Users' Evaluation of Rental Apartment Units: the Case of Laguna Residential Blocks in Mağusa

Fatemeh Sadat Hashemi Nasab

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Approval of the Institute of Graduate Studies and Research

_____
Prof. Dr. Serhan Çiftçioğlu
Acting Director

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

_____
Prof. Dr. Özgür Dinçyürek
Chair, Department of 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 Architecture.

_____
Assoc. Prof. Dr. Türkan Ulusu Uraz
Supervisor

Examining Committee
_____

1. Assoc. Prof. Dr. Türkan Ulusu Uraz   _____

2. Asst. Prof. Dr. Nazife Özay   _____

3. Asst. Prof. Dr. Pınar Uluçay   _____

ABSTRACT

Issues related to the planning of houses are central in architectural theory, discourse and professional practice. However, house planning and dwelling processes are complex due to the complexity of the concept of built environments and the relation of human with it. In this regard, this study aims to investigate the relationship between human and built environment, as well as identifying factors which interfere in human's experience of the space which may or may not lead to environmental fit. Particular emphasis is given to the rental apartment as they raise the problem of anonymous user in housing design.

This study then contribute to improve quality of design knowledge through a post-occupancy evaluation of selected housing units in the Mağusa with the hope that housing condition in the future developments of this city will insure physical and psychological well-being of its users.

The first chapter has been dedicated to clarify the problem and the necessity of such study. Then it deals with the scope of the study and the main aim and objective.

In the chapter two, multi-family rental housing units are defined, and then the qualitative and quantitative issues in housing design are discussed with emphasis on the importance of qualitative issues in user's well-being and satisfaction. Chapter two also has provided a historical back ground throughout 19th and 20th century, by describing those theories and criticisms in reform and development of these houses, and identifies those social and spatial implications of this trend.

Chapter three has devoted to the theoretical background in human perception and evaluation of his housing environment. It discusses the factors which have to be taken into account in design process as concerning an interactive relation between people and their built environment. Relevantly, there has proposed a table which pictures a two-sided relation in formation of space and the role of both designer and user in design of residential environment.

In the forth chapter the user's evaluation of their housing environment has been investigated in terms of their dwelling preferences, space usage and satisfaction, adaptation, organization of communications and intimacy of space. It aims to evaluate the success of project by underline those features of dwelling which mostly linked to user's satisfaction. The results, however, implies that despite some contradictory implications, in general the scheme of apartments has been successful partially to fit the user's expectations.

The main finding and results of the thesis also has been highlighted in conclusion in chapter five.

Keywords: User Experience, Rental Housing, Spatial Appropriation, Housing Design

ÖZ

Konut planlamasıyla ilgili konular mimarlık kuramı, söylemi ve pratiğinin merkezinde yer alır. Ne var ki, konut planlaması, tasarımı ve kullanımı süreçleri insan ve yapılı çevre ilişkisinin kavramsal çerçevesindeki karmaşıklığa da bağlı olarak çok boyutludur. Buradan hareketle bu çalışma insan ve yapılı çevre arasındaki ilişkileri araştırmayı ve aynı zamanda insanın çevreye uyum ya da uyumsuzluk sürecindeki mekanla ilgili deneyimlerini konut tasarımına bir girdi oluşturmak amacıyla anlamayı amaçlamaktadır. Çalışmada özellikle anonim kullanıcı problematiğinin belirgin olduğu kira konutları üzerine yoğunlaşılmıştır. Dolayısıyla bu çalışma, genelde tasarım bilgisinin kalitesine; özelde kullanıcılarının fiziksel ve psikolojik refahları açısından gelecekteki yerel konut pratiğine katkıda bulunmak için seçilen sınırlı sayıda iki odalı kiralık konut tiplerinin kullanım sonrası değerlendirilmesindeki bulguları aktarmaktadır.

İlk bölüm, çalışma alanını ve araştırma problemini bu doğrultuda tanımlamakta, çalışmanın amaç ve hedeflerine açıklık getirmektedir. İkinci bölümde, çeşitli aile büyüklüklerine hizmet eden kira konutlarının ortaya çıkışı, nicelik ve nitelik boyutlarına değinilerek, bu konut türü uygulamalarının tarihsel geri planı 19 ve 20 yüzyıl içindeki gelişimlerinin; özellikle kıta Avrupasında ortaya çıkan global sorunlar, parallel reformlar, kuramsal ve eleştirel bakış açılarıyla nasıl etkilendiğine bakılarak bunların sosyal ve mekansal açıdan sonuçlarına değinilmiştir.

Üçüncü bölüm, kullanıcının konut çevresini algılaması ve bu yolla da değerlendirmesinin geri planına kuramsal bir hazırlık niteliğindedir. İnsan ve çevresi

arasındaki karşılıklı etkileşimi göz önüne alan faktörlerin, tasarımdaki yerini tartışarak bu açıdan yaşam çevresini tasarlayan mimar ile onu kullanan kullanıcı arasında mekan ve yer ilişkisi üzerinden çevresel uyum ve sahiplenmeyi tartışır.

Dördüncü bölümde, Mağusa Laguna Bölgesi'ndeki Laguna Apartmanları'nın bünyesindeki iki yatak odalı konut üniteleri arasından farklı katlarda ve konumlarda seçilen 15 dairenin kullanıcılarıyla yapılan görüşmelerde kullanıcının kendi konutu ve çevresini değerlendirmesi, konut tercihleri, mekansal kullanım ve tatmini, mekan uygunluğu, iletişim organizasyonu ve mahremiyetin sağlanması açılarından araştırılır. Sonuç olarak araştırma alanı olarak seçilen konut ünitesi tiplerinin hangi özellikleriyle kullanıcının beklentilerini karşıladığı ortaya konulmaya çalışılır. Sonuçta, bazı tersi görüş ve değerlendirmelere rağmen seçilen iki odalı apartman unitelerinin genellikle kullanıcı beklentilerini karşıladığısaptanmıştır. Tezin genel sonuçları ise beşinci bölümde kapsamlı olarak özetlenmiştir.

Anahtar kelimeler: Kullanıcı Deneyimi, Kira Konutları, Mekansal Uyum, Konut Tasarımı

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INTRODUCTION

1.1 Research area and statement of the problem

Despite the flux of contemporary trend in architecture, issues related to the planning of houses have remained central to architectural theory, discourse and professional practice. Therefore, house planning which essentially concerns the provision and satisfaction of human needs, has remained a subject that has been addressed from diverse perspectives by architects, public administrators, national as well as international agencies.

It is quite notable that housing is basically one of the needs of all members of a society and it is a part of the built environment which creates that direct connection and link between humans and the built environment. Rapoport (2005) emphasizes the importance of this subject as dwelling is the primary need for most people and it comprises of the bulk of the built environment. He also affirms that dealing with the built environment and dwelling includes not just individual isolated buildings but it also goes deeper to concern itself with their inhabitants, possession and furnishing. However this claim reveals the importance of improving knowledge on the relation between human and the built environment in design approaches.

Like most social issues house planning and dwelling processes are complex and this is in part owing to the complexity of the concept of 'built environments'. Therefore,

to understand the impact of this concept and the reciprocal relations between its component elements, it is instructive to consider the relation between non-physical or trans-physical factors of the design with the planning of built environment. In this attempt, the relation between people and their environments has been set out which is a problem of environmental fit; (what expects by anonymous user into expressed uses and values by designer). This is beyond technology related to architectural practices and research and the subject of much post-occupancy evaluations (Dusun &Saglamer, 2009; Rapoport, 2005; Sungr, 2003; Lawrence, 1987).

Reviewing the relevant literatures reveals that in order to describe such a relation it is bound to refer to a basic question of 'knowledge about human beings'. The bio-social, psychological and cultural characteristics of human being as members of species, individuals, and members of various groups influence the built environment. What is notable in this argument is that human characteristics tend to change with time. Lawrence (1987) argues that crucial aspects of housing satisfaction revolve around the dynamics of attitude management over the time within the mind and lives of individual persons and families. Besides, people are placed in environment and the attributes and qualities of built environment, which is directly related to the design, affects people through person's perception and beliefs about those environmental attributes and experienced space. In this interaction, human experiences his relations with environment, i.e. people and house, in his own spatiality and the spatiality of environment, which reveal itself as objects and places. Then the context in which spatiality is experienced and should therefore be analysed is the experience of environment in the present given time and space (Peled, 1979).

These, however, involves both rejecting or leaving undesirable, dissatisfaction, and seeking out desirable, suitable environment and satisfaction, as there exist also a dialectical relationship between what people want and what they get, between the values of designer and decision-maker and those of user (Rapoport, 2005; Lawrence, 1987; Altas & Ozsoy, 1997; Peled, 1979). In this sense, there is an obvious gap between the desires of prospective occupants of a house which involves their perception and experiences of dwellings, their insatiable housing needs and the eventual planning of their houses. On the other hand, another growing issue within the housing scope in terms of quality is the constantly increasing demands placed by users for improved and better housing and services. In recent times, quality has become a major consideration which housing owners or space users pay attention to. This conscious advancement is shifting the objective of housing providers from a quantitative orientation to a qualitative one.

The first decades of post-war era recorded the peak of emergence of housing problems as they were faced with growing expansion of large industry and rapid urbanization, and hence a new situation came to light, it was the crucial need for a radical reform and modernization of housing. Besides, the extent of crisis regarding the housing shortage and the persistent increase in demand for shelter as the number of people seeking housing has been greater than the number of houses available, and in this way, the number of apartment dwellings grew at an advanced rate.

Since the greater majority demanded small-size and low-cost apartments amongst different types of apartments, rental housing projects were proposed to provide affordable housing for low and moderate income families. This was the most logical answer to the question of housing crisis at the time. In this attempt, the solution were

seeking in the methods of modern architecture and practically achieved primarily by rationalizing and industrializing construction through standardization and serial mass production, while the quality housing in term of accounting for the actual needs of residents reduced and human values lost. Meanwhile the community was affected since regulation of relationship among the apartments to public spaces provided the residents with unhealthy isolation and antagonism toward their environment, leading to some social problems as vandalism. It is notable that, all the methods of modern architecture were intended to be easy and fast to construct as well as cost-saving. Besides, housing norms included a uniform standard for the mass production of houses. In spite of the failure to use modern mass production methods in apartment construction, speed of construction and the reduction of costs by rationalizing space exert a beneficial influence on architectural development in general.

Even though statistics show that the number of housing units in most cities is considerably less than the number of households, they do not prove that there is an absolute shortage of houses, especially if one takes into account that a wealthy minority presently occupy the bulk of available dwelling space (Teige, 2002). The proof of this contention can be found in the fact that a certain percentage of the population remains without adequate housing, simply because their income is insufficient to cover the required rent. The miserable housing condition got even worse due to the influx of people into the cities and there is a growing increase in rent, a calamity that is not confined only to the working class, but one that is also starting to affect the small middle class as well.

What is more, considering the problem of housing toward human relations to environment, the situation of rental apartments gets even more crucial and complex

as one single type of unit will be experienced by different individuals and families with multi-dimensional profiles. Ideally, housing units have to accommodate the dwellers characteristics and their expectation and needs to provide their satisfaction. Regarding the family structure, we are nowadays faced with a situation in which the family will cease to exist as a basic economic unit and the division of labour and the resulting inequalities between man and woman, parent and child. However it should be noted that in today's society there already exists a class-the proletariat-in which the family as an economic unit has been broken up and transformed. Demographic feature of households are still transforming gradually, from complex families into small households. On one hand, by decreasing the household size and on the other hand by a growing increase in population, cities are inhabiting the new and varied small household types; i.e., couples, cohabiting couples or friends, single parents and one-person households which mainly involves a new, alternative and transformed life style, eventually lacking the suitable rental dwelling (Ulusu Uraz & Unsal Gulmez, 2006).

However, residents' dissatisfaction of dwelling is not only constrained by the insufficiency of productions derived from the lack of the quality of design knowledge, but also productions are limited by considering the paying power of population, which are insufficient in such needs and highly required to be investigated from architectural point of view.

Apart from described crisis of housing which overshadows the situation of housing in most countries all over the world,Mağusa, which is located in North Cyprus own its specific housing situation in raising such crisis. Previously the Maraş region in this city had been the basis of a broad construction toward tourism attraction.

Meanwhile as the other regions in Mağusa were neglected, Maraş district was more urbanized. Following the consequences of war in 1974, Mağusa lost its dominant position and Maraş district was left without any population and thus any urban activity. With the establishment of the High Institute of Technology in 1979, and later the Eastern Mediterranean University, the overall economic and social structure of Mağusa has undergone a rapid growth in another part of city, campus region. Following these new developments, the city in general has faced with deterioration of architectural and housing environment in developed area. This is whilst the other regions of city, e.g. Palm Beach, has attained even less attention in term of architectural developments. These events all are what cause the unique urban settlement of Gazimağusa, which could be an interesting subject for this study.

1.2 Research aims and objectives

Referring to the cities failure to offer rental apartments as an opportunity for decent human living and to produce an environment for living whose amenity, economically, physically and psychologically, is of enviable quality, contemporary architecture has been confronted with the urgent task of facing today's social reality and its concomitant acute housing crisis.

In this regard, this study contributes to improve quality of design practice of professionals and knowledge of decision-makers by discovering and understanding human relations to the environment and their responses to dwelling space through a modest scale but quite challenging post-occupancy evaluation regarding to the selected housing units of the multi-family rental apartments, in the Mağusa city.

Such a focus on study of housing provides cues for a comprehensive approach which is interrelated in the field of architects, ethnographers, historians and housing administrators, and can employ negative, as well as positive, environmental quality, what is disliked and rejected, as well as what is liked and chosen, and reveal how they can be operative in the design of houses. However it is essential to account them when formulating design and management policies for the development of new rental houses and the renovation of old residential quarters.

This study then hopes to present some supplementary information in order to achieve more qualitative issues in planning of houses and improving housing condition in the future developments of Mağusa city to ensure at least in part, physical and psychological well-being of its users at home and ultimately quality of life which mostly concerns prevailing lifestyle of the low and middle class of population in this city.

In order to achieve this aim in this study, a background study has been presented about the subject which provides a basis in design of rental houses in 19th century, their reforms and emerging housing problems in 20th century. Furthermore, dealing with a proposed table which implies the process of environmental fit of users' perception into what design provides, the relation between human and built environment, the content of dwelling has been discussed. Finally, factors of spatial satisfaction of the selected case study, regarding tenants' characteristics and expectations, their evaluation of their experienced dwelling space, and adaptations and alterations were investigated.

1.3 Research methodology and definition of case study

Literature review has been carried out related to the backgrounds and propounded theories in this subject from existing data documented in books, journals, articles, and website.

Following the discussion of problems in planning of houses, apparently Cyprus and especially Mağusa city has not been excluded from such crisis; wide variety of household types with different social and economic profiles who needed to dwell in the quite suitable dwelling type of ownership, rental house. Then, as a case study, the research concentrates on Laguna Apartments with their specific feature which is rental and the administration of the Waqf has been responsible to offer these apartments to the people for reasonable rental fee. What is notable toward this case is that the apartments were designed as summer houses at the beginning evidently for quite high income families with various household types and relevantly used to provide quite high housing standards however later they turned out as rental properties after 1974. Since then it is used as rental apartments presumably for low income families. On the one hand due to their background profile the design qualities of the Laguna apartments could be accepted as a suitable case regarding to the aims of the research but on the other hand they are still far beyond the qualities of the current ordinary rental apartments in the city in general. However it is apparent that today better quality but expensive rental houses are started to be constructed. Therefore it should be underlined that 40 years old Laguna apartments are still quite appropriate and up-to-date to be selected as a case of the research. Doubtlessly they deserve more research interest.

Relevantly, a post-occupancy research has been dealt with these apartments to describe perceived environmental quality of users and in this attempt among residents of these apartments, fifteen households have been selected to be interviewed and their statements and reactions towards the flats has not only been recorded as 'I like it' or 'I do not like it' responses. But their full answers including their reasons and further explanation carefully documented in the text to attract the reader's interests and help their individual interpretations. However, in order to limit the scope of research and applying more qualitative approach, it has been attempted to present the result of analysis on two-bedroom type apartment units having different plan organization and located in different floors. Apparently, two-bedrooms type of flat are of more preferred type generally by tenants, and more than half of the sum of existing types of flats in Laguna Apartments. In this case qualitative data collection methods are pertinent in order to provide data which implies the rate of residents' satisfaction and housing quality.

Information has been collected by a set of questions and in-depth interviews through interactive communications with the users. Then the analysis of data completed by observation of the users' particular ways of using, changing, adapting of home space.

Chapter 2

MULTI-FAMILY RENTAL HOUSING UNITS: DEFINITIONS, THEORIES, DEVELOPMENTS AND CRITICISMS

The reforms and developments in design of houses are discussed in this chapter by providing a historical perspective on emerged concepts regarding them from nineteenth century. Particular emphasis is given to the development and design of rental apartment houses of middle-class households. According to Teige (2002), the issues that concern the reformation of housing as it relates to its social context can be best understood inside history. In these historical developments which embodies significant implications on the design of houses, cognition of issues related to the failures and successes in rental apartments would be basic and resourceful for future prospects in architectural designs and developments. However, before anything else, a set of definitions and classifications related to the rental apartments has been presented.

2.1 Multi-family rental housing

2.1.1 Definition and classification

Multi-family dwelling is generally defined as a class of houses where multiple separate housing units for residential are contained within one building or one complex comprising of several houses, i.e. non-commercial, inhabitants. A common example is an apartment building. Apartment buildings are building with multiple flats, which are self-contained housing units. They can contain multiple flats on each floor and they often consist of multiple floors (URL 1). Apartment buildings even in its

multiplicity can vary in size, height, kind and number of unit and in its general layout. Concerning the ownership statue of these apartment building vary, they could be owned by a single party who rents the apartments to tenants or on the other hand each of the flats can be owned by different individuals (URL 2).

Today, most city people leave in apartments as it is the most available option. Indeed much of the character that connotes a city derives from this distinctly and historically urban building type. Most developers have resolved to creating apartment buildings as land in the city is expensive and in high demand. As such, planning the apartment buildings has been tended to provide more amenities than their predecessors (Thompson, 1958).

In the attempt to cut down on housing cost, multifamily apartments have been developed for rent, this is specially targeted to low and moderate income earners families to salvage the housing challenge around the world (Cooper, 2003). Besides, the design of such apartments requires greater skill from the architect as generalized requirements for different users and there varying individuality must be satisfied and this aim must provide often on a limited budget and within strict limitations (Nylander, 1999). However, the overview of different types of apartment buildings brings about the following comments, mostly relevant to the study.

High rise apartments: Restriction on height of apartment buildings in certain residential neighbourhoods regarding the number of units, required parking, and other aspects set up by zoning laws. It is notable that the smallest self-contained flats are referred to as studio, efficiency or bachelor flats. These usually consist of a large single main room which acts as the living, dining room and bedroom combined and

usually also includes kitchen facilities, with a separate smaller bathroom. Moving up from the bachelors, efficiencies are one, two, three-bedroom apartments, and etc. However apartments with more than three bedrooms are rare (URL2).

In well developed urban areas, where land is both scare and expensive, tall apartment or high rise buildings, make economic sense and mostly appears in these types. This is height and bulk, shape and form, details and materials of apartment building which determines its role in the city, as it is in the case study of this research.

Low rise apartments: A garden apartment complex consists of low-rise apartment this type of buildings is built with landscaped grounds surrounding them. In most instances, the houses are often arranged around courtyards that are open at one end. Such a garden apartment shares some characteristics of a townhouse and besides it has an urban character of its own, with its own kind and degree of amenity, from interior court with its landscaping, fountains and pools, to its ingenious handling interior spaces. Unlike a townhouse, each apartment occupies only one level. Such garden apartment buildings are almost never more than three stories high, since they typically don't have elevators/lifts and they are often landscaped (URL2; Thompson, 1958).

Apartments in resort areas: An apartment house located in a resort area, like a holiday home on a sea island, is an exciting means of creating a second home. Perhaps more than other kinds of places, the resort area needs protection if it continues as an attraction to people. This sort of housing is very beneficial as the users are able to enjoy the natural beauty and recreational facilities of such environment without necessarily using a large amount of space when there is multi-

use of it; besides the excessive cost of land can be spread, in effect among many where it might not be allow amongst a few.

The ownership status, perhaps the majority, is condominium and the occupancy would be multi-family living. The design layout for all these buildings is quite important, nevertheless, the climatic requirements as well as the terrain are even of more importance in deciding the design of and of meeting the basic requirements to achieve the desired spatial quality (Thompson, 1958).

2.1.2 Standards: Qualitative and Quantitative issues in housing design

According to Clapham (2005), housing authorities' policy is a significant determinant of dwelling outcomes to the occupants comfort and satisfaction. Political ideas are given some importance as a mediating factor between dwelling challenges and government efforts to resolve them. Nevertheless, there are two basic demands placed on housing, two different ways of dealing with residential issues, quality and quantity. Teige (2002) and Nylander (1999) see the quality and quantity as standing on polar opposites, and yet there is an obvious relationship and bond that exist. These contradictions change places, as there is no quality without quantity. They also affirms that housing authorities and architects must deal with a series of technical and functional challenges, but the design of houses must also help its residents to appreciate and interpret the qualities of the house.

However, the objectives brought forward by political housing authorities in the period after the World War Two sacrificed quality in the interest of building as much quantity as possible. Good architecture was increasingly overcome by a growing interest in production techniques and economic issues. In the face of strong political and economic demands, architects failed to demonstrate the value of successful

design. In effect, dimensions of a dwelling spaces has been always undergone fluctuate changes throughout the process of development in architecture till now. This feature as well as other physical attributes of dwelling has been concerned mostly by architects by proposing the minimum dwelling and demand for new ideals and standards in modern societies. Considering the relationship between sizes of units and affordability, engages architects to provide a proper and affordable dwelling for low-income family, according to functional/activity based requirements, through cost/benefit analysis and standardization targets. Such achievement is significant in design and development of rental apartment houses but space standards could theoretically fall within the ambit of 'securing the health, safety, welfare and convenience of persons in or about buildings' as set out in the primary legislation. The effects of such developments, in which quantitative values were allowed to preclude qualitative, can be seen in some rental housing projects today. Many residents feel ill at ease in their apartments, find it difficult to make homes of them, despite their satisfactory condition with respect to measurable, quantitative attributes.

During the last decades, that policy makers and professionals do not talk about dwellings, nor do they concern themselves any more with housing; they are concerned with homes. They are concerned with increasing home values and the appearance of physical body of each dwelling in term of standards, as accommodating a typical family's needs and protect their quality of life. In other words, the quantitative changes in housing design are going to reach a point where quantity becomes transformed into quality (HATC, 2006; Lawrence, 1987).

However, all housing designs have one aim to achieve and that is human well-being and satisfaction, and this satisfaction on dwelling space and environmental quality

are two mutually related concepts in evaluating housing projects. As a modern definition of environmental quality, it has been state that the many characteristics or attributes of environments that respond to wants and are preferred or rejected together constitute environmental quality (Rapoport, 2005; Sungur & Çagdas, 2000; Altas & Ozsoy 1997).

There are two interpretation of environmental quality. One is related to what one could call physical-chemical- ecological qualities of the environment and the second meaning is the more variable qualities of environments, which when positive, provide satisfaction to people and which they then choose, rejecting environments with negative attributes. These are the psychological, bio-social, and cultural qualities of environments. As mentioned earlier, designers are concerned with both, and attempts are being made to link them by including components of both in the same environmental quality profiles. In making better environments the two meanings of the environmental quality need to be combined, and designer need to manipulate both.

The bundle of attributes that makes up environmental quality is the link between choice and specifics of particulate environments of all kinds and at all scales. Components of all aspects of environmental quality can be represented, studied and ranked- locational, physical (climate, topography, view, vegetation, water, noise, pollution, etc.) social (homogeneity, status, family structure, etc.) perceptual (e.g. ambience), concerning meaning (latent aspects, symbolism), and so on (Rapoport, 2005; Sungur & Çagdas, 2000; Turgut & Unugur, 1997).

2.2 Historical background

The history of architectural developments throughout the 19th and 20th century embodies a set of emerging theories of architecture with respect to the definition of a modern and sanitary house that responded to the quest for health and housing reforms, rationalized domestic activities, and answered the requirements of modern movement in architecture. However, these reforms and developments has resulted successes and failures toward design of urban space and public housing which is closely intervened with the issues in reform and design of rental apartment house in particular. Although many of developments did provide more spaces and facilities, but the general trend during these two past centuries does not respond to the pluralism of social variables associated with the design and use of built environment.

2.2.1 Development of urban spaces and apartment houses in 19th century

The development in urban spaces and construction of houses throughout the nineteenth century had significant social and political implications. This particular century has been witness of many basic theories in evolution of planning of houses and emergence of rental apartment houses in response to the industrial revolutions and rapidly growing urban population. The architectural reforms which are directly concerned with the organising the constructed space and changes in dwelling content are fully discussed in the next part of this chapter.

2.2.1.1 Philosophical bases in housing design: Rationalism, Empiricism& Pragmatism

Historically, it is obvious that the modes of designing and patterns clearly enhanced different ways of thinking about the city and its design; urban planning that focuses on pure geometric system, considering the human sense and how he experiences the space, and finding out by trial and error were known and distinguished from each

other by the ancient Greeks. These three basic ways of thinking were developed, over the centuries, into coherent and rival philosophies. Empiricism, which puts its trust in the human senses and emphasis that everything we know about the world around us has been gained by experience as received by our senses. Since human sense can be confused, the evidence of sense cannot be trusted. It must search for universal truths which could be reached by logical thinking, hence, Rationalism proffers to work in logical steps from first principles and Pragmatism to understand objects by thinking of their practical consequences (Broadbent, 1990).

During the period that philosophy of Rationalism developed, it is hardly surprising before planners should try to turn it to design principles. Hence, there has been an attempt to establish actual design principles. In this regard, Broadbent names the architectural theorist, Laugier, who diligently gave time to develop his ideas with significant details; but he still intended to move on towards something new, something from the historic past which is not common as well and can easily be achieved with the help of all the regular geometric figures to vary the plans almost infinitely. His concept of designing new cities, after a considerable consideration of individual buildings to a significant degree, it is actually the first prescription for city planning. At the heart of his approach are his descriptions which most current theories of urban design still adhere. However, Holland and Paris become very interesting examples of these trends.

Regardless of the advantage or disadvantages of Empiricism as a philosophy, its influence on the practice of design in England in the 18th century was profound. Its effect on design was made into theory first by Addison when he stated that there are two types of pleasure which is attained through the sense of sight. These two

includes those posed by object themselves and those we still enjoy when the objects which gave us pleasure are no longer there giving us their enjoyment directly; those of the imagination. This pleasure is experienced through creating the feeling of greatness and beauty.

This philosophy thrived in England in the 18th century and was indeed a rich seed bed for this philosophy. A philosopher called Repton differed from his contemporaries as he focused on practical applications rules for achieving the picturesque in design and architecture. So, at the scale of buildings he naturally has rules for siting them; the aspects, the levels of surrounding ground, objects of convenience, and the view from the house are including aesthetic connections and matter of convenience and utility in design (Broadbent, 1990)

2.2.1.2 Public health correlation in principles of housing design and further developments

Right from the start of the nineteenth century building construction has had quite some important social and political dimensions. At the beginning of the Industrial Revolution, the design of dwellings was given serious consideration by different concerned groups such as architects, politicians, and developers considering the fact that the existing conditions of the houses in most countries weren't really conducive enough as most of them were either overcrowded or had poor sanitary conditions. Besides, expression of Rationalism and Empiricism in designs is for very rich land owners. But those within the working class status of the industrialized society were let with no choice but to use the appalling houses constructed for them (Broadbent, 1990; Lawrence, 1987).

From the year 1840, it became more and more common to consider housing and public health as a unified social issue, especially in England. As a result, disease and ill health became associated with morality and slowly the need to guard against poor environmental sanitary conditions became a part of the duty of the society. Chadwick (1842), a reform leader who chaired the movement for sanitary developments in England applied the miasmatical theory of the generation of disease, which was a major head way in the housing reform movement. In 1848, it was as a result of his efforts in putting together a report on the conditions of the social working class, such documents were all part of the of the public health acts of 1848 and subsequent years, and finally adding up to the act of 1875.These acts successively provided the basic standards for urban living resulting in what has been known today as Bye-Law-Housing. It required that local authorities formulate, and enforce, regulation to do with the provisions of sanitary facilities and drainage, at adequate standards in all new houses.

However, Chadwick did not bother himself creating sensory delight as Repton did for the rich elite within the society. Nevertheless, he made effort to provide them basic such as fresh are, day lighting, good sanitized environment, for the seemingly not so privileged in the society. However, Repton's ideals and Chadwick's had certain basic things which were crucial in common and concerned with the effect on human sense.

Subsequently, after the nineteenth century's first half, design standards for house planning were formulated at a slowly increasing rate and these standards have evolved with housing legislation, health and housing policies. It is clear from diverse studies that, at in international level, beginning in mid-nineteenth century, the

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protagonists of public health reforms based their lessons upon increased efficiency and cleanliness in the home. They endeavoured to teach higher standards of home maintenance.

In this regard, sets of concepts developed; including planning of houses and in a larger scale, city planning. It has been noticed that several current research which have already considered health and housing reforms have commonly described regulations relating to the design of dwelling, and such a references geared towards spaces surrounding the immediate area of the dwellings such as streets, courts and passages, rather than its effects, and the layout and use of spaces (Lawrence, 1987; Gauldie, 1974).

Right until the late nineteenth century, the building regulations in the most countries in Europe primarily concerned with precautious for the control of fires, by establishing certain construction techniques. Much later, the next major concept was urban planning which was done according to artistic principles. It was in a sense making formal the type of planning that picturesque theories had earlier on attempted to abstract principles for design. Picturesque decay may be attractive, but in a real life scenario the average person deserves modern sanitation, environmental comfort, and efficient transportation system. These emerging demands must be met as much as possible whilst working towards achieving a splendid and theatrical city. The emerging new demands can hardly be reconciled with the delights and inconsistency of the true picturesque and probably will be lost irretrievably to modern planning. The modern life and modern methods no longer allow the direct imitation of old townscapes.

The other sets of designing methods, those used in the garden city movement, for certain reasons cannot give any tangible effect on the internal organization of urban planning in existing cities. They were designed to be used to reduce pressures on such cities by decanting population to new and much smaller towns, created on the outskirts of the city. Then houses should be turned away from it and faced inwards, towards, sheltered greens.

Later, the concept of neighbourhood unit emanated in regard to the challenge posed by urban growth and needs of more dwellings by analysing gardening and community participation. An important concept was that all facilities used daily should be placed within a certain neighbourhood. This idea was targeted at creating a more humanised environment which accommodate the increasing population, so certain features were developed in plans out of variety of ways demonstrated in which such ideals could be realized, including, i.e. the super block-in place of the narrow and rectangular block, complete separation of pedestrians and automobiles, housing re-orientation; with livable spaces looking towards green areas, rooms for special services were oriented towards the roads and a background park for the neighbourhood. However, the neighbourhood itself would not be an impermeable unit, indeed there was envisaged a rich interaction with other neighbourhoods and with the rest of the city, as on a much larger scale such ideas were adopted in the planning English new towns.

2.2.1.3 Reforms and developments of rental apartment houses

The Industrial Revolution swept all over the world in the nineteenth century and the country's cities grew at an unprecedented rate. The various housing types were developed which represents not only a transformation but also a reduction of the

merchant dwelling into its bourgeois counterpart in term of both space organisation and interior opportunities (Gyetvai, 2007; Teige, 2002). These developments, however, were responding to social and lifestyle changes on the one hand and improved architectural solutions on the other. Even though this new housing type was a historical trendsetter for its time and its society, it was by no meanings meant for everybody, for dominate dwelling type naturally the dwelling type of the dominate class; and played an important role in the development of the modern apartment.

Formerly, the merchant estate had been a common form of home for the bourgeois in cities (Figure 2.1). These merchant estates had been used as both workplace and dwelling; with industrialization the two were set apart, and the merchant class moved into large rental apartments. However, by about 1870-80 the multi-family apartment building was well established as the predominant housing form for middle-class living. Basing its layout in this model, the apartments consist of an endless row of salonlike rooms of approximately equal dimensions. Besides, parlour, hall and drawing room of this model served as an extension of the public realm within the apartment through which was closely tied to the role of the home as an arena for the social life of the day (Figure 2.2).
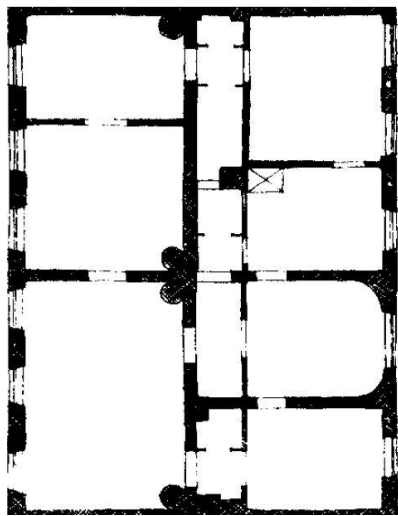
Figure 2.1. Merchant estate, rental apartment, (Nylander, 1999).
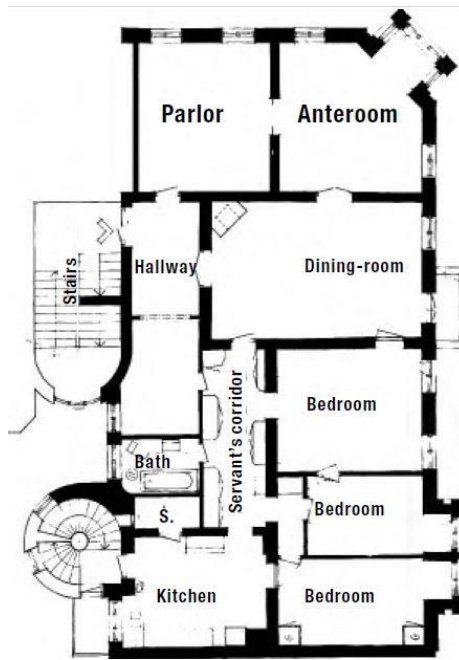
Figure 2.2. An example of a middle-class apartment, (Nylander, 1999).

It should be noted that, throughout the development of bourgeois, even though the floor plans have been improved; what has not changed is the basic housing type in historical-social terms: the functionally differentiated house, with its family-based housekeeping regime. The important feature of bourgeois houses is that it is a family-based household. Besides, it is a material expression of the ruling ideology and its social organisation: the monogamous family, the inferior economic and social statue of woman, parental rights over children, and so on (Gyetvai, 2007; Miller Lane, 2007; Teige, 2002).

The common failures of the multi-family bourgeois apartment included their vast size, which required a number of servants for their care. The old form came to be seen as out of step with the idea of the nuclear family that was coming to prominence at the turn of the century. The Classical middleclass home of the past made no provisions for children. Their rooms were often poorly lit, facing the courtyard, and

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often the children shared their rooms with servants. Parents' bedrooms were kept at a safe distance from their children's (Nylander, 1999).

During the first half of nineteenth century, the so-called open gallery type was introduced, showing a noticeable adoption of the Empire style to urban multistorey housing. The reform included technical infrastructure of an apartment, the addition of special housekeeping and sanitary room and, at the same time, reduction of the number of rooms and the revision of their size. During the following decades the most mature form of the bourgeois apartment gradually emerged as the result of adjusting dimensions of the rooms according to the special functional requirements: its centre is defined by a large living room, and a sitting room. The other rooms are kept small, more like cubicles, each dedicate to its own special function. In smaller apartments the living room doubles as a dining room, salon, and library as well (Figure 2.3).
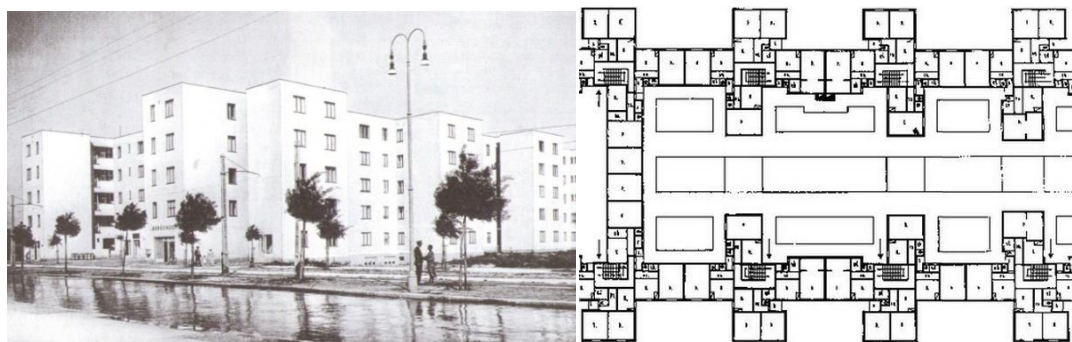
Figure 2.3. Bratislava, Slovakia, by Fridrich Weinwurm, Ignác Vécsei (URL 3).

By means of these various reforms of the apartment layout, rationalisation and economization have simplified all housekeeping operations in the apartment. The outcome is a building that embodied a living room with sufficient size and several individual sleeping small rooms. In particular, an addition space that is more technically advanced is added to plan for sanitary functions.

The changes made in bourgeois apartments also led to abandonment of the simple open gallery apartment type in rental housing, as apartments increasingly became the object of rental exploitation and speculation. Affectively, the urban rental house primarily evolved, but it retained the principle of a family home of the conventional housekeeping household type. The large increase in the price of land in cities meant that site use had to be maximized. Thus, it was necessary to achieve the highest floor area possible on a given plot which usually meant covering the hundred percent of site with buildings with the greatest number of stories allowed by low. As the result, the quality of site plan worsened in inverse proportion to the growing internal comfort of the apartments. Such development brought about progressively decreasing direct access to daylight and natural ventilation, and as a consequence a general deterioration of health conditions in the city.

Technical improvement of mechanical service amenities to improve comfort and convenience in housekeeping, as well as improved plan organisation, were mostly indecent by competitive pressure of the housing market rather than consideration of health and safety. The apartments didn't even meet the minimum health standards that were basic in a middle-class house. The great disjoint that exist between creating a liveable space and the desire to make profit by the owners of the apartment was

obvious. As a building type, today's rental house is nothing other than the material embodiment of the free-for-all quest of the owner for maximum profit.

However, in the nineteenth century, the dwellings of the wealthy in the society differed greatly from those of the middle-class and working class, rental apartments periphery mainly in its greater number of rooms and greater self-contained and differentiation in its layout. If it means by dwelling something beyond just spending the night and barely being able to move between one's four walls, middle-class rental apartments were not, strictly speaking, real dwellings. As a phenomenon, dwelling is not a thing; that is, at any historical moment it does not necessarily have to represent a mature and rational housing type that is technically fully developed. Both dwelling and city must be viewed as the sum total of certain relationship between different people and different classes, to which architectural form is subordinate (Teige, 2002; Broadbent, 1990; Lawrence, 1987; Gauldie, 1974).

2.2.2 Emerging theories toward development of urban spaces and apartment houses in 20th century

By the first decades of 20th century, apartments with one room and a kitchen were more common form of rental houses of working class. Although this form of apartment was not particularly an answer to the needs of the country's typically large working families since it was far too small for them, but still was affordable for them all.

Following the activity of housing authorities of 1910s and 1920s of expanding and improving the stock of worker housing, i.e. holding architectural competitions, subsidizing construction and funding housing studies, the apartments' spaces was introduced in a new way. Of those new spaces it can refer to a space for storage and a

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larger living room. But later in the 1930s with the rise of Functionalism, entirely new demands on housing research evolved and new role for architects was influenced by the working methods of engineers and scientists. Architects were then seen as the organizers of a number of scientifically based tasks. They were to use the guidelines established by government housing research to ensure that residential design was supported by scientific facts (Miller Lane, 2007). Evidently, emerging planning approves supported to the new urban housing development.

2.2.2.1 Le Corbusier's approach of modern town planning

Regarding to the urban spaces in 20th century, the major and most renowned oppositionist to dispersion planning of the time was Le Corbusiers, characterized with his excessive use of concrete and glass tower bock, apartment slabs and so on. He made effort to bring all this anti-city planning right into citadels of iniquity themselves by transforming the city core into a recreational contains the specific dwellings where the main building world only use up just 5% of the land. Though this seemed diametrically against the idea of small-town garden city, Le Corbusier's drew his concepts and perceptions from it. Le Corbusier's concept for the city was initially first projected in draught drawings and model forms in the year 1922. This city was design and conceived basically on four basic standards: easing the core from vehicular concentration, improving the general compactness, improving on movement path and general landscape (Fig 2.4). However, his aim was not to overcome the existing state of things but to arrive to the basic principles of contemporary urban planning. This was obvious that his residential apartments which were basically made of steel and glasses were not the best options for families. Then, he strongly suggested the two bedroom types of dwelling designed and built around the city core.

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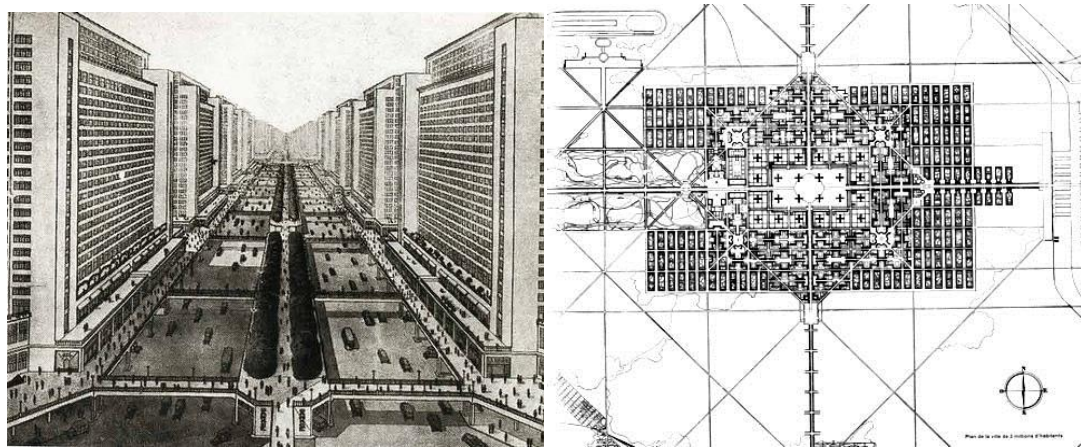
Figure 2.4. Ville Radieuse (Le Corbusier, 1929).

The mass housing solution designed by Le Corbusier was to be constructed of two-storey marionettes', having two-storey terrace flanking a two-storey main lounge having and small terrace behind designed to contain single storey bathrooms and bedrooms over the kitchen and dining area, much in the manner of the typical Parisian artist's studio(Fig 2.5). The basic idea was to design to open up the daily family life to the daylighting, ventilation and vegetation in such a manner that wasn't realistic in the tight roads of the middle age urban context or the broader roads of the 19th century urban context. However, even if the sun eventually penetrates at specific hours of the day, the building which already faced one another wouldn't allow for privacy. But Le Corbusier's apartment slabs were to be wide-space in his parkland; and this, not to mention the trees, would afford sufficient privacy (Fig 2.6).

The lower-rise set back buildings of Le Corbusier would also contain two-storey maisonettes varying, it seems, from six to twelve storeys high. They would meander across the parkland in a Cartesian arrangement of open, U-shaped courtyards with connecting blocks. Other issues he paid significant attention to was the variation of his fast motor tracks, slower access road and pedestrian roots.

Le Corbusier's design layouts and three dimension drawings covered the perception of fellow designers globally. In the 1960s to be specific, a noticeable amount of architects had the ability to design their individual city layout or large segments of them-look significantly like Le Corbusier's perspectives with their motorways slashing between their skyscrapers.

It should be noted that, Le Corbusier refutes his planning ideals later, where the tower and slabs have been abounded; so have the motorways. Rather, a more humanistic scale surrounding emerged; the vehicles were kept in their rightful place, underneath, thus allowing human scale to prevail at ground level. Meanwhile, Oscar Newman presented evidence against tower and slabs of modern movement housing (Broadbent, 1990; Jencks, 1973).

Figure 2.5. High density housing with private balcony, open to sun, space and greenery (Broadbent, 1990).
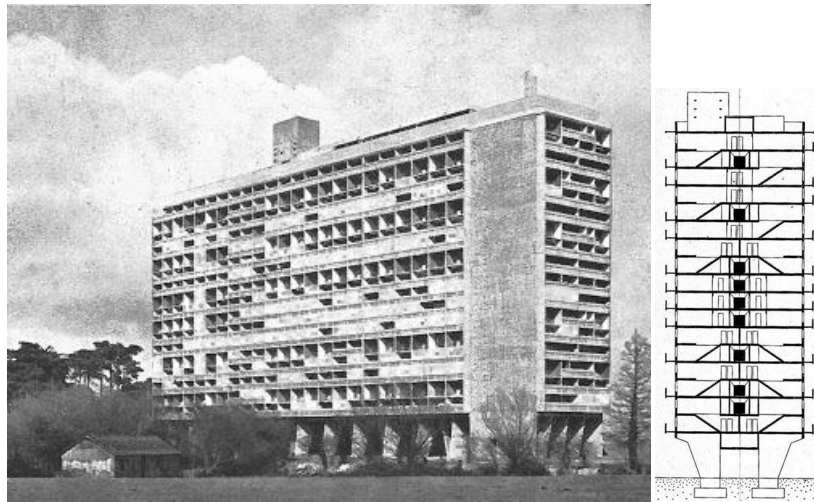
Figure 2.6. Unite d'Habitation, an example of apartment slab
(www.heathershimmin.com).

2.2.2.2 Theories following the efficient land use

A number of the ideas occurred around the ideal environment for urban living. Therefore, it was suggested that if a specific area accommodate enough building of the right type, a large number of people can be accommodated without even creating the feeling of it being crowded. Of course the cost of land facilitate for such densities which are, by their very nature, urban.

Taylor (1973) figured out the historic past of the English town as well as their tower blocks. When he was faced with the challenge of building new high density apartments, he compares high rise apartments with the single family house and praised the virtues of front door with its associated private space, the virtue of normal back yard, and little front garden as a way of expressing individuality. He suggests that such things are quiet unrealizable in the high rise flat as it becomes difficult to individualize the ground since it is generally share with the general public, hence, the occupant looses that sense of identity. He affirms that freedom is made: thriving

literally in the private gardens and psychologically in the well-rooted growth of family life.

However, Taylor built his own dwelling during the period where it was fashionable to create spaces to accommodate owners vehicle that was around 1911, thus car-ports and garages. In this case, he was an advocate of courtyard housing; where the garages are placed around the front of the development in the short access streets.

According to Broadbent (1990), this, then, followed the work of researchers in the land use and built form studies as architects named, Lionel March and Michael Trace, had been researching into the nature of efficient land use. They are influenced by Le Corbusier's fundamental principles; that homes should be designed such that, even on the worst winter day of the year, the winter solstice, daylight should be able to reach the living rooms of the apartments for at least two hours. Le Corbusier and others had used this to argue that given the same sun-angle the slab-blocks of the modern movement, wide space in park land, were more efficient users of the land than two-storey, three storey, or other terrace form might be.

March and Trace, were dealing with the spaces between buildings but the spaces within building are related to these in order to optimizing interiors of houses. In this regard, the relation between group of activities and room size was plotted by another architect, Peter Cowan. He assumed that the smallest room in each dwelling might accommodate some ten activities and as room size increased, so did the number of activities. Indeed it rose very steeply, up to about 18.5 square meters after which it levelled off abruptly. Beyond this point, indeed, quite large increases in floor area made very little differences to the number of additional activities that could be

housed. In this regard, since Georgian houses were planned to contain quite a lot of rooms of, or around, this significant size it is hardly surprising that the basic Georgian form has proved so eminently usable for so many purposes.

2.2.2.3 Reform and development of modern rental apartment houses

The main ingredients of the modern 20th-century apartment evolved as early as the turn of the century. The reforms of dwelling, as a whole, primarily affected the modernization of large apartments of the wealthy and the dwelling of the individuals from the middle classes improved only much later. The attention of architects was caught by effort to make housing for the average income people bearable as a matter of fact quite later in the CIAM in Frankfurt, 1929, with much emphasis on the question of minimum dwelling as the top of agenda.

In this regard, there was an effort to retain the family and its associated household as the core ingredient of all reforms in housing. As a consequence, it comes as no surprise that the reform of housing which was generally characterized by a number of smaller and large numbers of rooms, a kitchen, and rather primitive mechanical applications.

This original improvement generated slight changes in the dimension of rooms, orientation, and furnishings of rooms, which was better adjusted to their function. There was also a significant change of traditional floor plan and modernization of windows, doors and furnishings. There were also an attempt to more logical grouping of rooms, e.g. the spaces for service were grouped close to each other, and better arrangement of circulation elements. Basically, the tendency was to assign each dwelling function its own space and equipment and this principle was applied to all modern types of housing.

This resulted to a dwelling that is maximally differentiated in both the number of rooms and their functional individualization: only the living room and dining room remained designated as common spaces in a modern apartment. The rest was strictly individualized and the apartment may even have one or more bathrooms; most importantly it provided each occupant with his or her bedroom and, most likely his own extra sitting room was provided. Owing to the rooms' specialization, differentiation, and individualization, their dimensions had to be changed as well. The size of a bedroom is now reduced to that of a mere sleeping cubicle as the size of bedrooms (Teige, 2002; Nylander, 1999).

Regarding the reforms of the middle-class rental houses, the emphasis was on isolation from work, care for the family, cosy comfort, and the search for a more intimate relationship between the house and its site. The new form of middle-class house that evolved out of the Arts and Crafts movement satisfied the growing need for intimacy in a rapidly changing society and in many ways revolutionized the design of urban apartments. As a result of this functionality and comfort came to eclipse the role of the private home as an architectural expression of social status. Private intimacy replaced public image as the most important aspect of the home (Peel and Powell, and Garrett, 1989).

However, following the severe economic crisis of the century, the nation's social housing program with reference to rental housing took shape. Basically the Social Housing Program aimed at providing comfortable and affordable homes to all, regardless of their social class. But, during the Second World War, housing production came to a stop. Although after the war, in the late 1940s and 50s, many of the Social Housing Program's ambitions were realized. The number and quality

standards of apartments grew steadily. Hot water, bathrooms, toilets, laundry rooms, and well-equipped kitchens were among the improvements.

2.2.2.4 Effects of world wars on construction of houses and failures of modern architecture

We can vividly see from the World War I and World War II the gravity of the devastation that occurred and the economic bankruptcy it brought in Europe as well as the exhaustive building opportunities it created for the building industries. Due to the fact that most countries had been crippled economically it amounted to severe house shortage. After the war ended, both the democrats and the socialist governments across Europe and America carried out the development of large-scale social welfare, and a rapid growth of massive state. There were limited funds at the disposal of local authorities, as well as multitude of people to care, hence, they turned to the methods of modernism and constructing of high-rise buildings. It seemed to be the quickest solution to the emerging housing crisis especially to the poor in the society. Under such patronage modern development thrived throughout the 1950s and 1960s (Miller Lane, 2007).

Apparently, quite a lot has been written about the wars of early 20th century development and the subsequent in profession. It has been cited that the devastation caused by the wars offered both social and architectural opportunities never seen before, however, a lot of opportunities were lost as a result of government desperation to erect the buildings as fast as possible so that minimum standard housing haphazardly sited, become the reality rather than well thought out schemes providing quality housing that would have taken longer to realize yet would have been better in the long term. For example, In North America, the prefabricated

housing was an approach that came in only four or five basic styles as such individuality was lost. It has been also pointed out that, demand for vehicles and cars raised failure of development as meant that cities were beginning to be intersected by motorways, often cutting through historic areas without much concerning about existing buildings. (Peel and Powell, and Garrett, 1989)

Newman (1996) and Ravetz (1995) drew the outlines of this which appeared as the great disillusionment of the public and of government agencies with high-rise housing, this eventually became a breeding ground for vandalism as well as other social crime, violence in urban apartment buildings, which contributed to psychological dangers from inhuman and indefensible spaces. In fact, it is in the human nature to be sociable and like to be grouped into communities. High-rise buildings seem not to support this communal nature of man, it tends to isolate them since it does not provide them with any meeting point can often create unhealthy isolation and antagonism toward the environment, leading to such social problems. In this regard, the new flats designed may have been far from comfort as far as emotional and social needs are concerned (Peel, Powell, & Garrett, 1989).

It is notable that through the modernist development, philosophers

> sough to modernize man to bring him into harmony with the times which meant eliminating reminder of the past that inhabited the progress of modern life... Bringing the advantages of industrial society to more people was an admirable goal, but the way the proponents of the modern movement attempted it has been destructive (Brolin, 1976, p. 61).

The concept of modern architecture has attempted to address how people should supposedly live rather that the way they actually do live. Designers neglect the basic traditional societal patterns and try to find justification for their contemporary

building solutions with the assumption that everyone in the world has the same basic social and physical needs.

From the start of industrialization the relationship between building designers and occupants took a new dimension. Face to face communication between architect and the client/user lost. In large housing development, the situation even got more curtail as architect had to provide solutions for the problem of anonymous users.

Such failures gradually made the tide started to turn against the mass housing projects and the high rise. There soon followed a series of highly-publicized demolitions of housing towers in both Britain and the United States; the best-known of these was the demolition of Pruitt-Igoe housing in St Louis in 1972. (Miller Lane, 2007; Peel & Powell & Garrett, 1989).

2.2.2.4.1 The stigma on public housing: Pruitt-Igoe

The famous sign of the failure of the social policy in North America, Pruitt-Igoe, was established under the United States Housing Act of 1949, which provided direct funds for clearance of slums, revitalization of the urban environment as well as housing for the masses. These infrastructures were built within the period of 1955 and 1958 in the city of St. Louis and were designed by Minoru Yamasaki. Regarded as creative at its construction, it was in blown up in 1972 due to agitations from its occupants (Fig 2.7).

Figure 2.7. The project of Pruitt-Igoe (http://www.imdb.com).

In the bid to accommodate the average income earners as well as to draw them back to the city core, certain redevelopment programs were employed in St. Louis. At the same time, the St. Louis Housing Authority would secure land to construct more homes for the masses. The goal of this project was to make available houses that are affordable so as to enable the low income earners have access to originally, the city had two parts, and they were: Captain W. O. Pruitt Homes housing for the blacks and William L. Igoe a dwelling for whites. Public building built with federal aid permitted none of facilities and services was proposed for the project, thus creating a gap between the plan and its realization (Comerio, 1981). For instance, the first mixture of vertical apartments and walk-up dwellings, it was approved by St. Louis authorities, but was beyond spending restrictions set by the PHA; an eleven floors maximum height restriction was agreed upon by the body. As suggested by the urban city planning standards and progressive concepts of Le Corbusier and CIAM, in order to create more space for social activities in the ground, the residential buildings were raised to eleven floors. Pruitt–Igoe supported by such international standards and consisted of thirty-three apartment buildings on a fifthly-seven-acre site and completed in 1955. The entire project after completion had about 2870 apartments, which counts the largest in the country (Bristol, 1991).

Skip-stop elevators stopped only at the first, fourth, seventh, and tenth floors, forcing residents to use stairs in an attempt to lessen congestion. The same anchor floors were equipped with large communal corridors, laundry rooms, communal rooms and garbage chutes (Bristol, 1991). However, Pruitt–Igoe was initially seen as a breakthrough in urban renewal. Residents considered it to be "an oasis in the desert" compared to the extremely poor quality of housing they had occupied previously, and considered it to be safe. Some referred to the apartments as "poor man's penthouses". In 1957, occupancy of Pruitt–Igoe peaked at ninety one percent after which it began to decline. As Newman (1996) cite, after a certain point occupancy never rose above sixty percent, and by the end of the 1960s, Pruitt–Igoe was nearly abandoned and the complex had seriously degenerated as a result of criminal activities, poverty and sectionalism (Fig 2.8).

Figure 2.8. Signs of vandalism in Pruitt-Igoe (www.wsws.org).

The residents identified the main cause of the degeneration as lack of maintenance, this also involve the constant break down lifts as a major cause as well. Besides, the local agencies identified inadequate funds to pay workers for the maintenance of the

buildings. Other issues include the lack of proper penetration of fresh air and non availability of air conditioning.

In addition, ventilation was poor, and centralized air conditioning nonexistent. The generally used spaces were trailed by hoodlums. Condition of kitchen, living, and dining areas of four-bedroom apartments that house up to 10 people were the same size as the one in two bedroom units. The car parking and the public parks such as play areas were constructed basically after when the occupants insisted that they should (Comerio, 1981).

Nevertheless, the challenge Pruitt-Igoe experienced escalated far beyond physical design. One major issue was the absence of elderly males as heads of families, the project's notoriety, and the deficient management and maintenance are of such failures. However, critics majorly consider the failure of the project as a result of flaws in the overall approach or design philosophy in this project over the economic and social ones. The general assumption that was help was the fact that the designers were not sensitive to the needs of the not so privileged in the society and attempted to fit the users into their designs hence, imposing the white lifestyle on Pruitt-Igoe residents. Hence, the design was simply inappropriate for the social structures of the people who were going to live there and were entirely different group. This implies that low-income earners blacks made-up a tenant group with special needs. They didn't posses the virtues of taking pride in sanitizing their immediate environment which was a part of those in the middle class (Bristol, 1991). Similarly, Newman (1996) considers discipline of environment and behaviour and states his criticism as: a failure of the architectural design and site design of Pruitt-Igoe housing project

which had a deterministic control on conduct of its residents and led to violent crime and destruction.

Ultimately, in 1968, the federal Department of Housing in 1968, the federal Department of Housing started suggesting to occupants that remained in Pruitt–Igoe. In the last month of 1971, both the different governmental bodies came to destroy two of Pruitt–Igoe buildings using explosives (Fig 2.9). This was done with the premonition that a systematic reduction in the population and compactness of these buildings could make better the conditions. In attempting to do so, the authorities employed including conversion to a low-rise neighbourhood by collapsing the towers down to four floors and undertaking a "horizontal" reorganization of their layout (Peel & Powell, & Garrett, 1989; Checkoway & Patton, 1985; Comerio, 1981).

Figure 2.9. Explosion of Pruit-Igoe (www.heathershimmin.com).

2.2.2.4.2 The concept of defensible space in high rise building

Regarding failure of modern projects such as Pruitt-Igoe and following the emerging ideas toward ideal environment for urban living, Newman (1972)in his book "Defensible space" discovered by series of research on high rise buildings in New York that these building were prone to criminal activities. He also finds more crime in the spaces between housing blocks than in the public streets which border them .It was based on the outcome of his research that he developed his concept of defensible space that:

> is living residential environment which can be employed by inhabitants for the enhancement of their lives, while providing security for their families, neighbourhoods and friends (Newman, 1972, p. 3).

So there should be a hierarchy of space-types from the most public to the most private, from street to the inside of the dwelling. Between these extremes there should be a semi public area special designed for the occupants of the apartment, although it is open to public access. Thus new residential buildings should be planned, and old projects adjusted to include these hierarchies of spaces.

According to Brodbent (1990) in this sense, another important research was carried out by Alice Coleman in 1985 which also used the data gathered by Newman. She calculated the number of occurrence of these crimes happened within a particular area in most high rise buildings. Furthermore, she analysed them in more detail that her counterparts did, the feature of high rise flats which seem to correlate most strongly with anti-social behaviour.

However, she anticipates her crisis and has her strategies for discouraging anti-social behaviour. Meanwhile it was proposed that far from being beneficial effects, the

presence of shops, places of recreation, entertainment and so on can bring anti-social behaviour if they are located within a housing estate.

2.2.2.4.3 Theory of participation in design: Byker wall

The renewal existing housing stock was of large developments which made great sense for cities such as New York. One of the advantages of redevelopment was that communities did not need to be split up or relocated and could be consulted about their needs or desires. This 'community' architecture allows people to participate in process of design and have a direct influence on their environment. One of the most successful of these plans is the Byker development in Newcastle – upon- Tyne in Britain (1968-81) by Ralph Erkine, Vernon Gracie and Roger Tillotson (Fig 2.12).
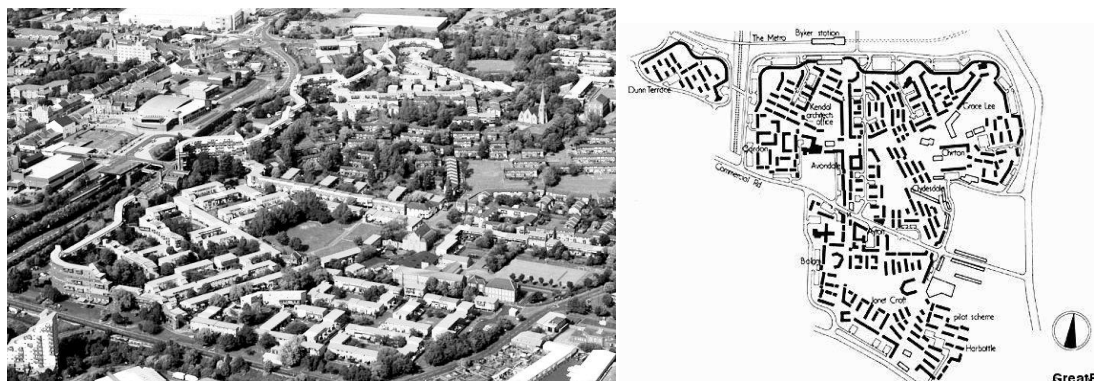
Figure 2.10. Byker development in Newcastle upon Tyne (www.heritage-explorer.co.uk).

This housing is being approved perhaps the most exceptional resolution to the problem of modern urban mass housing for ten thousand people. By being part the community, the architects have connected totally with the lifestyle and beliefs of those whom they are designing for. Their realization has been to create sense of distinction and personality amidst a huge new development while conserving the spirit of the existing community.

In the early 1960's the then Bykers was constantly experiencing decline in their population. The explanation for the scheme's failure to advance seems not easy to be analysed. The creation of a route for the motorway ended in demolition of many homes. For this reason, people unwilling relocated to other cities. For many of the younger ones who persisted distant themselves. When the consultants began work in 1969, they were eventually regarded as 'only some people'. In addition, Erskine presents his idea towards such non advancement simply as the perimeter block obvious without any negotiation with Byker people.

Nevertheless, by means of official acceptance it was aimed to produce a project and building an entire homogeneous environment for living. In abroad perception at the lowest cost to the residents, in a close connection and collaboration with them.

Furthermore it respected to keep important traditions and characteristics of the neighbourhood itself and its connection with the surrounding areas and those who until now are native in Byker; without breaking family ties and other respected lifestyle. To provide new accommodation in relations to the difficulty the locals find in finding their way, the scheme was liable to produce an identifiable physical structure i.e. a distinction to each group of houses to make it easy for the inhabitants to find their way through each phase.

From Erksin perspective, the initial neighbourhood of Byker notwithstanding the economic recession has dignity. In spite of all it is still noticeable. He regarded the existing sentimental connections to the community to provide the right physical framework to ensure Beneficial's retain importance of their community subsequently. However participation was a basic technique of working to associate

the users in design on a large scale with the architect's involvement on site. It will enhance a constant two- way communication.

Basically, Erksin instituted the principle of what was predominantly low rise environment, with all its community facilities intact. The strategy maintain a well-known features as pubs, churches, schools and many other facilities, it tried to put together shops and offices in with housing. To give an increase to long established and standard of living The permitted number of single exclusive gardens and open space for adults recreation and children's play included corner shops in renovation of small shopping areas developed to substitute large shopping facilities a bit of the then Byker. Every few yards there has designed a corner were a table and benches invite conviviality and hence organize social ties (Fig 2.13). Besides, each area has its distinct characteristics and bright colours, and a careful hierarchy of small private gardens and semi-public communal spaces overlooked by the surrounding homes. Excluding Tyne perspective that every component stands as benchmarks elements in today's urban planning.

Figure 2.11. Byker development with Open spaces and corners to provide social ties (Glinn, 2011).

As the result of such solutions; the   project was completely welcomed by the people living in it, as they were contributors to its constructions. The courtyard, square principal provided more successful, as done by many house type, there was still complaints of privacy in single aspect houses. And that of noise which is a main problem of mass housing. (Yingying & Beisi 2011; Ravets 1976)

Following such developments, architecture that in the 1970s were seen as struggling to find a true identity had been restored by 1980s.it went further by a step in the middle of the decade. From being welcomed to a complete modern trend. For the meantime, the problem of modern developments were regarded as "community" architecture; considering the main need of the people prospective users and residents of the building are the consulted outcome of architecture for the community by the community.

Architects began to reduce large scale construction through initiating greater variations in building heights and types of these ideas put into consideration low building heights small courtyards and incorporation of non-residents activities into housing developments. Besides, there has been an attempt to involve the community in the design process by user planning strategies. When the buildings have been finished and the occupants are part in running them, then this idea have been moved a step further. This is the double advantage of keeping the feeling of involvement and personal responsibility created in the course of design phase.

There have been also efforts at enlarging the flexibility of apartments in this sense architectural competitions have been suggested to create a service system for the future residents to fit into the changing habitat. More so physical changeability of the

building and commendations indicates space, saving simple apartments with flexible sub division. These new ideas have little consequence on the building industry's production of new housing however (Yingying & Beisi, 2011).

2.2.3 Post-modern theories and practices: Neo rationalism

According to Broadbent (1990) the 'Tendenza' towards a Neo-rationalism emerged during 1950s and 60s in Italy. In this time, a group of young architectural theorists came together and began to explore the nature of architecture itself as well as to develop their own philosophies. Dealing with Tendenza most fully, the architects needed to express the ideology of societies in built form, and envisage and develop social utopias for which their task, then, is to find appropriate three-dimensional built forms. In this regard, Rossi deals with urban fact, the actual physical objects of which cities are made, not only the visible images of the city but the construction of city over time. So Rossi describes the elements of which cities are made, that is to say the different building types with the aim to establish the basic continuity that underlines the apparent diversity of individual urban facts. However, apartments at Gallaratese in Milan (1969-73) with their pure geometry are Rossi's answer to the question of establishing the actual type of a building one then realizes it as tree-dimensional architectural fact. As Rossi was reviving the idea of typology, Carlo Aymonimo was preparing a thoroughly worked example. He analysed social housing as described at Conferences of CIAM at Frankfurth, 1929-30. He also presented built examples, almost 100 model plans of apartments from most European capitals, submitting them to thorough typological analysis with special solution for Moscow and USA.

It is notable that during this time, CIAM at an international level illustrated how it was possible to design houses that responded to the tenets of housing reforms and such proposals clearly embodied the principles of scientific management in the house, the rationalization of the modern movement (Broadbent 1990, Lawrence 1987).

2.2.3.1 Gallaratese project in Milan

From 1967 to 1970 Rossi collaborated with Aymonimo on the design of speculative housing, Gallaratese. Aymonimo designed a complete urban complex with three housing blocks. His housing is based on the existenzminimum type, and he packs apartments of different sizes, for different kind of household, with some ingenuity into stepped sections with access balconies on alternate sides every two floors or so. The upper floors are given over to various penthouse forms. He clearly is affected by Corbusier. Rossi's single block runs behind and parallel to Aymonimo's one and both are much in the manner le Corbusier in 1920s. Rossi's building type housing is indeed an architectural fact and represents a paradigm for Neo-rationalism. It is a constructed version of the very many sketches by which, Rossi had shown what, for him, is the essence of architecture(Fig 2.10).

Figure 2.12. Gallaratese housing in Milan (Broadbent, 1999).

So there are two, long, thin, rectangular slabs meeting at the fault line-or expansion gap-one contains tree stories of apartments, reducing near the fault, to two. The other has two stories throughout its length and both have perfectly square, blank window opening and so do the upper apartment floors. The blocks themselves are supported, over undercrofts, by septa. Shortly before completion Rossi's was occupied by squatters who were 'surprised and puzzle'. They were struck by the emblems of community life. They simply could not understand why tenants casually in these buildings were supposed to carry on particular social relations. They preferred the concept of a much larger neighbourhood and social relations on the job. Thus they found Rossi's corridors too wide, the undercroft between Rossi's septa to be a complete waste of space especially since the apartments seemed to them too tight and the finishes too carelessly executed. Eventually the squatters were evicted; Milan City Council bought the Gallaratese and reserved the apartments for city employees.

2.2.3.2 Large scale housing developments in France: Les Arcades du Lac

Over time past, whilst Rossi and others have built individual rationalist buildings they have had limited opportunities to develop large scale organisms. Ricardo Bofill was loosely associated with the Rationalist movement of architecture. He applied the rationalist thinking in a large scale projects mostly in France. Bofill turned to historicism and the old idea of the palace as a model of public housing. This concept produces the ultimate set piece, the building as monument favoured by modernism. But the scale of Bofill's Arcades du Lac scheme is so large and flat, and the surface so broken up and ornamental, that the building can also be read as background. This project incorporates the expected symmetry and parterres of its model, and adds other historical dimensions which root it across time and French culture. Some corners are turned into giant, suggested columns, and they are meant to engage the

mind through their amplification. Ceramic and concrete, used in four shades of earth colours, define a vertical morphology which is reminiscent of the traditional French street: large entrance bay, almost an arcade; pronounced piano nobile and second floor; and small attic and balustrade (Broadbent 1990; Jencks, 1988).

Figure 2.13. Les Arcades du Lac, an example of large scale development (http://openbuildings.com/).

2.2.3.3 IBA development in Berlin

The IBA developments of 1987 In Berlin resulted from the explorations of the 1970s as to how the frayed general texture of the city should be rehabilitated or rebuilt, by the aim of restoring the inner city as living space and rescuing a clapped out city. Berlin senate's director of architecture in the year 1975, made a decision to plan another exhibitions at diplomatic areas. However, instead of building new ones in the diplomatic area, attempt should be made on the past, the present and the future of West Berlin entirely. By October 1977 Berlin held a comprehensive program for an international building exhibition. Some proposals presented and this formed the basis of a senatorial bill. This bill contained different propositions; it also suggested that the historic plan of the city be used as a basis for future development. This would

secure the future for their past. Relationship too between social norms and individual freedom had to be reformulated and re-thought. Variety, requisite individuality, and capacity for change could all be achieved by if the city is regarded as a constraint, the building as a variable. It also placed major emphasis on the quality of housing and, above all, a productive tension was developed or rather redeveloped between individuals and social requirements, artistic responsibility of an architect. However, as a result of the competitions held the planning of recreational facilities and residential was developed.

Regarding such developments, it can be referred to the work of Architect Rob Krier, were he has been concerned to develop types of urban spaces derived from, but not copies of, historical exemplars. as well as developing internal spaces in particular. Krier, has in a series of drawings and painting lovingly re-created images of the lost public reals. His designs recapture the closure and centeredness which are common to most European squares of the past, rendered with a timeless abstraction at once classical and surrealist. He reconstructed parts of Berlin using his favourite device of the urban block. Notably his IBA practical exhibits at Ritterstrasse (Berlin, 1978–80), illustrates his theories of social housing (Figure 2.14). Although the intention to use art in a symbolic and urban way is exemplary, its meaning here is still esoteric rather than fully public. This is not to argue in favour of a facile populist aesthetic, but rather to demand the same clarity in expression that Rob Krier attains in his urban design. If his statements, drawings, and city schemes propose a partial return to a world of urbane rooms (streets, squares, arcades) then his use of art, in contrast, inarticulate (Brodbent, 1990, Jencks, 1982).

Figure 2.14. Ritterstrasse Housing, Berlin, West Germany (Jencks, 1982)

In conclusion, such studies on history make the sense of the present. However, humans' mindset and behavioral responses are based on the happening of the past, and it is necessary to understand the role of history to make an appropriate design decisions today. Moreover, in order to increase the comprehension of the relationship between human and built environment which is concerned in this research, in particular, the study of relevant theoretical background are necessary which are discussed in following chapter.

Chapter 3

THEORETICAL BACKGROUND OF HUMAN EVALUATION OF HOUSING ENVIRONMET: DEFINITION, CONCEPTION, EXPERIENCE AND ADAPTATION

Many recent studies set a number of the factors which have to be taken into account in designing process and planning of built environment as concerning an interactive relation between people and their built environment. As Lawrence (1987) states, the notion of dwelling connotes an active and mobile relationship of individuals to the physical, social and psychological spaces around them and includes their spiritual and physical well-being and quality of life. He also affirms that the concept of dwelling emphasizes the contrast between 'home' and 'houses' and does not regard that the physical unit of a house defines the human's relation to housing environment or experience of home. Relatively, firstly distinguishing between the terms house, home, and dwelling has been provided by their definition as there need to establish relation between the terms while designing houses. Then, dealing with relation between human and his built environment, an argument on essence of human experiences of environment has been provided, as well as conception of built environment in term of organisation of communication, time, space and meaning.

Eventually, this chapter discusses a two-sided relation in housing space formation and deals with the role of both architect and user in design of residential environment. This is, however, a problem of environmental fit with the expectation

of user and the subject of most post-occupancy evaluation, when investigating thoroughly things work, if not, conflicts may follow and design fails. In this two-sided relation, accompanied factors in processes of decision making in formation of housing space by architect with those of user's response to that housing space has been defined and explained, which are culturally, socially, and psychologically variable. However, Dursun and Saglamer (2009), Rapoport (2005) and Lawrence (1987) affirm that it is essential to account for such factors and it is operative the correlation of designer's value with those of uses when formulating design and management policies for the development of new houses and the renovation of old residential quarters to providing occupants with forms and means that facilitate a fit between their space needs and the constraints of their living spaces which are the product of housing design.

Accordingly, this study intents to contribute to the knowledge about human and his experience of housing environment and knowledge about environment and its effects on human. In this way, it provides cues for a comprehensive approach which architects and housing administration can employ to enrich more understanding of human relation to housing environment. Evidently, it is expected to have an important implication if laypeople are participating in the design of new residential areas and the renovation of old ones. These consequences of these kind of researches can be used in a complementary way to comprehend the housing processes and foundation of a contextual approach for research and design.

3.1 Housing, dwelling, and home

According to Lawrence (1987), certain issue emerges as a result of architects' adoption of the broad social, cultural and psychological viewpoint in characterizing the human-environment dialog. The most important among these are the importance of context; the connection between house (which implies both use and exchange values), home (with its social, cultural, and psychological meaning) and the course, the act, of dwelling. Nevertheless, imposing regulatory boundaries, stressing the exchange value of the real estate, and promoting the concept of the house as investment interfere to establishing or absence of a link between house and home.

In order to understanding such a relation, researchers and theoreticians from wide variety of disciplines have studied the meaning of house, home and dwelling. Basis in most of these studies is an interest in the subjective experience of dwelling, and all those with such an attempt generally share a vision of the dweller as an acting subject who gives meaning to the world (Miller, 2004; Garzon, 1985). In sum, the personal experience of home and one's relation with it are not separate from the dwelling practice and human relationships which give cherished meanings to domestic space, activities and objects (Lawrence, 1987).

3.1.1 Definition of dwelling

Garzon (1985) expresses his opinion about dwelling from the phenomenological perspective, makes a comparison between the stages, 'to inhabit' and 'to be'. He stresses that a very certain hint of the level of a dwelling and the essence of a human been lies in this reality that in a language, 'I dwell' and 'I am' might have been applied indistinguishably. Concerning the experience of dwelling, King (2004) states that:

Dwelling is something we all experience, but it is not something that we necessarily experience together. For each of us dwelling is unique, in that it is something we do by and for ourselves. We all dwell, but each of us does it separately... Dwelling is something we all do, and the counter fact that how I experience dwelling is different from how others experience it, including to an extent those with whom I share my dwelling and according to the basis of human experiences (King, 2005, P. 18).

3.1.2 Definition of home

Swenson (2010) states that, not every built environment is a dwelling place; only a home provides a true dwelling. The home is a place that is safe, protected, and defended. Just as shelter is necessary for human survival, the home is essential for human happiness. To prove his claim, he makes reference to Bruner's definition of home as "a place that is inside, private, forgiving, intimate, and predictably safe" (Swenson, 2010, P. 382). Swenson views the real world as outside, demanding, anonymous, open, unpredictable, and as a result, dangerous. Home is a secure haven, a refuge that draws you back, no matter where you go or how long you have been away.

It is very clear that 'home' is an ambiguous concept. Nevertheless, distinguishing between the concepts of home and house is to develop an understanding of the meaning of home. Turgut & Unugur (1997) stated the dynamic interaction between the occupant and the dwelling is what gives birth to the home in itself. In other words, a house is turned into a home as a result of household living. Bachelard also states "A house that has been experienced is not an inert box. Inhabited space transcends geometrical space" (Bachelard, 1964, p. 47). He continues that inhabited space bears the notion of home, that when a human being finds shelter it comforts itself with the notion of protection. A house is a primary setting which is part of the physical environment and functions as a shelter; it does not necessarily convey the

feeling of home (Turgut & Unugur 1997). A house may be occupied temporarily, or abandoned, but a home has an experimental dimension over time. In principle, a house or building can be bought but people can never purchase a home. In the same way, architects can design houses but not homes (Lawrence, 1997; Pallasmaa, 1992). However, the idea of house and home goes beyond geographical areas, cultural norms, linguistic connotation, religious doctrines, and temporal boundaries. They are basic human concepts which are grounded in sets of relationships that order and define the status of individuals in relation to society at large.

Regarding the Laguna apartments, it can be noted that despite some contradictory statements, the way residents of Laguna apartment describe their feeling toward their dwelling embodies many of such notions toward home. Residents repeatedly state expressions toward their dwellings which approves their self-identity.

3.1.3 Meaning of home in attached with human activities

Turgut and Unugur (1997) consider the relation of people and place to define home and state: "home is an integrative schema that creates a bond between person and place; a set of interactions between the experiences of the dwelling and the wider spatial, socio-cultural, and temporal context within which the meaning of home space emerges" (Turgut & Unugur, 1997, p. 6). However, this is human activities and interactions which give meaning to housing and meaning guides human activities. In other words the meaning of home reflects in a set of activities and interactions occur in home based on appropriation, identity, attachment and affordance. These concepts are place-based and concerned with the meaning and affective orientations of people to place. These concepts refer collectively to the idea that people associate places with meaning and significances and act in ways that reflect their bond and linkage

with these places (Rapoport, 2005; King, 2004; Schmidtz, 2002; Lawrence, 1997). Relatively, it was seen those residents of Laguna Apartments who has dwell these settlements to pay less rent, or poor who could not afford to make their desirable changes in their dwelling spaces to provide its partially appropriation were who could take no interest in such relation with their dwelling as a home.

3.1.4 Essence of home

Beyond these fundamental semantic qualifications, differences occur within and between cultures and societies with respect to the essence and also with respect to the experience and image of home.

Image of home: Pallasmaa (1992) argues that contemplation on the meaning of home, moves our thinking away from the physical properties of the house into the imaginative arena of the mind. It involves human attachment to the space in the sense of identity, and memory, cultural and behaviours sparked up by biological connection and other values that have been innately motivated. Essentially, home is a diffuse and complicated condition that integrates complex condition by a seamless integration of memories and images, desires and fears, and past and present. Home cannot he produced all at once. It is a gradual product of the family's and individual's adaptation into their environment and the world at large over the course of time. As Bachelard (1964), states the image of home or experimental home, roots in childhood senses. The word 'home' is the sudden and simultaneous reminder of all the warmth, protection and love of whole childhood. It is the collection and conceptualisation of personal images of security and intimacy that makes one to recognise and remember his individuality. Perhaps, our home of adulthood is basically shaped by a search to

create that individuality created during childhood. But, the thought of home can as well revive the memories of the past that were not so palatable.

However, an indicant for this argument is what has achieved through the statement of residents of Laguna Apartments when they describe the dwelling which they desire with characteristics rather similar to dwelling where they grown up.

Nostalgia of home: Pallasmaa (1992) also describes the nostalgia of home according to his personal experience of childhood: "I remember the sadness and secret threat of leaving the home as we moved to another town. The greatest tragedy was the fear of facing an unknown future and losing my childhood friends"(Pallasmaa, 1992, p.8). Obviously, there is also a strange melancholy in abandoning a home which reveals traces and scars of intimate lives. It is touching to come across the remains of Pruitt-Igoe project as already have discussed. In Laguna apartment also, there were two interviewees, by chance, who were interviewed just when they were ready to move out as they found their current dwelling quite dissatisfactory. Still, despite what they state harshly toward their dwelling, seemingly they were not such willing about this relocation. Instead, they wish they could afford to pay more to have what they need in their current dwelling.

Home and identity: Home is delineation and base of identity, not only of individuals but also of the family and groups. Home structures both the mere secrecy of private lives which is concealed from the public eye, and the public life. Hence it creates the domain of intimacy and communal life. Human has personal and social characters and home is domain of the former. Generally in all cultures the secrecy of home is almost a taboo as it causes people feel guilty if they are obliged to enter

some bodies home. To see a home which is uninvited is like to see its dwellers naked or in their most private situation. Obviously it is quite undesirable to be force to live in a space that one cannot recognize or remark as own territory. However, the scheme of Laguna Apartments, seemingly, has been successful to inspire such sense of territoriality to its residents. On one hand, hierarchy of spaces from public road, semi-public yard in front of apartments, semi-private spaces of backyard, entrance and corridors to private indoor spaces, , and on the other hand the space organisation of indoor spaces itself, provides the sense of privacy and publicity. This argument is discussed more widely later in case study.

Intimacy of home: Regarding the intimacy of home, Bachelard describes the psychology of houses and refers to the 'nooks' and 'corners' where human beings like to curl up since it suggests the images of quiet and rest, and intimacy. However, to curl up is attached to the phenomenology of the verb 'to inhabit', and only who have learnt to do so can inhabit intensity (Bachelard, 1964, p. xxxivvv). Just like as balconies with the sight of sea, or a single personal sofa in a corner which the residents of Laguna Apartments point out where they regain their peace. However, it should be clear by now that the structuring of home as a lived-in institution differs from the principles of architecture. The house is composed by the architect as a system of spatial hierarchies and dynamics, structure, light, colour, etc., whereas home is structured around a few foci consisting of distinct functions and objects e.g. entry, window, bookcase, television, and furniture, are of types of elements may function as foci of behaviour and symboliztionentry.

3.2 Human Experience of housing environment

Human experiences have spatial aspects, and terms like 'built environment', 'use of space', 'man-environment-relations' even 'space' enhance the view of humanity as living, experiencing beings inside the lifeless container of this world, as noted by Peled (1980). Since the human experiences his being-in-the-world in his own spatiality and the spatiality of the others, a lived world can clearly not be seen just as a physical environment. In a human's everyday life, he shares an area in time and space with other beings which show themselves as objects and places, and he discovers that 'space' is basically what 'surrounds him' in a period of time, and 'place' is the sum of all entities surrounding him.

However, Peled (1980), states his idea toward the human's experience of his relation to the environment as; human's construct and human's behaviour are both parts of a set of relations between himself and the environment he is in. The 'I and space' relation is then, one of a set of relations in which ones find themselves at any given point of their life and in any given situation. It has interpreted by Bachelard the image of humanity in the world, the relation of human to the environment, as an "oyster in its shell", carries the Cartesian dichotomy of mind and body from internal processes of the individual to the 'I and space' relations (Bechelard, 1964). However, the 'I and space' relation is generated through the ever reoccurring encounter with other in its multitude of manifestation and in each interaction human experience the world and being-in-the-world, the unity of experience and the presentness of experience, through the spatiality of his body (Garzon, 1985; Peled, 1980).

In order to understand the spatiality of experience, some studies refer to the phase "Return to the things themselves", which means the need to recover the attention directed at human primal experience. This phase has interpreted as "the event of being-in-the-world" (Peled, 1980, p. 706), "return to that world which precedes knowledge" (Ponty, 1967, p.9), and "our relationship to the life world of first experiences, prior to any representation" (Garzon, 1985, p.5).

Also Garzon (1985) deals with human experiences by phenomenological view and expresses his idea by saying the fact that phenomenology is, from the outset, concerned with the question of space. He continues that phenomenology is situated between three poles – those of affectivity, historicity, and sociality. By affectivity he refers to the investments of the subject in the "positive" or the "negative" appropriation of space. By historicity, he refers to the temporal components in the embodied subject's relation with environment though perception, memoires, anticipation and so on. At last, by sociality, he means communication. Regarding this latter, he states that "My experience of space depends on what I can make of it, that is, on the nature of the actions I can perform on it" (Garzon, 1985, P.5). However, considering such issues is necessary through the process of housing design.

3.4 Human conceptualisation of built environment

According to Rapoport (2005 &1979), built environment can be conceptualised as a set of relations, between people and people, people and objects, objects and objects. Built environments are therefore more than just physical as they always include human beings. These relationships then can be conceptualized in a way that organisation of built environment can be seen to include organisation of communication, time, space, and meaning.

3.3.1 Organisation of communication

Organisation of communication is the relation between people, their activities and interactions. The expression of limits, cues, transitions, rule systems, inclusion/exclusion of certain people, etc. arises and accompanies, following the organisation of communication. These accompanies with specific rules based on beliefs, trends, norms, standards, discourses, taste, etc., considered by designer in organization of communication between the people and their relations and reflect in desisions made in the design process. In fact, rules partially help to define groups, people who share rules. They guide behaviour and play a vital role in lifestyle and activity systems.

The rules imposed in a design, are usually conveyed by the physical elements of environment which are known as cues. Cues lead appropriate actions and behaviours. To be effective, cues need to be noticed, they cannot be too delicate. This is a recurrent fault in design. Secondly, cues need to be understood, and cues that do not mach scheme are meaningless and do not work. Definitely, those involved must be prepared to obey, i.e. to follow the expected and appropriate behaviour. Despite the fact that a designer uses this knowledge, he cannot influence peoples' obedience of cues. (Rapoport, 1979 &2005). Regarding the organisation of such communication in Laguna apartments it can refer to a family which man has been personalized a bedroom and it adjoining balcony as workplace and a private sitting room. By this way he attained his desire to control his interaction with other family members and guests. Besides, in the neighbourhood scale, although it seems that the facilities to organisation of communication has been provided, e.g. communal and meeting places, but practically interaction between neighbours has been weakly organized.

3.3.2 Organisation of time

When there is an organisation of time, communication is controlled. People live in time and the environment which is also temporal, reflects and influences behaviour in time, e.g. privacy can be gotten by a timely organization of activities and also through spatial separation, physical devices and other systems. The organisation of time has been ignored in environmental research and design, but maybe understood in a standard way which refers to extensive, cognitive constructing of time such as linear flow versus cyclic time. Linear time deals with the continuum of past, present, and future. Cyclical time refers to repetitive and recurring activities and meaning, with cycles potentially recurring daily, weekly, monthly, annually or in some other regular or semi-regular fashion. In the course of time, it affects humans' patterns of activity (Rapoport, 2005; Turgut & Unugur, 1997). The research on Laguna Apartments has been done all at a specific point of time. Hence, it has not been provided the opportunity to measure the household's patterns of activity. Still it was possible to deduce from statement of some residents that, there are time schedules in residents' activity. Regarding the cyclic organisation of time in Laguna apartments, mostly during the night family members gather in living room and adjoining balcony, and interact. Besides, it can be seen theta the users' patterns of activities changes when they transfer their daily life to the southern spaces, southern balcony and its adjoining bedrooms, during the winter in flats which is laying east and west.

3.3.3 Organisation of space

Space organisation has been explained as the method of separating and linking intervals, distances, and relationships in space. Obviously, when space is organised, design at all scales, from region to furniture grouping, and the relationship among people can be seen. Therefore, space is a basic property of environments and it is

central in understanding, analysing and comparing built environments. Nevertheless, the designer and the public have attached different meanings to the concept of space on different occasions.

Study of territories in order to assess their impact on human behaviour and personal preferences is one way of intercourse with such meanings. In environmental design studies, behaviour is transactional determinant of the environment. Spatial elements driven from ethology and human behaviours are of potential meaning of concept 'space'. It refers to what calls 'territoriality'. Thus, Altman (1975) sees territories as serving as meaning toward achieving some desirable level of privacy, Edney (1976), sees them as serving a stabilising and regulating role at individual, group and community levels, and Turgut and Unugur (1997), also state that 'privacy', 'personal space', and 'territoriality' act together, to form different behavioural settings in regulated relationships and promote interactions. It seems that in Laguna apartments it has been provided to control the interactions even between family members themselves where in flats with two balconies, couples are able to enjoy the spaces of their bedroom, its private adjoining balcony with direct access to kitchen without even to be seen by the other family members. However, there was an obvious psychological defence in entering to their private balcony, especially they try to hide themselves from the stranger's eye.

3.3.4 Organisation of meaning

The materials which give the space physical expression and other similar characteristics can be seen as the organization of meaning which frequently expressed through signs, materials, colours, shapes, size, furnishing and the like. Meaning is a critical element in preferences and choices of environments and many

of its characteristics. It is notable that the most concrete and, hence, simplest conceptualisation of environment to consider it as composed of fixed (infrastructure, buildings, walls, floors, ceilings, columns, etc), semi-fixed (furniture), and non-fixed (Human, their behaviour and activities) elements. If it be conceptualized spatial organisation, primarily as the organisation of fixed-feature elements, then meaning is often expressed through the organisation of semi-fixed feature elements. In the same way, in Laguna Apartments each family apply to their specific ways try to organise their furniture, using remarkable colours and decorative elements in order to give an identity and attach meaning to their house spaces.

3.4 The Roles of Architect and User in Design of Residential Environment: Two-sided Relation of Housing Space Formation

Just like many other authors, Rapoport (2005) affirms that design is for users. Therefore designers are surrogated for users, doing what the latter cannot, or do not wish, to do. Users' preferences are paramount, and their evaluation of housing environment expresses these preferences based on users' images, ideals and the like. However, the proposed physical order formed through the design process, comprises a set of values and beliefs and world view of designer himself and embodied in scheme. As well, decisions made by designer forms habits, manners, roles, and behaviours of users as well as built environment, and reflect in users' perception of housing space. Hence, this is fundamental to approach the design in a way that the scheme are mutually understood and shared by designer and users (McClure & Bartuska, 2007; Rapoport, 2005 & 1979; Lawrence, 1987). Relevantly, the table below has been proposed as it pictures the two-sided relation in formation of space; correlated factors in the process of making decisions in design from one side, with

the elements of human responses to the that design through the process of usage from the other side (Table 3.1).

This table clarifies the roles of both architect and user in design of residential environments and the circumstances in arising conflicts where the formed space by designer comes to meet user expectations and requirements. Ultimately, the act and process of appropriation takes place following conflicts arisen in dwelling space as a response to the resident's preferences, choices and decisions in order to make fittest correspondence with housing space and providing close relation between the terms house (formed by designer) and home (experienced/used by user).

By proposing of this table, however, it has tried to enhance the comprehension of the human's relation with his housing environment. Considering the factors and relations proposed in this table can be useful to provide the design with empathy for the user when designing houses and hence creating an architecture which is motivated by an architectural social vision, or view of life. The ownership status of housing as stated by Lawrence (1987) is a critical variable that defines the relation of human to his housing environment and, in particular, renal statue of houses confronts the architects with the problem of anonymous user. Hence, it necessitates for more care in this type of ownership counting for such relation in more common dimensions.

Table 3.1. Two-sided relation of housing space formation, affected by the models proposes by Schwehr, 2010, and Rappoport, 2005.

DESIGNER
Agent / Actor
With design knowledge

Process of Filters Design

Beliefs
Trends
Norms
Standards
Discourses
tastes

Design / Qualitative & Quantitative Features / Desicion Making

BUILT ENVIRONMENT
Organisation of:
Communication
Time
Space
Meaning

House
Home

DWELLING

SPACE
Sensational perceptual experience of person

Spatial living experience of the user

PLACE

Re-design / New design
Preferences
Choices

APPROPRIATION

Process of Usage

Usage / Adaptation / User-Environment Communication

Filters
Ideals
Images
Values
Sense of Well-Being
Life Style

Agent / Actor
Individual / Groupes / Cultural charecteristics

USER

3.4.1 Correlated factors whit user's decision making in housing space

According to Rapoport (2005), built environments are used differently by different users; as members of specie, as individuals, and as members of various groups. Furthermore, McClure and Bartuska (2007) assumed that people have reasons to undertake the role for consciously manipulating the environment to make it more suitable and appropriate for humans and all other creatures. So, modifying an existing built environment and creating a better one to accommodate the life in a more healthy way is quite natural response of the human being, especially where enforcement of design codes is often weak or unsuitable or users' expectations. That is because such environments need to be supportive for the various users, to be congruent with the way they experience and use the space. This means that one standard or common size and norms do not fit every one as the modern movement thought and most designers still assume implicitly.

However, Clapham states that users' making decision in housing space

"is encapsulated by the concern with 'lifestyle', by which is meant the desire to choose an individual identity that leads to self fulfilment [and]... lifestyles are expressions of identity in daily life. At the same time they help to define human's identity by patterning his interaction with environment"(Clapham, 2005, p. 16).

In this regard, Friedman (2002) and Lawrence (1987) express their idea towards houses and state that houses are based on the customs and habits of the residents. Culture generally defines diverse users groups, hence, there are cultural influences in the use of housing space. Furthermore, within cultures there are subcultures and social groups, and the design and use of houses commonly reflects diversity of their preferences and choices. Apart from expressing cultural and social factors, houses are also endowed with psychological meaning (Teiger, 2002; Lawrence, 1987). From

this point of view, individual filters can be understood as rational choices based on past residential experiences. Users make diverse decisions through the filter of their images, values, ideals, sense of well-being, and life style. However, this expresses in their continuous way of dealing with perceived environments and their attributes. The results of personal experiences are reflected in individual filters, and the effects can be identified through what has been called by Rapoport 'residential histories' or 'environmental autobiographies' describing the environments one has lived in, most memorable experiences, etc. Although even conflicts and negotiations among family member often occur as a result of their various experiences (Rapoport, 2005, p. 53).In fact, users' making decisions in housing space encapsulate a particular environmental quality. However, it should also be reiterated that wants often play a much more important role than needs in preference and choice and that wants are closely related to meaning (Rapoport, 2005).

Since meaning is the most latent aspect of human activities which takes place within housing space, this means that meaning is not something added to function but that meaning itself is a most important function in the sense that the form of the environment responds to it. This helps explain why wants are often more important than needs and as decisions made embodies two main different faces, rational an irrational, this also explains why simply more 'irrational' decisions are made by users. This also plays a major role in helping to explain the major differences in evaluation and preferences, and hence decision between users as a whole and also among different groups of users (Rapoport, 2005). Relevantly, it was observed in Laguna apartments, although dwelling does not fit the residents with proper size and enough

dwelling space they still persist to stay there to be close to their work place, coastal areas or pay less rent.

3.4.2 The notion of space and place

A psychological concept of an existential space defines a human developed scheme in the interaction process with his environment. Therefore, the architectural space is the concretization of existential space to provide both physical properties and functional possibilities of architecture to meet human requirements (Atasoy & Erkman, 1976). Existential space where; human activities and interactions carried out, have definite uses and adaptation accuse, is place (Tabouret, 1976). Based on psychological studies, human places are of dynamic nature which changes in time and space. Also Thornberg (1976) in expressing his idea toward place refers to the Hegel's definition as 'time posited in space'. Balance is cultured in a place among actions and representations, in which each user locates his own place, with a specific balancing in its case, encapsulating: the outset between reality and identity, functional accessibility and enclosure and so on. Therefore, it creates an aim for designers to provide the environmental fit by conformity between architectural space and that of user's expectation is which is a kind of the definition of space partially in relation to his/her feeling of place (Friedman, 2002). Referring to the Turgut and Unugur (1997), they define temporal quality of space which also discussed earlier. In this regard, they state that cyclical time represents a continuously repeated activity with circles that occurs within stipulated times, space matters even if it is taken over only for a limited period of time. Just like as the residents of rental apartments who spend certain time period in any space. The point is that, spaces of rental houses will are experienced by different groups of users hence, they are needed to accommodate with the expectation of a certain social group, rather than one user.

3.4.3 Different aspects of raising conflicts in housing space

3.4.3.1 Different cultural background of users and designers

According to Lawrence (1987) a dialectical relationship exists between what people want and what they get, and between the values of decision-makers and those of the user. Remarkably, influencing and distorting these aspects of communication are values, and there are cultures which differ in their value system. Diverse classes, norms and cultures, unawareness of cultural differences between designer and user's, perception of space and making choices based on designer's own experience all leads to design implications and conflicts, which is the different ways a designer and user would choose to behave in a same space.

Throughout the design process, rather than feeling that designer is bypassing the user's actual preferences (assuming that the user would become accustomed to living the way architect expects him to live), he ought to be convinced that he is fulfilling his social responsibilities to user, because if architect allows his own values to be consistently dominant it would lead to one aspect of conflict in environmental fit. In other words, the user's acceptance or defiance of the values embodied in the design actually determines the success or failure of any past or present design (Brolin, 1976).

3.4.3.2 Temporal aspects of human characteristics

Furthermore, conflict exists between the dynamic nature of user's lives and that dwelling they decide to reside. As household members grow older, they experience biological changes therefore resulting in changes in their habits, lifestyles, and use of space.

There is equally obviously a sense in which regardless of the occurring behavioural changes, there could be little or no change in their culture and its institution. Hence, predicated ideas and value to housing at any point in time may not necessarily reflect ultimate aspiration. In other words, housing which is perfectly satisfactory during a brief period of occupancy can be equally replaced by quite different desires.

However, these temporal perspectives advocate for the adaptation of shelters by their residents to fit their diverse needs, also during the course of time, as it has always been a part of human habitation. Changes are habitually made by users in their living environment and through these changes their personal preferences and identity can be reflected and reinforced. In this regard, as altering a dwelling layout by demolishing partitions and building a new one are all seen as more complicated and costly modifications which tend to be avoided and people would rather change their own habits or move out to another house (Friedman, 2002, Lawrence 1987).

3.4.3.3 Changes in household's compositions and family structure

Generally, households are assumed to be rational and instrumental in their approach to housing decisions. The problem of frequently making and remaking of households is also a process that is crucial to the housing field. The required number, size and type of housing are influenced by the changes in the size and structure of households. The comprehension of these processes is therefore essential for a successful plan by governments and housing developers (Lawrence, 1987).

An evaluation of trends in the distribution of types of household shows that, the major growth is in lone-parent and single-person households. The declining incidence of marriage and the increasing rate of divorce means that, households are constantly forming, splitting and re-forming, making a dynamic imperative

perspective. Individuals pursue housing pathways which may sometimes involve membership of one or more different households. There is a need to focus on both the individuals and equally the functioning of the households to which they are belong (Clapham, 2005).

Understanding how households achieve their search for identity and fulfilment through housing, requires much more knowledge about the way different perceptions and attitudes blends together within the household and how a household perspective emerges that results in the making of housing decisions. Without this knowledge there will be a limitation in the understanding of the housing field, and conflicts may follow (Rapoport, 2005; Friedman, 2002).

3.4.3.4 The problem of unknown user

It is notable that the basis for such conflict turns to the rental apartment projects, example of such is the Laguna Apartments. In such projects the client who paid for the project (often governmental agency) was not the client who would use the project, and this separation between the paying-client and user-client, raises the problem of anonymous user and hence brings about conflict in environmental fit (Brolin, 1976).

3.4.4 Appropriation of space

Different forms of appropriation take place where any conflict arises between space, human needs and requirements. As a general definition, it is stated by Atasoy & Erkman (1976) appropriation of space is a human action related to changing his environment in order to make utmost use of it according to his needs and requirements. Garzon defined appropriation more specifically as a fundamental characteristic of dwelling. He explains that "this is appropriation, by which is meant

that home usage has consequences on one's experience of dwelling. One's inner self is thus transformed and grows because of one's actions in home."(Garzon, 1985, p. 12). In short it is an interactive process through which space and its user transform and grow.

The idea of appropriation originated in Marxian's thought. Appropriation in his own opinion, taken as self-actualisation, is dependent on man's level of alienation, from the products of his work, his fellow-men, and himself. He viewed work which is the result of human's operation and activities, as the primary urge which is reified through his products. The individual actually reproduces himself by producing things that are unfamiliar to him except he appropriates them (Garzon, 1985; Graumann, 1976).

Appropriation occurs in a world of modification, alternation, and transformation since it partakes of acting and making. It doesn't only operate by the modification of things, but it is also behind all the identification processes that human approves. As a result, any practical analysis of the appropriation of space must continue along the measurement of the change of environment, i.e. its objective meanings, and independently, of the change in the person, i.e. in the coping skills or styles. Only then, it can be conclude that appropriation in the strict sense of the word really has occurred.

Many types of works may not bring about appropriation simply because they are not willingly accepted. This acceptance results in investment and, as well as involves physical effort. Thus, appropriation never is a "by-product" of something, but is always a process that has the philosophical study of the nature of being, becoming,

existence, or reality, as well as the basic categories of being and their relations. Different human capacities are, even within one and the same individual, on different levels of historical development i.e. what the eye may be ready to appropriate, the ear will not; what our manipulatory powers will be able to cope with, our conscious reflection still fail to do. Therefore human's comprehension of the appropriation of space will have to deal whit different modes of appropriation, and differentially so. Modes of appropriation of the space, regarding a psychological perspective, as Graumann (1976) proposes include:

- Sensory exploration of space / seeing, hearing, tasting, smelling, touching, kinesthetic experience

- Doing, manipulating, making, categorizing, producing, shaping, forming, destroying thing

- Cognitive-linguistic mastery (mapping measuring modelling) naming

- Communicating / use of space and spatial objects as media of communication

- Personalisation of spaces / furnishing rooms, decorating, marking, gardening, distribution of personal items, reshaping space: making space habitable.

These two latter models, however, are the ones that this study has deals while surveying appropriation in Laguna Apartments. In this context, appropriation does not occur in space or the home, but instead what has been appropriated is the meaning of home and the modes of the relationship established between human and space. Appropriation is said to be experienced when the occupant is able to set make modifications, re-arrangement and maintenance to the shelter. Likewise, in order to be able to bring about appropriation in a dwelling, it is important to have a good

understanding of the entire dwelling experience. Meanwhile, it should be notice that, in a way, things reveal themselves in part, with much imprecision, trial and error. The appropriation is not only connected to what can be easily observed, even when these aspects are sometimes an integral part of it,, but all accompanied alternations should be accepted and recognized (Garzon, 1985).

All the gestures through which the home is transformed from "space" into "place" simultaneously introduce the risk that appropriation may break down. Indeed, home appropriation does not occur only through the gestures that modify the dwelling but also in the effects these actions have on the dwelling experience. Consequently, any praxis contains its risk of alienation when it is carried away by its own movement and loses touch with its finality or when the subject no longer wants to invest it with meaning.

Ultimately, it should be noted that for any significant appropriation of space, design and construction alone are necessary but not sufficient conditions. However, people will appropriate places and streets, houses and rooms, furniture and things only to the extent that their individual capacities are ready. Then, appropriation of space can be considered as user participation in the use of buildings and user contribution to the formation of architectural spaces. Then, a post-occupancy evaluation on appropriation of space can be considered as a channel to specify human needs and requirements which are difficult to determine. The obtained data or results can be used in both developmental and new design problems. They provide feedback to design (Graumann, 1976).

In conclusion, the study of theoretical background regarding to understand the relationship between human and built environment as creates a critical sense in the research, then it implies why basically the type of post-occupancy researches have been widely applied. A summarized theoretical background is obviously given a strong meaningful base for the case study by providing a close link between carefully selected theoretical items and the issues that are going to be questioned and investigated in the coming chapter.

Chapter 4

CASE STUDY: INVESTIGATION OF THE USERS, EVALUATION; INTERVIEW, OBSERVATION AND INTERPRETATION

As Sungur and Çağdaş (2003), and Altas and Ozsoy (1997) and many other researchers affirm, practically, process of design in built environment necessitate for evaluating housing projects. Investigation of the way users judge and assess the quality of their housing environment is of basic modes to doing analysis which provides assessing the environmental quality and hence evaluating the success of a particular housing project.

Rapoport (2005) has introduced the environmental quality profile in order to illustrate user's response to various attributes of a specific environment. He states that using the profiles of environmental quality is very useful in post-occupancy evaluation because it allows one to describe negative, as well as positive, environmental quality, what is dislike and rejected, as well as what is liked and chosen. Eventually, environmental quality profiles are useful in design, because they make it possible to specify positive and negative attributes of the environment to be designed. In other words, the profiles enable one to programming and considering the ways to reach the desire state and the means available. Evaluation then becomes a way of finding out if one has achieved the goal and to what extent. In this connection, designer can consider various constraints and group differences in evaluation and preferences in order to develop current projects or design the future

ones in Mağusa city. In this respect, a post occupancy evaluation has been handled by interviewing fifteen households who reside two-bedroom type apartment units, having different plan organisation.

4.1 General Information of the Subject of Case Study: Laguna Apartments

4.1.1 Historical information and current situation of the Laguna Apartments

Gazimağusa has located on the eastern seacoast of the Island of Cyprus, in the eastern Mediterranean Sea, and it is the second greatest city of north Cyprus. Throughout its long, affluent, unique, and turbulent history, this city, houses many remarkable remainders of historical, architectural, and cultural heritages of the Island.

Based mainly on distinctive physical, functional characteristics, type, rate and development trends, the city of Gazimağusa can be considered to be composed of four main parts; the walled city which has getting prominent because of its historical feature, the newly developed quarters to the north-west of the walled city which shapes the current form of settlement, the Aşağı Maraş region which is a district has been developed mainly by the Greek Cypriots, and the Maraş region.
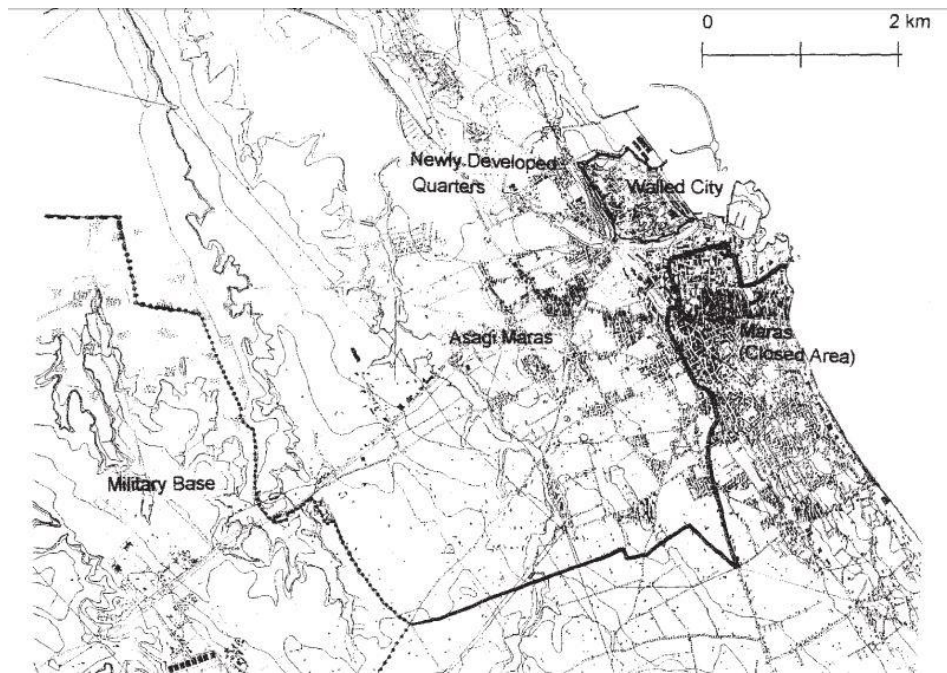
Figure 4.1. Districts of Gazimağusa (Onal, Dagli and NaciyeDoratli, 1999)

This latter is considerably a large district, includes a vast area of eastern coasts, and as tourism has been one of the major sources of income in Cyprus this region had been the basis of a broad construction toward tourism attraction, such as hotels, and meanwhile as the other regions in Gazimağusa were neglected, Maraş district was more urbanized. Anyhow as consequences of the war in Lebanon/Beirut in 1969–1970 and following the war in 1974, after the separation of the Island into two regions, Turkish in the north, Greek in the south, Gazimağusa lost its dominant position. The city has turned out to be one of the rare examples of war-torn cities. Rare in a sense that, on the one hand, the Maraş region, which was evacuated by the Greek Cypriot population of approximately 4469 families since then, was left uninhabited due to UN decisions. Without any population and thus any urban activity, the most dynamically developed quarter of the city became a ghost settlement. All prevailing trends of growth and development were terminated and hence the major income generating activities, tourism and commerce ceased. Till

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now this region has been closed to habitation while many of the hotels on the seashore in this area have been left untouched. These events all are what cause the unique urban settlement of Gazimağusa and by occurrence of these events the new tourism centres was becoming popular and the adjoining areas of Maraş also were affected, particularly Palm Beach region which dramatically lost its tourism boom. On the other hand with the establishment of the High Institute of Technology in 1979, later the Eastern Mediterranean University, the overall economic and social structure of Gazimağusa has undergone a rapid growth in another part of city. These changes in the urban development and growth trend of the city and drawn attentions to the campus region, also affected the adjoined areas of Maraş and Palm Beach to get more inert. The little attempt which has made to market historical attractions of the walled city and so some growth tendencies at the traditional core in the walled city nearby the Palm Beach, existence of Arkin Palm Beach Hotel and some beautiful open beaches at that area, and visage of restricted area at which expresses its sad story are somehow excuses which has kept the Palm Beach region still alive by tourists who are interested to visit these areas and also by residents who wish to profit an environment by those specific features of the region (Warner, 2010; Cleridesand & Pashourtidou 2007; Onal & Dagli, &Doratli, 1999). Laguna Apartments, the selected case study located on the coastal area of Palm Beach, are of projects that have become a specific sample of rental apartments on the region as in particular they have been effect by such invents and situations.

Figure 4.2. Location of Laguna Apartments on the region of Palm Beach, (URL3).

4.1.2 Laguna Apartments from Architectural Point of View

4.1.2.1 Introduction, history and layout characteristics

The project, Laguna Apartments, is an important example with its ownership status which is rental and the major objective in doing this project, to provide a temporary residence and vacation place on Mediterranean beaches. The apartments are designed by Lordos Seagate Court group of companies. The construction of apartments commenced in 1968, stopped in the pick of conflict period when the island was within the process of physical division into two northern and southern sector while flats were evacuated by their owners who were mostly Greek Cypriots , and ended in 1976 by intervention of devoted assets institute (Waqf).

Figure 4.3. Laguna Apartments, western front, (URL2).

Laguna Apartments are located on a flattened land which is quite high above sea level. The sea from north and east, existing road and some coffee bars from west, and Arkin Palm Beach hotel from south surround these buildings. Planning of the site includes a part of overall space allocated to car park, greeneries and a swimming pool, and the residential blocks itself with some communal areas and facilities at ground floor. As Thompson (1958) has noted toward apartments on coastal areas, form is important in design for such buildings to providing the best view to the sea, then it is obvious that apartments form a large 'T' on the site and optimal view has been provided through all flats in apartments. The plan review shows that scheme has been broken and articulated in some parts of its form to better define of block's entrances, and accessibility has been provided from both side of apartments (Appendix C).

The project consists five blocks which differ in height and number of floors (Appendix B), and total one hundred and fifteen housing units which vary considerably both in size and typology both in different blocks and floors. The floor

spaces of the units change between 48m² to 120m² including one-bedroom, two-bedroom, three-bedroom units, and studios (Appendix E). Nearly half of units are allocated to two-bedroom type and what is obvious regarding the layout of this type is the clear separation of the public and private zones in flats. The scheme forms the private space of bedrooms in one side, and the more public spaces of living room and kitchen in the other side of flats. Moreover, the equal size of spaces of bedrooms and even kitchen seems to provide a kind of flexibility to the space usage by tenants. This flexibility in the space use seemingly has affected the users' patterns of activities. The sample for that can refer to interchangeable use of northern bedroom during the summer and southern bedroom during the winter. Of these cyclic patterns of activities also can refer to daily use of balconies for serving breakfast and for gathering in weekends. However, two-bedroom flat is the type which has been preferred mostly by users to reside and that is why this type of flat in particular has been selected for research and interviewing with its residents.

The units and blocks are organized side by side and as concrete was more preferred in construction all over the European countries at those decades, (Peel & Powell, & Garrett, 1989) unsurprisingly, it is the applied material in these apartments and although it is over about four decade from construction of this project, the overall appearance of the building components and materials, walls, doors, and windows still has been remained partly in a desirable situation, except car parking and swimming pool which has lost their usability today. An overview on the performance and efficiency of the apartments reveal its very well-designed plan and space organisation in minimum standards, without losing even one centimetre.

4.1.2.2 Today appearance of building

Today, due to unclear ownership situation of units and situating devoted assets institute at the head of decision-making about the future of apartments, some changes has imposed to their settlement feature which turn them from summer homes to the rental residential apartments. The institute concludes its annual contracts with just Turkish citizens or others only with a Cypriote bailsman, and spends the revenue for charity. Moreover according to the applied policies in order to revival of these apartment and persuasion of families to reside into them, tenants are allowed to implement their desired changes by just keeping the institute in contact, opposed to what is common in rental house contracts with very strict content to conclude in a way that the tenants are not allowed even to nail a wall. It is noteworthy that apart from general appearance of apartment as rental, there are still eight units with original landlords who reside their units from the periods before war, and there are also units which are rented still by the aim of the summer home.

What has resulted from the operation and management of Waqf till now is physical changes in project, and the scope of such changes has been not limited only into the interior spaces of the units, but also it has been applied into the usability of some of ground floor spaces which was schemed in original plan, by omitting the reception, allocation of more spaces to the offices, and turning some units to restaurant, supermarket, gym and private offices (appendix A). Besides, disregarding the water penetration in the basement, unfortunately, has lead to destruction of car parking which has lost it functionality completely today. What has provided by Waqf as services for these apartments is security and weekly cleaning, however residents' grievance of feeling non-secure and dirt of stairs and public indoor spaces imply poor

operation of Waqf in offering such services. What is notable regard to the common characteristics of the residents is that there are gathered families by both low and high level of income, besides, variation in typologies and unit design resulted different structure of families which are singles divorced/non-married, couples, families whit children/without children, and so on. However, perceived environment by residents of Laguna Apartments has been investigated in follow.

4.2 Interview and Observing the Users and Life in the two-Bedroom units of Laguna Apartments

Evaluation of households has been carried out by providing six groups of questions in order to clarify dwellers' responses to different components of their dwelling spaces. However, the dwellers' statements has been summarised in following tables and then these statements has been interpreted in the following sector.

Table 4.1. The results of interviewees, group1

Dwelling Preference																	
	Question 1		Why did you select this building to live? (Due to good location in terms of good view; greenery and quietness, being close the friends etc).														
	Types of flats		**FT1**					**FT2**	**FT3**	**FT4**		**FT5**	**FT6**	**FT7**			
	Household No:		1	2	3	4	5			1	2			1	2	3	4
	Answers	View/Quietness	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓
		Proximity to work place					✓		✓		✓				✓		
		Apartments' Facilities	✓											✓			
		Low rent						✓				✓	✓			✓	
	Question 2		If you were able to choose, where did you wish to live instead of this current dwelling?														
	Types of flats		**FT1**					**FT2**	**FT3**	**FT4**		**FT5**	**FT6**	**FT7**			
	Household No:		1	2	3	4	5			1	2			1	2	3	4
	Answers	Nowhere else	✓		✓	✓							✓	✓			✓
		Other different answers		Coast of Kyrenia			Former village	A bigger flat in	Other bigger flat type in these apartments	Villa in Kyrenia	Other flat beside the sea	Former flat In Kyrenia			A flat near the sea (Gulseren)	Former village	

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Table 4.2. The results of interviewees, group2

Space satisfaction

Question 1	Which qualities (size, daylighting, good view, quietness etc.) of spaces are most strongly linked to your overall living satisfaction? Please put them in order according to their importance.

Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4
Size	1	4	4	3	1	1	1	4	4	2	2	1	4	2	3
View	2	1	1	1	4	–	–	2	2	1	1	–	1	–	1
Quietness	3	2	2	2	2	–	–	3	1	3	4	2	2	1	2
Day lighting	–	3	3	4	3	–	2	1	3	4	3	–	3	3	4

(Answers by ranking)

Question 2	In to your opinion which spaces (kitchen, bedroom, living room, bathroom and balcony) are most strongly linked to overall house satisfaction? Please put them in order according to their importance.

Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4
Living room	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Balcony	1	1	2	1	4	3	3	1	4	1	2	1	4	–	1
Kitchen	4	3	3	2	2	2	2	–	2	2	3	2	3	2	3
Bedroom	2	2	4	3	3	4	4	–	3	3	3	3	2	–	4
Bathroom	3	4	5	4	5	5	5	–	5	4	4	4	5	–	5

(Answers by ranking)

Question 3	Are you satisfied with the quality of spaces in this house? Which spaces you are satisfied most and why?

Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4
Satisfaction of Size – Living	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✗	✓
Satisfaction of Size – Balcony	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Satisfaction of Size – Kitchen	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✗	✓	✗	✓
Satisfaction of Size – Bedroom	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗	✓	✗	✓
Satisfaction of Size – Bathroom	✗	✓	–	–	–	✗	–	–	–	–	✓	✗	✓	✗	✓
Satisfaction of Daylighting – Living	✓	✗	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Satisfaction of Daylighting – Balcony	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Satisfaction of Daylighting – Kitchen	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Satisfaction of Daylighting – Bedroom	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
Satisfaction of Daylighting – Bathroom	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Satisfaction of View in all spaces	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Satisfaction of Quietness in all spaces	✓	✓	✓	✗	✓	✗	✗	✓	✓	✓	✓	✓	✓	✗	✓
Household type	Single Mother	Single	Couple	Single Mother	Family with children	Family with children	Couple	Single father	Single	Family with children	Family with children	Family with children	Couple	Complex-Family	Couple

(Answers)

The #1 choice has a weight of 4	The #2 choice has a weight of 3	The #3 choice has a weight of 2	The #4 choice has a weight of 1	The #5 choice has a weight of 0

Table 4.3. The results of interviewees, group3

Experience of Space Usage

Question 1	Do you like the floor/block which you live? Do you like the location of your house regarding to staircase, corridors, or the doors and balconies of the neighbours? Why?

Types of flats /Block	FT1 /A					FT2 /B	FT3 /B	FT4 /C		FT5 /C	FT6 /C	FT7 D/E			
Household No:	1	2	3	4	5			1	2			1	2	3	4
Floor	10	9	11	7	8	4	2	4	2	4	4	6	4	5	7

Answers:

	1	2	3	4	5	FT2	FT3	FT4/1	FT4/2	FT5	FT6	FT7/1	FT7/2	FT7/3	FT7/4
Upper levels Preference	✓	✓	✓	✓			✓			✓		✓	✓		✓
Lower levels Preference								✓						✓	
Neutral					✓	✓			✓		✓				
Satisfactory	✓	✓	✓	✓	✓	✓	✓	–	✓	✓	✓	✓	✓	✓	✓
To be distant from staircase & corridors	–	–	✓	✓	✓	–	–	✓	✓	✓	–	–	✓	✓	–
Satisfactory	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓
Flat not to be overlooked by doors & balconies of the neighbours	✓	✓	✓	✓	✓	✓	–	–	✓	✓	–	✓	✓	–	✓
Satisfactory	✗	✗	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓

Question 2	Where and for which space you need privacy more? Why?

Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4

Answers:

	1	2	3	4	5	FT2	FT3	FT4/1	FT4/2	FT5	FT6	FT7/1	FT7/2	FT7/3	FT7/4
Balcony		✓	✓	–				–		✓			✓	–	✓
Kitchen				–			✓		–	✓	✓		✓	–	
Bedroom	✓	✓	✓	–	✓	✓	✓	✓	–	✓	✓	✓	✓	–	✓

Question 3	Do you find equal size of bedrooms useful? Why?

Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4

Answers:

	1	2	3	4	5	FT2	FT3	FT4/1	FT4/2	FT5	FT6	FT7/1	FT7/2	FT7/3	FT7/4
Yes/No	Y	Y	Y	Y	Y	N	Y	Y	Y	–	N	Y	Y	Y	Y
Reason	Providing Flexibility	Providing Flexibility	Providing Flexibility	Providing Flexibility	Providing Flexibility	We need a bigger bedroom than our children's	Providing Flexibility	Providing Flexibility	Providing Flexibility	I have demolished one bedroom	It is nice that already we have a bedroom with separate bath	Providing Flexibility	Providing Flexibility	Providing Flexibility	Providing Flexibility

Question 4	Do you think double bathrooms are useful? Why? (If it is not what you would prefer instead).

Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4

Answers:

	1	2	3	4	5	FT2	FT3	FT4/1	FT4/2	FT5	FT6	FT7/1	FT7/2	FT7/3	FT7/4
Yes/No	–	–	–	–	–	–	–	–	–	–	–	N	Y	N	N
Reason												Storage/ laundry	–	Storage	wardrobe

Experience of Space Usage

Question 5	In your house, which relation between the certain spaces makes you more comfortable? Why?

Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4
Answers	Defined Entrance	Access of private balcony to bedrooms	After making changes, now the controlled interaction between private and public spaces	Visual relation of all spaces to sea	The relation between Kitchen and dining room	The relation between Kitchen and dining room	Visual relation of living room to sea	Visual relation of living room to sea	Circulation through kitchen and living room	Visual relation of living room to sea	Visual relation of living room to the sea	Visual relation of living room to sea	Circulation through bedroom, balcony & Kitchen	–	Circulation through bedroom, balcony & Kitchen

Question 6	In your house, which relations between the certain spaces creates problem and makes you feel uncomfortable? Why? How do you solve it?

Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4
Answers	–	Visual across to my flat	Visual across to my flat	Undefined entrance	Visual across to my flat	Direct access from corridors to indoor space	–	–	Undefined entrance	Direct access from corridors to indoor space	We preferred more isolated bedrooms	Undefined entrance	–	–	Undefined entrance

Question 7	Do you wish to have any extra space in your house? (Garden, more rooms, storage, TV room etc).

Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4
Answers	A space to keep pet	–	After changing flat's configuration, no	No, the spaces are quite enough	Storage	An extra bedroom/ laundry	We have already an extra bedroom	–	Already I have an extra bedroom	A little garden	An extra bedroom	Storage	–	–	An extra bedroom

Question 8	Are you generally happy with your house to arrange and fix your furniture in the way you like most? Why? (Could you show one of your spaces as an example)?

Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4
Answers: Yes/No	Y	Y	Y	Y	N	Y	Y	N	Y	Y	–	Y	Y	Y	Y

Table 4.4. The results of interviewees, group4

Adaptation

Question 1	What kind of changes you have made in your house?

Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4
Answers – Arrangement of Furniture	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Answers – Space Use		✓	✓	✓						✓		✓		✓	✓
Answers – Painting /Flooring/ Installations	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓			✓
Answers – Space Configuration		✓	✓			✓				✓					✓

Question 2	Is there anything that you wish to change in your house but you can cannot?

Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4
Answers	Joining the space of balcony to bathroom	Making a glass facade all over the northern wall	–	To shift the place of kitchen to the place of balcony	–	Changing the size of kitchen to a bigger one	Changing the size of kitchen to a bigger one	–	–	Making a glass facade in one side of living room	Changing the size of living room to a bigger one	–	Changing the size of kitchen to a bigger one	–	–

Question 3	Are you willing to pay more to afford the changes in your house to satisfy your expectations?

Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4
Answers: Yes/No	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N	Y

Table 4.5. The results of interviewees, group5

	Question 1	Do you have any close friends that you can regularly meet in this apartment?													
Organisation of Communication	Types of flats	**FT1**					**FT2**	**FT3**	**FT4**		**FT5**	**FT6**	**FT7**			
	Household No:	**1**	**2**	**3**	**4**	**5**			**1**	**2**			**1**	**2**	**3**	**4**
	Answers — Yes			✓	✓			✓			✓					
	Answers — No	✓	✓			✓	✓			✓			✓	✓		✓	✓
	Answers — Kind of								✓						✓		

	Question 2	Do you get any help from your neighbours for the daily life? And for what?													
	Types of flats	**FT1**					**FT2**	**FT3**	**FT4**		**FT5**	**FT6**	**FT7**			
	Household No:	**1**	**2**	**3**	**4**	**5**			**1**	**2**			**1**	**2**	**3**	**4**
	Answers — Yes															
	Answers — No	✓	✓	✓		✓	✓		✓	✓			✓	✓		✓	✓
	Answers — Kind of				✓			✓			✓				✓		

	Question 3	Do you spend time with your friends/neighbours around Laguna area or in the open areas around Laguna apartments, or gathering for a special event? Where you go?													
	Types of flats	**FT1**					**FT2**	**FT3**	**FT4**		**FT5**	**FT6**	**FT7**			
	Household No:	**1**	**2**	**3**	**4**	**5**			**1**	**2**			**1**	**2**	**3**	**4**
	Answers — Yes/No	N	N	N	Y	N	N	Y	Y	N	N	N	N	Y	N	Y
	Answers — If yes, the place of organising social groups				Road beside the beach			Road beside the beach	Road beside the beach					Road beside the beach		

	Question 4	Do you want to share any responsibilities voluntarily to refurbish the indoor/outdoor common areas of Laguna apartments? For example to clean, to look after plants, etc?													
	Types of flats	**FT1**					**FT2**	**FT3**	**FT4**		**FT5**	**FT6**	**FT7**			
	Household No:	**1**	**2**	**3**	**4**	**5**			**1**	**2**			**1**	**2**	**3**	**4**
	Answers — Yes/No	Y	Y	Y	N	Y	N	Y	N	N	Y	Y	Y	N	N	Y
	Answers — If yes, the kinds of responsibilities	Looking after the greenery	Proving internet line	Looking after the greenery		Looking after the greenery		Looking after the greenery			Cleaning the corridors & lift	Cleaning the corridors	Cleaning the corridor			Building maintenance

Table 4.6. The results of interviewees, group6

Intimacy of Space

Question 1	Please take a picture of the part in your house which you like most. Why this part?													
Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4
Responses	Balcony where really delights me	The **corner** which has placed a **cosy sofa** there	My **sofa** in my private living room, where I rest there	The **balcony**, which makes me calm	The **corner** of living room on **sofa**	**Balcony**, the only lively space	I think the **balcony** can be good	My **cosy sofa** in front of TV, where I feel intimate	My **sofa** In front of TV is where I feel comfort	My **sofa**, where mostly I spend time on it	**Balcony**, where provides a unique view	My lovely **sofa**, where I regain my peace	Eastern **balcony** which is opposite o a great view	My **personal sofa** at the corner of living room	My **private balcony** in the lovelies space

Question 2	Please take a picture of the part in your house which you generally dislike. Why this part?													
Types of flats	FT1					FT2	FT3	FT4		FT5	FT6	FT7			
Household No:	1	2	3	4	5			1	2			1	2	3	4
Responses	As I have changed everything, **Nowhere**	**Nowhere**. My flat is really lovely	**Balcony**, where it provides overlooking to flat	**Balcony**. I wish it was distant from neighbours' balcony	**Balcony**, it make me feel I am under control	The **trace of humidity** on the surface of materials where makes unhealthy living spaces	**Nowhere**. I am partially satisfied with all spaces	The **trace of humidity** on the surface of walls	**Nowhere**. All parts are quite fine	**Nowhere**. There is nothing disturbs me about my flat.	**Nowhere**. I like my flat as a whole.	All parts are partially in good quality. **Nowhere** is disliked	**Nowhere.**	**Nowhere**, all spaces are equally unpleasant	Absolutely **nowhere.**

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4.2.1 Dwelling preferences: The dweller's settlement priorities & accordingly, appearance of most desirable features in apartments

Even a brief and primal survey of Laguna Apartments reveals that this coastal settlement, by locating itself beside the Mediterranean Sea provides such a unique view that is mostly linked to the residents' decision making toward selecting the apartments to reside. What is obvious in comparison to the status of other apartment buildings at within the same area is the fact that these apartments are more desirable and preferred by people potential occupiers. Effectively, the regional peace and quietness was enjoyed by the residents is another major reason why the occupants prefer these apartments.

> I once owned a flat near the Karakol. I relocated to this environment after my divorce; I decided to move to this apartment not only because of the serenity of the environment but also because of the security that it creates. Frankly speaking, here is the only place I wish to live inMağusa...

> I was resident in a rental flat at the center of the city before. I later decided to relocate to an area where I could have a better view to the sea. That is why I chose to live in these apartments, and as soon as I can afford the possibility of living in a stand-alone villa in kyrenia similar to this, I will move in to it.

> I was living with my parents in a flat before, after I got a job and became more independent I started my single and independent life in these apartments. The quality of the district, the social class of people who resident here and the view to the sea all contributed to the reason why I chose this apartment to live in. InMağusa, here is the only place I would like to live, but if peradventure there be any chance for me to relocate I will move to Kyrenia near the sea...

> I was living in a rental house, and then we decided to move in these apartments to enjoy a more qualitative life. After considering the fact that the rents are not too different from other buildings in the city that do not posses all of these .I found here entirely suitable for my family and surely we would not like to live in other house...

> I was living in a villa in Kyrenia before. When I got a transfer toMağusa, I moved into this apartment as I was drawn to it by the views and quietness of the environment. It's over fifteen years that I have been resident here. Although this

flat is not my property, but I found such an ease and comfort in it that I will would not want to change my residence and one day if given the chance to buy this property I will do so with all gladness.....

We stay in a flat in Istanbul and during the hot months we move here into these apartments. We are not young anymore and we just seek refuge here from the noise and pollution of the big cities. Somehow we have found our ease here and we are not willing to change our house....

I was living in a village near the Mağusa. Then at a point in time, I found that I was not young anymore to manage a big villa like the one we were living in, besides, my son had to stay in Mağusa as he was applying to study in the university. With regards t this, we decided to move in here. Actually, I had the experience of living in Laguna Apartments when I was coming to visit my sister who was resident in these apartments. The view and quietness of region really impressed not seem good enough in comparison to our previous villa but still I will not lose this unique view to have a better flat...

We have been resident in Maraş region before. During the war we were force to abandon the region. Hence, we persist in residing somewhere close to our previous home by its distance and statue. As Laguna Apartments is located in a region which is coastal, quiet, and mostly touristic then we found these apartments mostly proper and decided to rent one of its flats. But now, after over fifteen years living here, I have changed my mind to live in a villa in sorrowing village. I've continued staying here because of my children as well, since they are here in Famagusta, coupled with the fact that they enjoy quality education from around the city....

I have been the resident of a duplex flat in Kyrenia, then I was faced with financial challenges and I decided to come here as I found these apartments nearly in a good quality and rent range. But the point which attracted me most toward these apartments that I decided to reside here was the sea view. Overall, I am sure as soon as I get over my current financial difficulties I will go back to Kyrenia to my former flat...

Already I am living in a flat in Iskele with my family, but I found that it would be nice if I had another flat in these apartments, because not only is it close to my workplace but also I like this environment as it is coastal and touristic. (I found later in addition to what he said he is living with his girlfriend at that flat and it was somehow his second home). If I had a chance, also I might live in a flat In Gülseren as well...

What is more regarding the residents preferences, since the district is somehow touristic and it has created job opportunities at area e.g. adjoining hotel, restaurants, cafe bars, and so on, it has been seen that these apartments have been selected as they were mostly close to the residents' workplace. Following statement of residents somehow, affirm this claim:

> I was living with my parents in a villa in Izmir before. Then I was hired at Palm Beach Hotel and moved here. The rent for these apartments is paid by the hotel and I am here because it is near to my workplace. Besides, I benefit from regional quality, by its view and quietness as well. I think an apartment near the sea in Gülseren can be nice to live as well...

> I was living in a villa in Tuzla with my parents, when I married I decided to move here. Living in these apartments provides an opportunity not only to be close to my workplace, but also benefiting a good view which is unique in all Mağusa. But yet I do not feel such an attachment regard to these apartments which dissuade me, if one day I had to move in other flat...

> I have grown up in a village, Güvercin. Then we moved to Mağusa with my family to enjoy the urban amenities, specially because of our children, then we chose these apartments as it was near to the workplace of my husband and we found the region more quiet in comparison to others .This is over 15 years that we have been residing here and all these years I just wish to go back to my village...

It is notable that although a few numbers, but still there was some families whom just look at to these apartment as a shelter. By this standpoint, they expressed their idea toward the apartments such harshly that it seems they even could not justify a percentage of pleasure by the unique view of their flats. Instead, nearly low rent rang is of those services has provided by Waqf, has noticed by residents.

> I was living in a village around Mağusa, then we decided to relocate to a place where we can easily get access to urban amenities as well as a more qualitative life. In this aim, we were not able to pay more than what were our common expenses in the village. As we found the more proper payment for the rent range in these apartments then we moved in here. In this regard, recently we have been looking for a flat with even lower rent range which is more proper...

I was living in Russia; I married, then got married to Turk and directly came here. I chose these apartments because I was just looking for a shelter with low rental range, although at this moment I really admire the quality of these apartments because of their location. This type of flat was the only one available at that time, but now the situation has changed and I am moving to a flat in Iskele after 10 years...

The moderate rent of the apartments and the apartment administrator had in mind to attract low income families, but practically these apartments has been rented by mostly average and high income families whom enjoy a high social class as well.

Apart from the dwelling features with regards to its location, the apartments' facility such as lift, garbage chutes, and security was spontaneously mentioned as satisfactory, so that it seems the tenants' preferences also regards the facilities. However, it is irrefutable that apartments in a way have their own disadvantages e.g. the noise from cafe bars, often late at night and in weekends, and the old materials and mechanical and electrical systems of apartments, but still the basic features of apartments had such a connection to the residents' ideal that rarely they have changed their mind toward the apartments after residing there. Apart from this, when the residents were asked where they wish to live except the current dwelling, mostly answered "no where else", and whom was willing to change their dwelling, answered in such a way that they either describes nearly the same features of their current dwelling, or the home where they reside before.

4.2.2 Space Satisfaction: Evaluation of the space values according to dweller's images of ideal home compared to the current one

Selection of two-bedroom flats for the research among different types of flats in apartments, somehow limit the scope of research, and what is primarily expected is to see nearly similar type of families whom have found this type of flat congruent

with their ideals. But it is surprising that this type of flat has been preferred to reside by a wide variety of family types i.e. single, single parents, couple, and family with children or without children, and even multi-families. Although it can be justified partially that having seven different organization of this type result   this, but it also has revealed that the scheme of this type has operated effective to embody different decisions, choices, and way of doing things. However, through the interview, it has been tried to derive the households' specific way of perceiving environment and its attributes from expression of their ideas toward dwelling. This however, brings about different satisfactory ranges which reflect how effective personal experience of dwelling integrates residents' memories and images. In this matter the statements has been ordered as follow.

Hatice, a single mother states that:

> ...As size and then view are the most important characters in a house in my point of view, then I have chosen the biggest size of this type of flat. Apart from this, I am busy with my job, this makes me to cook rarely, moreover I hate cooking and when I am at home and awake, of course I spend most of my time in living room, hence, if I want to prioritize different spaces of a house, living room and balcony and then bedrooms take precedence over every other spaces and particularly, the kitchen. I would like specify the rectangular shape of living room, separate entrance, the placement of kitchen which is far from entrance and quite proper size of spaces, between all aspects contributed in my entire satisfaction of this flat... (Appendix G, Case number 1)

Elena, mother of a family, states that:

> ...I cannot continue living here anymore as my children have grown up. I know that originally these apartments were designed for rent during the summer time, it's not surprising that its size shows that it was people for a short period of time make me trouble when residing there for 10 years. All the spaces are such small that limits my activities and all these years, I have just tolerated small spaces of this flat. I need a bigger house as well as more healthy spaces; no trace of humidity and mould. During a day, mostly I move through the kitchen and living room. That is why these two spaces are even more important to me, and if you ask if I am satisfied with this flat, definitely I will say no...(Appendix G, Case number 2)

Tizen, who is newly married, state that:

> ... when we came to visit different flats in these apartments, I checked for the size of spaces firstly and then how the spaces enhances the natural light. As we were not able to pay for the rent of a quietly proper flat, then we decided to rent a two-bedroom flat as I found it more suitable for us. But still I am not quite satisfied with it, because of the small size of spaces especially the kitchen, as I cannot fix all of my furniture...(Appendix G, Case number 3)

Durdu, father of a family with children, states that:

> .... Size and quietness are the items which take precedence over other qualities in my ideal house, and living room is where my food is served, I rest and gather the family members. So the quality of living room is mostly important and I can say I am happy with the size in this space. Although the rest of spaces are really small but still the location and facilities e.g. lift and garbage chutes, are what generally makes us quietly satisfied...(Appendix G, Case number 4)

What is obvious through the interviews is the fact that the size of the spaces is what mostly noticed gives a lot of concern to the users whether the person being interviewed is a male or female. In addition to this group, women mostly affirm that when they enter a flat to visit, the first thing they check out for is the size of spaces. On the contrary, the size of space which has been more strongly noticed by women is less significant or even insignificant for single men. Single men when were asked about the size of the spaces, they found it somewhat irrelative to be counted as amongst the key factors that add up to the quality of a house. Instead they mostly look out for a cosy and friendly space in living room, to relax and gather with their friends. Another major observation was that the singles still preferred to rent the two bedroom apartment as opposes to the general premonition that they would go for the one bedroom flats. When asked why they chose to rather go for the two bedrooms instead of a smaller space they didn't give any reasonable answer. Therefore, what is obvious is that the size of spaces although is not a major priority for men but still is noticed to be an under laying factor.

Nazım, a single father, states that:

> ...Never mind how small or big my flat is. What I want is to have a quiet and bright indoor space with good views. I spend my time during the day in my living room with my friends. I watch TV and my favourite audio equipments are also here in the living room. So it is clear that I gave priority to this space when I chose this flat. Notwithstanding, all the other spaces posses same value in my point of view. I am not sure if I am entirely satisfied with my flat or not but I find it suitable as it meets all my basic spatial need...(Appendix G, Case number 5)

Ulutan, a young and single man, states that:

> ...here are the basic attributes I look out for in a flat which I wish to live, firstly good view, quietness, natural light, and size of the indoor space, these are my major priorities. The living room and its adjacent balcony are not only my personal space which I spend the most of my time when I am alone, but I also love to share these same spaces with my friends when they visit. That is the reason I prefer this space in my house more than the other spaces. Although they are all given same value as they all serve their peculiar functions in the house, besides, I am generally very happy with the quality of the spaces in my house...(Appendix G, Case number 6)

Yiğit, a young and single man, states that:

> ...Size, in a house is the least priority for me in choosing an apartment. When I come back home to rest, I just want my home to be quiet not necessarily spacious. Besides, I am already working in a place where I constantly have the view to the sea every day, so except for making barbecue, balcony does not have any major appeal to me. In my point of view all the spaces of a house have same value. But as I share the living room and kitchen with my friends I feel these two are more important than others, also I have found them to be the points which satisfy me most in the flat...(Appendix G, Case number 7)

Emir, who lives with his girl friend, stats that:

> ...As this is my second home, I do not use to spend too much time in its living room, and mostly I move through balcony, kitchen and bedroom to enjoy, eat, and sleep. Besides, with regards to the quality of the spaces, in my ideal house it is enough if it is beside the sea and quiet. Considering the general quality of space provided by this flat I can say I am quite satisfied...(Appendix G, Case number 8)

Appropriate size and good view from the different spaces of a house have appeared as the mostly desired qualities occupants look out for. Amongst, the residents whom

have rented a flat in these apartments either as a permanent or temporal summer home all had less emphasis on the importance of size. The major mentioned qualities of the space by tenants were quietness and slightly daylighting. Below are some statements from the tenants that affirm this claim.

An old couple who are architects state that:

> ...View, quietness, light, and size are what we find most importance in choosing our dwelling space. Besides, with regards to how important the different spaces of the house are for each of us, one space overtakes due to its importance by our preference in our activities, and how we prefer to share the spaces e.g. My wife likes to spend her time all the day with her friends while I would like to sit in my personal TV room as it has been furnished according to my needs. That is why living room is more important for her and the bed room, which I have organized for myself in more important for me. We are entirely satisfied with our flat as it is a temporary dwelling, if not we are not sure we will still persist in staying here...(Appendix G, Case number 9)

An old woman, who is a member of a complex family, states that:

> ...since I moved into this apartment, I found the noise which comes from the cafe bars, corridors, and surrounding really disturbing to me, thus, quietness has got the only concern toward my ideal house. Except that I would like my house to be large enough then I can arrange all the stuffs which I have kept from the past. But practically I am faced with a lack of space and I am forced to keep my stuffs in one of the balconies and the extra bathroom. I spend most of my time during the day in the living room and on my favourite sofa. Besides, the family members gather here, in living room, around me to chat. Even I have placed my bed here in front of TV. This is why I take care of the living room the most. Generally, I cannot say if I have been satisfied with my flat or not, I just adapt to the space and try to like it as it is..."(Appendix G, Case number 10)

Özlem, an old single mother, states that:

> ... The size and natural light can be important as view and quietness are. The size of the flat is quite satisfactory, but my living room has been oriented to the north, it does not gain enough sun light that is why I experience excess humidity and mold in this space. But generally I am happy with my flat..."(Appendix G, Case number 11)

Gündüz, an old man who lives with his wife, states that:

> ...I am not sure which kind of qualities of space is mostly important for me. Whatever it is, I am entirely satisfied with it. Furthermore, balcony, living room,

kitchen and bedrooms are respectively important in a house in my point of view. I am busy during the day outside and when I come back home I just want to feel fresh and I can gain it no where except my home, especially in my private balcony. It is nice that I have another balcony jointed with the living room which is more public and I can share it with my friends who prefer to sit at balcony, this point directly links to my high satisfaction of dwelling...(Appendix G, Case number 12)

Fatma, mother of a family with 2 children, states that:

...The proper size of spaces and then quietness are the key attributes I am mostly concern about in a house. Besides, during the day I mostly spend time in the kitchen and living room. That is why size is most important in these spaces for me. Although, we found this area really quiet but still I am not satisfied by the size of spaces, specially the kitchen...(Appendix G, Case number 13)

Mr. & Mrs. cirik, a couple with a child, state that:

...view and then size is the most important quality of a space in an ideal house in my opinion. As we are a family we gather in living room and keep company. So it is the most important space but in this house it is really small. Bedrooms and kitchen are less important and we have not any complain about them, and totally by considering all the attributes of flat we are partial satisfied, and view of apartments in the major point of our satisfaction... (Appendix G, Case number 14)

Sardar, a single man who is divorced, states that:

...View and size were the priorities for me when I selected this flat, and then living room and kitchen were the spaces that I care mostly. Somehow I feel living room is the centre of my flat where I have dominance over other spaces and it provides a good view, and kitchen is the service provider part of living room. I mean, for me these two spaces are the most important, and generally I am happy with the quality of spaces in my flat...(Appendix G, Case number 15)

What can result in this section of the residents' statements, the living room and its adjoining balcony were most strongly linked to their overall dwelling satisfaction, with secondary emphasis on kitchen. As also Lawrence (1987) affirmatively states that it is apparent that the ascribed role of housewife has not change as they note the importance of kitchen and devote considerable amount of time to housework in this space.

Bathroom design was relatively unimportant. However it is not known how important bedrooms were in this respect. What is quite notable is the fact that the 'view' is what has been repeatedly emphasized as satisfactory point and since the balcony is a space which enhances the view to the sea, there wasn't any mention of balcony as separate from living room when resident were asked about the importance of spaces. In other words, residents strongly affirm that devoting time to stare at the sea is an inevitable part of their daily life. It is considerable that the specific way of ordering housing spaces and giving priority to them by men and women, relates also to the specific activities that take place in these spaces and are of particular interest and expresses the demarcation between male and female activities.

Living room is a space that individuals spend most of their time to relax as well as watching television, besides they share the same space when they are in a group with friends or other family members. Meals are served in dining room which is also a part of living room space. It reveals that living room is usually the focus for all family activities whilst, they are able to extend a part of these activities to the adjoining balcony when they wish.

Two third of interviewees found the size of living room satisfactory but the rest, mainly the families with children, found this space too small. Only tenants living in flats with the orientation of the living room to the north, complained about insufficient daylighting within their space as it increased the humidity and caused mold in the building. Otherwise there is sufficient sunlight in living room facing the south, east or west. Tenants who rarely make use of the kitchen, considered the size of this space adequate. But still there is complaint of space deficiency in kitchen by families with children who wish to serve the meals within this space. Although

location of kitchen in different flats provide different quality of lighting but there is no complaint of lighting in this space. Besides, except two cases, the other residents considered size of bedrooms adequate with sufficient lighting.

The small size of bathroom drew complaints from all the households with single bathroom. But seemingly they do not care about the quality of lighting in this space as they were unconcerned in their response to lighting in bathroom. Meanwhile, quietness has been emphasized by about half of interviewees, especially elderly households. Two interviewee found the noise from the cafe bars during the weekends and late at night as well as the noise from the surrounding area, communal corridors, and through the wall of neighbourhoods quite disturbing, whereas the rest although acknowledge its effect, but found it insignificant.

In sum, it is clear that the quality of spaces in Laguna Apartment has provided partial satisfaction to its tenants and the generally location of houses seem to be appreciated more than the design. From the data analysis, about half of the interviewees were very satisfied with their flats except two tenants the rest were fairly satisfied. Amongst the different types of households, Swenson (2010) and Komut (1996) in particular describe the relationship between environment and behaviour of elderly households and they propose that attachment to home is a vital component of emotional and physical health, especially for these groups. Regarding expression of households toward their satisfaction of flats, it was somehow obvious that elderly households were who mostly suffer if they could not gain their satisfaction of their dwelling. Hence, homes lend meaning to the lives of elderly households is at higher risk for loss of a sense of meaning in their lives.

However, as Lawrence (1987) states that tenants' satisfaction of their dwelling and given point in time may not inevitably be a long term desire as human characteristics and expectations changes with time. Regardless of tenants' level of satisfaction or dissatisfaction caused by the objective characteristics of existing environment, the satisfaction of housing space is in part a function of expectations of the future.

4.2.3 Experiences with the space usage: Evaluation of use and statue of the spaces

As Peled (1979) states, dwellers responses regard to usability of dwelling spaces, and how they are involved in dwelling spaces by its relations and organizations somehow reveals the way they experience and use their dwelling. In this regard, residents' statements of this sector have been investigated to deal with spatial experiences of housing units in Laguna Apartments.

> ...I prefer higher levels. This location not only provides more beautiful view but also it keeps me far from the noise which crosses through the corridor. No one stranger comes to my house, and I never have to be concerned about having to always control my privacy by always blinding the opening of my flat. Though there is no concern about these spaces for me, still my guests let me know when they want to enter the bedrooms, ... Equal size of bedrooms makes it possible that I can interchange my room with the one belongs to my daughter while I can find my new room as spacious as the former and I can set the furniture as I wish in these space and elsewhere. But generally, I prefer to fix my furniture in the best position toward the view. Nonetheless, I think I need an extra space where I can keep a pet, and beside it would be nice if I did not have a second balcony but instead I had a big bath separate from toilet. The only thing disturbing to me is the neighbour's balcony which makes them have a direct view into my living room...

> ...toward the location of my flat, I do not care about it and I am not unsatisfied, but according to the information obtained, the flats which are located on the ground floor possess a better insulation which reduce the air fluctuation. So just in order to benefit from this quality it would be nice if I had a flat on ground flood. My flat has the most distance from the staircase which makes me pleased not only because it keeps me away from noise but also because it gives me a sense of privacy. First I felt uncomfortable as the entrance door and balcony of my flat was quite adjoining to my neighbours, as though I share my flat with someone else. But this is now the reason that we are close friends now.

Fortunately the location of bedrooms keeps at least these spaces far, giving the required privacy which is really important for me... Although the same size of bedrooms provides the opportunity to interchange bedrooms, or even to change the usability of one room during the time my son lived with his mother. But still I persist on allocating the room with better view to myself, and the room which is more exposed to light radiation to my son... by considering the entrance to the bedrooms and balcony and the size of living room, I am not free to rearrange the furniture...I think if I had a chance to have an extra space I preferred storage...

... I prefer higher floors because they provide a wider view compared to the lower ones. Nevertheless, I still satisfied with the one I presently live in, although it would have been better if it was even higher. I think the only thing that disturbs me with regard to the location of my flat is that it is too close to my neighbour's balcony and I am often been disturbed by noise from my them. Apart from that, nothing else bothers me, not even the distance from the entrance or the several neighbours I have around.

I rarely allow anyone access my bedrooms, I have the same and even more reservations about the balcony which is between them, and toward the equal size of bedrooms I can say I find it useful as it provides almost same satisfaction. I take each of them as my bedroom (although I prefer the room with two window openings) and the next one is actually my extra space that I always refurnish based on how I want the space to look like at the time e.g. TV room, office, library, or anything else. I am happy with the current arrangement of my furniture which is fixed in front of the balcony to benefit the best view. I do not like to rearrange them but however, I think even if I want to the organization of living room does not allow for such a change...

... Toward the location of my flat I am happy with the floor where I live. I prefer neither upper levels because of storm nor lower floors. It doesn't really matter that the door of my neighbour is directly facing mine; I ensure that just when someone knocks my door I am all the time careful not to open it entirely since they can see my living room easily. Besides, being close to the cafe bars, and the noise coming from them is really annoying... my bedrooms have different shapes; we found it easier to embed our stuff in bedroom with rectangular shape. The next one is allocated to our children, which is both in good conditions of lighting and far from dirt. Hence I did not find equal size of bedrooms such useful and interchangeable... I think if I had an extra bedroom and a space for my laundry it would be quite a pleasure...

...I am living alone and I rarely have guests so I have so much privacy. Besides, except during the summer, most of the flats stay empty for the rest of season. This quietness from the upper floors causes me to feel even more isolated and alone, that is why I like the floor which I live. I have chosen two-bedroom flat because it has a more thoughtful design besides, I can reserve the extra bedroom for my parents when they come to visit me...

... We do not have any complain about the floor or distance from the staircase, or the door of neighbours, the only thing that disturbs us is the dirt and the smell of pets. We use the bedroom that seems to have more privacy and reserve the other which has more direct daylighting for our daughter. We don't mind that the bedrooms are equal, it is clear that the master bedroom was designed for us by the positioning. We like to show the wonderful view to our guests; hence direct access and view from living room to balcony makes me happy. in other hand, the sudden encounter from my bedroom with my guests in living room is not desirable, we did not have same problem in our previous flat besides, we would like to have one extra bedroom for our guests...

... we chose to stay on the last floor to avoid noise and disturbances from neighbours. Besides, the current location of our flat and its distance from the stair case and entrance door of neighbours somehow meets up with what is our ideal home... I think as an architect that the privacy gets significant according to ones preference and the level of interactions. I have isolate my personal space in a room where is multi-functional, my personal living room, TV room, and office. Even I eat me meals in my personal balcony jointed to this space. This balcony, and the next bedroom opposite my personal spaces are the spaces which I share the most with my wife. This time these spaces are our personal spaces when we have some guests, and we share the living room and the next balcony jointed to it with them. This second balcony is even so public that it has been also shared with our neighbours without even their physical presence,(I mean direct view through the neighbours balcony into my balcony and living room interferes with the pure sense of secure and safe at home)... We found that we need an extra bedroom for our children during the time they come to stay with us. So we have created this extra space by applying some structural changes.

... I like the floor which I live, somehow it could be lower but definitely not higher. This is what I feel, I am not sure why maybe because I am scared of lift. Toward the placement of balconies I have to say the western balcony is used by my daughter time to time to enjoy the view, but I just use this space to dry my laundries and store the extra stuffs. So in my point of view it does not matter how close they are to the neighbours' balcony. I just always was willing to have one extra bedroom. I think an extra bedroom could allow us to arrange and fix the furniture more properly.

... I am pleased with the location of my flat. It is not located on a too high level, it provides a good view and keeps me away from noise; I didn't choose the last floor because vast amount of energy lost occurs through the ceiling on the last floor flats. I am close to the lift and the door of neighbour is completely opposite to mine, but I've never had the feeling of being disturbed. Somehow there is just one neighbourhood beside me in this flat and I do not think he ever makes disturbing noise. Except for the living room and the balcony beside it, the rest of spaces in my flat are private spaces. The general layout of this flat satisfies me as it provides an entire separate private usable space. The accessibility between one bedroom, my private balcony and kitchen really makes me happy with

regards to the relation between spaces which creates a part of desirable privacy. As a couple and share the same bedroom, we have chosen the bedroom which is oriented towards sea view and the next has been converted to a personal library for me. I think same size of bed rooms have been useful as they provide partly same quality then we can change their usability as we wish... I think although size of spaces limits us somehow to arrange the furniture as we wish but still it has its flexibility partly which keeps the space far from uniformity...

...the bedrooms where I need more privacy have been placed by design toward the surrounding cafe bars. The noise coming from these bars is really annoying and I think this is why flats in this block are mostly vacant. By this situation I do not feel secure. Although the door of my neighbour is directly opposite mine and it may seem undesirable, but still I wish someone live there and see my living room. With regards to the location of floor, although I prefer top floors but I do not have any complain from the floor which I live... one bedroom has been reserved for our laundry and when it is needed to our guests, also the next one is our bedroom. We change the function of these spaces seasonally. Right now as the weather is hot we sleep in northern bedroom. And I think this opportunity somehow is related to the equal size of bedrooms which makes us benefit nearly same quality in both bedrooms...

... the main challenge with regards to the location of my flat is the fact that I am force to clean the filter tips which usually drop down to my balcony. Apart from that, the location provides a good view and enough distance from staircase, and the door of neighbourhoods. I just thought the neighbours' balcony is really close to mine, but still I do not have any complain as they are vacant most the time... The only private space in this house is my son's bedroom. Except that I do define other space by its privacy. I have brought my bed to the living room in front of TV, because I feel I do not have anything that I want to be hidden. Anytime I see the need for more privacy I restrict the entrance of visitors into living room... toward the relation between spaces, the interior spaces provide visual connection to sea through the kitchen, living room and balcony. Somehow the accessibility and the way that I move through these spaces are nice as well. Especially since I have brought my bed to living room I quietly feel comfortable. However it would be nicer if there was also a proper relation between inside and outside of flat that would not force me to take off my shoes inside the living room...

...this flat has two bathrooms; I don't really see the need for that so I use one of them as laundry and storage. However, we still need extra spaces for storage. We need one extra bedroom, as it is very inconveniencing for our children to share one bedroom....

...The only thing that disturbs me about the location of my flat is that it is mixed with that of my neighbour that we can hear each other easily. Besides our balconies are adjacent and it increases the problem. After all now we are close friends and I just try not to increase the problem. I am single does not mean privacy is not meaningful for me. I think privacy is what I need entirely in the all

spaces of my flat. When I allow someone to enter my flat, the pleasure would last for just few hours, more than that I feel somehow when he is disturbing my privacy, but of course still my bedroom is more important in this aspect as all my personal belongings are there...

... When I came to visit the flat my attention was drawn to the double bathroom, because I had always needed something like this to separate my bathroom from that of my guests. Besides this, I spend most of my time in the living room and the balcony as that is where I watch TV, eat my meals, read a book, and do all my hobbies. The two balconies on the east and west side of my flat allows daylight into the building as well serve as a relaxing place when the sun goes down. I found two-bedroom flat more useful to rent, as often have guests from Turkey. These bedrooms are where I need privacy more but the noise that crosses through the wall, corridors, and area is really disturbing. I am not too bordered about how my furniture is arranged, but as much as it creates problem now it has become necessary. Especially when it has to do with space, direct access through kitchen, balcony, and bedroom really makes me happy. I just limit my life between these spaces and it is what I really Love....

...I am okay with the floor. I do not have any complain about location, except for the confronting balconies, which makes it possible for my neighbours to have direct view into my flat. However, tin order to solve this problem, I covered the linking space which leads to my loosing part of the view. Due to the limited space, I would prefer store instead of an extra bathroom. Even though we found two-bedroom flat suitable at first, it is not now as our children are grown now, in order to provide a convenient spaces to arrange my furniture the adjustment has made it difficult to rearrange the furniture in living room, This limitation of design was caused by the placement of corridor and doors....

About four to five interviewees living in flats above the ground seem quite happy about living at these floors. They stated that the upper levels provide more desirable view and keep them away from noise. They also affirm that the upper floors make them have a feel of privacy. Only two out of the interviewees preferred to move to the ground floor; however their choice might be due to their ignorance of the disadvantages. Tenants tend to evaluate their flats based on the amount of privacy they get from it, it is obvious, that tenants who have less numbers of neighbours seem more satisfied. In addition, worries on the distance of space between their doors and that of the neighbours and that of the staircase seem not to be a problem as long

as it does not interfere with their privacy. In this regard they will prefer distant space form their doors and staircase. It seems the only troublesome thing in regards to the location of flats, is the view been provided by the indoor spaces, of flat type FT1 through the adjoining neighbours' balcony. However, all the interviewees faced with this type of situation strongly agree with the existence of such a problem. The way that tenants describes their location, is always with the level of privacy they get. A context of privacy also appears in a smaller scale in the accessibility between the spaces inside the flat. As it has been noted, the layout of the apartments separate bedrooms in one side making them private, and the living room and kitchen on another side making them more public. Tenants believe this type of layout provides them with privacy inside the flat which they seem to gain satisfaction from related to a flat. Regarding different spaces of flats and their private and public values, there was an agreement between tenants that, bedrooms seem more a private space. And the Balcony appears semi-public; tenants who are living in flats with one balcony are happy with the way it is joined with the living room as they can't share this space with the others. But it was noted, that in flats with two balconies; certainly the balcony joined to the living rooms interfere with the most desired value privacy.

Tenants in this type of flat affirm this point positively that, not only can they spend time with their guest on the balcony adjoining to living room, but also creates a relaxed environment where they can spend some private time alone. In a comparison between men and women expression of privacy, it is obvious kitchen carries less sense of privacy for men, and tenants who are old did not have such adherence to have privacy regard to view and access. Seemingly for elderly tenants, coding spaces by different level of privacy is something unnecessary. There was also another way

of interpretation of privacy which regards noise penetrating from neighbours' wall, corridor, and surrounding, which has been discussed before.

Regarding Newman's (1996) statement with regards to the hierarchy in space type, Laguna Apartments is seemingly benefiting from such hierarchy as tenants describe, this can clearly been seen from the location of apartments which is at the corner region, greenery in front of apartments, entrance of apartments, corridors, till their flats creates a hierarchy of public, semi public, and private areas. This however increases residents control on their living spaces, increases the sense of proprietorship and territoriality felt by residents, allow residents to relate better to the surrounding community.

Tenants, when were asked about their feeling about the relation between spaces still expressed their idea in such a way that they are willing to gain their privacy by these spatial relation. Complaint of absence of a defined entrance in tenants' description of direct relation between indoor and outdoor spaces, were linked with those disturbed as their flats were being looked into by strangers when they open the door. In flats with two-balcony mostly the one accessed through bedroom and kitchen, while one balcony which stands out as a private and cosy space has been provided and as it has been stated by tenants repeatedly, you can spend most hours a day in these spaces. Despite this fact there were also two tenants abused this space as they have closed the way of this accessibility and have converted the balcony into a store. However, in flats with one balcony, the visual connection between living room and outside is appreciated.

Except three interviewees, who have families with children, the rest found the equal size of bedroom quite useful as they could interchangeably allocate each bedroom to their personal space for sleep or any other special purpose. However Altas and Ozsoy (1997) also affirm that same size of bedrooms of two-bedroom flats provides the most flexibility and hence higher percentage of satisfaction in long term. Generally, view and exposure to the sunlight to a bedroom are the most considered factors to individuals' preference when they chose one. This somehow implies that a visual access to sea still has remained a priority even in bedrooms.

It is clear that somehow more than two third of tenants have arranged their furniture setting such that way they can still enjoy the view provided. Although Nylander (1999) states that from 1960s television became a common feature of homes which changed the role of living room to where families gather to what TV. But in this case, the residents arranged their TV set in a way that the can both watch their TV and catch the view to the sea as well. However, the way the residents have creatively set their furniture is entirely different from the model of arranging furniture proposed by designer in original scheme.

There were some tenants whom affirm that they do not care if spaces of home provide them the opportunity that they can apply variation in furniture's arrangement, since they prefer to keep unchanged the placement of furniture to the best view. Mostly tenants who had families with children complained about the space organization as they cannot fix their furniture as they wish, due to the limitations of space and design, while the rest affirm that although they cannot impose such a notable changes into the arrangement of furniture but still they are quite happy even with those little changes made.

An extra space for storage or laundry is what tenants think has been missing in the process of planning for space allocation and usage in these apartments. There were proofs of this dissatisfaction as tenants who possess double-bathroom changed the usage of one bathroom to storage and laundry, and some others tried to keep their extra stuffs to balcony which looks really awful. Tenants also wish to have an extra bedroom for their guests. Although singles and couples use one of bedrooms for different purposes that they wish but still they think it would be more desirable if they had a space specifically designed for storage then they can use other bedroom for their guests. However, spaces are designed in minimum sizes and not surprisingly if residents mostly families with children, faced with limitations in their activities and space usage as they state they cannot find the dwelling space and zones entirely suitable for their different activity patterns.

Overall, as Lawrence (1987) also state, tenants' behaviours observed in their flat is not necessarily characteristic of the individual or family doing it, nor the most deeply seated attitudes or values they hold. It is consistent with the normative criteria tenants apply to their flats while there. This however is a cause that residents make their initiated changes to make their living environment more proper and provide the maximum possible matches in their flats with their expectation and wants.

4.2.4 Adaptation: Dwellers' responses to dwelling spaces

Interviewing the residents starts with asking them about the dwelling type they had been reside before, in order to provide an overview of the space experienced previously, with probable factors that interferes in residents' current expectation. Tenants also were asked about duration of stay as a determinant item in the level of residents' sense of attachment to flats and the level of changes and adaptations.

However, as discussed before, such changes and adaptation, and their interior decoration are mediums enabling people to articulate their interpretation of their identity and are means of self-expression which reflects individuals' cultural, social, and psychological characteristics.

According to Altas and Ozsoy (1997) what the adjustment of physical environment in a housing unit can be made through adapting it to the users' needs regarding the physical characteristics such as dimension, installation, supporting system of the adjacent spaces, and on their functional compatibility. Regarding the adaptation taken place in Laguna Apartments, some changes were basically applied in structure by demolishing walls and door, windows, and even in one case on the facades.

> ...living room is located to the north, and does not gain enough natural light; hence I have made changes by demolishing part of the wall and door of the kitchen towards the west, and have fixed some wooden vertical elements instead. This change keeps kitchen space separate, provides the light to the living room through western part, and also improves the interior design. Except that, I have chanced all flooring; and old cabinets, wardrobes, and taps. The only thing that I still wish to change is to make glass facade over the northern wall of living room, but I am not allowed to demolish the facade... (Appendix G, Case number 6).

> ... When I moved in this flat some modifications had already been made to the flat probably by the previous user. The space of one bedroom was incorporated into living room to create a bigger space. Therefore the flat was turned to one-bedroom type. Besides, one extra window was created in the eastern facade, and the kitchen was open. However I changed just the painting and the flooring. Even though I found former changes quite desirable, still if it was possible I would create an entire glass facade in northern and eastern side of living room... (Appendix G, Case number 15).

> ... I have already made my ideal changes to provide my partially pleasures, e.g. I have connected the balcony to living room to make the space bigger. I was able to enlarge the living room by this change but still I would like to enlarge the kitchen as well but it seems impossible. Parquets, wallpapers, and taps were the other things that I changed..."(Appendix G, Case number 2).

... I have been allowed to change my flat as I wish, so I have made changes as much as possible. I have covered the western balcony by joining it to the living room, besides, I have changed all the old cabinets, wardrobes, taps, and flooring; and painting...(Appendix G, Case number 12).

... We have not made any changes yet, but we were considering joining the balcony to living room to justify its size but then we gave up. Balcony is an advantage that we cannot ignore easily... (Appendix G, Case number 14).

Some changes apply to just the usage of space and some of the other changes were basically to provide more privacy and control the relationship between the spaces.

...We are a couple and each of us has his/her own desires in our daily activities. Besides as this flat is our summer home, then I resolved to allocate a part of the flat as my private space. In this regard I change the used of one bedroom to a personal living room, TV room and workshop. Meanwhile, we found that we need an extra bedroom for our children during the time they come to stay with us. So we decided to reserve all the space of kitchen for an extra bedroom and creating a new, small and open kitchen at the corner of living room. After making these modifications to the flat the living room became bigger and even more suitable for us. Beside we covered that part of balcony to cut the sight which was created to our indoor spaces from the neighbours' balcony... (Appendix G, Case number 9)

... I have taken help from my architect friend for the interior design of the flat. A partition in front of the door is my favourite redecoration, which not only cut the direct view to my living room but also provides an entrance. This partition itself can be use as bookcase. All walls are painted and flooring has been changed as well...(Appendix G, Case number 7)

All the flats, except one, underwent the primary changes to provided minimum quality of flats by changing old cabinets, wardrobes, taps, wall papers, flooring, painting, and so on.

...before I reside, I changed wardrobes, cabinets, Taps, paint of walls and flooring to provide the minimum quality to my flat. And beside it would be nice if I did not have one more balcony but instead I had a big bath separate from toilet... (Appendix G, Case number 1)

...toward the indoor physical quality of the flat I can say it possessed such inferior and old building materials that I had to change all the flooring and paint of walls before residing here... (Appendix G, Case number 5)

.... We have made some primary changes to the colour of walls, material of floor and old taps in bathroom and kitchen... (Appendix G, Case number 4)

... except some necessary changes such as painting and flooring I have not made any other changes to my house, although I think if it were possible I would like to shift the place of kitchen to balcony so that my living room can gain enough natural light... (Appendix G, Case number 11)

... I have not made any changes in this flat, except the colour of walls, because I cannot afford it. Even if I can afford, it seems impossible that I can make the changes which I wish. I cannot change the size of kitchen to a bigger one neither can I interrupt the layout by transferring bedrooms to the opposed side of the flat... (Appendix G, Case number 3)

Through the interview there were also some cases that they could not make all their ideal changes or they could not afford to do. Instead, they changed their habits and try to accept what exists there already. In other words residents adapt themselves to the space created by designer. An old woman who could not afford to make changes states:

... nothing has been changed in this flat, even the colour of the walls, and it has been entirely kept as it was ten years ago. Although I really was willing to make some changes, but I never could afford it. You ask me if I am satisfied, I can just say I do not have any complaint because there is no other alternative... (Appendix G, Case number 10)

Temporary dwellers affirm that since they spend a lesser period of time in the flat it is not logical for them to make any adjustments to the building. However, these type of dwellers are the target tenants the designers designed this building for and they care less than other inhabitants to make changes.

... It is likely I might leave this house anytime soon, that is why I prefer not to spend money for such a house at the current situation. But if it was possible I

wish to change the size of kitchen to a bigger on... (Appendix G, Case number 8).

In summary, tenants express their ideas toward hypothesis changes, which they wish to apply but are impossible for them, as mostly relate to those of plan's layout and size of spaces. Moreover, tenants, who have already stayed for long duration in apartments, or they plans to do so and of course can afford are willing to pay more to apply changes and satisfy their expectations which are more than three fourth of interviewees.

Apparently, that flat type FT1 (case number 9, Appendix G) has been undergone the most adaptations in terms of changing the space configuration, space use, arrangement of furniture, and painting, flooring and installations. All tenants who were able to apply their ideal changes could gain their fairly satisfaction of dwelling after these changes. It was obvious, tenants who were wealthier, were relatively more satisfied with their flats after making their desired changes. In this respect, as Lawrence (1987) also states, affluence is not merely an indicator that the wealthy own more possessions than the poor; it also implies that the former have a relatively greater degree of control and choice that can reflect and reinforce personal preferences and identity. Besides tenants affirm; their entire satisfaction of dwelling is not limited only to the indoor spaces. As also Berkoz and Kellekci (2007) it is also necessary to assess the satisfaction of tenants with the house environment which interferes to psychological and physical health. Participation of tenants to improve the building environments and the level of organization of communication in it, relates directly to following discussion.

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4.2.5 Organization of communications: Relations between the neighbours & establishment of social ties

Although Laguna Apartment is located in a place which is surrounded by unique meeting places near the sea, cafe bars, and park. Despite what was expected, rarely neighbours communicate and gather in these spaces. Tenants mostly affirm that rarely do they have any close relationship with their neighbours and even they refuse to say a simple 'hello' to each other. As flats are rental, firstly it seems this kind of relation results as they have not given enough time to engage themselves to such communication and feel attachment with the community of apartments, but what is notable tenants with the experience of residing more than ten years in these apartments also state the same idea:

> ...I do not know anyone in these apartments, but time to time I walk through the coastal road behind the apartments alone and refresh...

> ...before I had some friends in different blocks. We used to gather behind the building and sometimes walk around but now I do not...

> ...everyone in these apartments is busy with his/her own life like me and there is not such a close relationship that exists between neighbours. We go on a walk surrounding the building mostly on the sea shore. I have seen this is the way frequently used by my neighbours to walk as well...

> ... I respect my neighbours but our relationship is not so friendly so that I spend a time with them...

> ...this is a few months we have been residing here. We do not have any friend yet...

> ...I like all my neighbours but still we do not exceed some limits in our relationship. I just show my courtesy by a formal greeting and I never thought to ask them for help or gathering...

> ...I do not have such a close relationship with neighbours. Even rarely I speak with them; still little I spend time with them for gathering. Over all, I refuse to

spend time in spaces around the building, because already I can see what is scenic around, through my balcony...

... I am not such a sociable person that is why I do not have any friend in this apartments except one, whom I knew from past and he has rented this flat for me and sometimes helps me if I need. We both are so busy that we cannot make any plan for walking...

...I do not want to be close friends with neighbours, it is enough for us to just exchange pleasantries...

There were also some tenants who affirmed they have some friends but still hardly named them as 'close friend'.

... We have some friends but I do not remember any time we have had meeting or gathering. But if I need help of course she will help...

... I have just some friends from the other blocks and I repeatedly walk through the way beside the sea when I get to work or go to a walk with my friends...

...my neighbour, whom our balcony is adjoining, is my close friend. Although our acquaintance was somehow compulsory as we could hear each other, but we are really close now and sometimes we go running throughout the region up to the Castel...

It seems huge deference between tenants' social classes to be interfered factor in such situation that they prefer to isolate themselves. However, when tenants were asked about their tendency toward a collaborative participation in order to refurbishing common areas, four fifth of answered 'yes' quiet anxiously.

...of course I do want to share some responsibilities with others like cleaning the block. But I am so busy, then when I can arrange such participation? I mean give it up...

...I am ready to look after the greenery if I fine people that are going to undertake responsibilities to improve the quality of the common areas with me...

...I like to follow up the process for connecting the apartments to internet, or painting facades...

...indeed, I have had always felt the need to mobilize neighbours within this building and its environment so much that I would always promote any attempt to promote its quality. When water from the sea started penetration to the basement of building, pose a serious risk to the entire building. Then I led a team of concerned neighbours to te government in order to motivate the government to start basic action to secure this building. After all, I still try to keep my participation by trying to cleaning the lift, staircase, and corridors... (GunduzAykota, Residence of FT7, really a wealthy man who had also the most level of satisfaction of his flat)

...I am really interested to undertake some duties to improve the quality of the outdoor area. As already I clean the lift and corridors, and I have planned to paint walls in corridor as well...

There were also tenants who were not eager for such participations; a few of them were single men.

...I care just about what is related to inside of my flat. I am not willing to take part in activities, to improve the quality of what is not related to the inside of my house.

Mostly low-income families without any exaggerating started that they could not even be a part of it. Referring to Maslow's hierarchy of needs (1964) it can be understandable that when a tenant mostly concern with his primary needs by their budget and he is not able even to fulfil his ideal changes due to the dwelling space satisfaction, then of course he can step forward and be concerned with the common area.

...before I was willing to improve the quality of the environment by looking after the greenery, but now I just want to run away from these apartments... (Actually she was faced with hardship economically).

...if it is supposed that we undertake any responsibility, firstly I prefer to undertake the responsibility to modify inside of my flat and for my family, not outside and for others...

...although the corridors and staircase is really dirty but I never have been willing to clean them. Actually Waqf is responsible for that not me...

...of course I will not share any responsibility. Is there anyone who likes to share a responsibility?...

Surveying patterns of tenants' activities, interactions and in effect the way they communicate with neighbours and surrounding areas, however, reveals that design has been abortive in organizing such communication to foster convivial atmosphere between neighbours in apartments and tenants' inclination to maintain building and increasing the quality of common areas, although they are aware of its effect in the quality of their own life. But still it seems that most of tenants concern themselves with apartments and they are really willing for improvement in such communication.

4.2.6 Intimacy of space: Dwellers' evaluation of their house through the objectives of camera

Tenants were also asked about what they like and dislike, most particular, regarding their dwelling. About half of tenants mentioned the space of 'balcony' which they mostly admire as they affirm that the scene provided through this space raptures them. Tenants several times express the sentence this space unwanted make them to meditate and feel relax. There was obvious a bond between tenants and the space of balcony where it really provides the sense of being at home. Mostly tenants had an agreement that "human does not grow old here". However, it is marked in interviewees that between tenants, who possessed two-balconies, interchangeably, some in particular note their private balcony adjoining to bedroom, and some noted the more public one adjoining to living room as their intimate space, but there was not such a clear reason in such tendencies.

Balcony, the space which provides me great view is the only space which has energetic potential in this house, the rest is failed.

We like mostly the balcony, we spend our time there privately by our own and also we share it with our friends.

I can affirm that my private balcony is the loveliest space in this flat...

I cannot say my favourite, but the only potentially desirable space in this house is balcony.

Although I think all the spaces in this flat are quite comfortable, but still I like my balcony the most...

Eastern balcony, which is private and opposite to view, is my cosy space (Fig 4.4).

The balcony is the space which I both like and dislike most. I like it when I sit and relax there by enjoying its wonderful view. And it disturbs me when it makes neighbours way view into indoor spaces and makes me feel I am always under control by neighbours (Fig 4.5).

Figure 4.4. Balcony, as a place of comfort (Author, 2014).

Figure 4.5. Balcony, the way of overlooking indoor spaces and lose of privacy (Author, 2014).

A further half of tenants affirm that where they mostly spend time and feel relax is their "cosy sofa in front of television". This state has been mostly expressed by men and in particular they point to the sofa which is located in corner. They stated that their sofa is the part that they feel comfort, secure and intimate, and obviously these statements all are attached to the meaning of home, and implies tenants have attained, at least in part, the sense of being at home. Even, there were two interviewees who noted all the spaces of their flat are their intimate space.

...I think my sofa in front of my TV is my favourite place.

...I would like point to all the spaces of my home as my favourite space, but mostly I like the corner with its chest and small sofa where I sit and study.

...My sofa in front of television is my cosy and favourite space.

...My private room, particularly its sofa in front of TV is my favourite space in this flat.

...I can note my sofa in the corner of living room as the most comfortable place in my flat.

...When I come back home, directly I move toward my lovely sofa where I really regain my peace.

...My sofa in front of television is somehow the centre of my home and when I am home, mostly I spend my time on it.

...The sofa at the corner, where I spend my time to chat with my husband is really lovely (Figure 4.6).

Figure 4.6. 'Chest', as the artefact of memory; 'Sofa' and 'Corner', as reminder of comfort, and security at home (Author 2014).

Amongst tenants who had an attachment mostly to balcony, those possess a balcony adjoining to the neighbours' one, noted a same space, balcony, as a space which disturbs them mostly since it creates an overlook into indoor spaces of dwelling through neighbours' balcony.

... It would be nice if there was no balcony adjoining to ours. It is really disappointing when we lose view as we have covered the balcony to block overlooking to indoor spaces.

...Ideally, I wished to keep open the window in my bedroom, then I could benefiting both view and fresh air, but practically, it disturbs me as it has getting a way of transiting noise, rather than make me pleasure (Fig, 4.7).

Figure. 4.7. Window, the frame of external world, which get the object of loosing intimacy. (Author, 2014)

Figure. 4.8. Spoiled indoor material. (Author, 2014)

Tenants, except two cases, expressed that they have found no space in their dwelling unpleasant, instead they like all their dwelling. Actually, these tenants were the ones who have had the opportunity to make their desirable changes in their dwelling spaces match with their expectations, and then they find all their dwelling spaces desirable. There are some tenants who refer to physical appearance of their dwelling, where the trace of moisture still remains on the surface of materials as dissatisfactory which is as a result of the old and decayed mechanical system (Fig 4.8). Lower income families, who could not afford to make changes and who could not find the level of changes they have already made as satisfactory to provide their needs, point out no specific space as they dislike more, not for that they like their dwelling, but because they find it totally disappointing.

Chapter 5

CONCLUSION

Following the increasing demand of user for better quality housing, and drawn attentions to the qualitative issues in design of houses in architectural theories, discourses and professional practices during the recent decades, there has been an attempt to take account for the actual human needs and his values during the design process. Then, it is necessary to enhance the comprehension of the relation between human and his housing environment by underlining those users' experience of dwelling space through a post occupancy evaluation. It is considerable that social, psychological and physical characteristics of users individually or within a group, and their changing needs in time are determinant in establishing such relation between users and housing environment. Considering these factors in design is crucial in provision and satisfaction of needs.

Since the design of houses basically embodies a set of designer's value, housing environments are not always experienced as they conceptualized during the design process and hence, conflicts follow. In this regard, the situation of rental apartments get even more complex as it confronts the designer with the problem of anonymous user and necessitate a concern for the variation in the meaning and use of houses in the given society.

The study of issues related to reform and development of rental houses through a historical review is basic and resourceful for future architectural prospects. Throughout the 19th century, it can refer to industrial revolution and its consequences on emergence of overcrowded and insanitary housing conditions as significant implications. It necessitated seeking for solutions which accommodate a rapidly growing urban population, especially for working classes. Meanwhile, it became increasingly common to interpret housing and public health as a unified social issue, which prescribed minimum standards for urban living. Until the late nineteen century, the new demand of human for benefits of modern sanitation, standards of comfort and transport systems caused modernization of lifestyle and techniques.

Following such social issues, rental apartment houses as predominant housing form also for middle-class living conditions which undergone many changes and improvements. Through such reforms, even though the floor plans have been improved, the basic housing type in historical-social terms has remained the same. Following the increase in price of land, the construction of rental apartment houses failed where economic exploitation and rent ability located on the top of design principles, and hence poorly conceived plans with inappropriate room dimensions, ill-suited for proper furniture placement and less normal living resulted.

At the beginning of 20th century, opponent to such poor planning was Le Corbusier's principles in design of modern house, which covered the perception of designers globally. He too tried to convert the city into a park. Later he improved slab blocks to provide human's demand for sufficient privacy and his idea toward human scaled environment appeared when his tower and slabs were abandoned. In this time, as

developed ideas following the increase in land cost offer no chance at all for self-expression and user's sense of identity, the spaces within buildings were noticed as well as optimizing interior spaces.

In development of rental apartments mostly the number of bedrooms and the size of dwelling spaces decreased to be more adjusted to its function, instead new spaces, e.g. storage, introduced to add to the layout. The emphasis was mostly on comfort, care for the family, isolation from work, and the search for a more intimate relationship between the house and its site. World wars embody other implications which necessitated serial mass production. Crime and social alienation was the results of such developments, and then the tide started to turn against the mass housing projects. Later, the idea of defensible space was put forward following such failures.

Throughout the post-modernist period it was an attempt to find more appropriate built forms. For example in Berlin following rebuilding the frayed general texture of city, the relationship between social norms and individual freedom re-thought and reformulated and the quality housing were emphasized.

However, study of theoretical background creates a critical sense in research and makes the qualitative improvement to be conceivable. Through reviewing the theories related to human's evaluation of housing environment, it is necessary to distinct the terms house, home and dwelling as they connotes the relation of human to housing environment and hence establishing relation between these terms while designing houses. Home is conceived as a dynamic interaction between user and dwelling, and a house is part of the physical environment. In essence, home

integrates individuals' memory and image. It embodies identity and delineates the realms of intimacy and public life; and that intimacy in home relates to bodily experiences of home.

Beside, understanding the human's relation to environment, necessitate enhancing the knowledge about human-being and his concept of built environment. Human as a living-experiencing entity experiences his relation with environment in his own spatiality and the spatiality of other entities. Human experiences embody his perception, memories and anticipation; they depend on the space usage; and they attach that lived space the phase of appropriation. Regarding the conception of built environment it should once more be noted that organization of communication in built environment provide for appropriate actions and behaviours; organization of time reflects and influence behaviour in time; organization of space creates the sense of territoriality and privacy; and organization of meaning make the space meaningful through semi-fixed feature of environment, and they all need to be investigate thoroughly while designing houses.

However, concerning the relation between human and environment, there has been set a number of factors in a two-sided relation in the proposed table which has to be taken into account in design process. The proposed table also implies that, the space which is formed by designer has to be supportive for user's expectation. If not, conflicts in housing space arises and following such conflicts changing and modifying become unavoidable to achieve the appropriation of space in order to achieve a better fit with housing environment.

In practice, the evaluation of housing projects is an essential part in the process of design of the built environment. In this regard, the evaluation of selected housing project in Mağusa city has been the way of assessing the success of project through its dwellers judgment of the various components of the housing environment. As a significant issue it can refer to the most desirable feature of apartments: location of apartments in coastal area which makes the occupants get the view to the sea. Issues that raised concern to the residents of the apartments include: noise, old materials and mechanical system are hardly serviced and are currently wearing out.

Furthermore, the scheme of apartments has been successful to accommodate households with quite different profiles from different social classes. Regarding to the space satisfaction of dwelling, location, size, view, quietness and with less importance day lighting are the basic space qualities has been considered by resident. However the space of living room and adjoining balcony were most strongly linked to overall dwelling satisfaction.

Regarding the space usage and statue of spaces, upper level dwelling locations were more popular among the residents. Blocks with less number of neighbourhood, as well as considerable distance from stair case has been noticed by residents. Considering different aspects in project i.e., indoor layout, hierarchy of spaces, visual privacy, noise and accessibilities the project has been mostly successful to provide the residents' desire in privacy. There has been an agreement between resident that they need an extra space for storage and guest room. In order to attain the appropriation of space, residents have made their desirable change in dwelling spaces mostly by reorganizing furniture and space usage accordingly. It was seen that some

changes were basically related to the structural system and residents had to adapt themselves to the existing situation.

Regarding the organization of communication between the residents, it seems that although the general layout characteristics of the residential complex had been facilitated to develop such communication but still it has failed to provide tenants' sense of attachment to their apartments and neighbours in the neighbourhood scale.

Ultimately, it can claim that generally design of apartment has been successful to embody the world view of many different groups of residents and provide such a form of spaces that has been generally matched individuals' expectations, and in particular it can refer to the quality of spaces in flat type FT7 which has been mostly linked to overall satisfaction of two-bedroom dwelling units. However, despite some contradictory statements, it seems that residents of Laguna Apartments in general have attained meaning regarding the notion of home since residents, repeatedly, stated expressions toward their dwellings which approve their self-identity.

Apparently Mağusa Laguna Apartments with their remarkable features provide a quite high level satisfaction for the majority of the residents as being quite successful rental housing units. However, considering increasing student population with different economic and ethnic background brings the urgent need of constructing the different size and standard of the new rental housing design into discussion more seriously. Accordingly to support and contribute this growing housing demand more research with various frameworks should be taken a part in the same field as this thesis tried to achieve.

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APPENDICES

Appendix A: Site plan and Ground floor of Laguna Apartments

N

Swimming Pool

Kiosk Kiosk

Kiosk

Waiting Room

Recepcion

Shops
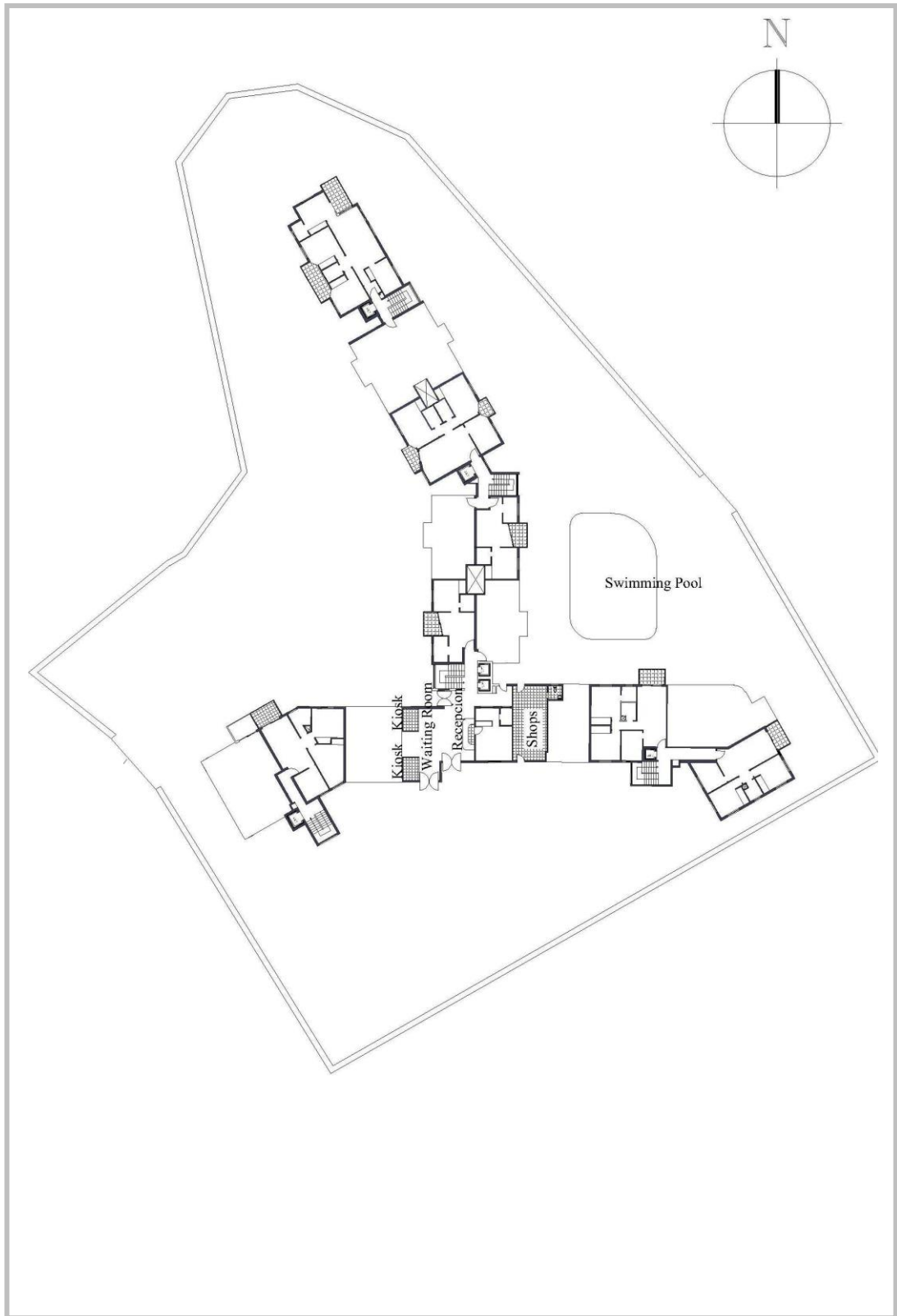
Original plan

Site plan and Ground floor of Laguna Apartments
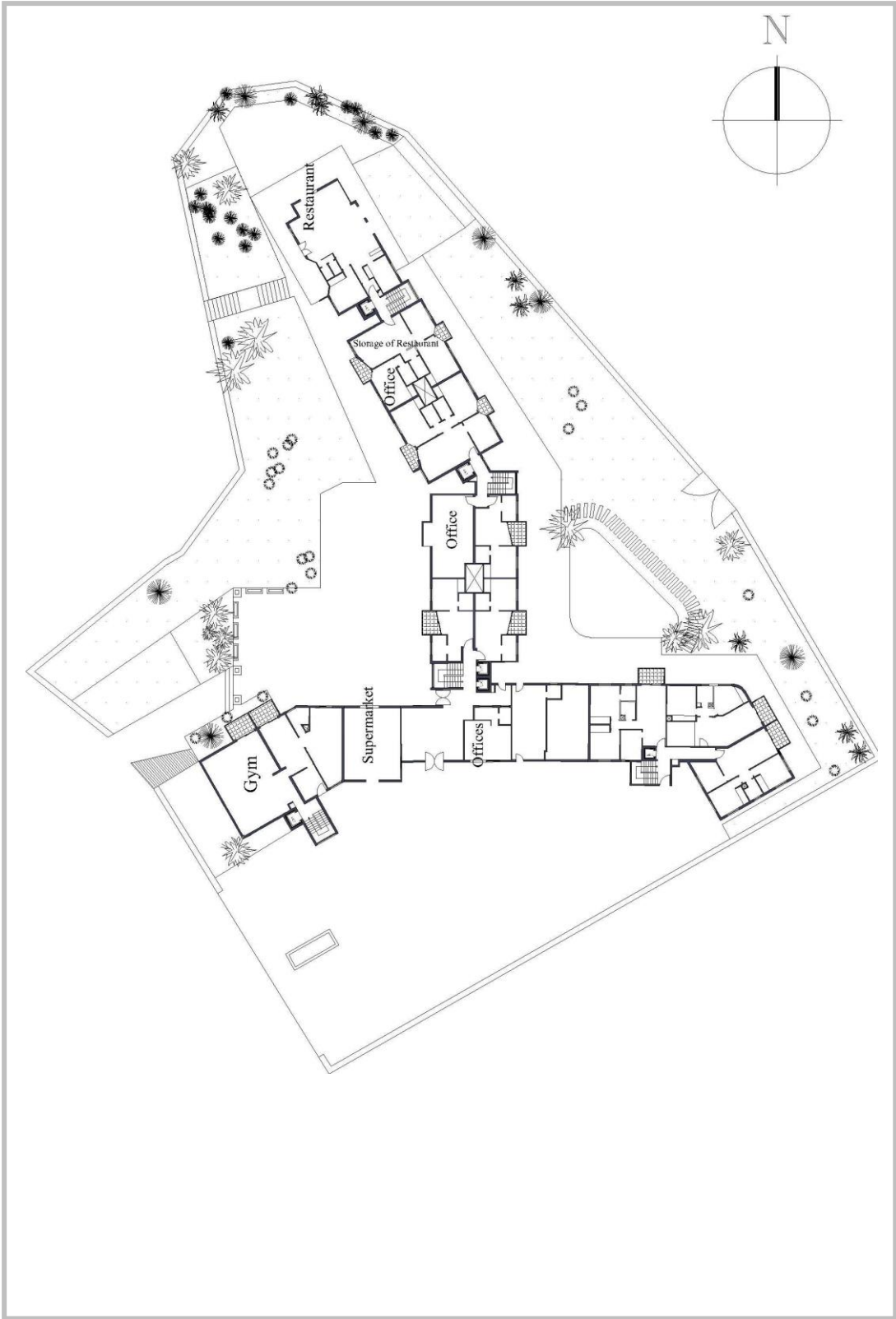
Adapted plan

Appendix B: Placement of blocks, staircases and corridors
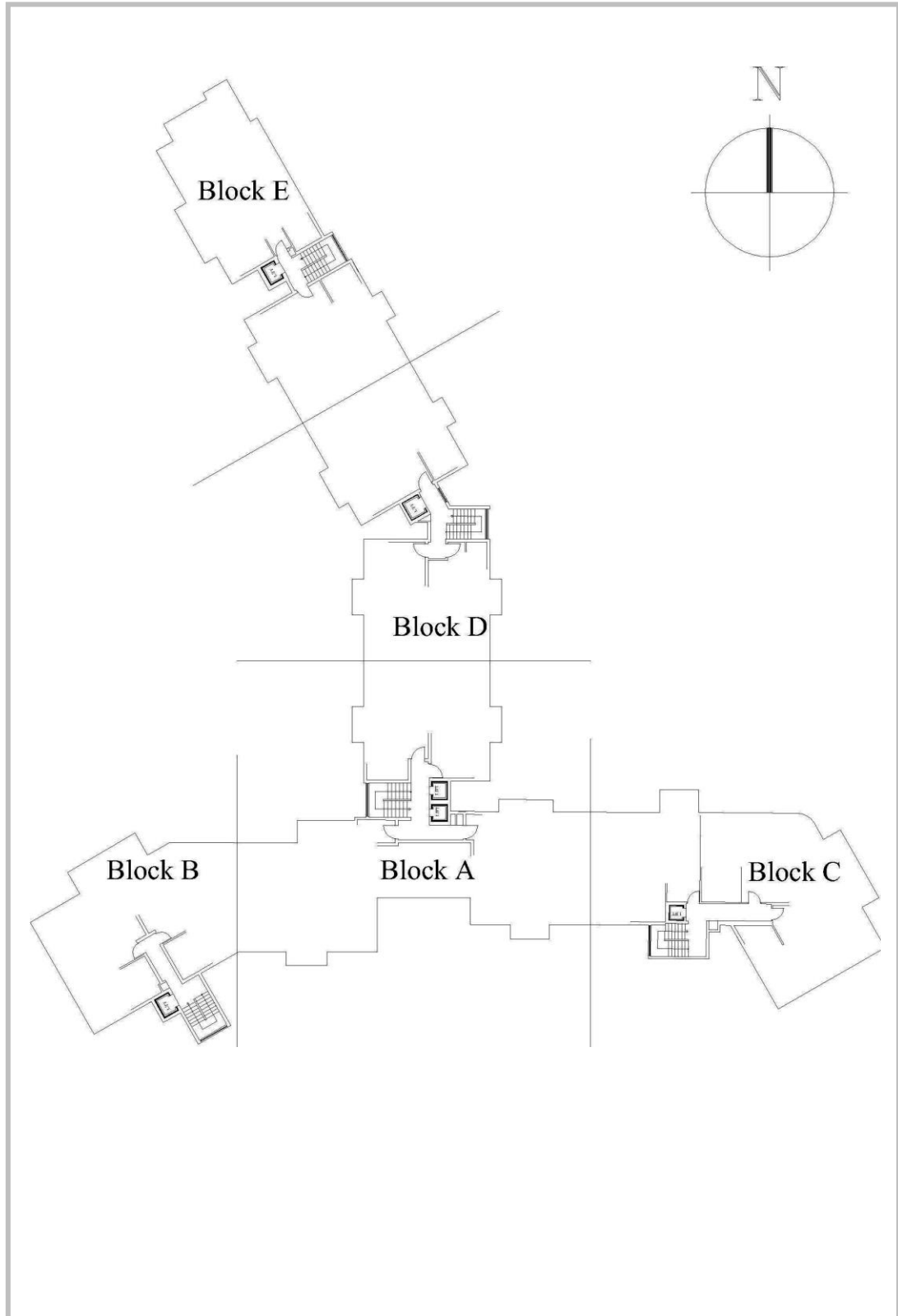
Appendix C: Accessibility to blocks
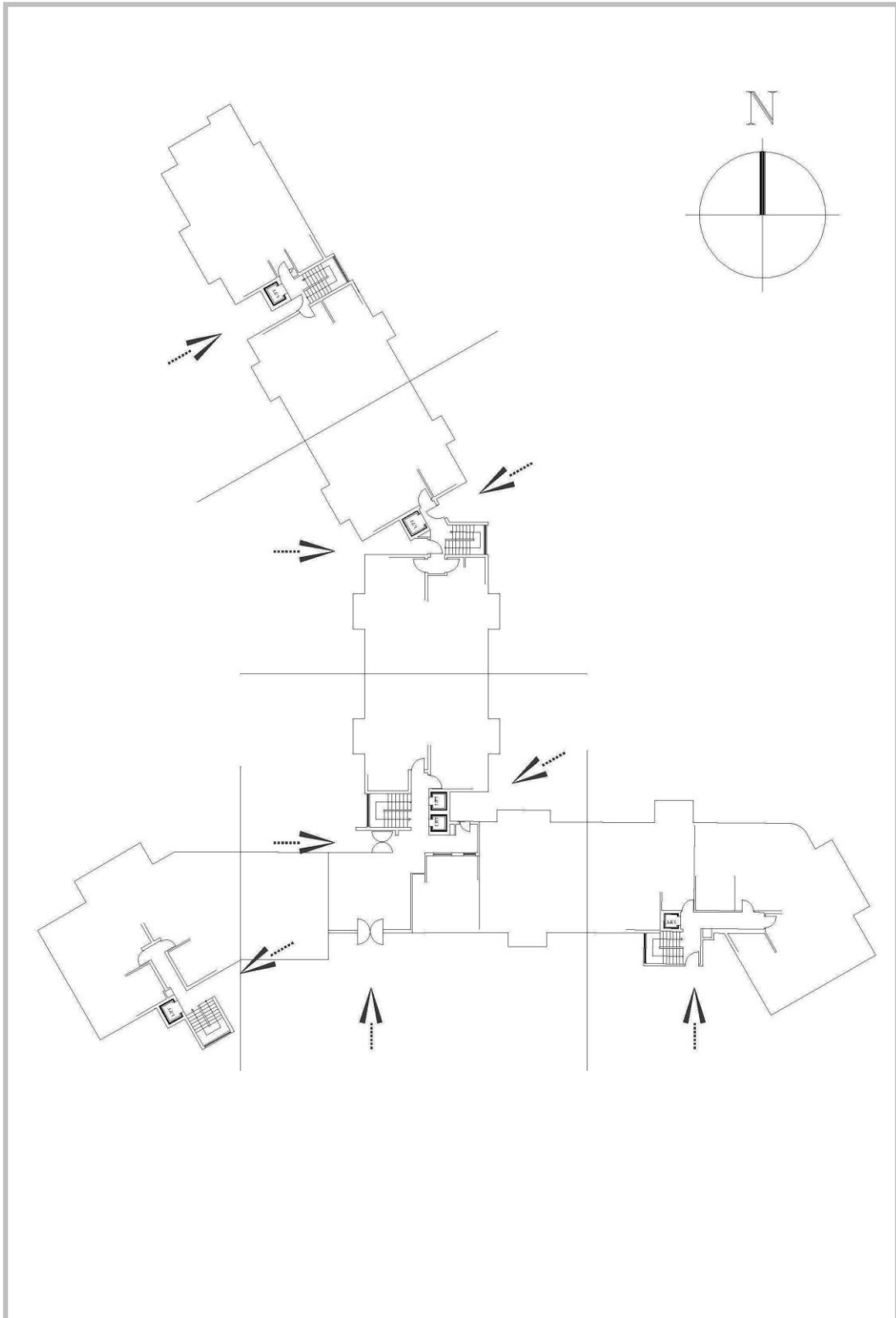
Appendix D: Placement of two-bedrooms flats
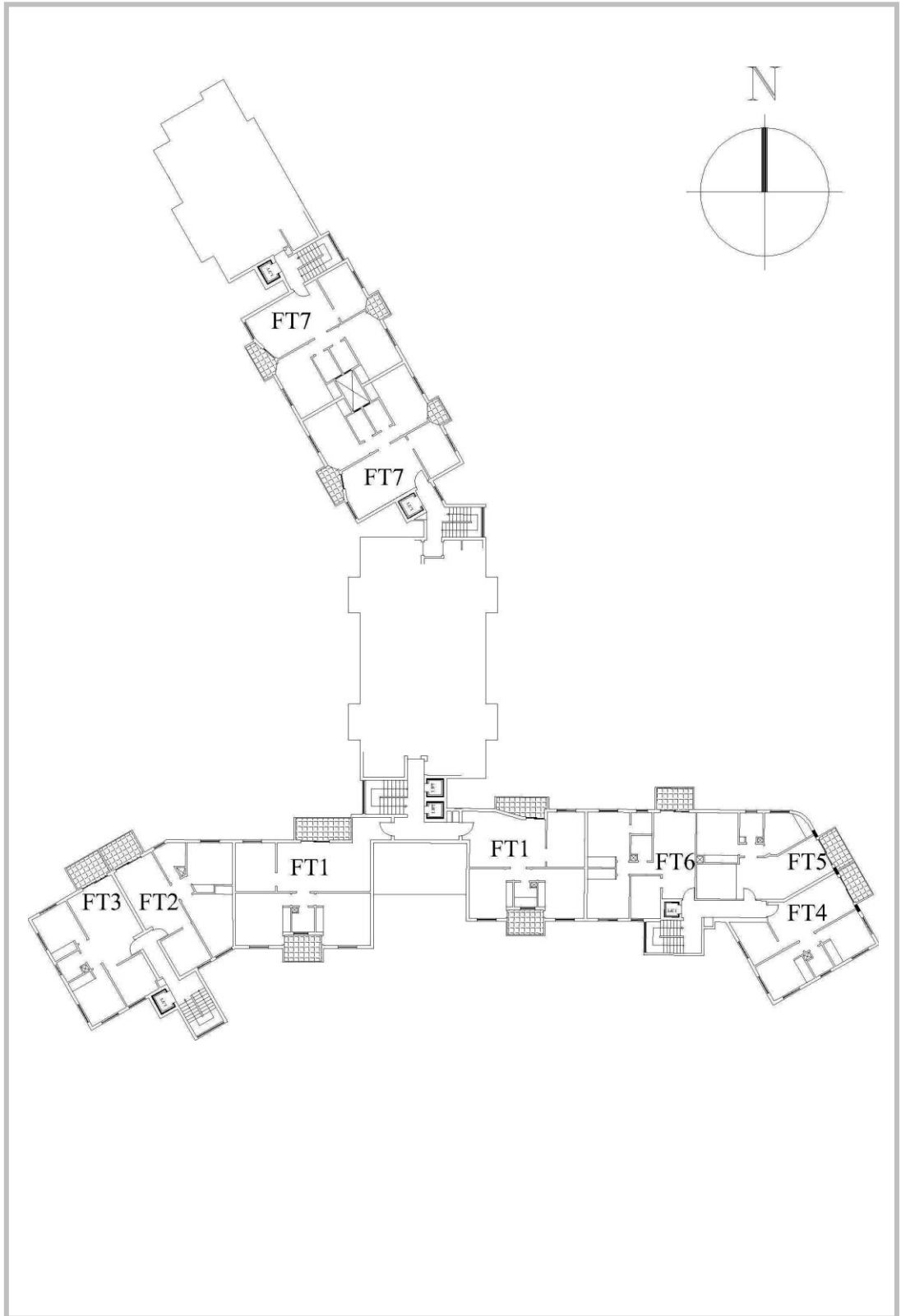
Appendix E: General information of dwellings

Dwelling type		Block	Story	A 0–11	B 0–5	C 0–4	D 0-8	E 0-7	Number of dwelling types totally	Size/m²
						Number of dwelling types built in each block and story				
studio				2 / 2.(11)					2	15
One-bedroom				24 / 2.(0-11)			18 / 2.(0-8)		42	48 & 49
wo-bedroom					11 / 1.(0)+2.(1-5)	10 / 2.(0-4)				79 & 73
						5 / 1.(0-4)			52	79
				9 / 1.(6)+2.(7-10)						100
						9 / 1.(0-8)	8 / 1.(0-7)			90
Three-bedroom				11 / 2.(1-5)+1.(6)					19	115 &109
								8 / 1.(0-7)		120
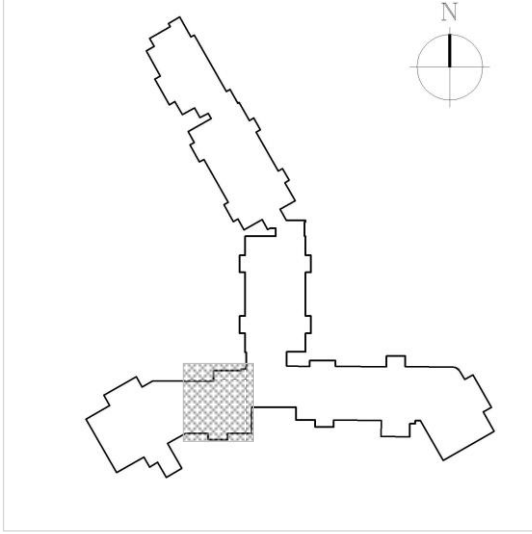
	Kitchen			Twin beds
	Dining			
	Living			Bedsitting room
	Dining			Toilet
	Dining/Living			Balcony
	Double bed			

Appendix F: Information of two-bedrooms flats

Dwelling Spaces	FT1	FT2	FT3	FT4	FT5	FT6	FT7
Number of spaces in each Two-bedroom flat/ shape							
Dimension of spaces/meter							
🍴🛋	1	1	1	1	1	1	1
	6.65 × 4	6.4 × 3.66	6.4 × 3.66	6.4 × 3.35	7.6 × 3	6.4 × 3.35	6.4 × 4.22
🍲	1	1	1	1 (irregular-rec)	1	1	1
	3.3 × 4	3 × 3.66	3 × 3.66	2.74 × 3.8 × 2.64 × 3	2.34 × 3	2.6 × 3.35	2.74 × 4.2
🛏🛏	1	1 (irregular-rec)	1	1	1 (filleted-corner)	1	1
	3.66 × 3.2	3.7 × 1.6 × 5.26 × 4	3.35 × 3.15	3.35 × 3.2	3.56 × 3.5	3 × 3.5	4.62 × 2.9
🛏	1	1	1	1	1	1	1
	3.66 × 3.2	4.06 × 3.63	3.35 × 3.15	3 × 3.35	3.56 × 3	3.35 × 3	4.62 × 2.9
🏛	2	1	1	1	1	1	2 (irregular-rec)
	1.88 × 1.68 / 3.86 × 1.52	3 × 1.83	3 × 1.83	3 × 1.52	3 × 1.52	3.35 × 1.52	3 × 1.35 / 1.98 × 1.35
🚽	1	1 (irregular-rec)	1	1	1	2	2
	1.68 × 1.68	2.26 × 0.91 × 0.91 × 2.26	2.34 × 1.83	2.34 × 1.65	1.75 × 2.44	2.13 × 1.75 / 1.75 × 1.93	1.98 × 1.57 / 1.98 × 1.57
Total size of dwelling/m²							
	100	79	79	73	73	79	90
Placement/Block							
	A	B	B	C	C	C	D/E
Distant from the stair case/m							
	1 / 3.8	5	5	6	4.5	1.5	0 / 2.1
Direction of living room							
	Lying E & W	Lying NNW & SSE	Lying NNW & SSE	Lying ENE & WSW	Lying ENE & WSW	Lying N & S	Lying ENE & WSW
Provided view through living room to							
	N	NNW	NNW	ENE	ENE	N	WSW

Appendix G: Users' changes in housing units/case number 1

User's profile:

Name &surname: Hatice Capkiner

Type of family: Single Mother

Previews dwelling type: Flat

Sex/Age/Job: Female/42/Employee

Duration of habitation: 2 weeks

Income: Pension

Level of changes and modifications:

✓ **Arrangement of furniture**

  Space use

✓ **Painting/flooring/installations**

  Space configuration

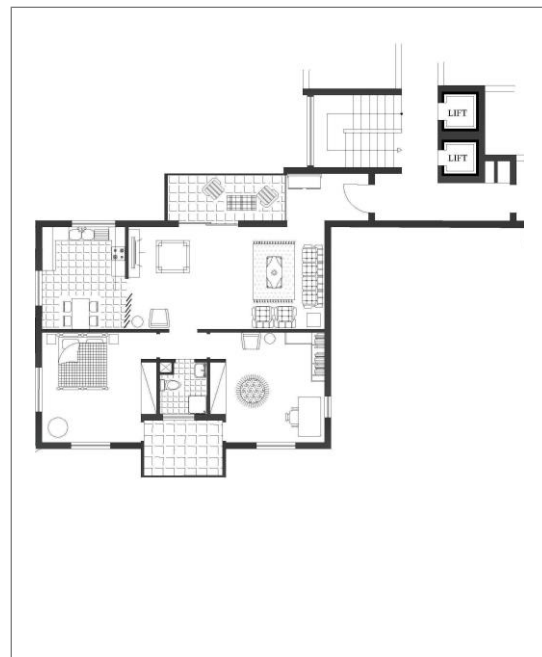## Information for dwelling:

Type: FT1

Block/Floor: A/ 10

Rent range: 750+100

Architectural drawing:

Proposed usage pattern

Current usage pattern

Users' changes in housing units/case number 2

User's profile:

Name &surname: Elena Donmuz Oglu

Type of family: Family with children

Previews dwelling type: Single detached

Sex/Age/Job: Female/34/Housekeeper

Duration of habitation: 10 years

Income: High salary

Level of changes and modifications:

- ✓ **Arrangement of furniture**
- **Space use**
- ✓ **Painting/flooring/installations**
- ✓ **Space configuration**

Information for dwelling:

Type: FT2

Block/Floor: B/4

Rent range: 650+100
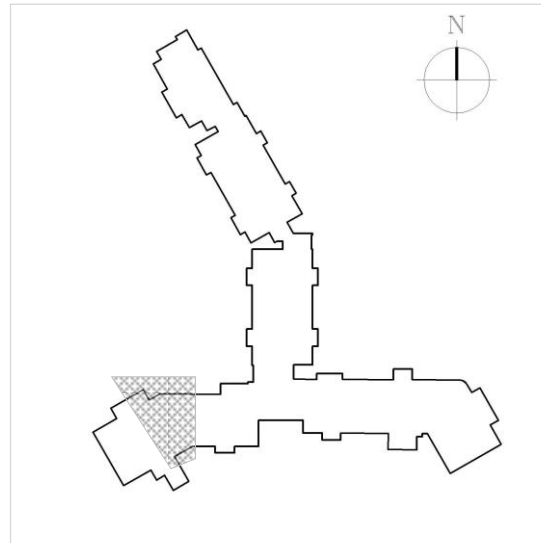
Architectural drawing:

Proposed usage pattern

Current usage pattern

Users' changes in housing units/case number 3

User's profile:

Name &surname: Tizen Beteri

Type of family: Couple

Previews dwelling type: Flat

Sex/Age/Job: Female/21/Employee

Duration of habitation: 15 months

Income: Minimum salary

Level of changes and modifications:

- ✓ **Arrangement of furniture**
- **Space use**
- **Painting/flooring/installations**
- **Space configuration**

Information for dwelling:

Type: FT3

Block/Floor: B/2

Rent range: 650+100
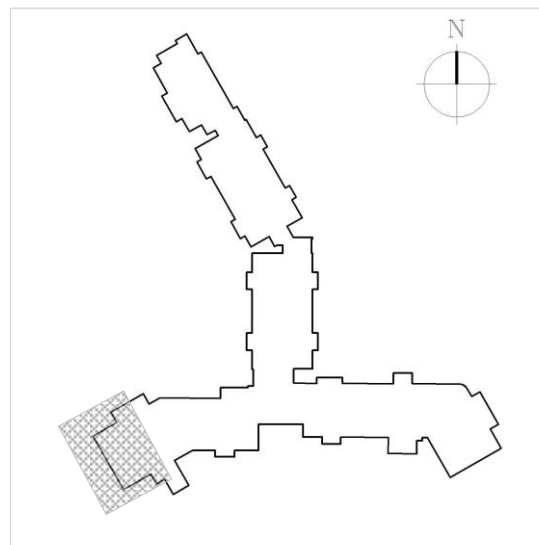
Architectural drawing:
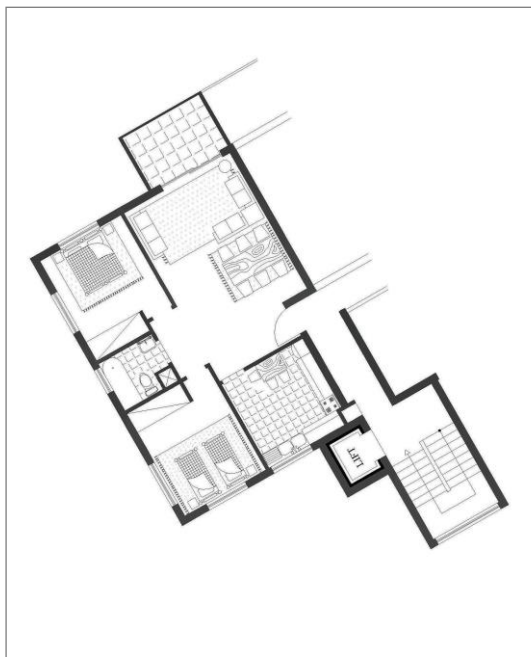
Proposed usage pattern
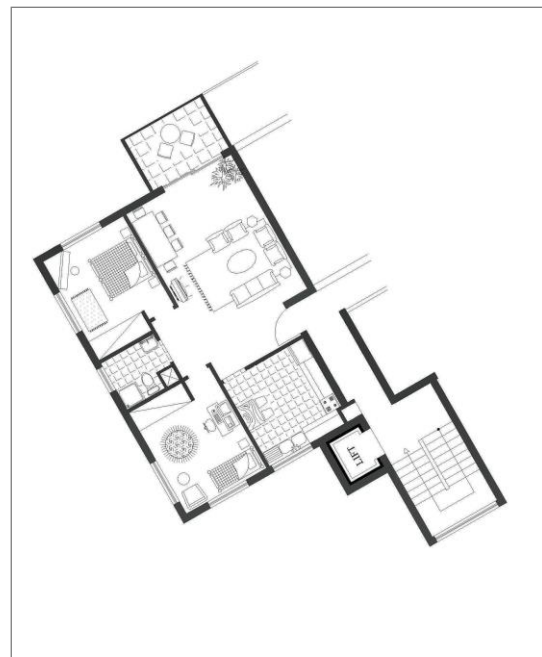
Current usage pattern

Users' changes in housing units/case number 4

User's profile:

Name &surname: Durdu Erdevir

Type of family: Family with children

Previews dwelling type: Single detached

Sex/Age/Job: Male/40/Nurse

Duration of habitation: 15 years

Income: Minimum salary

Level of changes and modifications:

- ✓ **Arrangement of furniture**
- ✓ **Space use**
- ✓ **Painting/flooring/installations**
- **Space configuration**

Information for dwelling:

Type: FT7

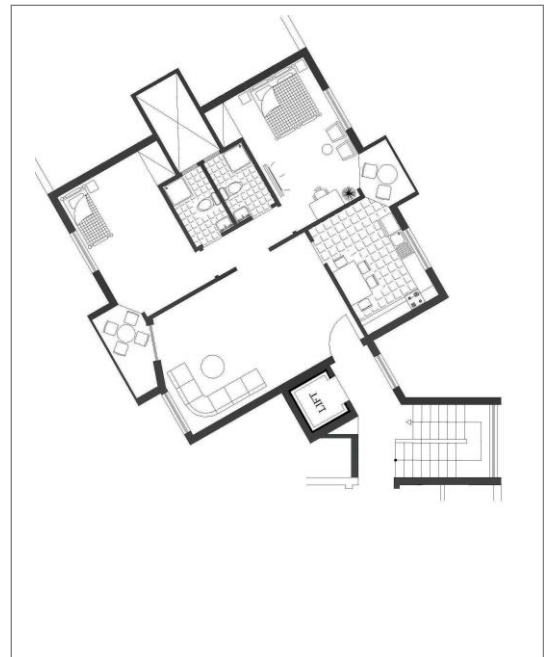**Block/Floor:** E/6

Rent range: 600+100
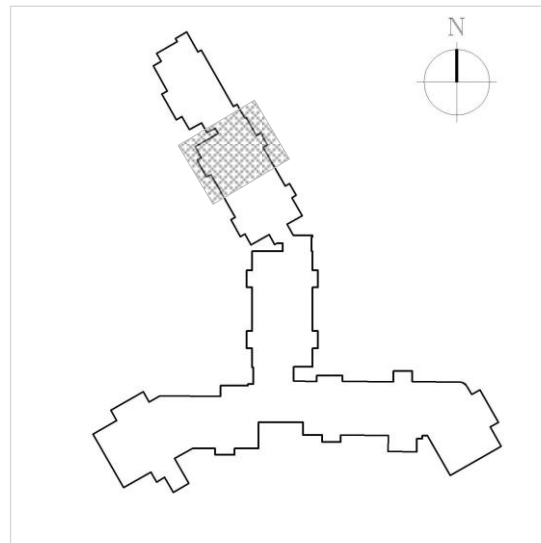
Architectural drawing:
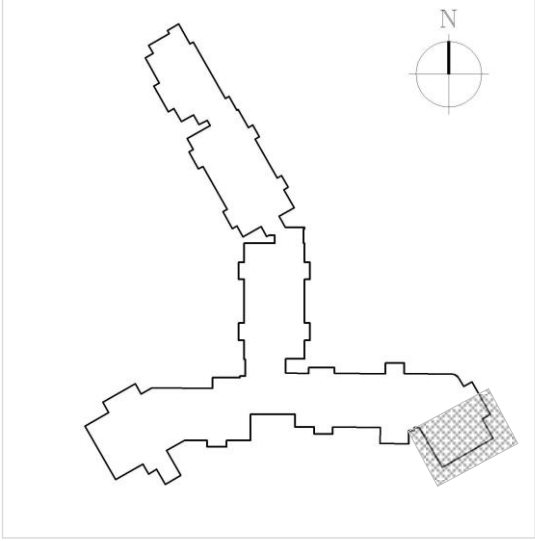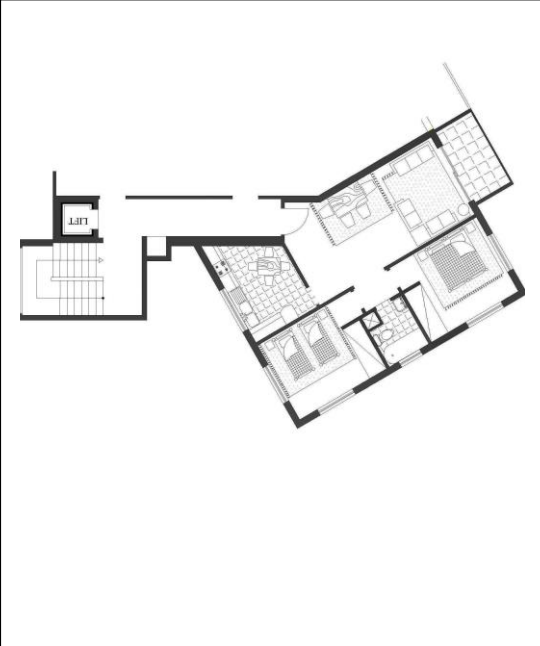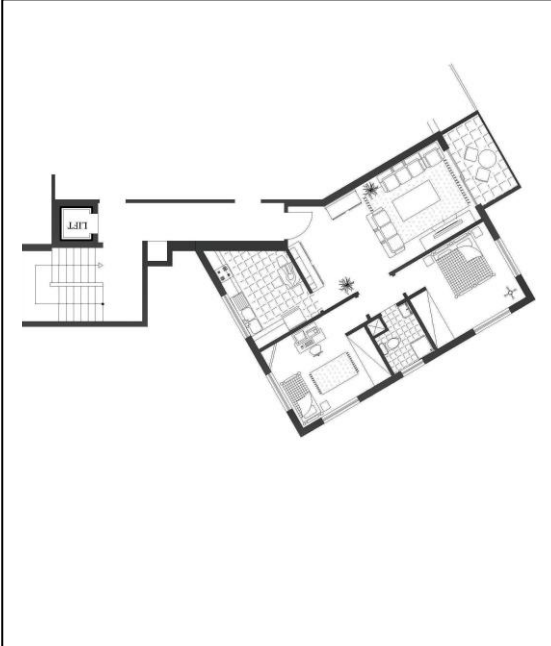
Proposed usage pattern
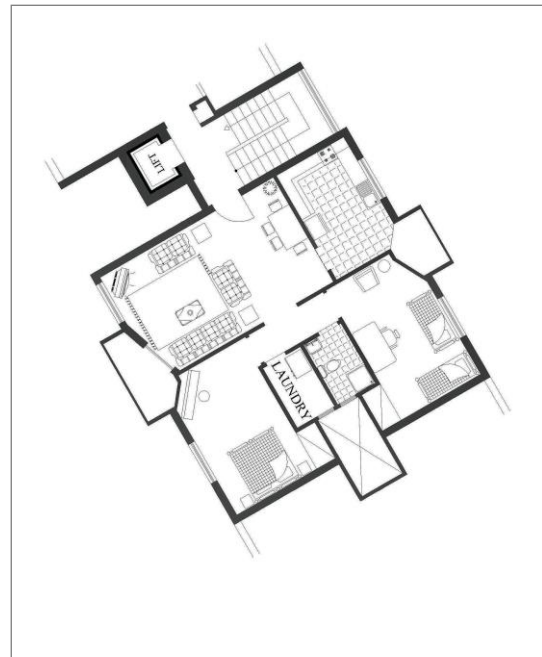
Current usage pattern

Users' changes in housing units/case number 5

User's profile:

Name &surname: Nazim

Type of family: Single father

Previews dwelling type: Flat

Sex/Age/Job: Male/37/Police Officer

Duration of habitation: 7 months

Income: High salary
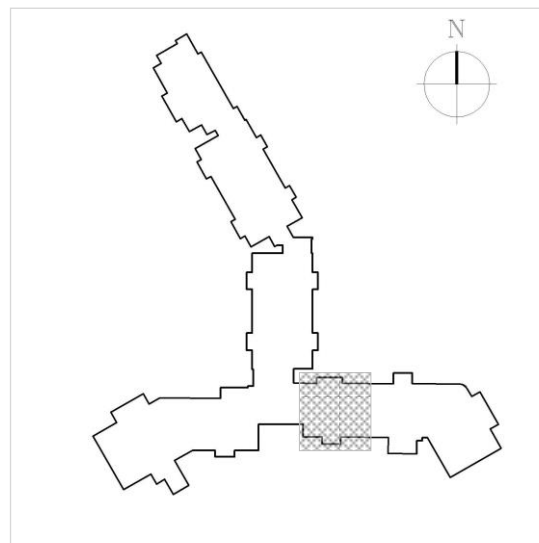
Level of changes and modifications:

- ✓ **Arrangement of furniture**
- **Space use**
- ✓ **Painting/flooring/installations**
- **Space configuration**

Information for dwelling:
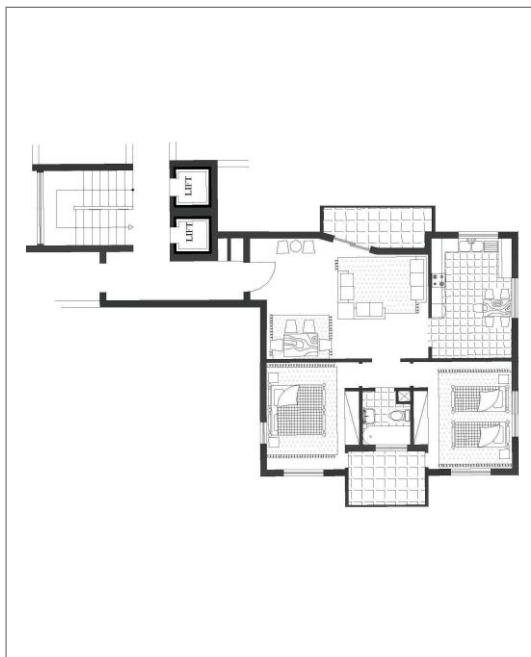
Type: FT4
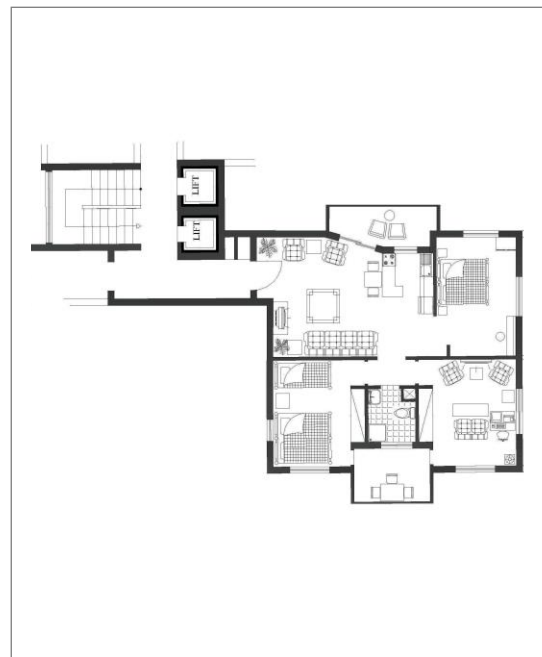
Block/Floor: C/4

Rent range: 500+100

Architectural drawing:

Proposed usage pattern

Current usage pattern

Users' changes in housing units/case number 6

User's profile:

Name &surname: Ulutan Denizer

Type of family: Single

Previews dwelling type: Flat

Sex/Age/Job: Female/32/Architect

Duration of habitation: 1 year

Income: High salary

Level of changes and modifications:

- ✓ **Arrangement of furniture**
- ✓ **Space use**
- ✓ **Painting/flooring/installations**
- ✓ **Space configuration**

Information for dwelling:
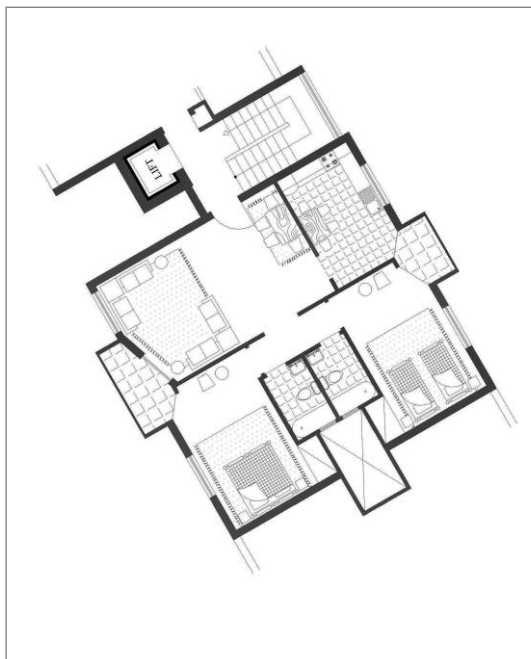
Type: FT1

Block/Floor: A/9

Rent range: 750+100
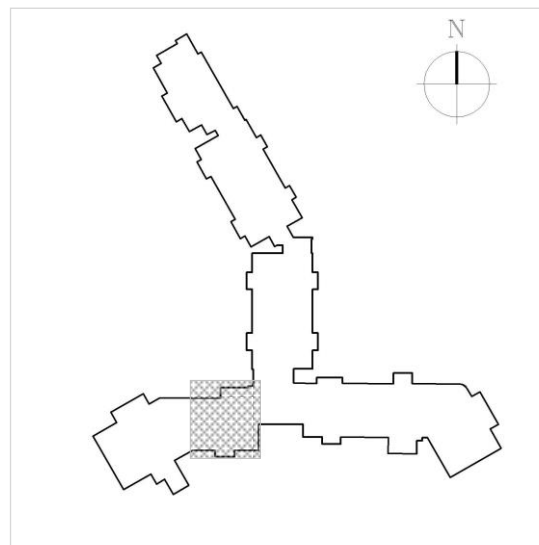
Architectural drawing:
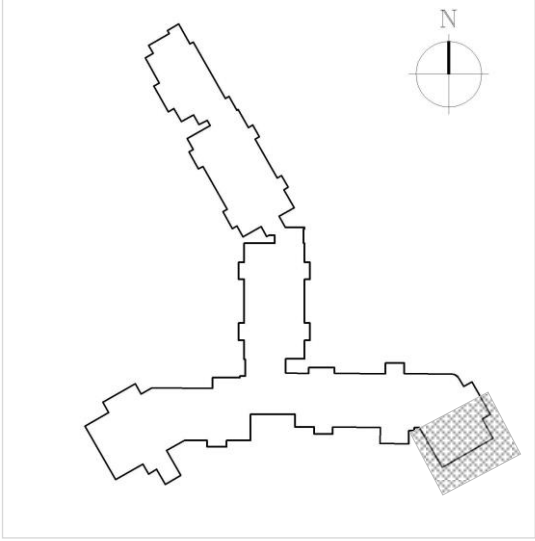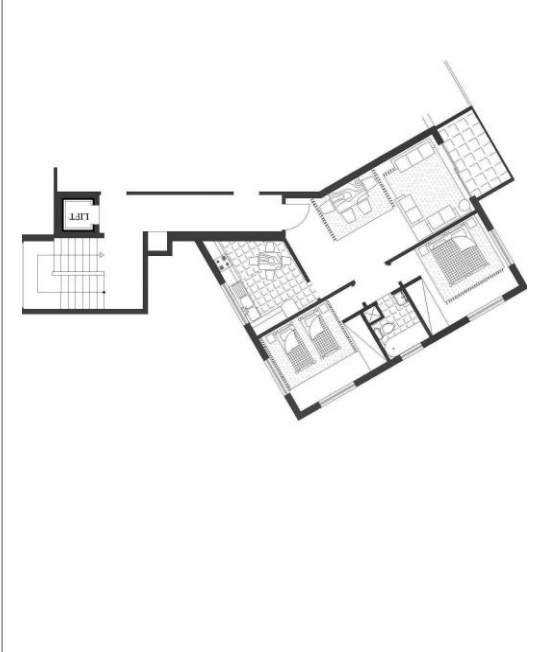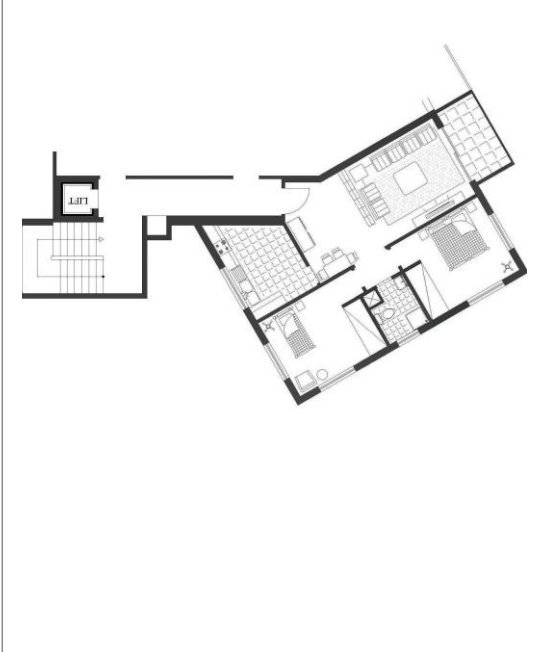
Proposed usage pattern

Current usage pattern

Users' changes in housing units/case number 7

User's profile:

Name &surname: Yigit Sarica

Type of family: Single

Previews dwelling type: Villa

Sex/Age/Job: Male/28/Employee

Duration of habitation: 4 months

Income: High salary (6000 TL)

Information for dwelling:

Type: FT4

Block/Floor: C/2

Rent range: 500+100

Level of changes and modifications:

- ✓ **Arrangement of furniture**
- **Space use**
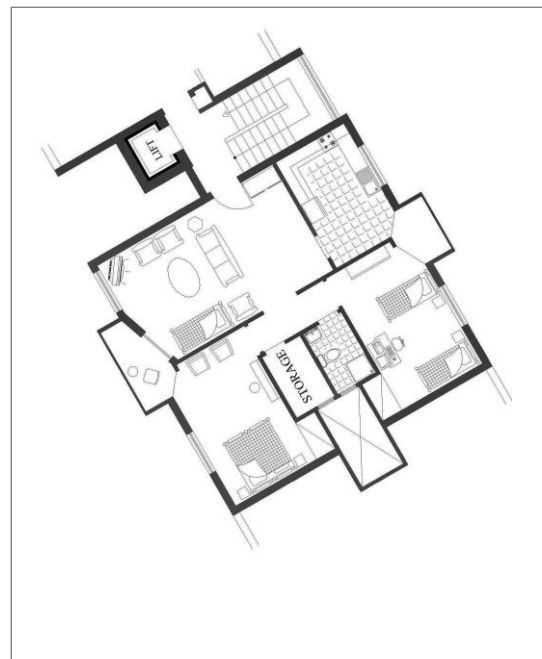- ✓ **Painting/flooring/installations**
- **Space configuration**

Architectural drawing:

Proposed usage pattern

Current usage pattern

Users' changes in housing units/case number 8

User's profile:

Name &surname: Emir Huseyin

Type of family: Couple

Previews dwelling type: Flat

Sex/Age/Job: Male/45/Self employee

Duration of habitation: 20 months

Income: High income
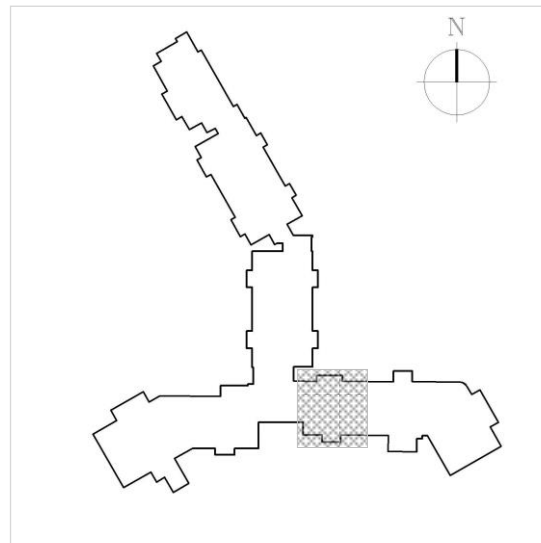
Level of changes and modifications:

- ✓ **Arrangement of furniture**
- **Space use**
- **Painting/flooring/installations**
- **Space configuration**

Information for dwelling:

Type: FT7

Block/Floor: D/4

Rent range: 550+100
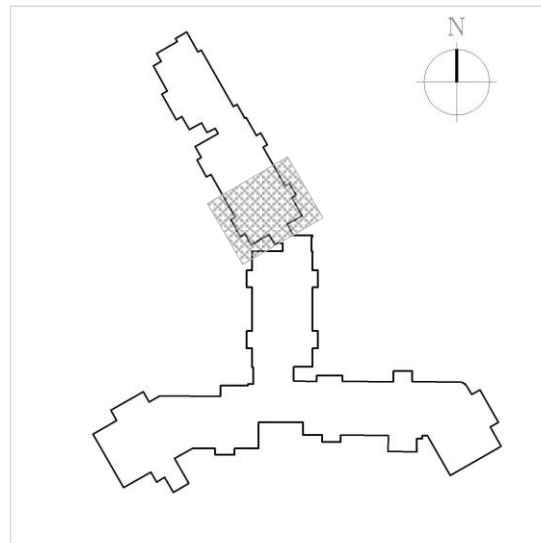
Architectural drawing:

Proposed usage pattern

Current usage pattern

Users' changes in housing units/case number 9

User's profile:

Name &surname: ___

Type of family: Couple

Previews dwelling type: Flat

Sex/Age/Job: Male/83/Architect, retired

Duration of habitation: 10 years

Income: Pension

Level of changes and modifications:

- ✓ **Arrangement of furniture**
- ✓ **Space use**
- ✓ **Painting/flooring/installations**
- ✓ **Space configuration**

Information for dwelling:
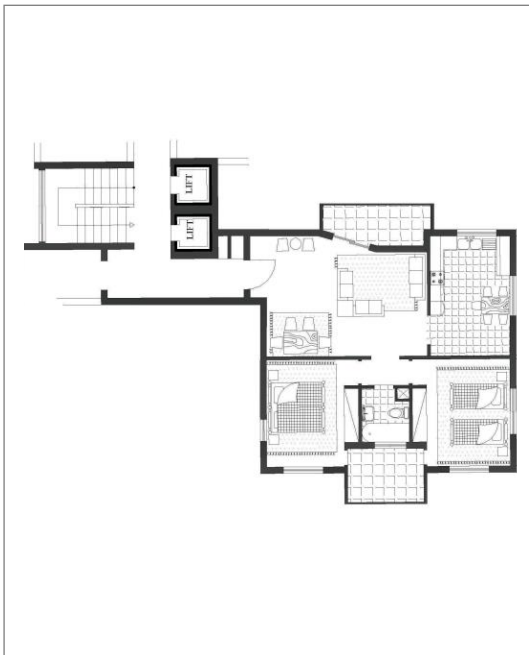
Type: FT1

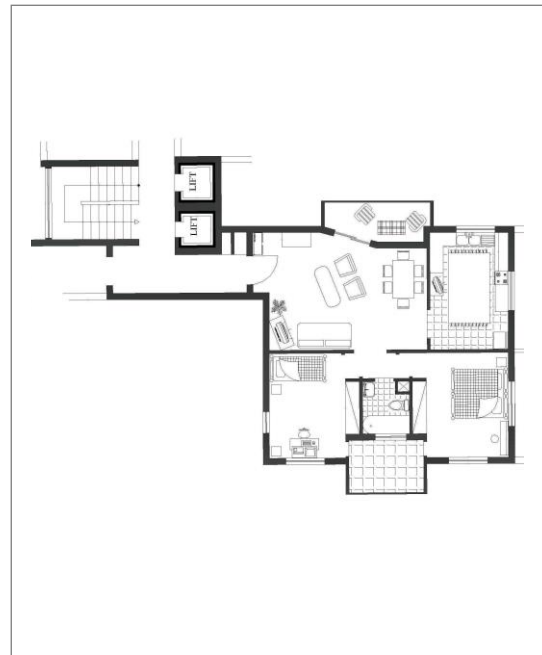**Block/Floor:** A/11

Rent range: 650+100

Architectural drawing:

Proposed usage pattern

Current usage pattern

Users' changes in housing units/case number 10

User's profile:

Name &surname: ___

Type of family: Extended family

Previews dwelling type: single detached

Sex/Age/Job: Female/55/Housekeeper

Duration of habitation: 10 years

Income: Minimum salary

Level of changes and modifications:

✓ **Arrangement of furniture**

✓ **Space use**

   Painting/flooring/installations

   Space configuration

Information for dwelling:

Type: FT7

Block/Floor: E/5

Rent range: 650+100
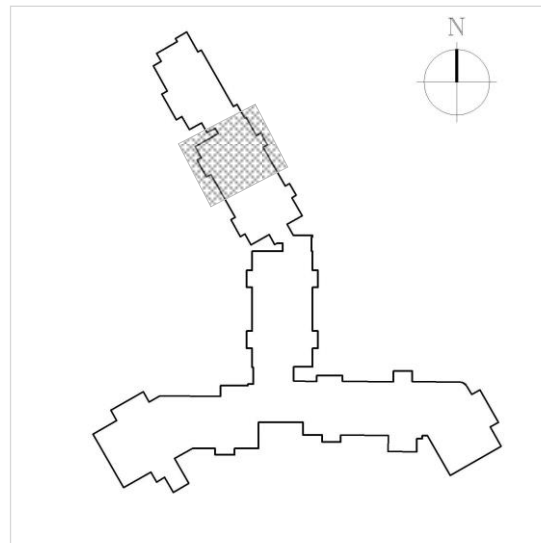
Architectural drawing:

Proposed usage pattern

Current usage pattern

Users' changes in housing units/case number 11

User's profile:

Name &surname: Ozlem Merter

Type of family: Single mother

Previews dwelling type: Single detached

Sex/Age/Job: Female/44/Cooker

Duration of habitation: 4 years

Income: Minimum salary

Level of changes and modifications:

- ✓ **Arrangement of furniture**
- ✓ **Space use**
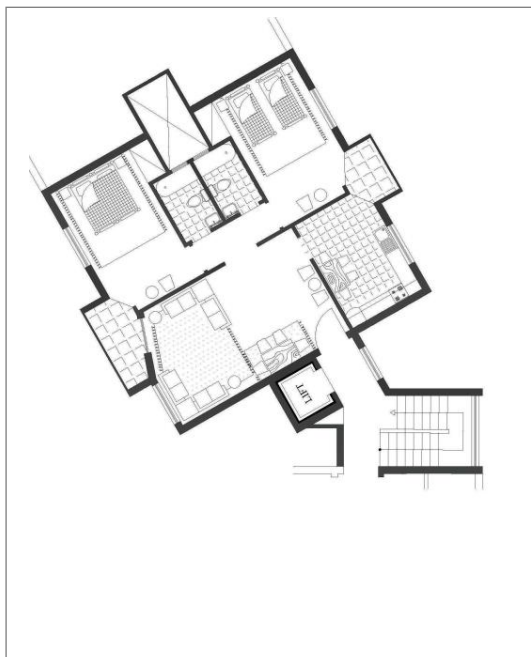- ✓ **Painting/flooring/installations**
- **Space configuration**

Information for dwelling:

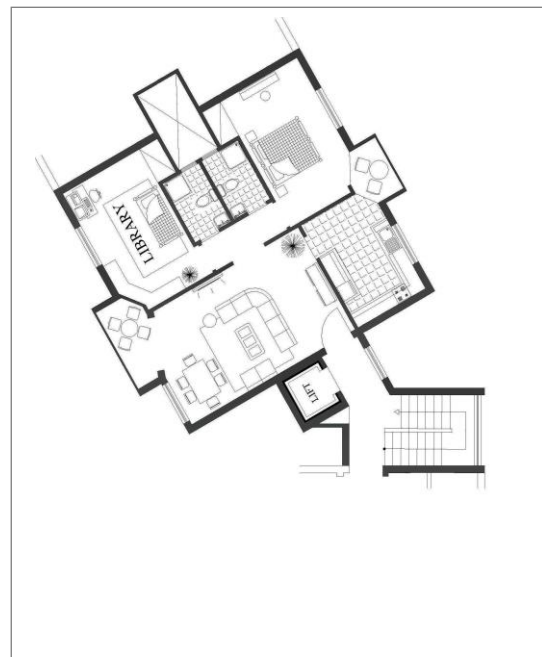**Type:** FT1

Block/Floor: A/7

Rent range: 650+100

Architectural drawing:

Proposed usage pattern

Current usage pattern

Users' changes in housing units/case number 12

User's profile:

Name &surname: Gundus Aykota

Type of family: Couple

Previews dwelling type: Villa

Sex/Age/Job: Male/60/Shop keeper

Duration of habitation: 15 years

Income: High income

Level of changes and modifications:

- ✓ **Arrangement of furniture**
- ✓ **Space use**
- ✓ **Painting/flooring/installations**
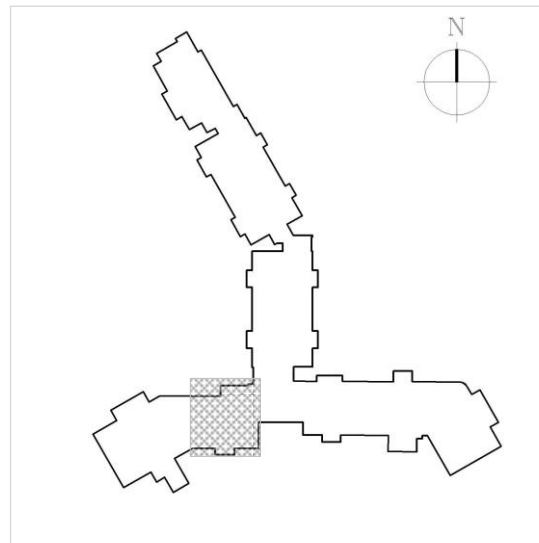- ✓ **Space configuration**

Information for dwelling:

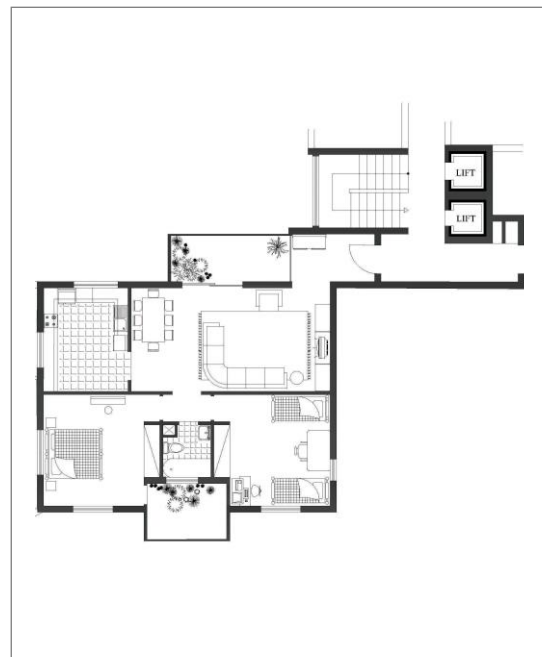**Type:** FT7

Block/Floor: D/7

Rent range: 750+100
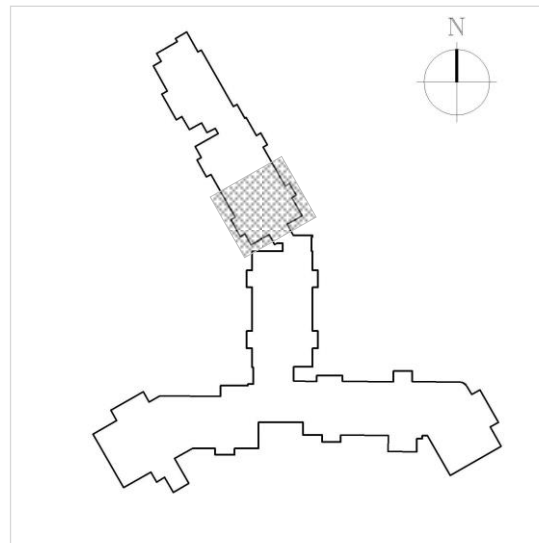
Architectural drawing:

Proposed usage pattern

Current usage pattern

Users' changes in housing units/case number 13

User's profile:

Name &surname: Fatma Guneslier

Type of family: Family with children

Previews dwelling type: Single detached

Sex/Age/Job: Female/45/Housekeeper

Duration of habitation: 15 years

Income: Pension
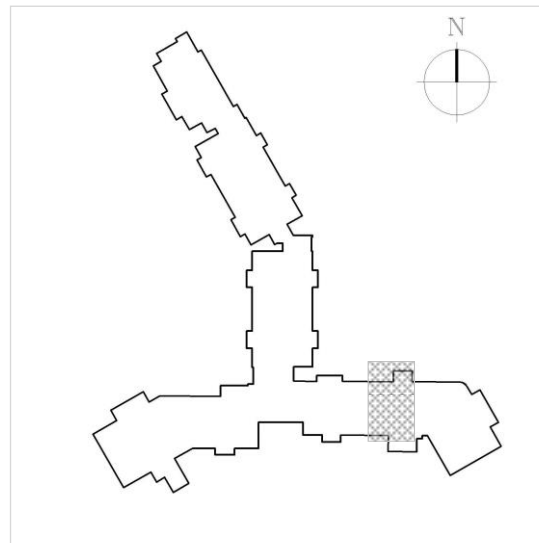
Level of changes and modifications:

- ✓ **Arrangement of furniture**
- **Space use**
- ✓ **Painting/flooring/installations**
- **Space configuration**

Information for dwelling:

Type: FT1

Block/Floor: A/8

Rent range: 600+100

Architectural drawing:

Proposed usage pattern

Current usage pattern

Users' changes in housing units/case number 14

User's profile:

Name &surname: Isa Cirik

Type of family: Family with children

Previews dwelling type: Flat

Sex/Age/Job: Male/43/Technician

Duration of habitation: 2 months

Income: Minimum salary

Level of changes and modifications:

- ✓ **Arrangement of furniture**
- **Space use**
- ✓ **Painting/flooring/installations**
- **Space configuration**

Information for dwelling:

Type: FT6

Block/Floor: C/4

Rent range: 650+100

Architectural drawing:

Proposed usage pattern

Current usage pattern

Users' changes in housing units/case number 15

User's profile:

Name &surname: Sardar

Type of family: Single

Previews dwelling type: Duplex flat

Sex/Age/Job: Male/39/Employer

Duration of habitation: 4 months

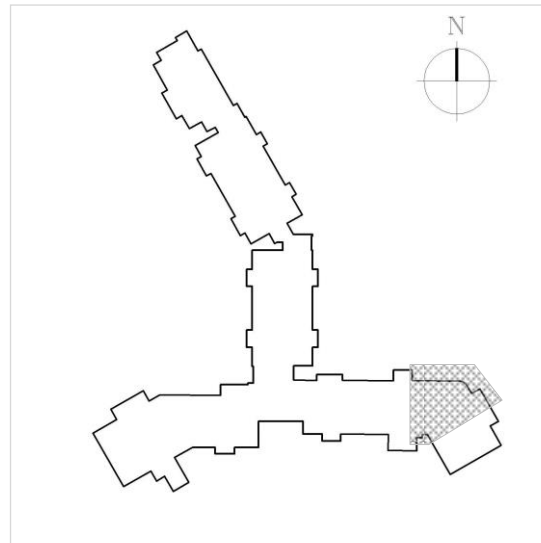**Income:** 500+100

Level of changes and modifications:

- ✓ **Arrangement of furniture**
- ✓ **Space use**
- ✓ **Painting/flooring/installations**
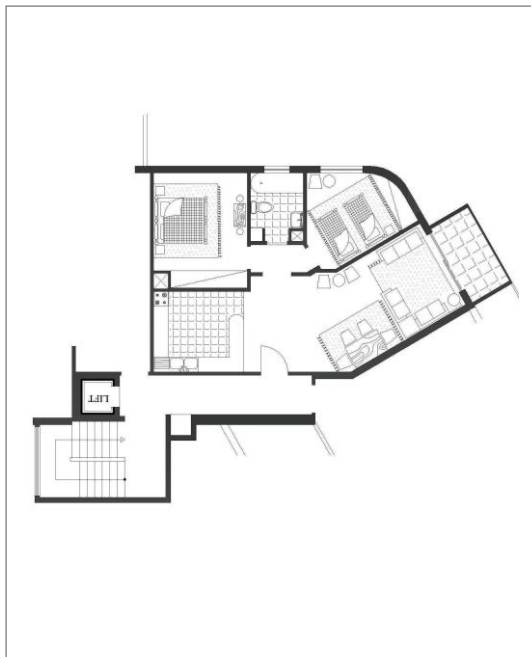- ✓ **Space configuration**

Information for dwelling:

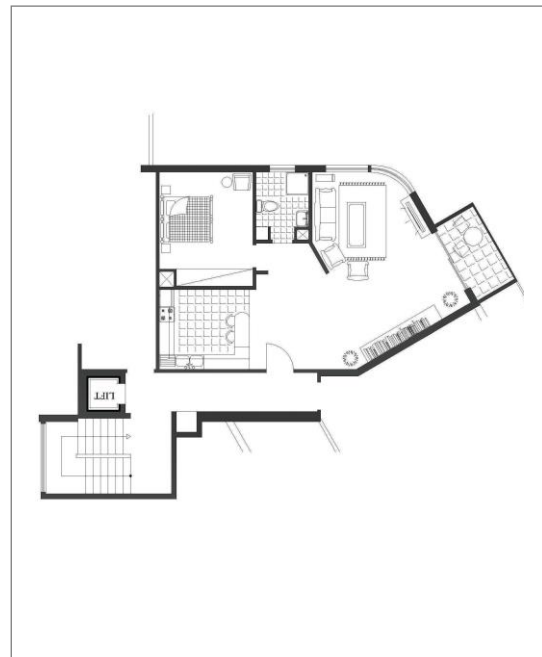**Type:** FT5

Block/Floor: C/4

Rent range: 500+100

Architectural drawing:

Proposed usage pattern

Current usage pattern