to each other zone public or private and has separate circulation in public zone. This type same as group A have ring of circulation among hallway and living room and dining room and accessibility from dining room to kitchen, some same as group B have accessibility and ring from hallway to kitchen and living room and some same as group C have separate circulation from living room to dining room and direct accessibility from hallway to kitchen or same as D have similar ring and circulation from hallway to living room and kitchen and dining room (Table 3.5).

Table 3.5. Second Type of Plan Organization of Apartment Units of North Cyprus
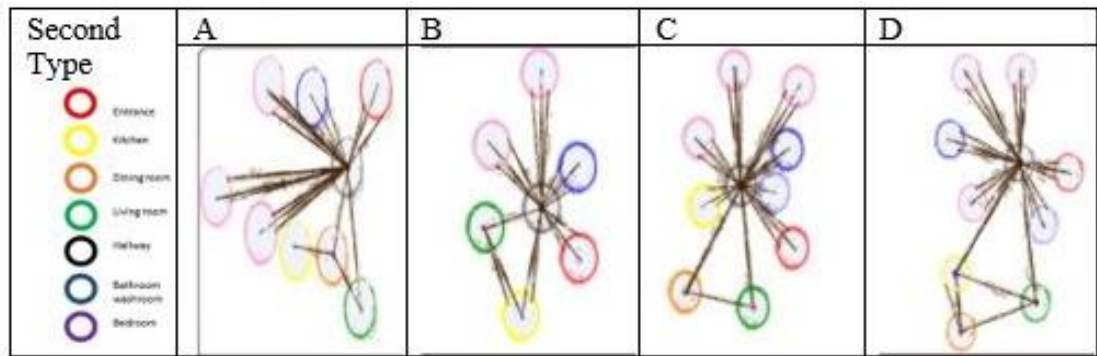
Third type is the apartment type with two hallway and different levels of accessibility from entrance to each public and private zone with separate hallway as divider of zones. Same as group A have direct accessibility from each public or private zone, some same as group B have accessibility and ring from hallway to dining room and living room and separate accessibility to kitchen from dining room and some same as group C have separate circulation with living room and dining room and direct accessibility from hallway to kitchen and group D have circulation and ring with all public zones with hallway as 4 zone (Table 3.6).

Table 3.6. Third Type of Plan Organization of Apartment Units of North Cyprus
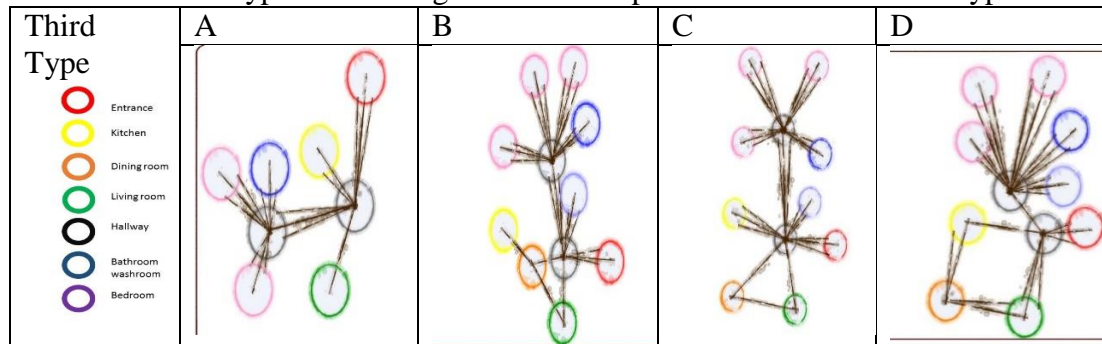
Forth type is the apartment with duplex and has different levels of accessibility from entrance to each public and private zone with separate hallway as divider of zones in different floor (Table 3.7).

Table 3.7. Forth Type of Plan Organization of Apartment Units of Cyprus
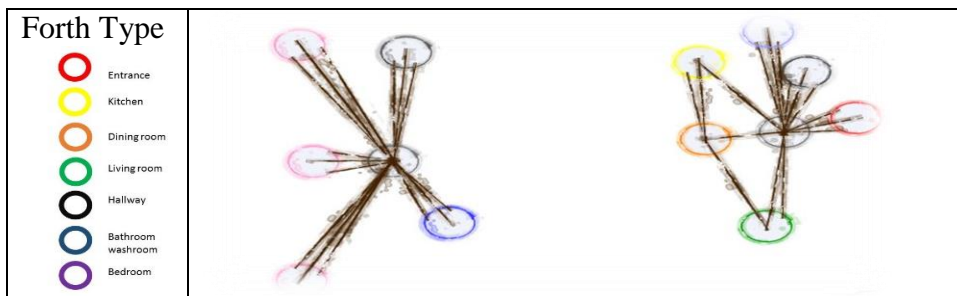
Fifth type is the apartment with three separate dividers as hallway for public, private and semi-private in different level of accessibility from entrance to each zone (Table 3.8).

Table 3.8. Fifth Type of Plan Organization of Apartment Units of Cyprus

3.3 Residents Privacy in Apartment Blocks of North Cyprus

Privacy and humankind has been built as synonymous. People based on their basic needs have the need to protect themselves from broader groups such as other people. Humankind has successively moved from the cave to the private house which has become one of the constitutional entities of modern society (Riley, 1999, Pg. 10). The idea of a space capable of providing both security and privacy has been seminal for societies. Private spaces have taken many forms and different kinds of layouts have succeeded one another through time, always in respect to technology and society.

Francescato et al (1979) defined residential satisfaction as the emotional response to a person's dwelling; the positive or negative feeling that the occupants have for where they reside. Residential satisfaction has been used as a measure to examine the success housing development projects. Resident satisfaction has been in use since the early 1960s as the basis for optimizing the architectural design of large housing developments, where feedback was collected from residents of housing projects with regard to resident's views on the physical features of proposed housing developments and then feeding those views back into the design process.

From the 1980s to present day, residential satisfaction has been a key tool to assess and improve the performance of housing developers, and key government policies related to housing (Amerigo and Aragones, 1997). Residential satisfaction is basically of two types; those that consider residential satisfaction as a predictor of behavior (intention to stay/move from existing housing), or residential satisfaction as a criterion of housing quality (Weidemann and Anderson, 1985).

Studies based on residential satisfaction as a predictor of behavior assumes that satisfaction with existing housing determines behavior of the resident in terms of making changes to the housing unit or the decision to move to another housing unit. The basis of this assumption is that differences in the existing housing and the actual housing needs and preferences of the dwellers will result in either making changes to existing housing or move to a housing unit that meets their actual housing needs and preferences. Studies that employ residential satisfaction as a measure of housing quality use housing unit features, services and facilities provided in housing area and the housing environment to determine the degree to which a person is satisfied with the existing housing unit (Amerigo and Aragones, 1990).

For instance, Morris (1978) found that satisfaction depends on a whole system of beliefs and opinions that the occupant entertains in respect to the housing unit and which are not connected with its physical characteristics. Other researchers such as Galster (1987) measured housing well-being using a composite sum of satisfaction with dwelling unit features, for example the number of rooms per family and the possession of a private bathroom and kitchen. On the other hand, Clarke (2008) identified dwelling types, property size, internal and outdoor space, kitchens and bathrooms, neighbourhood parking and external appearance as factors important to today's households. Varady and Carrozza (2000) stress that housing satisfaction is related to satisfaction with dwelling unit (i.e. physical aspects and personal preferences), satisfaction with services provided, and satisfaction with the neighbourhood and area, which also covers the location specific aspects.

Toscano and Amestoy (2008), in their study examined housing satisfaction on the basis of individual and household attributes, housing characteristics, and social interactions with one's residential neighborhood. Similarly, Chin-Chun (1981) used the same factors to study housing satisfaction in Taichung, Taiwan; satisfaction with physical space, location, neighbors, and the environment. Jiboye (2009) studied the residential satisfaction with public housing in Lagos, Nigeria, by assessing the levels of residential satisfaction of public housing tenants in Lagos using three major housing components; dwelling unit features, management of housing units and the housing area environment, and found that the level of residential satisfaction varies and is dependent on the physical features of the dwelling unit, housing area management and environmental features, with high levels of satisfaction for physical features and housing area environment but lower satisfaction level for the management of the housing unit and areas.

The development of mass housing is under the impact of rapid socio-economic and technical transformations. Furthermore, preference of foreigners to settle in Cyprus has created a need for designers and builders to inquire about occupants and their choices. In general, occupants, who are native (Turkish Cypriot), native living in the UK and the British, change and adapt their housing units. At this point, it is a matter of question if there is any commonality or divergence in the changes to houses made by different profiles of users. Without doubt, it is important to understand the range of architectural changes due to societal phenomena for launching design ideas and concepts. They provide the occupants with greater preoccupancy choices and the opportunity for later adaptability.

Under this scope, the aim is to understand the nature and degree of changes in the houses selected from different mass housing areas in cities.Based on the presented samples' floor plans, more or less all of them are similar to each other. Controlling the place of zones is wise. The circulation is set in each unit. Hallways are used mostly in the right use and parts. The place of windows and doors is accurately situated. Residents have the comfortable time at the unit. Balconies are in the right corner of the plan. Privacy of the resident in considered in each plan to provide the comfortable time for each occupants. Bedrooms are mostly occupied bigger spaces in compare to the living rooms which showed the importance of comfortability and privacy at the unit. In most of the units, bedrooms located in the most secured parts of the floor plan and public zone is mostly apparent to the visible part of the apartment.

In general interview with Cypriot people that subsidized renters in the US report higher satisfaction with their housing than similarly situated non-subsidized renters. The preceding review of existing literature and studies on residential satisfaction highlighted that physical characteristics of housing, the neighborhood environment and the public facilities provided determine the level of residential satisfaction, however, these may vary by the type of housing, the locale, the community, the cultural backgrounds as well as the nationality. This suggests that studies to determine the residential satisfaction of housing types is specific to the housing area, type of housing provided, community, housing policies and the country itself. As such, in order to assess the level of residential satisfaction with mass housing, based on or adopted from the main definitions and concepts of residential satisfaction internationally and on lesson learnt through existing studies in similar countries.

Chapter 4

DATA AND ANALYSIS

Based on the analysis of the privacy through plan organization of famous apartment blocks, which are designed with famous architects around the world, and variety of plans there is needs to look closer to the apartments blocks of north Cyprus to see what is considered in terms of privacy for needs and standards of housing and residents in the interior designing. Although there are some changes due to the concept and structure of each city related to occupants and their individual privacy but the housing standards are set accordingly and accurately.

Data for the study is collected through various ways. Firstly, by getting data from the constructions companies which are private companies of mass housing projects as apartments types, and collection of them through photography from each units to see current situation of plan analyzing. Secondly focusing on structure of plan through zoning and circulation then diagram of plan organization of all selected samples of mass housing buildings in three main cities of Northern Cyprus as Nicosia, Famagusta and Kyrenia analyzed to find the plan organization of all samples. Main reason for choosing these 3 cities for analyzing is because of the majority of apartment blocks and increasing of mass housing private constructions companies is there, so selected samples are taken from this main 3 cities;

90

Then interview with 20 residences of 20 same units in 15 different apartment blocks which selected for 15 companies by interview with 300 residents of 15 selected samples of mass housing projects of north Cyprus about the interior design, spacing and privacy, their satisfactions and case of similarity and variety in mass housing considered.

According to the numerous companies which have developed the mass housing Projects in north Cyprus mainly recent years, in this part it is tried to survey and investigate on the houses features in contemporary apartment's type. However, by attention to the aim of this study mostly focused on varieties and similarity between the plans organization from contemporary apartments. Therefore, to reached the thesis objections, 15 tables have been prepared which are randomly selected the mass housing projects all over the North Cyprus.

The reason behind choosing various companies which have been selected in the tables is to learn the utilized features that used different architects' and designers' ideas in North Cyprus at the current situation. Therefore 15 type houses information with photo and layout have been brought from different mass housing construction Companies.

The reason to choose this method of analysis as reading privacy of plan was based on the study of G. Michael and H. Okhovat by analyzing zones, circulations, barriers, and relatives' architecture factors to ready privacy from graph and tables.

The findings of the observation are based on pictures of inside of each unit and result of interview and plan organization of each unit which have been described in tables in

the following section. Therefor to transfer quality research on needs and answer of questioners of residents as a easy reading and visual diagram based on research of diagram of human satisfactions in Britannia mass housing project in 2011 by Alex Smith the fact of level of satisfaction of residents are presenting as visual circules that the points of their satisfaction can change in 5 circles based on their answer and make uncompleted density of circles because of lack of their satisfactions and as much they are more satisfy their circle points become to be more in center of diagram and more breaking point in level 5 of circle can show average of satisfactions is more than 50%, so all this information and visual readings by attention to the common type of design in mass housing project at finding relation of companies' customers and planning has been considered to provide reading of member privacy in each plan.

4.1 Selected Samples in Detail

Due to the rapid development of the island during the last twenty years, modern and equipped mass housing is appeared in the major cities.so because of current situation selected samples as mentioned before has selected from Nicosia, Famagusta and kyrenia with majority of construction especially mass housing projects in large amounts as apartments types.

Also these selected cities have more population and more foreigners so that could make more possibility to analyze the resident's variety as one of the important factors of analyzing. Therefore, in this part for supporting of selected samples its brief explanation about each company to definition of each samples and selected project from selected company with details are listed.

4.1.1 Famagusta Mass Housing

Mass housing in Famagusta is actually affected by oldest and biggest University of North Cyprus. Most of the mass constructions are apartment for the use of students as providing the cheap houses without the need for any elevator; so that most of the houses are having three or four floors. In following tables are five most popular private construction companies for mass housing project in Famagusta city which have different apartment blocks in Famagusta.

Halken Construction & Estate Co. Ltd.

Halken Construction was founded in 1996 in Cyprus. Moreover, they are trying to select and use of suitable materials, as well as appropriate design for Cypriot like style because most of their buyers are local. (Table 4.1).

Table 4.1. Halkan Construction

Famagusta /1:Halken Construction & Estate Co. Ltd	
Address of company: No9, Halken Apartmanı 8, Salamis St, Famagusta, Cyprus Mersin 10 Turkey **phone number:** +90 392 444 4848 Address of project Halken tower – Larnaka Road	
Plan layout of Floor	Picture of interior

Erbatu Construction

Erbatu Construction extended their activity by participation in some houses construction projects. Since, Erbatu was started the own projects to be the one of the numerous construction company which are working at the housing field over the Cyprus. (Table 4.2).

Table 4.2. Erbatu Construction

Famagusta /2: Erbatu Construction	
Address of company: No 1, near the universal bank, Osman Fazil Polatbasa mosque square, Famagusta phone number: +90392 365 59 90 Address of project: Aysergi Tower – Yeni Boğaziçi, Famagusta	
Plan layout of Floor	Picture of interior

Dovec Construction

Dovec Construction was established in 1989. Dovec during the 20 years of its experience tried to attract Cypriot and foreign buyers by constructing the houses according to investors taste. In addition, Dovec Construction Company achieved to be the one of the few companies in Turkish Republic of Cyprus to have a First Class TRNC Building Construction Certificate award from PWD ministry (Table 4.3).

Table 4.3. Dovec Construction

Famagusta /3: Dovec Construction	
Address of company: Muharrem Döveç Apt,Salamis St, Famagusta, North Cyprus Office phone number: +90 392 365 13 67 Addres of project: PARK VIEW TOWERS– Yeniboğaziçi village, Famagusta	
Plan layout of Floor	Picture of interior

Northernland Architectural Design and Construction Company

Northernland is one of the numerous construction and architectural company in north Cyprus with aim of constructing the houses settlements with the original design and appropriate for Cypriot citizen. To prepare the houses with the satisfaction place for costumers and their family company has the high attention on the houses features and details according to the buyer's recommendations (Table 4.4).

Table 4.4. Northern LAND Construction

Famagusta /4.NorthernLAND RealState & Construction	
Address of company:No 1- Ali Edip Apt. - Nicosia Main Road,Famagusta Phone number: +90 392 365 3444 Addres of project: Kentplus - Lefkoşa-Gazimağusa Anayolu	
Plan layout of Floor	Picture of interior

Noyanlar Group of Companies

The history of Noyanlar Group of Companies is rooted in the 1970s, with More than 70 apartments were built with accordance to high quality standards and affordable prices in Famagusta and other areas of Northern Cyprus. (Table 4.5).

Table 4.5. Noyanlar Group Construction

Famagusta /5. Noyanlar group construction	
Address of company: Dr. Fazıl Küçük Caddesi, Long Beach İskele, K.KIBRIS Pone: +90 392 371 4000 Address of project: G6 Apartments are located in the center of city Famagusta,	
Plan layout of Floor	Picture of interior

4.1.2 Nicosia Mass Housing

Nicosia is the Capital city of Northern Cyprus and the center of business atmosphere in the Island. Most of the companies and universities are built in this city so mass housing was a big help for development of this city. the most mass housing construction was built in capital city of Nicosia.

Due to the most developed city, this is significant point that observed evolution of mass housing construction in North Cyprus. For this reason evaluation of mass housing in Nicosia is an essential issue for achieving hard evidence.

Rapid development let the Northern Cyprus to experience modern mass housing against cheap old mass housing. Now days are lots of Constructions Company over Nicosia due to housing projects but selected samples are which have different type of plan organization for final analyses.

Unity Construction

This Construction Company is working in both of the design and build the housing construction. The houses settlements that designers of the company are designed mostly have high attention on climatic condition of Cyprus and qualified materials to build the appropriate houses for Cypriot. Many apartment types in Nicosia and Nicosia highway and Girne are built from this company (Table 4.6).

Table 4.6. Unity Homes Ltd.

Nicosia /1. Unity Homes ltd	
Address of company: Address: Sht A no, Şehit Mustafa Ahmet Ruso Caddesi 175, Nicosia Phone:+90 392 673 0000 Address of project: Gonyeli Levent Apartments– Gönyeli, Nicosia- Girne highway, Nicosia	
Plan layout of Floor	Picture of interior

Ozmerhan Group

In terms of determining Vision and Mission as a firm, they take into consideration those factors which pioneer and lead corporate structure. Mostly in recent years they are focusing on more apartment blocks and mass housing with affordable situation for people (Table 4.7).

Table 4.7. Ozmehrcan Group

Nicosia /2. OZMERHAN GROUP	
Address of company: 76 Atatürk Caddesi,,Yenişehir, Lefkoşa - KIBRIS phone: 0533 826 30 12 Address of project: Ortakoy,Nicosia	
Plan layout of Floor	Picture of interior

Mesan Company

The company was founded in North Cyprus in 1994. The Company with the year's works experience is one of the new companies through the island. This company only constructed the houses and apartments blocks in Nicosia until the current time (Table 4.8).

Table 4.8. Mesan Construction Ltd.

Nicosia /3. MesanConstruction Ltd.	
Address of company: Salih Mecit Sokak, Uygur Apt., B. Blok, Kat 1, No:1,Yenisehir - Lefkosa, North Cyprus, via Mersin 10-TURKEY phone : +90 392-228 11 37 Address of project: Minareliköy/Nicosia	
Plan layout of Floor	Picture of Interior

Haciali Construction

The company is dealing with all of the related business group and company through the north Cyprus. In addition, the company to sells numerous projects that they directly have built or indirectly participated in the construction process (Table 4.9).

Table 4.9. Mustafa Haci Ali Construction

Nicosia /4. Mustafa haci ali construction	
Address of company: No 1 ,Kizilay Sokak, Lefkosa Mersin-10 TURKEY, Turkey phone :90 392 2280117 Address of project: Live a life,Yenikent ,nicosia	
Plan layout of Floor	Picture of interior

Yırtıcı Construction

Yirtici company was founded in 1988 by Mr. Ali Yırtıcı since the company was established a lot of residents these investments were made Yırtıcı Construction has gained the confidence of investors in Cyprus and is rapidly advancing towards the institutionalization; satisfaction has become the focus of the company for mass products (Table 4.10).

Table 4.10.Yırtıcı Construction Ltd.

Nicosia /5. Yırtıcı Construction Ltd.	
Address of company: lefkosa merkez Phone: +90 548 840 9060 Address of project: Highlevel apts– Gönyeli, Nicosia-Girne highway, Nicosia	
Plan layout of Floor	Picture of interior

4.1.3 Kyrenia Mass Housing

Kyrenia (Turkish name known as Girne) being a tourist attraction city the distribution of national profiles is much more diverse in comparison with Nicosia. Kyrenia due to this natural beauty, most of the immigrants and refugees migrate to Kyrenia and asked for cheap housing so mass housing in Kyrenia firstly was built due to the need of the refugees and immigrants but now days the mass housing projects are so important for foreigners and local both to have their own apartment unit with high quality of design.

Levent Homes ltd.

Levent Construction Ltd. was established in 1985. This company have running the many housing project in the terms of mass housing settlement in North Cyprus. Levent Homes has constructed the wide range apartments and villas with the two or three bedrooms in North Cyprus (Table 4.11).

Table 4.11. Levent Homes Ltd.

Kyrenia/1. Levent Homes ltd.	
Address of company :No 143, Ziya Rizki Caddesi, Girne, Cyprus, Via Mersin-10 phone : +90 392 8151121 Address of project: Girne 3 bed Apt – Gazi Osman Pasa St, Girne	
Plan layout of Floor	Picture of interior

Kibris Developments

It's one of the family-run companies that have been building customized living spaces since1985.. Escape Homes Project was awarded the coveted 2014 'Best Proposed New Project Design Award' as part of the IV. (Table 4.12).

Table 4.12. Kibris Development

Kyrenia/2.Kıbrıs development	
Address of company: Address: Çağ İş Merkezi, A9 Boğazköy Girne/ TRNC Mersin10 phone: +90 (533) 826 37 60, Address of project: Escape homes alsancak,kyrenia	
Plan layout of Floor	Picture of interior

Carrington Group Designs

Builds and sells quality villas and apartments in North Cyprus specializing in the coastal area of Northern Cyprus east of Kyrenia. Carrington's experience and attention to detail has helped to become the Award Winning Company today. And they are one of the main companies as selling their mass housing to Scandinavian people who want to move in north Cyprus (Table 4.13).

Table 4.13. Carrington Group Construction

Kyrenia/3.Carrington Group Construction	
Address of Company: Deniz Sihir (Sea Magic),Development Esentepe, phone: +90 533 869 3845, Address of project: Ozankoy, Girne.	
Plan layout of Floor	Picture of Interior

Ozyalcin

In 1991- Özyalçın Construction Ltd., was founded by Oguz ÖZYALÇIN in Kyrenia. Özyalçın Construction began to grow and develop itself in Northern Cyprus and with the growing volume of apartments type in different location of Kyrenia which are suite for local and students, and it is the biggest creator of 25 building complex in Kyrenia. In (2007), Özyalçın Construction Ltd. has the capacity of finishing 350 houses and apartments per year (Table 4.14).

Table 4.14. Ozyalcin Construction

Kyrenia4.Ozyalcin construction	
Address of company: No 143, Ziya Rizki Caddesi, Girne, Cyprus, Via Mersin-10 phone : +90 392 8151121 Address of project: Girne Patara city	
Plan layout of Floor	Picture of interior

ATA Properties & Construction Ltd

The initial history of Company has begun approximately 35 years ago. The main cities

that they developed the mass housing projects are Girne, Famagusta and Nicosia until

now.   (Table 4.15).

Table 4.15.ATA Construction LTD.

Kyrenia/5.ATA Properties & Construction Ltd	
Address of company: Ata apt No 4 girne merkez Phone :+905337744245 Address of project: Ata royal ,Zeitinlik .	
Plan layout of Floor	Picture of interior

So now with having details of all selected samples in following chapter by analyzing

of plan organization try to find answer of this question how all different construction

of north Cyprus are considered about plan quality through privacy issues? How plan

organization provide necessary requirement of every member of each units? how

residents and activities of resident considered by designing those types of plan for

apartment blocks of mass housing projects? And how is level of satisfactions of

individual privacy of residents with current plan organization.

4.2 Reading Privacy by Plan Organization in Selected Samples

As mentioned and studied about reading privacy through plan organization and looking closer to plan of famous architects and selecting construction companies which are known for mass housing apartments type projects are collected ,in this part through analyzing plan , plan zoning ,relative zoning, circulation and shape of corridors as core and divider of the other public and private zone of units trying to find relation between all this quality and using them at the end for analyzing plan organization to find how companies and architects designed with varieties of plans for different units in Cyprus which make definition of barriers between zones and the placing each zones how considered to see relation of all factors to reading privacy through plan organization.

4.2.1 Privacy Issues in Plan Organization of Famagusta Samples
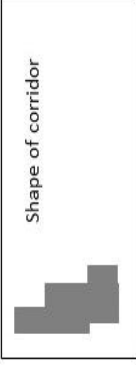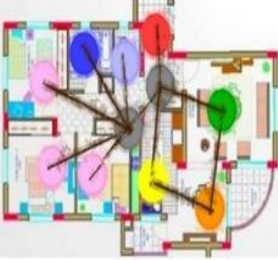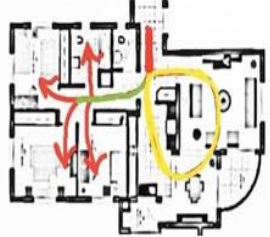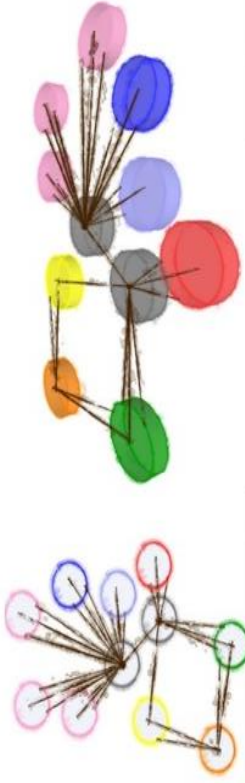
Here by analysing planning zonning and related zones and circulation in different mass housing projects of selected sampls of Famagusta city and folow on with plan organization the factors which can effect on reading privacy of home for residents and due to different function of zone in relation to each factor going on to analyse to having possibility to disscuse about all those factors throghy one graph as plan organization. For this purpuse each of this mass housing unit with table and discuse about tables to reaching concept of privacy will consider.

- **First Sample**

Planing in first sample as most common type of apartmet unit have private zone with separate hallway and assesibility .Also each zone of private zone hasn't individual privacy in different bedroom the only private element is door for each room other wise isnt any disstance or any separate bathroom or corridor and perhaps their activity effect on each member through visibility accesibility and function.in public zone from main hallway is direct accesibility to kitchen and livingroom while both of those zones have direct accibility to dinnigroom too, so there is separate circulation among public zone which give this option to users to use kitchen without crossing livingroom or bothering other members or maybe guest also if members are in zone of dining room other member by using bothzone of living room and kitchen without crossing diningroom can use the function of each zone and this circulation or ring made possibility for better accesibility due to bahevir of members.

From entrance to hallway its direct relation to kitchen which means isnt any privacy for member of kitchen while any other member or maybe guest want to entring to home, also kitchen is close in related to living room and isnt direct acces to livingroom so another hand made a filter for member who use most time in kitchen .Door between hallway and living room made this optioon for members to due to their activity use door as filtering from private zone. Shape of corridor made different direct for accesing to washroom but it was not effective on function and plan organization because anyway member have croos to hallway wich is open to kitchen and entring to private hallway wich is part of private zone of home (Table 4.16).

Table 4.16. Halkan Construction /Reading Privacy Through Plan Organization
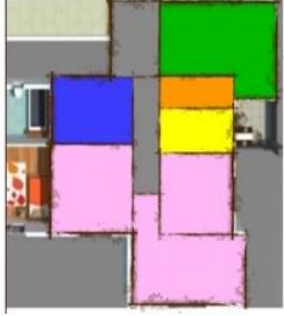
Plan	NOTE
	• 3 bedroom with one bathroom • Open kitchen • Private and public corridor • Dinning room between living room and kitchen have separated with one step accessibility Bedroom · Entrance Living room · Corridor Dining room · Bathroom Kitchen · Toilet

Zoning	NOTE
	Shape of corridor made different level of privacy for users and isn't direct opening to public or private zone through considering of corridor, [Shape of corridor]

Relation of zones	NOTE
	• Relative zones are just among dining room ,living room and corridor • Others zones related to each other through corridor.

Circulation	NOTE
	• Circulation among each zone are indirect through main way in corridor but its in depended circulation among living room and dinning room that make circle pass way for passenger

Plan organization	Note
	from entrance to private zone of home like bedroom and bathroom and public zone is different corridor which make different graph with solid barriers for all rooms in private zones but with public zones living room and dining room with kitchen and corridor make ring and kitchen and living room have open barrier to dinning room and corridor to living room is solid barrier while kitchen to corridor isn't any barrier

- **Second Sample**

By looking closer to plan of this samples and by finding from zoning and circulation its clear isn't any specific definition for living room and dining room in this plan because all public zone has directly open accessibility from entering to home to hallway, and shape and setting of hallway as main and one divider of other zone allow to members to use their private zone like bedroom by passing from public zone.

Accessing to kitchen is by passing from dining room and living room so behavior of members in living room and dining room has not individual privacy and anybody from entrance can break this privacy also isn't any partition or different texture or material to separate this zones and it seems just with one hallway as main core of home other zone have follow this core due to accessibility and privacy of this part .bedroom are around long rectangle hallway but when this shape and long distance can be as factor of privacy if was 2 hallway or if was not open access to entrance and public room so bedroom just with door as providing zone and filtering have their privacy and for using bathroom or other zone isn't any level of privacy for users(Table 4.17).

Table 4.17. Erbatu Construction / Reading Privacy through Plan Organization

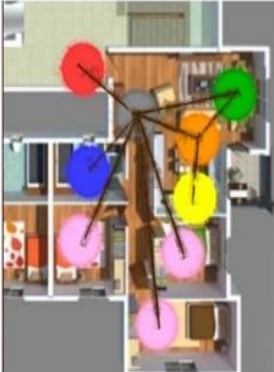| Plan	NOTE	Zoning	NOTE
	• 3 bedroom with one bathroom • Open kitchen • Private and public corridor • Dinning room between living room and kitchen have open accessibility Bedroom / Living room / Dining room / Kitchen — Entrance / Corridor / Bathroom / Toilet		Corridor as divider zone is as core of other zones which have short accessibility to public zone and long accessibility to public zone, Shape of corridor

Relation of zones	NOTE	Circulation	NOTE
	• Relative zones are just among dining room ,living room and corridor • Others zones related to each other through corridor.		• Circulation among each zone are indirect through main way in corridor but its in depended circulation among living room and dinning room that make circle pass way for passenger

Plan organization	Note
	In this diagram from entrance to private zone of home like bedroom and bathroom and public zone is same corridor which make same graph with solid barriers for all rooms but with public zones living room and dining room and corridor make a ring

- **Third Sample**

living room and dining room in this plan same as last sample hasn't privacy for users of home and who want to enter home because of lack of separator or any partition or any different texture make public zone as directly open accessibility suddenly from entering to home to hallway ,and shape and setting of hallway as public corridor or divider of other zone allow to members to use their public zone like by passing from other zone, and for accessing to kitchen members have pass from dining room and

living room so behavior of members in living room and dining room is not due to individual privacy of each member in each zone and anybody from entrance can have open accessibility.

But due to this public zone private zone with separate hallway and door between them have private privacy comparable to public zone but again same as other samples it's just one bathroom for all bedroom and isn't any different shape or accessibility due to privacy of hallway of private zone and just door is like boundary as filter of privacy of each member of home (Table 4.18).

Table 4.18. Dovec Construction /Reading Privacy Through Plan
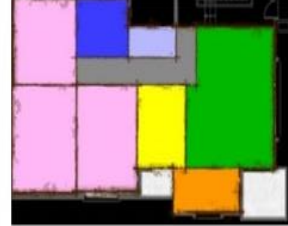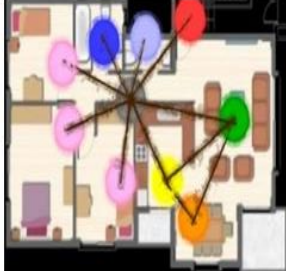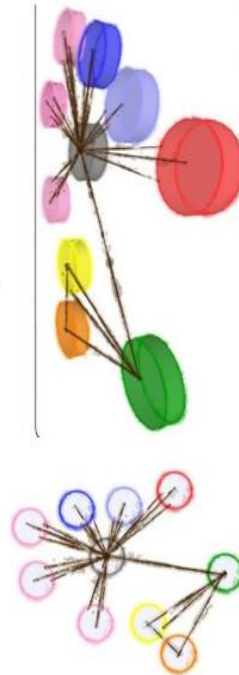
Plan	NOTE
	• 3 bedroom with one bathroom • Open kitchen • Private and public corridor • Dinning room between living room and kitchen have open accessibility Bedroom / Living room / Dining room / kitchen / Entrance / Corridor / Bathroom / Toilet
Relation of zones	NOTE
	• Relative zones are just among dining room ,living room and corridor • Others zones related to each other through corridor.
Plan organization	Note

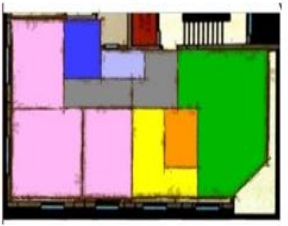| Zoning	NOTE
	Two separate Corridor as zone is as core of other zones which separated by door but public corridor have directly relation to living room and dining room Shape of corridor
Circulation	NOTE
	• Circulation among each zone are indirect through main way in corridor but its in depended circulation among living room and dinning room that make circle pass way for passenger
	In this diagram from entrance to private zone of home like bedroom and bathroom and public zone is different corridor which 2 same graph with solid barriers for all rooms but within living room and dining room which make a ring with corridor and kitchen is in second accessibility

- **Forth Sample**

Planing in this sample as most common type of apartmet unit ,have private zone which separate hallway and assesibility but each zone of private zone hasn't individual privacy and the only private element is door of each room other wise isnt any disstance or anyseparate bathroom or corridor and perhaps their activity effect on each member through visibility accesibility and function.in public zone from main hallway isn direct accesibility to kitchen but livingroom have direct accibility to dinnigroom and kitchen too, so there is separate circulation among public zone which give this option to users to use kitchen diningroom and living room but with crossing livingroom or bothering other members or maybe guest also if members are in zone of dining room or kitchen and want to go to private zone other member have pass living room and public hallway to entre private hallway.

living room and kitchen without crossing throgh diningroom can use and its open kitchen which provide enogh separation to livingroom and also require accesibility due the function of each zone and this circulation or ring made possibility for better accesibility due to bahevir of members.From entrance to hallway its direct relation to livingroom,also kitchen is close in related to main hallway and isnt direct acces (Table 4.19).

Table 4.19. NorthernLAND Construction /Reading Privacy through Plan Organization

Plan	NOTE	Zoning	NOTE
	• 3 bedroom with one bathroom • Open kitchen • One corridor Bedroom / Entrance Living room / Corridor Dining room / Bathroom Kitchen / Toilet		Corridor as divider zone is as core of other zones which have short accessibility to public zone and long accessibility to public zone, Shape of corridor
Relation of zones	NOTE	Circulation	NOTE
	• Relative zones are just among dining room ,living room and corridor • Others zones related to each other through corridor.		• Circulation among each zone are indirect through main way in corridor but its in depended circulation among living room and dinning room that make circle pass way for passenger
Plan organization	Note		
	In this diagram from entrance to private zone of home like bedroom and bathroom and public zone is same corridor which make same graph with solid barriers for all rooms but with public zones living room and dining room and kitchen make a ring		

- **Fifth Sample:**

In this planning, from entrance to hallway is direct accessibility to living room and its direct accessibility to dining room to kitchen, while isn't any circulation or direct relation from dining room to living room or from kitchen to living room, and also this hallway is direct access to bedroom and bathroom and isn't any level of privacy or circulation among any zone and each function effect on other function by behavior of each member because of lack of privacy in plan organization.

Setting zones as a cross sign around hallway made all activity of members in relation to each other by passing from entrance to bedroom while this due to pass between living room and dining room too.

seems bathroom isn't any privacy or leveling privacy for members its notice maybe because of size of home considering privacy or attention to require of members at all forgotten and they just tried to set zones without attention of relation of zones and members (Table 4.20).

Table 4.20. Noyanlar Group Construction/Reading Privacy Through Plan Organization

Plan	NOTE	Zoning	NOTE
	• 2 bedroom with one bathroom • Open kitchen • One corridor • Dinning room is in open kitchen 	Bedroom		Entrance	
Living room		Corridor	
Dining room		Bathroom	
Kitchen		Toilet				Corridor as zone is as core of other zones is L Shape but public zones are not in same direction of L ,living room is opposite of kitchen while corridor have main direction to private zone Shape of corridor

Relation of zones	NOTE	Circulation	NOTE
	• Isn't any relative zone among all zoning • Others zones related to each other through corridor.		• Circulation among each zone are indirect through main way in corridor

Plan organization	Note		
	• In this diagram all zones have relate to each other from same corridors but for public zones isn't any barrier and for private is solid barrier • Private zone hasn't any privacy and users by passing corridor to go living room have accessibility to reach private zone		

4.2.2. Privacy Issues in Plan Organization of Nicosia Samples
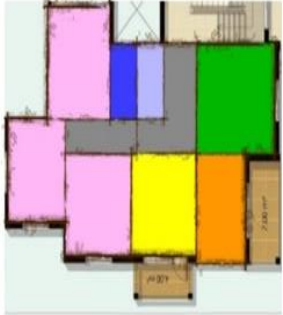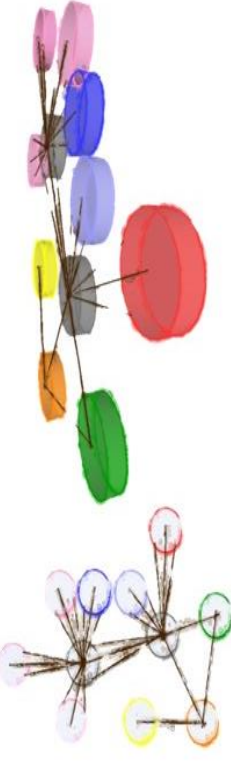
Here by analysing plan organization and related zones and circulation of selected sampls of Nicosia city and folow on with plan organization ,the factors which can effect on reading privacy of home for users and due to different function of zone in relation to each factor analysing to having possibility to disscuse about all those factors through one graph as plan organization. For this purpuse each of this mass housing unit with table and discuse about tables to reaching concept of privacy will consider.

- **First Sample**

Plan organization of this sample show living room and dining room hasn't privacy from members of home and who want to enter home as separator or any partition or any different texture because all public zone have directly open accessibility suddenly from entering to home to hallway ,and setting of hallway as public corridor or divider of other zone allow to members to use their public zone like by passing from other zone, and for accessing to kitchen members have pass from dining room and living room so behavior of members in living room and anybody from entrance can have open accessibility.

Due to this public zone private zone with separate hallway and door between them have private privacy comparable to public zone but again same as other samples it's just one bathroom for all bedroom and isn't any different shape or accessibility due to privacy of hallway of private zone and just door is like boundary as filter of privacy of each member of home (Table 4.21).

Table 4.21. Unity Homes Ltd/Reading Privacy through Plan Organization

Plan	**NOTE**
	• 3 bedroom with one bathroom • Open kitchen • Private and public corridor • Dinning room between living room and kitchen have open accessibility Legend: Bedroom, Entrance, Living room, Corridor, Dining room, Bathroom, Kitchen, Toilet
Zoning	**NOTE**
	• Corridor as divider zone is as core of other zones which have two separate part with door between them as private and public • corridor with L shape has formed other zones in 2 direction around it Shape of corridor
Relation of zones	**NOTE**
	• Relative zones are just among dining room, living room and corridor • Others zones related to each other through corridor.
Circulation	**NOTE**
	• Circulation among each zone are indirect through main way in corridor but its in depended circulation among living room and dinning room that make circle pass way for passenger
Plan organization	**Note**
	• As its clear in plan organization diagram from entrance to private zone of home like bedroom and bathroom is another corridor that make separate graph with solid barriers and for public zones living room and dining room with corridor make a ring and its just accessibility to kitchen from dinning room . • Users have cross dining room to enter kitchen and from main corridor its directly accessibility to living room and dining room has not privacy for this part for who want to watch Tv or have guess and who want to eat meal in dining room.

- **Second Sample**

Planing in this sample as most common type of apartmet unit have private zone wich seprate hallway and assesibility but each zone of private zone hasn't seprate privacy as different bedroom the only private element is door of each room other wise isnt any disstance or anyseprate bathroom or seprate corridor and perhaps their activity effect on each member through visibility accesibility and function.in public zone from main hallway isn direct accesibility to kitchen but livingroom have direct accibility to dinnigroom and kitchen too, so there is seprate circulation among public zone which give this option to users to use kitchen diningroom and living room but with crossing livingroom or bothering other members or maybe guest also if members are in zone of dining roomor kichen and want to go to private zone other member have croos living room and public hallway to entre private hallway.

living room and kitchen without croosing throgh diningroom can use and its open kitchen which provide enogh sepration to livingroo and also require accesibility due the function of each zone and this circulation or ring made possibility for better accesibility due to bahevir of members.

From entrance to hallway its direct relation to livingroom, also kitchen is close in related to main hallway and isnt direct acces (Table 4.22).

Table 4.22. Ozmehrcan Group /Reading Privacy through Plan Organization

Plan	NOTE	Zoning	NOTE
	• 3 bedroom with one bathroom • Open kitchen • One main corridor • Dinning room between living room and kitchen have open accessibility Legend: Bedroom, Living room, Dining room, Kitchen, Entrance, Corridor, Bathroom, Toilet		• L shape of corridor made short accessibility to public zone and long accessibility to private zone Shape of corridor
Relation of zones	NOTE	**Circulation**	NOTE
	• Relative zones are just among dining room, living room and kitchen • Others zones related to each other through corridor.		• Circulation among each zone are indirect through main way in corridor but its in depended circulation among living room and dinning room that make circle pass way for passenger
Plan organization	Note		Note
			In this diagram from entrance to private zone of home like bedroom and bathroom and public zone is same corridor which make same graph with solid barriers for all rooms but with public zones living room and dinning room with kitchen make a ring

- **Third Sample**

In this sample because of having 2 floorplans in downstairs and upstairs, staircase work as main divider or core between public zone and private zone and provide privacy of members by 2 levels. Members have their own privacy in their bedroom and private hallway without any interaction with public zones and proper distance among bedrooms in upstairs made possibility of having privacy for each room due to function and accessibility.

In down stair circulation among dining room and living room with public corridor have open accessibility to dining room but kitchen and living room have privacy through rule of stair case and isn't visual accessibility to kitchen and living room from entrance.

Open Kitchen have relation with dining room and have indirect relation with living room. also washroom in down stair is under stairs so isn't visually in public zone but members for using and passing through corridor to washroom have cross next to kitchen and dining room that made interaction between function of each zone of public zone (Table 4.23).

Table 4.23. MesanConstruction Ltd. /Reading Privacy through Plan Organization
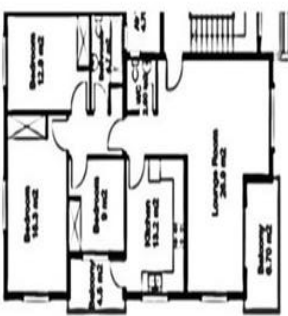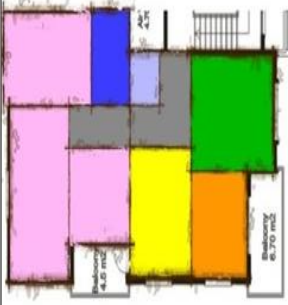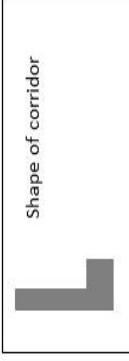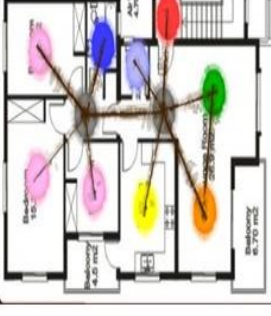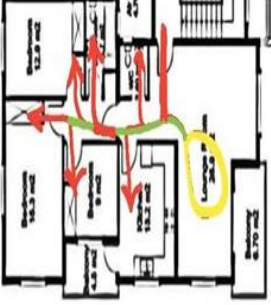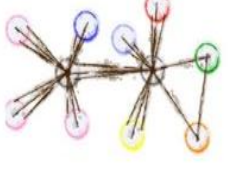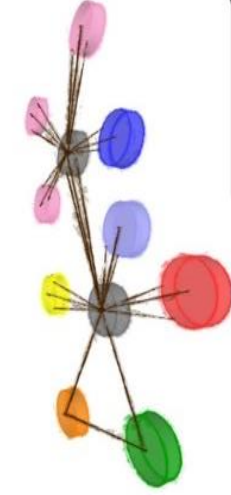
	Plan	NOTE	Zoning	NOTE
		• 3 bedroom with separate accessibility in upstairs • Open kitchen • Private and public corridor in different level • Dinning room between living room and kitchen have open accessibility Legend: Bedroom (pink), Living room (green), Dining room (orange), Kitchen (yellow), Entrance (red), Corridor (grey), Bathroom (blue), Toilet (light blue)		Corridor or divider is in 2 level of floor with rectangle in upstairs and rectangle in downstair . Shape of corridor

	Relation of zones	NOTE	Circulation	NOTE
		• Relative zones are just among dining room ,living room and corridor • Others zones related to each other through corridor and stair		• Circulation among each zone are indirect through main way in corridor but its in depended circulation among living room and dinning room that make circle pass way for passenger • Also circulation is in 2 different floor

	Plan organization	Note
		As its clear in plan organization diagram from entrance to private zone of home like bedroom and bathroom is another floor and corridor that make separate graph with solid barriers through stair case from public zones living room and dining room with corridor and kitchen make two ring

- **Fourth Sample**

Plan organization of this sample show living room and dining room hasn't privacy from members of home and who want to enter home as separator or any partition or any different texture because all public zone has directly open accessibility suddenly from entering to home to hallway, and setting of hallway as public corridor or divider of other zone allow to members to use their public zone like by passing from other zone.

Kitchen has separate accessibility as private kitchen and isn't any interaction with any zones and from hallway to kitchen is solid barrier as door. Due to this public zone private zone with separate hallway and door between them have private privacy comparable to public zone but again same as other samples it's just one bathroom for all bedroom and isn't any different shape or accessibility due to privacy of hallway of private zone and just door is like boundary as filter of privacy of each member of home (Table 4.24).

Table 4.24. Mustafa Haci Ali Construction /Reading Privacy Through Plan Organization

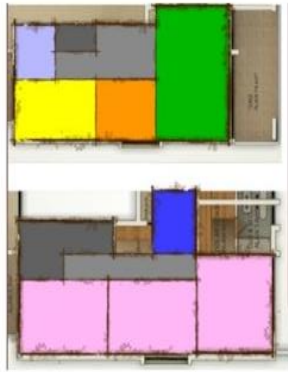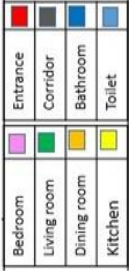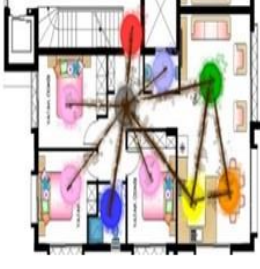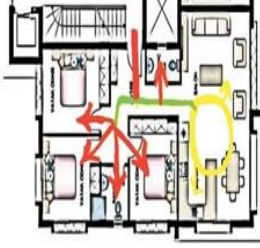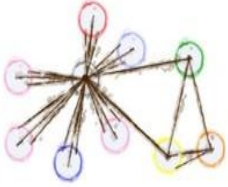| Plan	NOTE	Zoning	NOTE
	• 3 bedroom with one bathroom close kitchen • Private and public corridor • Dinning room between living room and corridor have open accessibility Bedroom ▦ Entrance ▦ Living room ▦ Corridor ▦ Dining room ▦ Bathroom ▦ Kitchen ▦ Toilet ▦		Corridor divided two part of private and public corridor as zone and core of other functions with a door between . Shape of corridor
Relation of zones	NOTE	Circulation	NOTE
	• Relative zones are just among dining room ,living room and corridor • Others zones related to each other through corridor.		• Circulation among each zone are indirect through main way in corridor but its in depended circulation among living room and dinning room that make circle pass way for passenger
Plan organization	Note		
	In this diagram from entrance to private zone of home like bedroom and bathroom and public zone is different corridor which 2 same graph with solid barriers for all rooms but within living room and dining room which make a ring with corridor		

- **Fifth Sample**

Planing in this sample as most common type of apartmet unit have private zone wich seprate hallway and assesibility but each zone of private zone hasn't seprate privacy as different bedroom the only private element is door of each room other wise isnt any disstance or anyseprate bathroom or seprate corridor and perhaps their activity effect on each member through visibility accesibility and function.in public zone from main hallway isn direct accesibility to kitchen but livingroom have direct accibility to dinnigroom and kitchen too, so there is seprate circulation among public zone which give this option to users to use kitchen diningroom and living room but with crossing livingroom or bothering other members or maybe guest also if members are in zone of dining roomor kichen and want to go to private zone other member have croos living room and public hallway to entre private hallway.

living room and kitchen without croosing throgh diningroom can use and its open kitchen which provide enogh sepration to livingroo and also require accesibility due the function of each zone and this circulation or ring made possibility for better accesibility due to bahevir of members.From entrance to hallway its direct relation to livingroom,also kitchen is close in related to main hallway and isnt direct acces (Table 4.25).

Table 4.25. Yırtıcı Construction Ltd./Reading Privacy through

Plan	NOTE
	• 3 bedroom with one bathroom • Open kitchen • Dinning room between living room and kitchen have open accessibility Bedroom / Entrance Living room / Corridor Dining room / Bathroom Kitchen / Toilet
Zoning	NOTE
	There is one Corridor as zone is as core of other zones but because of shape of corridor its different level of entering for users Shape of corridor
Relation of zones	NOTE
	• Relative zones are just among dining room ,living room and kitchen and corridor • Others zones related to each other through corridor.
Circulation	NOTE
	Circulation among each zone are indirect through main way in corridor but its in depended circulation among living room and dinning room that make circle pass way for passenger
Plan organization	Note
	In this diagram from entrance to private zone of home like bedroom and bathroom and public zone is same corridor which make same graph with solid barriers for all rooms but with public zones living room and dining room with kitchen and corridor make two ring.

4.2.3 Privacy Issues in Plan Organization of Kyrenia Samples
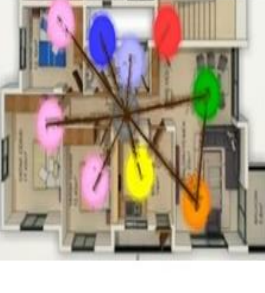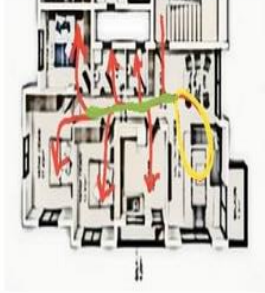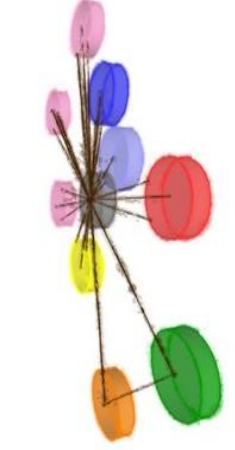
Here by analysing planning zonning and related zones and circulation of selected sampls of Kyrenia city and folow on with plan organization the factors which can effect on reading privacy of home for residents and due to different function of zone in relation to each factor going on to analyse to having possibility to disscuse about all those factors through one graph as plan organization. For this purpuse each of this mass housing unit with table and discuse about tables to reaching concept of privacy will consider.

- **First Sample**

There is seprate circulation among public zone which give this option to users to use kitchen diningroom and living room but with crossing livingroom or bothering other members or maybe guest also if members are in zone of dining roomor kichen and want to go to private zone other member have croos living room and public hallway to entre private hallway.

living room and kitchen without croosing throgh diningroom can use and its open kitchen which provide enogh sepration to livingroo and also require accesibility due the function of each zone and this circulation or ring made possibility for better accesibility due to bahevir of members.From entrance to hallway its direct relation to livingroom,also kitchen is close in related to main hallway and isnt direct acces (Table 4.26).

Table 4.26. Levent Homes Ltd./Reading Privacy Through Plan

Plan	NOTE
	• 3 bedroom with one bathroom Open kitchen • Dinning room between living room and kitchen have open accessibility Bedroom / Entrance Living room / Corridor Dining room / Bathroom Kitchen / Toilet

Zoning	NOTE
	Corridor is divider of public and private zone in same level and accessibility Shape of corridor

Relation of zones	NOTE
	• Relative zones are just among dining room ,living room and corridor • Others zones related to each other through corridor.

Circulation	NOTE
	• Circulation among each zone are indirect through main way in corridor but its in depended circulation among living room and dinning room that make circle pass way for passenger

Plan organization	Note
	In this diagram from entrance to private zone of home like bedroom and bathroom and public zone is same corridor which make same graph with solid barriers for all rooms but with public zones living room and dinning room and corridor make a ring.

- **Second Sample**

Planing in this sample as most common type of apartmet unit have private zone wich seprate hallway and assesibility but each zone of private zone hasn't seprate privacy as different bedroom the only private element is door of each room other wise isnt any disstance or anyseprate bathroom or seprate corridor and perhaps their activity effect on each member through visibility accesibility and function.in public zone from main hallway isn direct accesibility to kitchen but livingroom have direct accibility to dinnigroom and kitchen too, so there is seprate circulation among public zone which give this option to users to use kitchen diningroom and living room but with crossing livingroom or bothering other members or maybe guest also if members are in zone of dining roomor kichen and want to go to private zone other member have croos living room and public hallway to entre private hallway.

living room and kitchen without croosing throgh diningroom can use and its open kitchen which provide enogh sepration to livingroo and also require accesibility due the function of each zone and this circulation or ring made possibility for better accesibility due to bahevir of members.From entrance to hallway its direct relation to livingroom,also kitchen is close in related to main hallway and isnt direct acces (Table 4.27).

Table 4.27. Kibris Development./Reading Privacy Through

Plan	NOTE
	• 2 bedroom with one bathroom • Open kitchen • Private and public corridor | Bedroom		Entrance	
Living room		Corridor	
Dining room		Bathroom	
Kitchen		Toilet		
Zoning	NOTE
	for entering to private zone user have cross through public zone and living room and kitchen are in different side of corridor Shape of corridor
Relation of zones	NOTE
	• Isn't any relative zone among all zoning • Others zones related to each other through corridor.
Circulation	NOTE
	• Circulation among each zone are indirect through main way in corridor
Plan organization	Note
	In this diagram from entrance to private zone of home like bedroom and bathroom and public zone is different corridor which separate with solid barriers doors for all rooms for public zones living room is directly relation to corridor and have open kitchen from corridor and isn't any diningroom.

- **Third Sample**

In this planning, from entrance to hallway is direct accessibility to living room and its direct accessibility to dining room to kitchen, while isn't any circulation or direct relation from dining room to living room or from kitchen to living room, and also this hallway is direct access to bedroom and bathroom and isn't any level of privacy or circulation among any zone and each function effect on other function by behavior of each member because of lack of privacy in plan organization.

Setting zones as a cross sign around hallway made all activity of members in relation to each other by passing from entrance to bedroom while this due to pass between living room and dining room too. And seems bathroom isn't any privacy or leveling privacy for members its notice maybe because of size of home considering privacy or attention to require of members at all forgotten and they just tried to set zones without attention of relation of zones and members (Table 4.28).

Table 4.28. Carrington Group Construction /Reading Privacy through Plan Organization
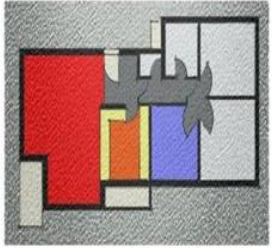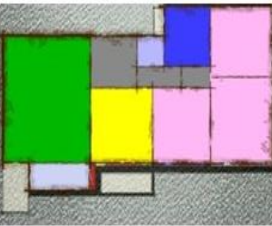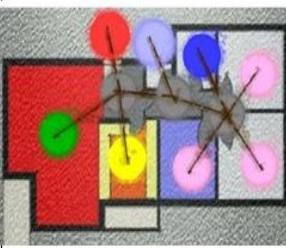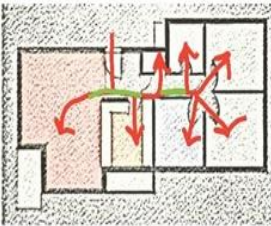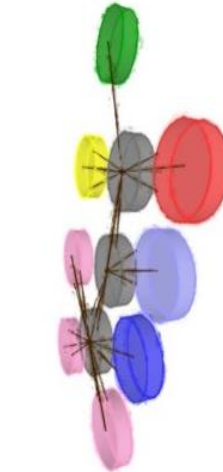
Plan		**NOTE**	• 2 bedroom with one bathroom • Open kitchen • Private and public corridor • Dinning room between living room and kitchen have open accessibility Legend: Bedroom / Entrance, Living room / Corridor, Dining room / Bathroom, Kitchen / Toilet
Zoning		**NOTE**	Corridor is all around kitchen and its crossing among all zone Shape of corridor
Relation of zones		**NOTE**	• Isn't any relative zone among all zoning • Others zones related to each other through corridor.
Circulation		**NOTE**	• Circulation among each zone are indirect through main way in corridor
Plan organization		**Note**	In this diagram all zones have relate to each other from same corridors but for public zones isn't any barrier and for private is solid barrier. Corridor its part of living room and its provided to users to cross between kitchen and living room with open accessibility to reach private zone

- **Forth Sample**

Plan organization of this sample show living room and dining room hasn't privacy from members of home and who want to enter home as separator or any partition or any different texture because all public zone has directly open accessibility suddenly from entering to home to hallway, and setting of hallway as public corridor or divider of other zone allow to members to use their public zone like by passing other zone.

Kitchen has separate accessibility as private kitchen and isn't any interaction with any zones and from hallway to kitchen is solid barrier as door. Due to this public zone private zone with separate hallway and door between them have private privacy comparable to public zone but again same as other samples it's just one bathroom for all bedroom and isn't any different shape or accessibility due to privacy of hallway of private zone and just door is like boundary as filter of privacy of each member of home (Table 4.29).

Table 4.29. Ozyalcin Construction /Reading Privacy through Plan
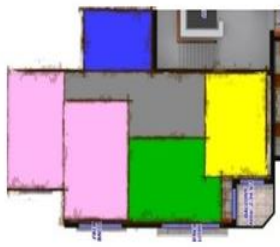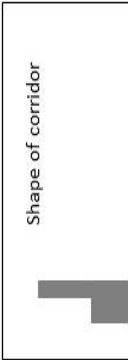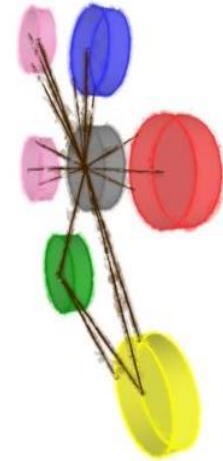
Plan		Zoning	
	NOTE • 3 bedroom with one bathroom • Close kitchen • Private and public and semi public corridor 	Bedroom	🟪	Entrance	🟥
Living room	🟩	Corridor	⬛
Dining room	🟧	Bathroom	🟦
Kitchen	🟨	Toilet	🔵			**NOTE** • Corridor separated to 3 part for public and private and semi public zone Shape of corridor
Relation of zones		**Circulation**	
	NOTE • Isn't any relative zone all have direct accessibility and related to each other through corridor.		**NOTE** • Circulation among each zone are indirect through main way in corridor
Plan organization			
	Note		In this diagram its strong separation and barrier among zones with 3 corridor and all room related to corridor with strong barrier and doors and isn't any ring between zones just living room and corridor have no barriers

- **Fifth Sample**

In this planning, from entrance to hallway is direct accessibility to living room and its direct accessibility to dining room to kitchen, while isn't any circulation or direct relation from dining room to living room or from kitchen to living room, and also this hallway is direct access to bedroom and bathroom and isn't any level of privacy or circulation among any zone and each function effect on other function by behavior of each member because of lack of privacy in plan organization.

Setting zones as a cross sign around hallway made all activity of members in relation to each other by passing from entrance to bedroom while this due to pass between living room and dining room too. And seems bathroom isn't any privacy or leveling privacy for members its notice maybe because of size of home considering privacy or attention to require of members at all forgotten and they just tried to set zones without attention of relation of zones and members (Table 4.30).

Table 4.30. ATA Construction LTD /Reading Privacy through Plan Organization.

Plan	NOTE	Zoning	NOTE
	• 2 bedroom with one bathroom • Open kitchen • Private and public corridor through different material 	Bedroom		Entrance	
Living room		Corridor	
Dining room		Bathroom	
Kitchen		Toilet				Corridor is part of living room and kitchen and shape of corridor made open accessibility to public zone . Shape of corridor
Relation of zones	NOTE	Circulation	NOTE
	• Relative zones are just among kitchen, living room and corridor • Others zones related to each other through corridor.		• Circulation among each zone are indirect through main way in corridor but its in depended circulation among living room and dinning room that make circle pass way for passenger
Plan organization	Note		
	In this diagram from entrance to private zone of home like bedroom and bathroom and public zone is same corridor which make same graph with solid barriers for all rooms but with public zones living room and kitchen and corridor make a ring.		

4.3 The Interviews with Members

Interview with members of the apartment blocks in three cities of Northern Cyprus. From each city five apartments blocks as mentioned from 5 different companies were selected and from each projects of apartment interview have been done with 20 residents of 20 same apartment blocks. Finding from 20 units in each projects were analyzed to find out what's the satisfactions of residents from planning and how they see privacy or even they don't see in their plan also through information about how many hours they're spending at home in average and in which zone they do their most interaction trying to find relation of residents and zones as relation of behavior facts and physical fact to considering the concept of privacy through all , the reason to ask them about the average time they are stay in home is to know their satisfaction and interaction in zones are based on how many hours of their daily life and is it their main activity in home .

David Eagleman mentioned in his article about true fact of human physiology if members of home in average use less than 8 hours in their home means they are not satisfied with their home as phycology aspect and even after work or any social activity they try to make other activity to full their time instead going to home however this article is so general but as references for analyzing charts tried to use this human fact studied for better finding at the end info of this study observed among residents.

Also in another chart with finding about in which zone most interaction of members of home happening trying to find which place for them is as most considering for public zone or heart of home to gathering or to do any main or daily activity or

spending time there therefore this result can help at the end for better discussion about relation of zone and plan organization to their activity.

So for this purpose with summary of all interview with 300 families of north Cyprus try to find general expectation and definition of privacy through residents of those mass housing projects, secondly for answering this question what's their definition of satisfaction through concept of privacy we need to know how many hours they are staying at home in general and in which zone their interaction is happening to find out their level of satisfaction through their physical behavior because satisfaction by concept of privacy can be psychological need and for finding relation of this psychological issues needing to find relation of their physical activity with zone and their circulation .

At the end, final finding, collection data and relation making among all are going to discuss as completing plan through the link between residents and plan organization through concept of privacy.

Sample of interview done with 20 family of same apartment building in each 15 mass housing building from different companies.

Summary of all 300 interviews show residents are in variety of culture from different countries European, Middle eastern, African ,Scandinavian, and local people Cypriot and all are in mostly in 3 categories about occupation who are study who work and who work and study both .they are different variety age and due to their activity in their home have variety of expectations from their home, some of them extremely agree to have open and wide kitchen but some prefer close and separate kitchen some

want separate zone for dining room and guest room but some are fine with one wide living room some prefer to have privacy in corridors and from entrance to bed room or entrance to living room have separate corridor which have door or if not door have somehow separation ad mostly mentioned they don't like to come to living room suddenly after entrance .mostly also mentioned bedroom can't provide for them privacy of other activity and they use just in sleep time but some others but with less percentage mentioned they use their bedroom for all of their daily activity watching TV study working on laptop or some else. Woman were care and more focus on relation of kitchen and dining room while men mentioned more in bedroom and living room. Most women expect to have homed with family room and separate zone which all their interaction can happen there without disturbing another zones.

So through summery of all interview with getting the important of (how many hours and where) in average all residents do their daily activity try to reach to final relation of their satisfactions in those places so this percentage get out from each 20 family of same apartment building in each mass housing companies.

How many hours they are in home is in 5 categories ,less than 8 mean they have not enough interaction or physical behavior related to home through zoning and circulation ,then its 8 to 10 as normal hours then 10 to 12 means they have enough interaction with other members of home and with zones and circulation, and 12 to 14 mean zone and circulation effect on their behavior in home in different aspect and home should be provide their satisfactions otherwise have negative effect on members behavior and more than 14 means its most relative effecting on members physiological and physical both.Follow this chart with answering this question in which zone of home their most

activity and interaction are happening we are getting the answer of most daily activity through living room, kitchen, dining room and bedroom to compare how they behavior and act in their own zone other chart is presenting for this purpose.

Then with graph of their satisfactions about privacy using this 5 categories strongly agree as 5 means home provide their individual privacy for each member of home in best way .agree as 4 means it's the home is fine for them and isn't any big problem .3 means its natural effect for them not good or not bad so 2 means disagree they are not satisfied with their individual privacy in home and 1 means they know their privacy as big problem in their home and they believe it shouldn't be like that and somehow thinking to change their home in future because of high level of un satisfactions.

Then with density of shape of graph we can reach each project how could satisfy resident of units by concept of privacy. The graph is based on study of psychological satisfactions of residents from their privacy and each circle around graph show one more level of satisfactions so as much they are agreeing with current design of their units the density in graph will be more wide and more as much density is less and its just in center means their level of satisfactions is not providing their privacy issues enough. Relation of this graph with plan organizations at the end can answer to relation of privacy through plan organization to members of each unit for each mass housing project of north Cyprus.

1- Halken Construction & Estate Co. Ltd

As summary In this mass housing project resident of different unit of same apartment building in their interview mentioned they mostly spend more than 8 hours per day in their home and its about 10 to 12 hours which means half of day spending at home

should provide their satisfaction in different level of design , and as its clear in (Figure 4.1) mostly have their main interaction with other members of family or friends or through function of zone in living room so this is another reason to show privacy of public zone of units should be considering because different exceptions and satisfaction from each members mentioned that mean they want to have the privacy in each zone living room that can be designed to respect and requirement of variety of activity of resident.
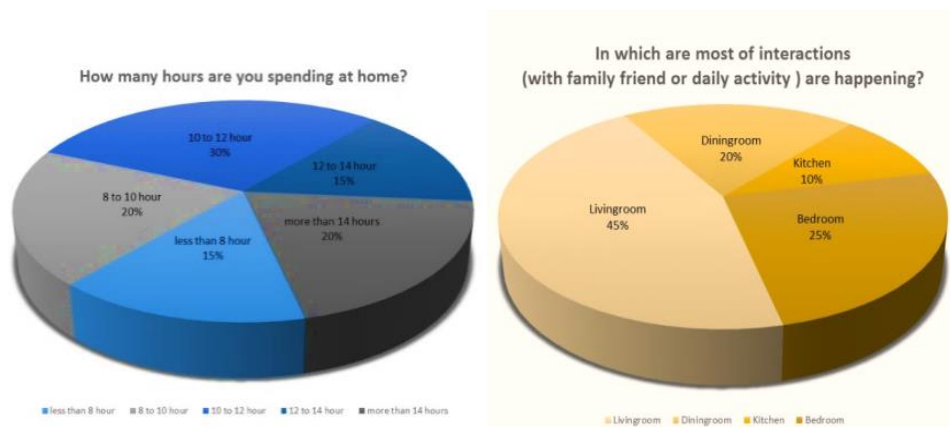
Figure 4.1. Halkan Construction Units /Interview with 20 Families

2-Erbatu Constructions

As summary In this mass housing project resident of different unit of same apartment building in their interview mentioned they mostly spend less than 8 hours per day in their home and means half of day spending at home should provide their satisfaction in different level of design , and as its clear in (Figure 4.2) mostly have their main interaction even in less than 8 hour time, with other members of family or friends in living room they mostly mentioned they just bedroom in sleep time and they prefer to do all their activity reading book listening music or talking with friends or family in

144

living room so different exceptions and satisfaction from each member have consider to make privacy of them due their activity. Also some members add they don't feel they have privacy in their own individual because if someone wants to watch some movie and other working on kitchen both of member feel uncomfortable with noise of TV or stuff in kitchen.
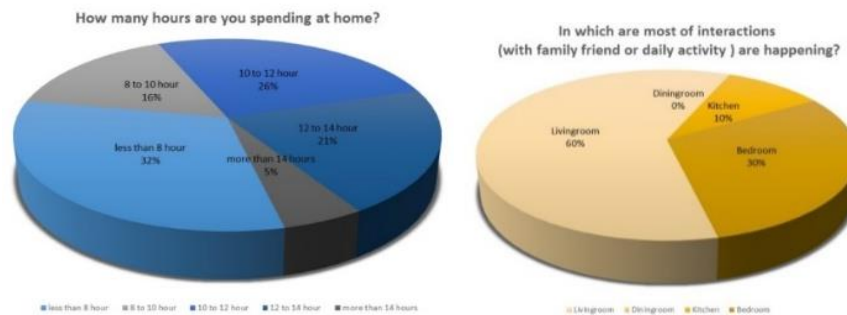
Figure 4.2. Erbatu Construction Units/Interview with 20 Families

3-Dovec Constructions

Summary of this mass housing project resident of different unit of same apartment building in their interview mentioned they mostly spend 8 to 10 hours per day in their home and means half of day spending at home should provide their satisfaction in different level of design , and as its clear in (chart 3) mostly have their main interaction even in less than 8 hour time, with other members of family or friends in living room they mostly mentioned they just bedroom in sleep time and they prefer to do all their activity reading book listening music or talking with friends or family in living room so different exceptions and satisfaction from each members have consider to make privacy of them due their activity .

also some members add they don't feel they have privacy in their own individual because if someone want to watch some movie and other working on kitchen both of

member feel uncomfortable with noise of TV or stuff in kitchen, they mostly mentioned they wish if they could some partisan or round shape plan for kitchen and they are not satisfied with open rectangle kitchen in front of sitting zone.
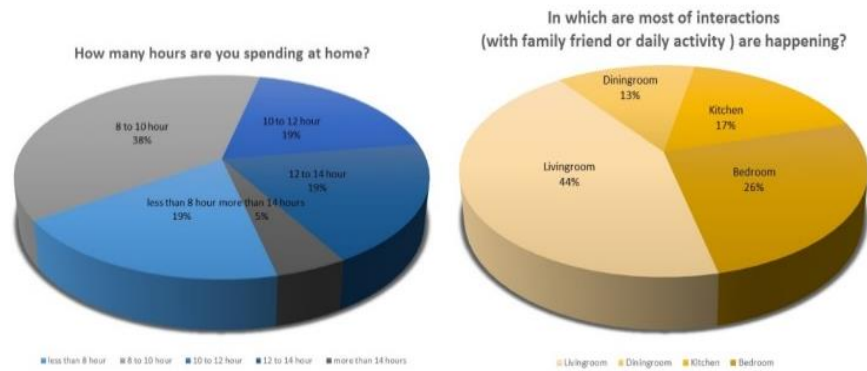
Figure 4. 3. Dovec Construction Units/Interview With 20 Families

4- Northern Land

As summary In this mass housing project resident of different unit of same apartment building in their interview mentioned they mostly spend more than 8 hours per day in their home and its about 10 to 12 hours which means half of day spending at home should provide their satisfaction in different level of design, and as its clear in (Figure 4.4) mostly have their main interaction with other members of family or friends or through function of zone in living room so this is another reason to show privacy of public zone of units should be considering because different exceptions and satisfaction from each members mentioned that mean they want to have the privacy in each zone living room that can be designed to respect and requirement of variety of activity of resident.
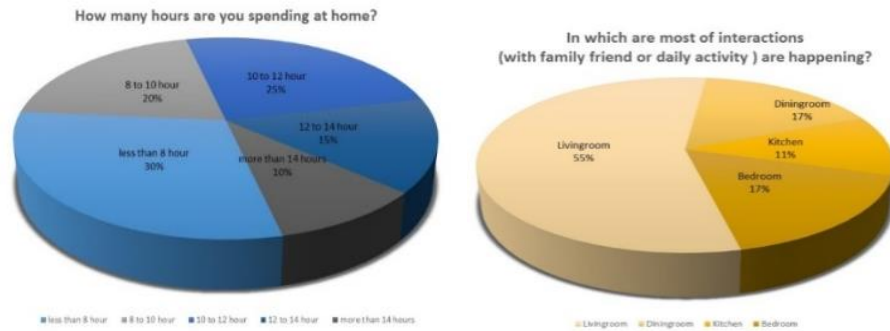
Figure 4.4. Northderlan Cunstruction Company/Interview With 20 Families

5- Noyanlar Group Construction

As summary residents of different unit of same apartment building in their interview mentioned they mostly spend less than 8 hours per day in their home and means half of day spending at home should provide their satisfaction in different level of design, and as its clear in (Figure 4.5) mostly have their main interaction even in less than 8 hour time, with other members of family or friends in living room they mostly mentioned they just bedroom in sleep time and they prefer to do all their activity reading book listening music or talking with friends or family in living room so different exceptions and satisfaction from each members have consider to make privacy of them due their activity.

Also some members add they don't feel they have privacy in their own individual because if someone wants to watch some movie and other working on kitchen both of member feel uncomfortable with noise of TV or stuff in kitchen.
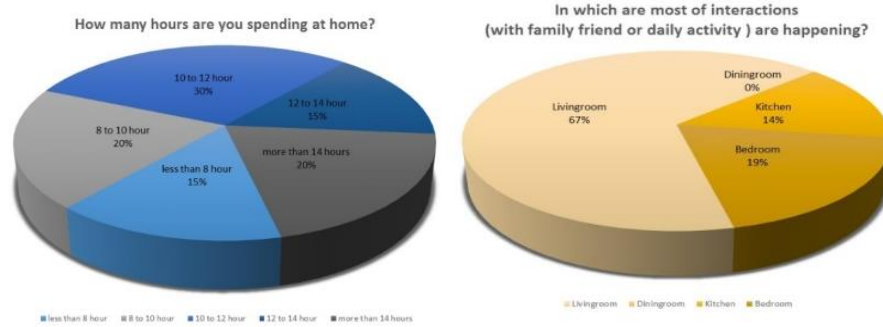
Figure 4.5. Noyanlar Cunstruction Company/Interview With 20 Families

6- Unity Homes Ltd.

As summary In this mass housing project resident of different unit of same apartment building in their interview mentioned they mostly spend more than 8 hours per day in their home it's about 14 hours per day and means more than half of day spending at home should provide their satisfaction in different level of design , and as its clear in (Figure 4.6) mostly have their main interaction, with other members of family or friends in living room they mostly mentioned they are satisfied with their planning and home design made for them possible privacy for any activity .
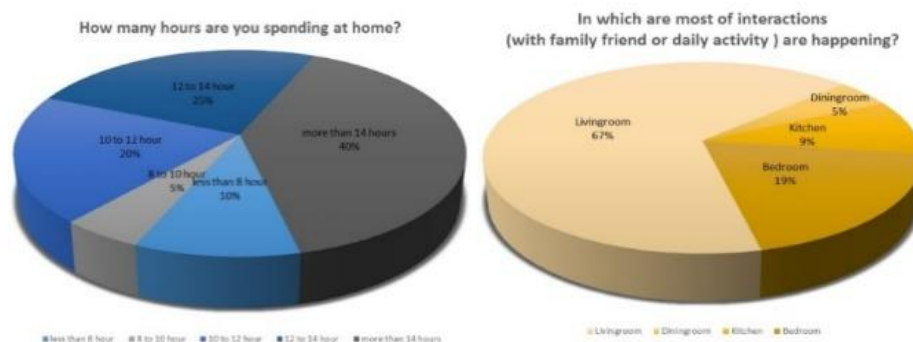
Figure 4.6. Unity Cunstruction Company/Interview With 20 Families

7-Ozmerhan group

As summary residents in this kind of building in summaries of residents interview as its present in Figure 4:13 mostly spend about 10 to 12 hours at home and same as other interviews they mentioned most of interaction of them is happen in their living room and they use living room for variety of activity in their available time at home ,additional the graph of their level of satisfaction on privacy show they believe with some consideration their units could be very suite for their privacy and density of level of satisfaction are not in same level that's means it's up to the variety of residents with variety of life style. Figure 4.7
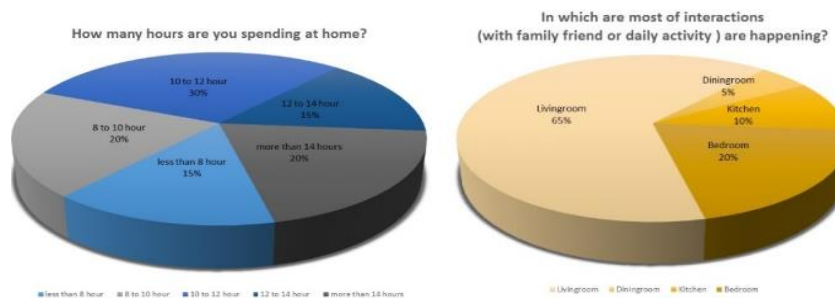
Figure 4.7. Ozmehrcan cunstruction company/interview with 20 families

8-Mesan Development Company

This kind of building in summaries of residents interview as its present in Figure 4:13 mostly spend about 8 to 10 hours at home and same as other interviews they mentioned most of interaction of them is happen in their living room and they use living room for variety of activity in their available time at home ,additional the graph of their level of satisfaction on privacy show density in level of 1 to 3 which means they're not satisfied with what they expected from their privacy for each members due their activity in home.(Figure 4.8)
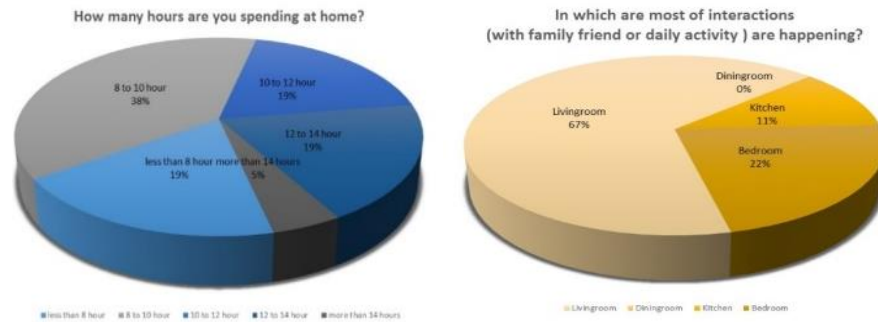
Figure 4.8. Mesan Construction Company/Interview With 20 Families

9-Hacialihomes

As summary In this mass housing project resident of different unit of same apartment building in their interview mentioned they mostly spend less than 8 hours per day in their home and means half of day spending at home should provide their satisfaction in different level of design, and as its clear in (Figure 4.9) mostly have their main interaction even in less than 8 hour time, with other members of family or friends in living room they mostly mentioned they just bedroom in sleep time and they prefer to do all their activity reading book listening music or talking with friends or family in living room so different exceptions and satisfaction from each members have consider to make privacy of them due their activity. Also some members add they don't feel they have privacy in their own individual because if someone wants to watch some movie and other working on kitchen both of member feel uncomfortable with noise of TV or stuff in kitchen .
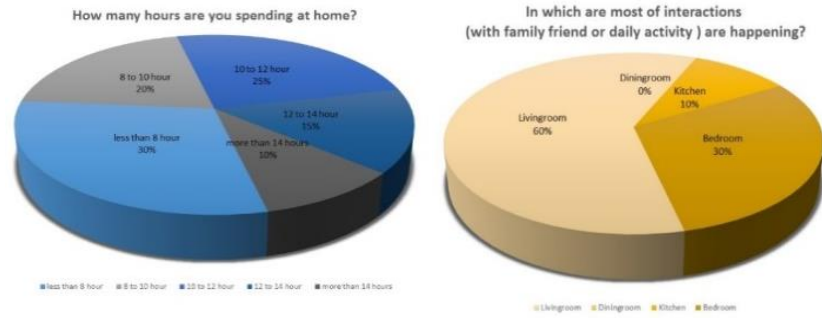
Figure 4.9 Mesan Cunstruction Company/Interview With 20 Families

10-Yirtici Company

This kind of building in summaries of residents interview as its present in Figure 4:13 mostly spend about 10 to 12 hours at home and same as other interviews they mentioned most of interaction of them is happen in their living room and they use living room for variety of activity in their available time at home ,additional the graph of their level of satisfaction on privacy show they believe with some consideration their units could be very suite for their privacy and density of level of satisfaction are not in same level that's means it's up to the variety of residents with variety of life style. Figure 4.10
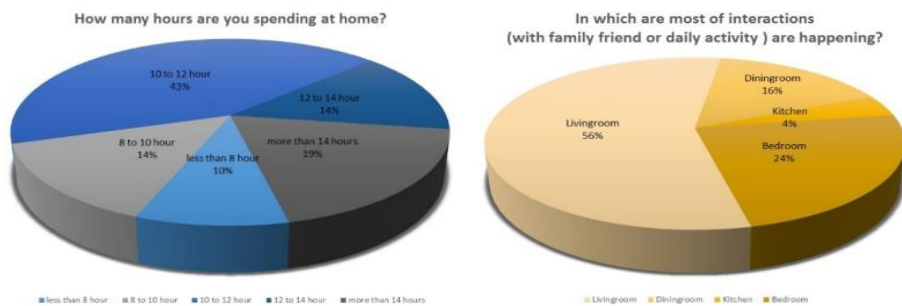
Figure 4.10. Yirtici Cunstruction Company/Interview With 20 Families

11-Levent Homes Ltd.

Summary In this mass housing project resident have more clear result through their answer to question they mostly spend more than 14 hours per day in their home and means more than half of day spending at home so providing their satisfaction in different level of design in home have to consider for each member to have proper behavior in their individual zone (Figure 4.11) mostly have their main in living room they mostly mentioned they just use bedroom in their rest time and they prefer to do all their activity reading book listening music or talking with friends or family in living room so different exceptions and satisfaction from each members have consider to make privacy of them due their activity and as its presented in graph of level of privacy they mostly select level 3 as normal feeling about effect of privacy in their units .
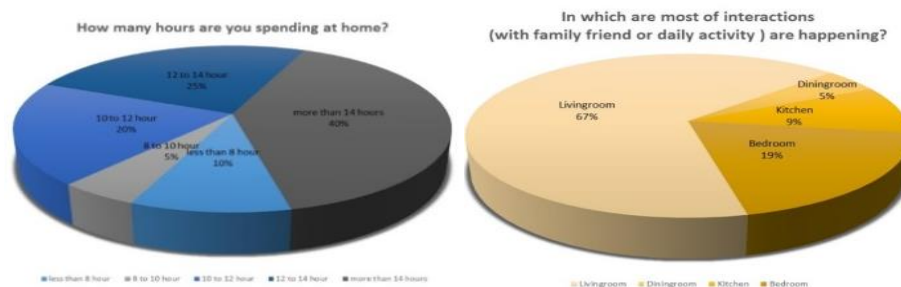
Figure 4.11. Levent Construction Company/Interview With 20 Families

12-Kibris Development- Escape Homes and Milos Homes

Summary of interview with this group of people show they mostly spend 10 to 12hours per day in their home and means half of day spending at home should provide their satisfaction in different level of design,(Figure 4.12) mostly have their main interaction, with other members of family or friends in living room they mostly mentioned they just bedroom in sleep time and they prefer to do all their activity reading book listening music or talking with friends or family in living room so

152

different exceptions and satisfaction from each members have consider to make privacy of them due their activity. Also some members add they don't feel they have privacy in their own individual mostly believe this home is just normal about level of privacy and they don't feel any level of privacy considering for each members of mass housing projects of this housing units.
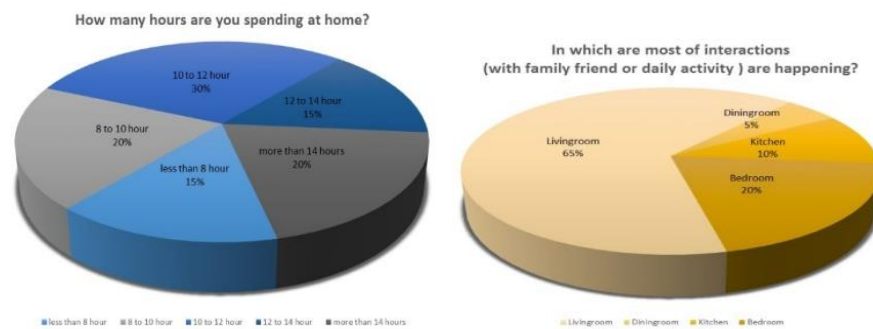
Figure 4.12. Kibris Development Construction Company/Interview With 20 Families

13-Carrington Group Construction

This kind of building in summaries of residents interview as its present in Figure 4:13 mostly spend about 8 to 10 hours at home and same as other interviews they mentioned most of interaction of them is happen in their living room and they use living room for variety of activity in their available time at home ,additional the graph of their level of satisfaction on privacy show they believe with some consideration their units could be very suite for their privacy and density of level of satisfaction are not in same level that's means its up to the variety of residents with variety of life style.
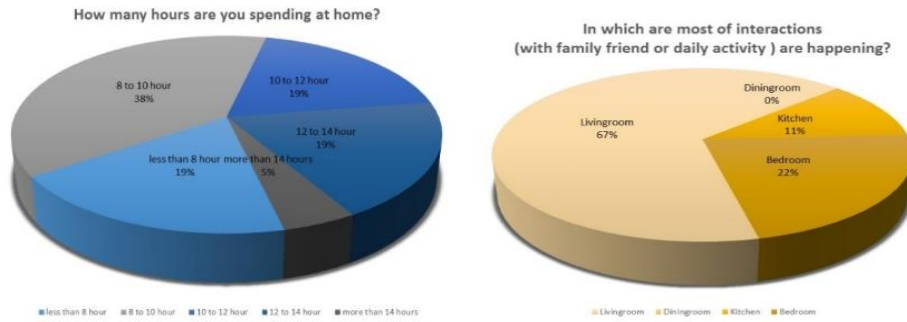
Figure 4.13. Carrington Construction Company/Interview With 20 Families

14- Ozyalçın Constructions

As summary in interview they mostly spend less than 8 hours per day in their home and means less than half of day spending at home so maybe they don't have enogh expectation from each zone by concept of privacy(Figure 4.14) mostly have their main interaction even in less than 8 hour time , with other members of family or friends in living room they mostly mentioned they just bedroom in sleep time and they prefer to do all their activity reading book listening music or talking with friends or family in living room so different exceptions and satisfaction from each members have consider to make privacy of them due their activity. Also graph of privacy show they maybe somehow feel privacy in their individual but mostly express the privacy in home as normal factor or unsatisfied factor.
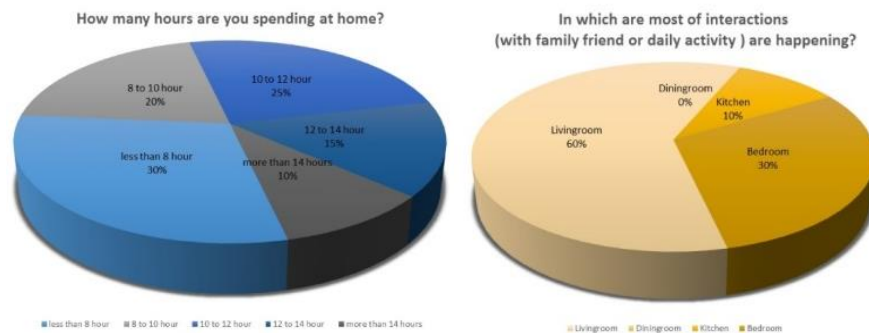
Figure 4.14. Ozyalcin Construction Company/Interview With 20 Families

154

15- Ata Ltd

As summary, resident of different unit of same apartment building in their interview mentioned they mostly spend 10 to 12 hours per day in their home (Figure 4.15) mostly have their main interaction, with other members of family or friends in living room they mostly mentioned they prefer to do all their activity reading book listening music or talking with friends or family in living room so different exceptions and satisfaction from each members have consider to make privacy of them due their activity. But also in graph of satisfaction of privacy mostly are in central layer of graph and means are not satisfied with privacy issues.
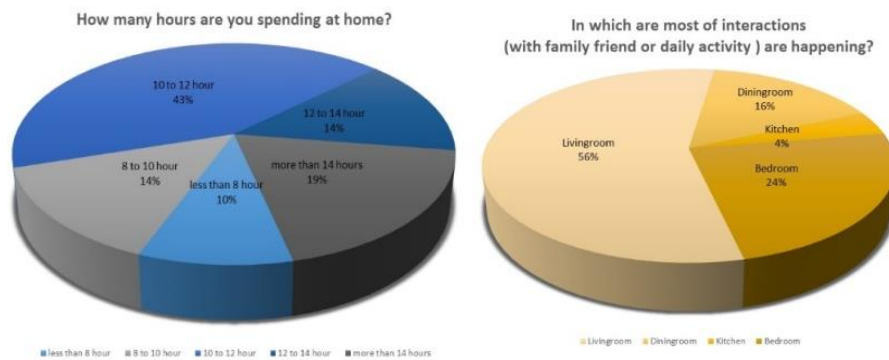
Figure 4.15. ATA Ltd Company/Interview With 20 Families

4.3 Finding and Analysis

According to data results of all three major cities in North Cyprus it can be understood that each city's houses have a very different group of people with different variety of need for privacy management. In Nicosia, most of the residents were the middle aged with having a paying job and social life; they were mostly satisfied with their household privacy. In Kyrenia and Famagusta that's a different view to privacy altogether, because the residents were mostly young and they are students and even more tourist who decided to stay here.

The younger generation wants more for their privacy and they are more consider about privacy of home and their needs and with the current status of the apartment blocks especially in Famagusta, they were mentioning of privacy problems in the unit's apartment blocks. While Famagusta hasn't the lowest rating in their buildings, the construction on the privacy borders in the apartment is the lowest ones. The occupants aren't satisfied with their privacy and cannot distinguish the privacy spaces from one another and don't seem to either know their housemate's privacy borders. Also they are not feeling enough privacy in the whole apartment however most of them spend less time at home.
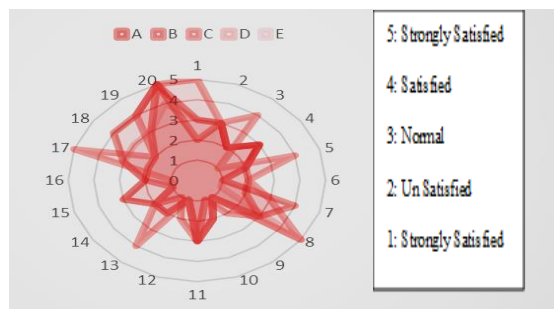
Figure 4.16. Level of Satisfactions of Resident by Concept of Privacy in Famagusta

In this graph(4.16) as summary of level of satisfactions of all members of selected samples of Famagusta which separate explained in appendix B show mostly density is in level 2 and 3 means disagree with satisfactions in privacy aspect of home and range of agree and strongly agree with providing individual of each members in home are rare and in graph as its clear most part of circulation in level of 5 and 4 are empty and means they are not satisfied with their home privacy and level of satisfactions if members as high privacy in level 5 is just some points in graph and there isn't readable density to mention its due to needs of residents.
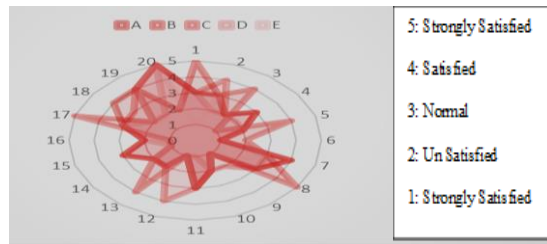
Figure 4.17. Level of Satisfactions of Resident by Concept of Privacy in Nicosia

In graph of (4.17) summary of each city finding show mostly density is in level 2 and 3 means disagree with satisfactions in privacy aspect of home and range of agree and strongly agree with providing individual of each members in home are rare and in graph as its clear most part of circulation in level of 5 and 4 are empty and means they are not satisfied with their home privacy but mostly have normal and requirement s privacy as basis needs which is clear in level of 3 of graph.
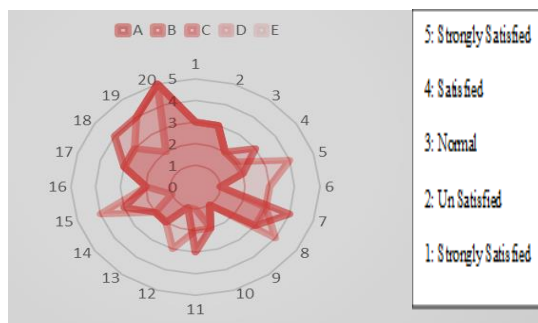
Figure 4.18 Level of Satisfactions of Resident by Concept of Privacy in Kyrenia

In Graph (4.18) as summary of each city finding show mostly density is in level 2 and 3 means disagree with satisfactions in privacy aspect of home and range of agree and strongly agree with providing individual of each members in home are rare and in graph as its clear most part of circulation in level of 5 and 4 are empty and means they are not satisfied with their home privacy.

Chapter 5

CONCLUSION

5.1 Discussion and Recommendation

This chapter is providing the final information about the privacy through plan organization and related recommendation for interior architects by putting privacy in the searching of point of view is consideration for internal changes to pursue the need of the residents. This study is about the role of privacy as one of the important factors in recent phenomena of architecture as mass housing. Mass housing is defined as the set of housing including multiple domiciles and units for use of several occupants in one building. (Christians, 1991).

Finding and analyzing from tables off chapter 4 can provide this list as main categories of all samples though privacy issues for providing better idea for architects to be more consider due plan organization because plan directly effect on human function and daily life so human life and behavior and needs should be relating to their plan as well.

Privacy can effect on people life style and plan organization should be based on needs of residents to make a plan with factors of resident's satisfactions.

Finding of Plans

- In plans with one corridor so isn't any privacy for private and public zone of house and all have same accessibility while have different function and different level of users.

- In plan which have 2 corridor to separate privacy of bedrooms with another divider from public zones and isnt direct relation to private zone.

- Some plans have even 3 corridor but its rare to make different step of privacy from public to private zones and also in some plans those 3 corridors are ithout any functional reason while it could be designed as right way to provide public ,private and semi private zones.

- Plans with same barriers to living room kitchen and even bathroom but how its possible to have same accicibility and barrier and step to different zone with variety of function!

- Plans which have strong barrier for bedrooms and no barrier or half barrier to living room and kitchen or dining room throuh distance ,barrier and different steps.

- In Some plan for entering to living room or kitchen residents have pass from dining room or for reaching to kitchen have pass from livingroom directly.

- Some plans have open kitchen some half open and some close kitchen so need to have different relation to living room or dinnig room throght accecibility.

- Some have open relation between dining room and living room but some have open relation between kitchen and dinning room and some have this relation with seprate hallway and making public circulation as public ring .

- Some plans have same accessibility to kitchen living room and dining room and residents can pass from each zone I same situation so made a separate circulation for this tree zone,

- Some plans the step of reach to kitchen is from living room to dining room then kitchen and some is from kitchen to living room to dining room and without any circulation among all 3 zone

- Some have one bathroom in living room one for bedrooms but some have one for all zones.

Based on the mentioned information and theoretical backgrounds, constructors and interior architects should consider the following recommendations in order to improve the privacy in mass housing development in Northern Cyprus.

- Designing flexible structure to meet the need of the different cultures and nationalities.

- Providing interior variability for students, locals and tourists.

- Designing different interior structures in zoning, circulation and floor plan, doorway for rent and sale apartment.

- Considering the bedroom and kitchen design based on the customer's needs for sale houses before construction.

- Interior variability increases the attention of different types of customers,

- Providing horizontal lines in the bedroom for more relaxation and safety of the occupants,

- Attention to the color and texture factors in the interior design for better interior results,

160

- For the Developer, in situ reinforcement concrete offer a very competitive building construction solution based on its energy efficiency, cost, long term economic benefits, lower maintenance, as well as for future planned to be reused upon the occupancy of the building changed.

- For the Designer/Engineer, in situ reinforcement concrete can offers unlimited design possibilities in a structural by providing a superior environmental and energy performance. Designs could take advantages by its thermal mass and structural integrity of concrete.

5.2 Conclusion

In a lot of ways, our sense of place or location gives us the sense of identity, belonging and to where we lived in. Housing of different time stands an important role in making history of mass housing; housing is one of the basic needs of every individual. The type and form of housing is differing during the time based on social, economic and cultural basis. Due to population development, shortage of land, construction expenses housing structure have been changes from villas to houses and recently to apartments (Kwofie et al., 2014). Mass housing as the recent phenomenon in architecture has attracted the attention of large population.

Regardless of type, location, space and size of the housing, one of the most important elements that should be considered in interior design and architecture is privacy of the members. The term privacy is first mentioned at 15th century on Encyclopaedia Britannica (Britannica Encyclopaedia, 2006). Privacy means the state of being apart from company or observation with sense of freedom. Considering privacy in the construction of mass housing unit increases the occupant satisfaction, safety and demands.

The aim of this study is to define the variety of mass housing, providing complete information about privacy, effects of mass housing and privacy on people's life, role of privacy in mass housing of Northern Cyprus and comparing the examples of well-known mass housing in terms of privacy with the ones in Northern Cyprus. . Jacobson (2009) developed the phenomenological account as a developed nature in experiencing homes. Koman and Erden (2010) did a closer attention to the development of mass housing and their flexible design in Turkey. Stahl (2013) studied the role of privacy and innovation in civil society.

Most of the construction companies are trying to improve their design to build houses for individuals to make them stay at the units as their home to live with providing those required facilities. Home is the first place we experience architecture and it influences the idea of a dwelling. Some of the construction companies have tried to improve their interior structure and design in order to allow the occupant to customize the interior environment.

Designers should realize the changes in the people's need and requirement along of technological changes to serve better floor plan to household at the time. Based on White (1986), equation and analysis never can define and solve all the design needs for the customers. Housing is based on the user's culture due to the fact that everyone won't use the spaces in the same way. Rapoport (1986) stated that housing needs should be discovered not assumed based on equation and analysis. Many factors have effects on the design interior environment such as zoning and circulation of floor plan. Zoning has three parts such as public, work and private zone. All of the zones should be in connection to each other. Zones should not be separated or split from each other.

Circulation is defined the path in the home; A circulation pattern in home utilizes the interior space based on the needs of the residents (Kicklighter and Kicklighter, 1986). Zoning and circulation complement the interior design of the housing together.

In the housing design there are different elements such as line, texture, color, size, shape, form, and space have important role in improving the interior environment. Design also has some principles such as rhythm, proportion, emphasis, balance and unity. Redesigning the interior environment is based on the space, need and expenses which the interior designer, architects or architectural technologist provide assistant for professional remodeling.

People may use home, interior and neighborhood to mark distinctiveness from other people and other groups. Distinctiveness motivates individuals to make change to their life and their home as a result. Changeability in the housing is the replacement of new requirement in the building (Russell-Clarke, 2010). Next to changeability, flexibility is another term which can be used in interior design to change regarding the needs and situational condition and also the ability to be modified for achieving new use or new concept. Andrew, Rebeneck, Sheppard, and Town (1974) mentioned the concept of flexibility is in deal with constructional roles and techniques with distribution of services. Flexibility is related to both structural and interior spaces as well as physical changes in the construction. Flexibility let the user take control of the interior environment and determine the user satisfaction without paying extra expenses (Schneider and Till, 2007). In all of these issues, considering the privacy of the users is also important.

Privacy is defined as the claim of individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others. Gender segregation is one of the important criteria when planning homes and forms a significant aspect of achieving privacy (Belk and Sobh, 2011). Privacy is an important phenomenon that each individual wants to achieve on a daily basis. There are many laws that have been established regarding individuals' privacy, such as the right to privacy. People had the need to protect themselves from the environmental conditions and from their enemies (people and animals) as well as to withdraw from the broader group.

All of these issues have been considered in the role of mass housing in Northern Cyprus. When the recent 'construction boom' in the island of Cyprus is considered, hundreds of mass housing units denote the range of changes to adapt the housing units during the pre and post occupancy periods. Changing needs (social, economic and cultural) are changed housing understanding accordingly social, economic and cultural differences in society. It caused housing need in North part of the island. Social housing projects in Nicosia, Famagusta, and Kyrenia are significant examples of the mass housing developments in the island.

According to the result of plan organization analysis, interviews and theoretical background following outcomes are concluded. According to the results most of the social interaction happens in the living room of the apartment. Also people prefer to spend their time in middle sized rooms followed by large rooms, small rooms and largest rooms. Most of blocks are two doorway entrances. The blocks preferences are

for standard sizes and followed by doorway entrances. Nearly all of the apartment complexes are rectangular shaped with a very small number being L-shaped.

Also all of the apartment residents feel relaxed at their home. This status nearly goes for the private space except a little less which still not being on the lowest score. Many of the people indicated that they have their own private space on the apartments and boundaries are well indicated between the apartments. Also each member of their home has their own distinguished private space in the apartment. Most of the residents agreed that finding a private spot is easy in their apartment but surprisingly most were oblivious or disagreed on some extent for their current homes to have their desired private spaces. The interaction between neighbors are low to medium which shows that people want their own privacy more or simply don't have time for neighborhood activities. Also in the privacy feeling between their own room and the whole apartment showed that the total privacy levels are in acceptable levels. Privacy level in Famagusta and Nicosia is much more acceptable rather than Kyrenia due to the style of living and the city concept. Although all of the residents have agreed the existence of the privacy but finding the private spot for long period of time is not easy.

In Nicosia, most of the residents were the middle aged with having a paying job and social life; they were mostly satisfied with their household privacy. In Girne and Famagusta that's a different story altogether, the residents were mostly young and they were students. The younger generation wants more for their privacy needs and with the current status of the apartment blocks especially in Famagusta, they were mentioning of privacy problems in the apartment blocks.

Architects and designers should consider the role of members and needs of the residents in interior structure and design. Every city has its own structure but improving the flexibility and changeability of the interior design is necessary in mass housing construction of Northern Cyprus.

Researchers, architects, constructions company and developers and even resident all have important role to provide the final plan of apartment units based on ideal plans for members, so by study on different factors of similarities, varieties and plan organization focus on needs of residents could answer this question, how can make all members of different units of apartment in mass housing projects of North Cyprus satisfy to have long term and stable environment with their necessary needs which is important in their individual privacy . having enough information about resident requirement for their privacy beside analyzing privacy through plan organization for each mass housing projects can be reason of developing quality of units plan in each apartment block in North Cyprus and the benefit of this research can effect on mass housing project, developer and architects and residents in same time.

REFERENCES

Altman, I., Gauvain, H. (1981). A cross- cultural and dialectic analysis of homes. In Ed Patterson, A.

Atkinson, G. A. (1960). Mass housing in rapidly developing tropical areas.*Town Planning Review*, *31*(2), 85.

Apple, M. W., & Christian-Smith, L. K. (1991). The politics of the textbook.

Aregger, H., & Glaus, O. H. B. (1967). Urban Design.

Baykan, C. (1979). The Structure of Space Activity Relations with Case Studies on Houses. Master of Architecture Thesis. Middle East Technical University.

Burnett, J. (1980). *A social history of housing 1815-1970* (pp. 81-3). London: Methuen.

Chermayeff, S. Alexander, C. (1963). Community *and privacy; Toward a new architecture of humanism* Publisher Anchor Books Doubleday. ISBN: 0385034768

Cleveland, W. l., Bunton, M. (2004). A history *of the modern Middle East* (3rd ed.). Boulder: Westview. ISBN-10: 0813348331

Colomina, B. (1992). Sexuality and Space: Princeton Papers on Architecture.

Colomina, B. (1994). *Privacy and publicity.* Modern architecture as mass media" Publisher MIT Press. ISBN: 0262531399

Cooper, C. (1974). *The house as symbol of the self.* In Ed. Lang, C, Burnette, W ISBN: 1402791031

Corbusier, L. (1987). *The decorative art of today*. Mit Pr.

Cousin, J. (1970). Topological Organization of Architectural Space. Montreal, Presses de l'Université de Montreal.

Daneshpour, A. (2011). Concept *of Privacy in Housing Design Based on Islamic Teachings*. Paper presented at the First Iranian Students Scientific Conference, Malaysia, 9-10 April 2011

Duarte, J. P. (2001). *Customizing mass housing: a discursive grammar for Siza's Malagueira houses*. Doctoral dissertation, Massachusetts Institute of Technology.

Egidario, B. A. (2011). *Housing Transformation and its Impact on Neighbourhoods in Selected Low-Income Public Housing Estates in Lagos, Nigeria* .Doctoral dissertation, Covenant University.

Fitch, A. N. (2004). The high resolution powder diffraction beam line at ESRF. *Journal of Research of the National Institute of Standards and Technology*, *109*(1), 133.

Golland, A., & Blake, R. (2004). *Housing development: Theory, process and practice*. Psychology Press.

Hagberg, J. M., Rankinen, T., Loos, R. J., Pérusse, L., Roth, S. M., Wolfarth, B., & Bouchard, C. (2011). Advances in Exercise, Fitness, and Performance Genomics in 2010 (Medicine and Science in Sports and Exercise). *Medicine and science in sports and exercise*, *43*(5), 743.

Hall, J. W. (1969). Studies on fossil Azolla: primitive types of megaspores and massulae from the Cretaceous. *American Journal of Botany*, 1173-1180.

Hall, E. T. (1990). *The Hidden Dimension*. Garden City, N.Y: Doubleday. ISBN: 0385084765

Han, J., Kamber, M., & Pei, J. (2011). *Data mining: concepts and techniques*. Elsevier.

Hashim, A. H, Abdul Rahim, Z. (2008). *The Influence of Privacy Regulation on Urban Malay Families Living in Terrace Housing*. International Journal of Architectural Research (Arch Net- IJAR) 2, no. 2 PP:94-102.

Hertzberger, H. (2005). *Lessons for students in architecture* (Vol. 1). 010 Publishers.

Hoşkara, S. O., Çavuşoğlu, B. T., & Öngül, Z. (2009). Legal frameworks and housing environments in north Cyprus. *METU Journal of Architecture*, *26*(1), 81-100.

Hounshell, D. (1985). *From the American system to mass production, 1800-1932: The development of manufacturing technology in the United States* (No. 4). JHU Press.

Jacobson, M. Z. (2009). Review of solutions to global warming, air pollution, and energy security. *Energy & Environmental Science*, *2*(2), 148-173.

Jones, E. (2003). *The European miracle: environments, economies and geopolitics in the history of Europe and Asia*. Cambridge University Press.

Kalamees, T., & Kurnitski, J. (2007). Moisture convection performance on the joint of external wall and attic floor-laboratory tests and two-dimensional simulation model validation. In *Clima*.

Kazaz, A., & Birgonul, M. T. (2005). The evidence of poor quality in high rise and medium rise housing units: a case study of mass housing projects in Turkey. *Building and environment*, *40*(11), 1548-1556.

Kwofie, S. (2014). The Effect of Aid: A Case Study in Democratic Ownership and Accountability in Natural Resources and Environmental Governance in Ghana. *International Journal of Business and Social Research*, *4*(6), 85-97.

Kwofie, T. E., Fugar, F., Adinyira, E., & Ahadzie, D. K. (2014). Identification and Classification of the Unique Features of Mass Housing Projects. *Journal of Construction Engineering*, *2014*.

Lawrence, R. J. (1987). What makes a house a home. *Environment and Behavior,*19(25), PP:154- 168

Leung, C. (2004). Macroeconomics and housing: a review of the literature.*Journal of Housing Economics*, *13*(4), 249-267.

Marcus, C. C., & Francis, C. (Eds.). (1997). *People places: Design guidlines for urban open space*. John Wiley & Sons.

Marshall, J. (1972). *Privacy and Environment*. Human Ecology 1, no. 2,PP: 93-110.

Mortada, H. (2005). *Traditional Islamic Principles of Built Environment*. New York: Routledge Curzon, : 95-107. ISBN: 0415515068

Mustafa, F. A., Hassan, A. S., & Baper, S. Y. (2010). Using space syntax analysis in detecting privacy: a comparative study of traditional and modern house layouts in Erbil city, Iraq. *Asian Social Science*, *6*(8), 157.

Nasar, J. L. (1989). Symbolic meanings of house styles. Environment and Behavior,21(22), PP: 235-257.

Norberg, S. C. (1971). Existence, Space and Architecture. New York: Prager, 1971.

Okhovat, H. (2014). Comparative analysis in privacy aspects between traditional and contemporary Iranian houses. Journal of Tehran Architecture; 32 (142) PP :97-112 http://www.jhre.ir(access on November 2014) Iran

Othman, Z., Buyz, L., & Aird, R. (2001). Home and the Embodiment of Privacy. Queensland University of Technology

Paley, P. J., Veljovich, D. S., Shah, C. A., Everett, E. N., Bondurant, A. E., Drescher, C. W., & Peters, W. A. (2011). Surgical outcomes in gynecologic oncology in the era of robotics: analysis of first 1000 cases. *American journal of obstetrics and gynecology*, *204*(6), 551-e1.

Pawley, M. (1971). *Architecture versus housing* (Vol. 287). Praeger.

Petronio, S., Jones, S., & Morr, M. C. (2003). Family privacy dilemmas: Managing communication boundaries within family groups. *Group communication in context: Studies of bona fide groups*, 23-55.

Pfeifer, G., & Brauneck, P. (2010). Floor plan types. *Freestanding Houses*, 18-117.

Proshansky, H. M., Leanne, G. R., & Ittelson, W. H. (1976). *Environmental Psychology:* People and Their Physical Settings. New York, N.Y: Holt, Rinehart and Winston, ISBN**:** 0030896797

Proshansky, H. M., Fabian, A. K., & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self. *Journal of environmental psychology*,*3*(1), 57-83.

Rachels, J. (1975). Why privacy is important. *Philosophy & Public Affairs*, 323-333.

Rasekhi, N. M. (2004). The hidden language of the spaces. Beheshti University doctoral dissertation.

Rapaport, C. (1997). Housing demand and community choice: an empirical analysis. *Journal of Urban Economics*, *42*(2), 243-260.

Reis, A. T. D. L. (1992). *Mass housing design: user participation and satisfaction*. Doctoral dissertation, Oxford Polytechnic.

Rowlands, R., Musterd, S., & Kempen, R. V. (2009). *Mass housing in Europe: multiple faces of development, change and response*. Pallgrave Macmillan.

Scheerlinck, K. (2012). Depth Configurations and Privacy. Proximity, Permeability and Territorial Boundaries in Urban Projects.

Saarikangas, K. (2006). Displays of the Everyday. Relations between gender and the visibility of domestic work in the modern Finnish kitchen from the 1930s to the 1950s. *Gender, Place & Culture*, *13*(2), 161-172.

Stahl, S. M. (2013). *Stahl's essential psychopharmacology: neuroscientific basis and practical applications*. Cambridge university press.

Serageldin, I. (1989). Space for Freedom.

Speare, A. (1974). Residential satisfaction as an intervening variable in residential mobility. *Demography*, *11*(2), 173-188.

Sýkora, L. (1999). Changes in the internal spatial structure of post-communist Prague. *GeoJournal*, *49*(1), 79-89.

Tonkiss, F. (2005). *Space, the city and social theory: Social relations and urban forms*. Polity.

White, M. J. (1986). Property taxes and urban housing abandonment. *Journal of* Urban Economics, 20(3), 312-330.

William, T. (2005) All Change, Monument, issue 68 (August/Septmber 2005): 24–25.

Westin, A. F. (1970). Privacy and freedom.

Witte, N. A. (2003). *Privacy: Architecture in support of privacy regulation*. Doctoral dissertation, University of Cincinnati.

Zumthor, P. (2005). The Magic of the real. *World Architecture*, *1*, 003.

APPENDICIS

Appendix A: Questionnaires

Questionnaires of interview with residents of Apartment blocks of North Cyprus

1.Cultural background	2.Age
3.Marital Status	4.Gender

5-How many hours are you spending at home?
Less than 8 hours ---8 -10 hors ---11-12 hours ---13-15hours --- 16-+ hours

6-In which area most of the interactions happen? (Interaction with family, friends, colleagues, watching TV, and etc.)
Bedroom/Living room/Dining room/Kitchen/Balcony/yard

7-Size of the room you most prefer to spend time at
Small room/Large room/Middle Room/Largest room in house/Smallest room in house

8-Please indicate whether you prefer doors between spaces or not?
Entrances have doors/Entrances do not have doors/Standard size/Oversized doorways
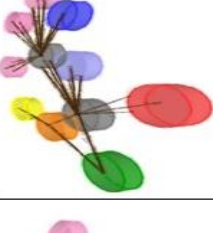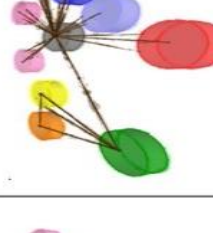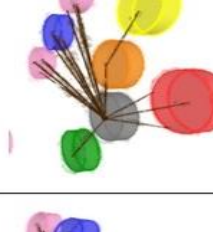
**Please answer the following questions based on these parameters.
1 Strongly disagree/2 Disagree/3 Neutral/4 Agree/5 Strongly agree
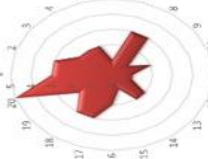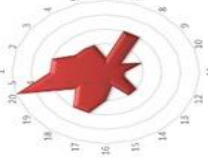
	1	2	3	4	5
9-Do you feel comfortable at your home space?					
10-Do you believe that your home provides for every individual a place for their Privacy?					

Table 6.1 Summery of analyses of privacy in plan organization of Famagusta apartment units

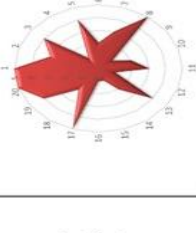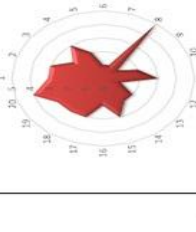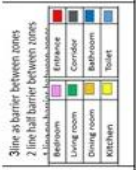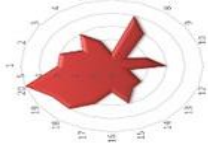| Plan organization					
3line as barrier between zones 2 line half barrier between zones Bedrooms / Entrance Living room / Corridor Dining room / Bathroom Kitchen / Toilet					
Level of satisfaction					
Analyses of privacy of members through plan organization	This plan organization show more level of privacy through hallways and circulation of public zone and another hand level of satisfaction is not high density in level of one or 2 or even 4 and 5 and mostly is in variety of piracy issues which show sharp point of graph in layer of 5 and 4 . so this mean this kind of plan considered most level of residents satisfaction in privacy	This plan organization show is not variety through variety function and level of satisfaction is not high and is in center of graph wish means mostly are not satisfied with privacy or they believe is not considered in plan organization of their home.	This plan organization show more level of privacy of public zone and private zone by 2 separate hallway but is not variety through variety function in public zone and circulation isn't proper so level of satisfaction is not high and is in center of graph wish means mostly are not satisfied with privacy or they believe is not considered in plan organization of their home.	This plan organization show more level of privacy through circulation of public zone and level of satisfaction is not high density in level of one or 2 or even 4 and 5 and mostly is in variety of piracy issues which show sharp point of graph in layer of 5 and 4 . so this mean this kind of plan considered most level of residents satisfaction in privacy.	This plan organization show is separation between public zone and is not direct circulation within through hallway so variety function and level of satisfaction is not high and most density of satisfaction about privacy is until level 3 is in center of graph wish means mostly are not satisfied with privacy or they believe is not considered in plan organization of their home.

177

Table 6.3Summery of analyses of privacy in plan organization of Nicosia apartment units

Plan organization					
3 line as barrier between zones 2 line half barrier between zones 1 line... Bedroom, Entrance, Living room, Corridor, Dining room, Bathroom, Kitchen, Toilet					
Level of satisfaction					
Analyses of privacy of members through plan organization	This plan organization show is not variety through variety function and level of satisfaction is not high and is in center of graph wish means mostly are not satisfied with privacy or they believe is not considered in plan organization of their home.	This plan organization show more level of privacy through hallways but also isnt circulation of public zone and another hand level of satisfaction is not high density in level of one or 2 or even 4 and 5 and mostly is in variety of piracy issues which show sharp point of graph in layer of 5 and 4 .so this mean this kind of plan considered most level of residents satisfaction in privacy	This plan organization show is not variety through variety function and level of satisfaction is not high and is in center of graph wish means mostly are not satisfied with privacy or they believe is not considered in plan organization of their home.	This plan organization show is separation between public zone and is not direct circulation within through hallway so variety function and level of satisfaction is not high and most density of satisfaction about privacy is until level 3 is in center of graph wish means mostly are not satisfied with privacy or they believe is not considered in plan organization of their home.	This plan organization show more level of privacy through circulation of public zone and level of satisfaction is not high density in level of one or 2 or even 4 and 5 and mostly is in variety of piracy issues which show sharp point of graph in layer of 3 and 4 .

Appendix D: Analysis of Kyrenia Samples

Table 6.3 Summery of analyses of privacy in plan organization of Kyrenia apartment units

Plan organization					
Level of satisfaction					
Analyses of privacy of members through plan organization	This plan organization show is not variety in plan organization through variety function and level of satisfaction is not high and is in center of graph wish means mostly are not satisfied with privacy or they believe is not considered in plan organization of their home.	This plan organization show is separation between public zone and is not direct circulation within through hallway so variety function and level of satisfaction is not high and most density of satisfaction about privacy is until level 3 is in center of graph wish means mostly are not satisfied with privacy or they believe is not considered in plan organization of their home.	This plan organization show more level of privacy through circulation of public zone and private zone by using 2 floor but level of satisfaction is not high density in level of one or 2 or even 4 and 5 and mostly is in variety of piracy issues which show sharp point of graph in layer of 3 and 4 .	This plan organization show is not variety through variety function and level of satisfaction is not high and is in center of graph wish means mostly are not satisfied with privacy or they believe is not considered in plan organization of their home.	This plan organization show is separation between public zone and is not direct circulation within through hallway so variety function and level of satisfaction is not high and most density of satisfaction about privacy is until level3 is in center of graph wish means mostly are not satisfied with privacy or they believe is not considered in plan organization of their home.

Legend (Plan organization):
- 3line as barrier between zones
- 2 line half barrier between zones
- Bedroom
- Living room
- Dining room
- Kitchen
- Entrance
- Corridor
- Bathroom
- Toilet