An Insight to People's Aesthetic Responses to Their Returned Environment

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ABSTRACT

This thesis is primarily concerned with aesthetic issues of symbolic expressions and preferences that are reflected in housing designs. The study consists of two major parts: First, features the process of reviewing existing literature on the various influential topics related to the field of housing and aesthetics such as formal and symbolic responses of the users. These responses occur as a part of the architectural language inflicted upon designs of housing in this study's four selected regions in the Yeni Boğaziçi area, Gazimağusa, North Cyprus. The existing literature includes works from both architectural developments and environmental design issues, focusing mainly on the social and symbolical developments of housing and ideas of how a house becomes a 'home'.

The second part to the study relates to the analysis of housing developments constructed during the recent years by the specific user profile of this study. Focusing on this unique user group, being British Cypriots that have returned to Northern Cyprus after living in England, UK for several years, provided the opportunity to gain an insight related to their aesthetic responses to their returned environments through housing.

The main objective of the study was to determine general characteristics of this user group's aesthetic preferences and what role their past environment played in their returned environment. Three different field surveys were carried out for the objectives of the study: Site inspections, semi-structured questionnaires and structured interviews.

The surveys were carried out in four different sample areas situated in close proximity along the out skirts of the currently-developing region of Yeni Boğaziçi region.

The findings of the study, in general suggest that not only the physical elements, but symbolic elements which are coming from one's past environment or life style, plays significant role through the process of turning a house into a "home".

Keywords: Housing, symbolism, aesthetic response, past and returned environments.

ÖZ

Bu tezin öncelikli olarak ilgilendiği konu, konut tasarımlarında yansıtılan sembolik ifadeler ve tercihlerde ortaya çıkan estetik sorunlardır. Bu çalışma iki ana bölümden meydana gelmektedir: Birinci bölüm içeriği, konut tasarımı ve estetik kuramında etkili olan konularla, kullanıcıların biçimsel ve sembolik tepkileri gibi, konuyla ilgili mevcut literatürün incelenmesinden oluşmaktadır. Belirli bir kullanıcı grubunun, ne tür biçimsel ve/veya sembolik tepkiler verdiği, bu çalışma içi Kuzey Kıbrıs'ın Yeniboğaziçi köyünde seçilen dört bölgede bulunan konut tasarımları üzerinden okunmaya çalışılmıştır. İncelenen literatür ve kaynaklar, konut yapımında sosyal ve sembolik gelişmeler ve bir evin nasıl bir 'yuva'ya dönüştüğüyle ilgili fikirler üzerine yoğunlaşarak, hem mimari gelişim hem de çevresel gelişim konularından farklı çalışmalara değinmektedir.

Çalışmanın ikinci bölümü ise bu çalışma için belirlenen kullanıcı profili tarafından son yıllarda inşaa edilen konutların analizi ile ilgilidir. Birkaç yıl İngiltere, Birleşik Krallık'ta yaşadıktan sonra tekrar Kıbrıs'a dönen Kıbrıslı İngilizlerden oluşan bu kendine özgü kullanıcı grubu üzerine yoğunlaşmak onların yerleşim sürecinde geri döndükleri çevreye gösterdikleri estetik tepkilerini anlama fırsatını sağlamıştır.

Çalışmanın temel amacı; kullanıcı grubunun estetik tercihlerinin yanısıra geçmişteki çevrelerinin geri döndükleri çevreye karşı mimari dışavurumlarının genel özelliklerini belirlemektir. Çalışmanın amacına ulaşmak adına üç farklı alan çalışması gerçekleştirilmiştir: yerinde inceleme çalışması, yarı-yapılandırılmış anketler ve yapılandırılmış mülakatlar. Araştırmalar Yeniboğaziçi köyünün

gelişmekte olan bölgelerinin dış mahallelerine yakın mesafede konuşlandırılmış dört farklı örnek alanda gerçekleştirilmiştir.

Bu çalışmanın bulguları genel anlamda sadece fiziksel unsurların değil, kişinin geçmiş çevresinden yada yaşam tarzından gelen sembolik unsurların da bir evin 'yuva'ya dönüşmesinde önemli bir rolü olduğunu ileri sürmektedir.

Anahtar kelimeler: Konut çalışmaları, sembolizm, estetik tepki, geçmiş ve geri dönülen çevreler.

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INTRODUCTION

1.1 Definition of the problem

Within the vast field of architectural design, housing has become a dominant and continuously developing branch which shapes and translates people's ways of lives, culture and social values into our environments. The constant interaction between people and the environment creates a complex relationship and is inflicted upon the issue of housing. Throughout the history of architecture, influential movements, such as the Modern Movement and the most dominant theory of the movement that is 'Architectural Determinism', provide important links to this concept and how it evolved. However these philosophies only focused on physical aspects of housing and neglected social needs, cultural and psychological needs and expressions of the people.

Many recent discussions (Jung, 1954; Rapoport, 1969; Cooper, 1974; Lang, 1987; Brent, 1995; Blunt 2006) in housing developments, on the other hand, have been centred upon and influenced by issues of how a house (a physical entity) becomes a 'home' (a social-cultural, symbolic entity). There are many factors behind this transformation; but it is a fact that this symbolic expression is directly related to the theories of aesthetics (Nasar, 1988; Krampen, 1989). Both formal and symbolic aesthetics play a significant role in controlling and shaping peoples responses and reactions to their senses and practical uses within an environment. Therefore the need

to study existing housing developments in terms of both stylistic associations and architectural character is vital.

During the recent years, in North Cyprus, the rapid development of housing (DPO statistics, 2012) has changed the shape and image besides affecting different geographies of the region and people in various ways. This study's scope has been narrowed down and focuses on a selected target group which are unique and play a significant role in this vast development of housing in Northern Cyprus. The target group is based upon British Cypriots who have returned to live in Northern Cyprus after living in England, UK for several years. This user group all have Turkish Cypriot backgrounds, however have chosen to live or were born in England, UK and as a result hold both Cyprus and British citizenships.

Over the years, many of the selected user group alike have chosen to make this journey back to Northern Cyprus. As a result, in terms of housing development, this user group have begun to increase and dominate certain areas. The increasing high numbers of this user group show that clusters have begun to form in similar areas which itself effects the environment in many ways. Analysing this particular user profile is vital in understanding the difference in cultures, aesthetic preferences and lifestyles which are reflected upon architecture and the environment. Yeni Boğaziçi village, Gazimağusa, is one of such localities in which a remarkable number of such developments have been taking place.

In view of these issues, that effects the environment and developments taking place in the Yeni Boğaziçi, Gazimağusa, region which are created by this particular user group, the following questions make up crucial loci of inquiry of this study:

- What are the elements that turn a house into a 'home'?

- What is the role of architectural aesthetics through this process?

- What could be an aesthetic response of a user group to their returned environment after living for several years in another country through housing?

- To what extent does cultural background (living in another country) play a role in aesthetic response of a user group to their returned environment?

1.2 Objectives of the Study

The objectives of the study are twofold:

- To determine characteristic features of the process which this particular user group aesthetically responded to their returned environment.

- To determine role and to what extent did the past environment play in influencing the selected residents' houses located in their present (returned) environment.

1.3 Method of the Study

The first part to this study is based upon a detailed review of existing literature. In order to understand and relate to the purpose of this study background information and history is needed. Chapter 2 entitled 'From House to Home' includes a chronological order of theories and movements in architecture relating to housing and environmental design. Recent developments in the theory of architecture and human-environmental relations are introduced in this study by focusing on issues such as; 'Modernist Movement' and its influences on housing design, 'Architectural Determinism' and human behaviour studies.

Chapter 3 of this study is related to the issues of understanding and measuring people's aesthetic responses to housing design. Therefore this chapter analyzes aesthetic theories in architecture focusing on the two main variables; Formal and Symbolic aesthetics. These variables have been distinguished by many theoreticians, starting with Nasar (1983) who is the main scholar in this field and later additions from Lang (1988) and Krampen (1997) etc.

Based on results of the literature review, Chapter 4 introduces case studies from the selected user group profile. This chapter firstly introduces the general characteristics of the respondents past and returned environment. The respondents of this study are situated in Yeni Boğaziçi, Gazimağusa. Therefore both physical and social characteristics of this region have been analyzed. In total twenty five case studies have been selected and categorized into four areas based in the same region. Semi-structured questionnaires, structured-interview surveys and site inspections of these case studies have all been conducted.

The sample buildings were selected and identified to meet the desired characteristics of this study. The findings of visual surveys and semi-structured questionnaires include data about the respondents' past and returned environments, formal and symbolic elements of their houses such as architectural styles, facade designs and personal preferences which have been discussed through the chapter.

Lastly, Chapter 5 concludes the findings from the case studies and relates to the original objectives of the study.

Chapter 2

FROM HOUSE TO HOME

How does a house become a home? In order to understand this complex concept, important factors relating to this transition need to be taken into consideration. Research indicates that the progression and development of housing design has excelled accompanied by the vast changes in architectural styles, meaning and introduction of other fields such as human behavioural studies and cultural aspects (Gibson, 1979; Krampen, 1997; Heft, 1997; Rapoport, 1990). Architectural movements such as Modernism, Architectural Determinism and developments in housing all relate to this concept of how a house becomes a home. This is due to the neglect which was shown towards these issues regarding housing and personal-cultural aspects within the Modernist Movement.

The relationship between the physical environment and human behaviour provides important links to this concept which will be discussed further in this chapter. Issues and influential factors concerning the Modernist Movement, housing studies and cultural aspects are mentioned in this chapter which all conclude and relate to this main topic.

This will be approached by firstly discussing these issues in chronological order, starting with the recent developments in housing arising with the Modernist Movement, secondly approaching housing studies and its developments during the

criticism of the movement and lastly by discussing important cultural aspects which greatly influenced housing for more than three decades.

2.1 Modern Architecture and its influences on Housing Design

The Modernist movement in architecture has been dominating architectural theory throughout the various periods and developments in history. Literature refers to this concept in various terms such as; 'Modern Movement', 'International Style' and 'Modernism'. This movement differed from earlier approaches like those of Beaux Arts, Eclecticism, Western Baroque and the Renaissance which paid attention to aspects such as historic approaches and stylistic traditions influencing their architecture which was not the case with Modernist Architecture.

When discussing the elaborate aspects of Modern Architecture, it can be generally characterized as the simplification of form and creation of ornament from the structure and theme of the building. Its style includes regular geometric forms, plane surfaces and flat roofs, which left no room for detailed ornamentation. These characteristics reflect the design methodology in which functional requirements and practical demands of users would influence the initial and final outcome of the design.

Modernism tried to establish an 'International Style' which meant they created architecture for every place and region. Unlike the Western Baroque and the Renaissance movements, the Modernist era had transformed architecture completely and broke away from what had been previously done. The Modernist Movement attempted to compose new architectural principles which were based entirely upon the practical purposes and functional requirements of a buildings form.

"Design for life" was in fact a slogan used to indicate the general aim of the Modern Movement. These design principles were those derived from the masters of this movement (Norberg-Schulz, 2000).

The intention of these new principles was to enable the architect to act and design more freely than before, in terms of formal characteristics such as creating large openings and glass surfaces.

Architects such as Louis H. Sullivan, Frank Lloyd Wright, Le Corbusier and Ludwig Mies Van der Rohe are famously classed as the masters and pioneers of this movement. They each had their own approach and controversial issues about Modernism which all occurred around the concept of 'form' and 'function'.

American architect Louis H. Sullivan's well known dictum "form follows function" became the basic principle of the movement and was widely accepted by others reflecting this movement (Norberg-Schulz, 2000).

Other responses from the masters of this movement included ones such as:

Frank Lloyd Wright: 'Form and Function are one'

Ludwig Meis Van der Rohe: 'Less is more'

Le Corbusier: 'Machine for living'

As mentioned before this movements principles and focus became on practical purposes and functional requirements, which is clearly stated in Sullivan's dictum of how 'form follows the function'.

The modernist era took part in an extremely important and influential time period in the 18th century, where the effects of both World Wars destroyed many cities meaning that the need for shelter was at a high demand and also as it developed throughout the time scale of the industrial revolution which secured many changes in society and everyday life. These were changes such as; vast increase of population, a steep increase in migration from rural to urban settlements, industrialization of urban areas with high numbers of factories and industries being produced and change in lifestyle with creation of new occupational opportunities.

Modernists within this movement would argue how stylistic traditions of the past were contradictory to the upcoming modern technological advances and modernization of society. Whyte's (1956) book "The Organization Man" discusses this issue of a modernized lifestyle and forever adapting environment. Whyte (1956) stressed the needs of the 'modern man' and how society has become generalized and less personalized. Within this period the "Organization man'' was accepted and used as a general stereotype for designing environments for humans.

Over and over again the pioneers of this movement referred to the newness of the modern world, and insisted that it cannot be served by the forms of the past (Norberg-Schulz 2000).

When the pioneers of Modern Architecture rejected the 'forms of the past', they did not only intend particular motifs, but also general space conceptions such as the linear perspective of the Renaissance, or the totalitarian patterns of the Baroque

(Norberg-Schulz 2000). Mies Van der Rohe stated that "Not yesterday, not tomorrow only today can be given form" (Cited in Norberg-Schulz, 2000:35).

Newman (1980) discussed conditions which reflected this emergence of Modernism upon architecture. He claimed that the buildings which were in demand for were no longer extravagant palaces, religious temples or large scale castles, but simple housing, schools and commercial building, which goes to show how the refusal and impact of concerns dealing with detail and ornamentation were opposed to. Newman (1980) also discussed how the increase of demand and quantity of these buildings needed to satisfy new urban mass societies, which was made possible due to the influence of the industrial revolution of the time that ensured factors such as new technology and multiple sources for materials. These mass societies arose from various factors such as; (i) mass attraction of people and (ii) increase of population to the large industrial areas which had to be accommodated for.

These principles seemed to formulate a universal language of architectural form within this movement. Frank Lloyd Wright's designs can be given as an example of this movement's architecture which also represents the accustomed principles of designing around the user's needs. These examples given are from houses which were designed by pioneer architects of the Modernist Movement.

The main design characteristics of Frank Lloyd Wright's work, which always seemed to be evident, were aspects such as; creating interior spaces formed by partitions not necessarily by load bearing walls and creating free distribution of areas

based on the user's description. These qualities were associated with the concept of 'open plan' living.

These characteristics were later developed by Le Corbusier (1926) who is associated world wide as producing the pioneering elements of the Modernist style. These being what Le Corbusier classed as the '5 points of architecture' (Le Corbusier, 1926):

1.   The free designing of the ground-plan

2.   The horizontal window

3.   Free façade design

4.   The roof garden

5.   The supports

[Le Corbusier, 1926(cited in Norberg-Schulz, 2000:42)]

Unlike the past, during periods such as Classical or Gothic, it seems that the Modernist Architecture gave the architect freedom to plan interior areas without being restricted by stylistic features (Newman, 1980).

This was capable due to the affect on architectural education and how the new education gave architects the license to expose materials used rather than covering them with plaster like previous movements and to produce more flexible and open designs with this new style.

However it neglected symbolic and psychological needs of people because of widely acceptance of a dominating theory of the Modernist Movement which scholars such as Jencks (1985) called it Architectural Determinism.

2.1.1 Architectural Determinism

The concept of Modernism became a central theme after the Second World War. It was during this period that it gained most popularity and was the most dominant all over the world. The movement was adopted by many influential architects and architectural educators. Masters of the Modernist era such as Gropius and Mies Van der Rohe were directors of the Bauhaus, which was one of the number one schools for craft tradition and industrial technology in Europe (Lang, 1987; Norberg-Schulz, 1965).

During the aftermath of World War II, architectural possibilities and building technologies were at its greatest. The rapid demand for structures during and after the war would create the perfect opportunities for the Modernist style to practice. Due to this demand war-devastated cities and new settlements were required and as a result needed to be built in vast quantities and in short periods of time.

Unpleasant living conditions resulted in poor social and psychological conditions. Architects believing that by simply changing the physical environment would not only improve living conditions but also change human behaviour in ways that people would act according to the desired ways of the architect (Lang, 1987).

Architectural Determinism, on one extreme, during the 1950's and later dominated architectural theories (Griffin, 1968; Maslow, 1954; Berlyne, 1971; Newman, 1972), holds that if an environment is designed and built right, desired behaviours such as increased productivity or increased community will result.

The belief claims that the social behaviour of people is influenced, even determined by the physical environment in which the behaviour occurs. The concept of architectural 'functionalism' derived from the notion that architects direct social behaviour patterns through their work. Functionalism became the most common architectural philosophy of the twentieth century.

This doctrine was given its characteristics by Walter Gropius in 1923. One of its major claims is that, in contrast to the formalistic revivalisms of the nineteenth-century styles, the forms of the Modern Architecture should be derived from the functions which buildings posses. As Gropius (1923) stressed: "We want an architecture whose function is clearly recognizable in the relation of its forms".

Team X, a group of architects who objected this view discussed and focused their main concerns relating to architecture on the complexity of city life and the relationship between people and the environment.

Between the 1930's and 1940's the principles of housing design generated many debates and meetings from the CIAM which were based on a series of assumptions regarding the impact of architecture and beliefs of the architects on human behaviour (Le Corbusier, 1973).

The CIAM was a declaration, signed by twenty four architects from all around Europe in 1928. Their main aims as mentioned above included many aspects of planning and were committed to providing: a) rigid functional zoning of city plans with green belts between areas reserved to the different functions b) a single type of

urban housing, widely spaced apartment blocks according to the density of the population (Frampton, 1997). The city and condition of towns were formulated by CIAM in terms of its five main headings: Dwellings, Recreation, Work, Transport and Historic Buildings (Lesnikowski, 1982).

In the early stages conferences of CIAM were dealing with concerns about the most fundamental human needs, related to Maslow's pyramid of hierarchy of needs (1943). This hierarchy portrayed in the shape of a triangle holds the largest most fundamental level of needs at the bottom and the need for self-actualization at the top. Many ideologies throughout the Modern Movement showed the beliefs of how the built environment is a major determinant of human social behaviour (Gans, 1967).

Therefore Architectural Determinism played a big role in controlling aspects of the behaviour of residents. Many designers made very strong assumptions that the spaces that they create will, in themselves, lead to change and produce the desire for interaction between people. However this was not the case as it became highly questionable when claiming that a design will have particular behavioural outcomes without first taking into consideration the motivations of the population concerned (Lang, 1987).

In 1960 a group of architects called Team X, who were apart of CIAM had started to criticise the earlier functionalism which was concentrated on and claimed that the five main points as mentioned in the previous paragraphs did not portray the situations of real life. Instead Team X approached concerns of the city in four main

scales; city, town, village and home. These continuous conferences which took place exhibited a belief that through architectural and urban design all kinds of other fields such as sociology and psychology were concerned (Lang, 1987; Frampton, 1997; Gans, 1968).

This was shown when Team X began to organize cities according to building sizes and scales in order to produce harmony within the buildings. The concept of neighbourhood units emerged. Brooks (1974) claimed that according to his research, the layout of the environment and the affordances it provides make a difference in people's perception of the environmental quality at certain levels.

However other studies such as Herbert Gans (1961) also showed that Architectural Determinism alone could not provide a powerful relationship between the environment and human interactions. The studies stressed that people sometimes refuse to behave in a way that architects impose them to do so.

Pessac event is also one of those dramatic examples that proved if there is no willingness or desire for interaction from people, then the behaviour is unlikely to take place. Pessac is the town near Bordeaux, in France where Le Corbusier designed and built a community of 51 houses in the 1920's. Many critics classed this project as a testament to the miscarriage of Modernism and the arrogance of its architects and became a commonly used example for singling out the defects of the Modern Movement.

The Pessac housing is a landmark of the early Modernist Movement. With over half a century of additions and remodelling, Le Corbusier's houses have been changed many times (Jencks, 1985). The project was supposedly finished off by the residents of the house which showed a rebellious rejection of Le Corbusier's Modernist aesthetic and ideology of life. These changes and modifications can be clearly seen and are thoroughly documented in a study published by Philippe Boudon in 1972 called 'Lived-in architecture, Le Corbusier Pessac Revisited.'

This research includes an analysis of both exterior and interior changes made by the occupants, accompanied by extensive interviews from the residents. Photographs included in this study clearly show the changes which have been made.

Most notable being on the physical exterior of the houses including changes to the windows replacing the large expanses of glass, tiled roof and modification to the entrances.

Boudon's (1972) conclusion showed a more positive approach compared to those of many critics. Boudon (1972) concluded that:

> "The modification carried out by the occupants constitute a positive, not negative consequence of Le Corbusier's original conception."

> (Boudon, 1972:45)

Historian Henry-Russell Hitchcock (1929) referred to Pessac as a 'serious disappointment'. In his book of 'Modern Architecture: Romanticism and Reintegration; (1929), he discussed his mixed views of the project.

He embraced the detached, semi-detached and row houses, but frowned at the interiors of the houses and described them as 'uncomfortable for the small-salaried employees they were designed for.'

The modifications which were explained before helped the residents realize and understand what their actual needs were. Due to Le Corbusier's Modernist approach, which provided unprecedented structural and design freedom (related to the five design principles which were evident in many of his designs), it created a challenge of a new kind of architecture which was later criticized in the Pessac project. Therefore the project provided a prime example of criticisms of Modern Architecture and evidence of failure of Architectural determinism.

2.2 Human - Behaviour and Housing Studies

During the Modernist era, whilst many solutions and advances in architecture were made, problems also have begun to appear. Due to the neglect of personal preferences and cultural differences in housing, human behaviour was not taken into consideration (Lang, 1987). The importance and large role human behaviour plays in environmental and housing design became evident due to this neglect.

However these issues between human behaviour, interaction and the built environment are not a simple process. It is not sufficient enough to claim that human behaviour can be shaped by the built environment alone as there are much more complex issues to this topic. This chapter aims to discuss these complexities and ideologies linked with human behaviour and housing design.

The complex relationship between human behaviour and the environment has created a wide spectrum of theories. Lang (1987) stresses that the relationship between environment and behaviour had been identified and classed under four basic theoretical positions each have different outlooks of how the environment affects human behaviour (See Porteous, 1977) that are:

1) Free will approach

2) Possibilistic approach

3) Deterministic approach

4) Probabilistic approach

The free will approach suggests that the environment has no impact on behaviour whereas the Possibilistic approach describes how the environment consists of a set of opportunities for behaviour upon which action may or may not be taken. The deterministic approach, on other hand, suggests that the environment is a major determinant of behaviour.

The probabilistic approach denotes that the environment is full of affordances for human behaviour, and that the perception and use of them is a function of individual's needs and competencies.

Hall (1971) claims that the architectural environments main functions can be noted in three ways: Firstly, it maintains the physiological states necessary to sustain behaviour; secondly, it provides the necessary behaviour settings; and thirdly, it supports psychological states through the use of symbols.

Therefore, recent studies (Krampen, 1997; Nasar, 1997) of the theory of architecture have begun to focus on understanding:

(i) How the environment is perceived,

(ii) The meaning of the environment for different people,

(iii) The opportunities that different people perceive from the environment

The nature of human behaviour has great influence in understanding the role of the built environment in people's lives through the three major components mentioned above.

Knowledge of the basic principles and explanations of human behaviour provided by many theoreticians (such as Gibson, 1979; Moore, 1979; Lang, 1987; Rapoport, 1990; Krampen, 1997; Nasar, 1997) has contributed for understanding the relationship between the environment and human behaviour.

Behaviour can be considered to be 'a goal-directed attempt by an organism to satisfy needs that are perceived and cognitively organized' (Lang, 1987: 90). Therefore it could be claimed that people's relationship to their environment is variable regardless to the specific features of the environment.

These theories on the relationship between people and their built environments provide the chance for the architect to consider how the environment affects people of different backgrounds and those with different aesthetic preferences. Throughout history the field of architecture has accommodated and constrained behavioural factors and its influences on the environment.

The study of environmental psychology and behaviourism has begun to become more and more evident in design and increase in importance for architects during the recent years.

Behaviourism is the term used in the study of psychology. Behaviourists approaches deal with 'the stimuli that impinge on an organism's sense organs and the observable responses or behaviour elicited as responses to stimuli' (Deutsch, 1978; Krauss, 1978). This theory relates to the meaning of the environment where it is derived from the information a person obtains which has symbolic properties that later results aesthetic response. These symbolic properties evoke emotional responses and motivational messages that the observer needs in order to perceive and understand an environment (Lang, 1987).

Human behaviour can be affected by many factors such as culture, values, personality and needs which will be discussed in the following paragraphs (Parsons, 1970; Rapoport, 1969 and 1976).

Therefore understanding the effect of behaviour on the built environment creates the link between behavioural science and architecture. Similarly the understanding and meaning of the term 'environment' and the nature of the psychological processes involved in the human-environment interaction is also important for behaviour-environment studies.

As Ittelson stresses: "It is important to consider that the man is both the centre of his environment and an integral part of the environment; therefore, an individual affects and is affected by his environment" (Ittelson, 1970: 84).

According to Moleski (1974), behaviour and environment interactions could be classified under three main typologies: 1) Perception, 2) Cognition, and 3) Spatial behaviour.

'Perception' is the process of obtaining or receiving information from the environment, where as 'cognition' being the function involving mental development, the process of thinking, remembering and feeling and 'spatial behaviour' providing spatial layouts which provide activity required by building users to achieve their goals (Hall, 1966).

The theory of perception until the 1950's had been attempted to be explained by theoreticians as a process based on action-reaction relations. In those studies the affect of the environment had been greatly neglected. Therefore, Gibson's (1979) study of the 'ecological approach to visual perception' has had a significant impact to the field of environmental studies.

Gibson's (1979) theory provided a basis to speculate about the physical environment and perceptual experiences of people. J. J. Gibson's approach to the study of perception emphasizes the way an active observer picks up information from the environment.

The central theory of Gibson's approach can be categorized into three key points: 1) Visual space is defined by information contained on environmental surfaces, 2) the crucial information for perception is information that remains invariant as an observer moves through the environment, and 3) this variant information is picked up directly, so that no intervening mental processes are necessary for visual perception (Goldstein, 1981). According to Gibson's ecological approach, what we perceive to great extent are the affordances of the environment.

Gibson's more detailed discussions about affordances were an important new contribution to his previous works. The concept of affordances is explained in terms of what the environment offers to the animal, what it provides or furnishes, either good or ill for organisms (Gibson, 1979:127 [Cited in Heft; 1989]).

This particular work of Gibson provided a conceptual framework for new concepts of value and meaning of the environment. Burtt (1954) noted that:

> "More generally, the affordance concept suggests that the environment, when relationally considered, is meaningful and value-laden."

Burtt (1954 [Cited in Heft, 1997:81])

The influence of behaviour on the environment has long been accepted by most psychologists (Birkhoff, 1933; Eysenck, 1941; Ashby, 1954; Maslow, 1954) all realizing its significance and how human behaviour not only effects a person's activities but also their perceptions and mental processes. Ittelson (1970:91) states that "a person will select whatever information is appropriate to his needs and will remain relatively unaware of irrelevant features of the external world".

This statement shows how if an environment does not offer the potential affordances for an individual to perform or achieve his or hers goals, that individual will either move to a new environment or learn to adapt to their current environment. The statement can also be supported by Dubos' studies.

As Dubos (1965) claims:

> "Humans are highly adaptable creatures, but their perceptions of the environment are affected by the things to which they have become accustomed."
>
> (Dubos, 1965 [Cited in Lang, 1987:103])

Studies of Louis Kahn (1977) also focus on these issues. In his researches, Kahn discusses how humans scrutinize the environment in terms of available options for achieving their goals. He claimed that if the physical environment does not support or provide opportunities for the users, then the individual would recognize the situation by changing the physical settings or adapt to their activity within the settings. These issues relate to the spatial behaviour component in understanding mans behaviour within an environment.

Behaviour relating to satisfy human needs provides another fundamental concept in designing for human behaviour. 'Behaviour relating' is 'motivation' which was a key study carried out by Young (1955). Young (1955: 205) stresses that the concept of 'motivation' is the 'process of arousing action, sustaining activity in progress and regulating the pattern of activity'. 'Motivation', the key element of satisfaction, had been developed further by the psychologist Abraham Maslow (1954).

Maslow formulated a hierarchy triangle of human needs which was considered by CIAM during their studies. In descending order first explaining physiological needs such as hunger, later safety needs, belonging or love needs, followed by esteem needs, actualization needs and cognitive and finally with aesthetic needs. This hierarchy provided a basis in understanding the human needs which buildings fulfil.

In addition to the influences of behaviour, there are other characteristics of an individual which influences the previously mentioned processes of; perception, cognition and spatial behaviour.

Parsons (1970: 98) stated that "everybody is a participant in an ongoing 'behavioural system', defined by the individuals' physiological capabilities, his personality, the social group of which he is a member, his values and his environment". These factors, which Parsons (1970) analysed, are important as they are catalysts of how and why humans perceive the environment, think about it and how they use it differently.

Carl Jung (1964) stated that people select environments in terms of images of themselves that they wish to portray rather than for what they really are. This statement made by Jung, reflects the importance of aesthetic responses of people and shows how environmental and behavioural studies occurred as a reaction to the environmental determinism approach.

As mentioned before, the cultural component of behaviour has important effects on the built environment studies. Shown in both Parson's (1970) and Linton's (1945)

studies, culture has been defined as "the configuration of learned behaviour and results of behaviour whose elements are shared and transmitted by members of a particular society" (Linton, 1945: 46). Parson (1970) claims that every individual is a part of a group and this group has an influence not only on the individuals' actions but also on the way they perceive the environment and what they think about it.

There are many studies on personality, group membership and culture which each show their effect on the environment. Rapoport's (1969) study on 'house form and culture' also stresses these issues in more detail. Cultural influences show that mental representations of the environment differ for people from different cultural backgrounds (Rapoport, 1969).

As mentioned earlier 'Architectural Determinism' is based upon the idea that if an environment is designed and built right, desired behaviour will occur. However, recent studies showed that the complex relationship between human behaviour, aesthetic responses and the built environment is important in understanding house and environmental design, because people don't behave in a way which architects want them to.

On the other hand the built environment is seen as a stage upon which human interaction unfolds. Authors such as Newman (1972), Berlyne (1971) and Griffin (1968) have conceptualized the built environment as a technology that shapes, organizes and structures human activity, symbolically shaping human lives. This concept is classified as a 'reciprocal' approach in which the relationship between the environment and people affect each other.

This concept itself shows the importance of the built environment and how there is a constant interplay between buildings and people. The built environment has material consequences for people's lives. A buildings structure, form, material, shape and personal preference all shape how we behave and interact with others and our surroundings.

2.2.1 Recent Developments on Housing

For a long time since the 1920's the topic of housing had been considered as one of its primary tasks. Starting with the Modern Movement, the importance of housing had been emphasized and many architects concentrated on the issue. As Giedion (1929: 75) claims "the present development in building is undoubtedly focused on the dwelling and in particular on the dwelling for common man."

Relating to the previous problems from the 18th century including factors such as; poor living conditions and insufficient lifestyles, Giedion (1929: 99) focuses that "human beings are badly housed, that is the profound and real reason for the present upheavals". This statement reflects one of the primary aims of the Modernist Movement which was to improve and create a healthier environment and housing for people.

Architects of the 19th century understood that a 'dwelling' implies more than being just a shelter. When discussing houses of this period in general, it shows that a house serves man in two basic ways:

(i) It offers him a refuge where he can feel at home and be at peace with himself,

(ii) It serves as a starting-point for his actions in the world. (Norberg-Schulz, 2000)

The modern house is the result of a gradual development, which was realized by Frank Lloyd Wright towards the end of the nineteenth century. The early development of the modern house took place in America. Frank Lloyd Wright (1929) was responsible for the decisive step which made the house become "what is wanted to be". The reason why this development started in America was due to the fact that firstly, the United States represents the new world par excellence, which therefore meant that it was more open to invention and change. Secondly, the individual house plays a more important role in America than in any other places. However this American development was greatly inspired by England, where the notion "my home is my castle" has a long tradition (Wright, 1929).

This influence on the modern house from England, derived from the mediaeval English models, which was then adopted and transformed to accommodate a new way of life that was seen throughout America during the second half of the nineteenth century (Scully, 1960).

Nineteenth century architects in America produced projects and buildings which possessed key features such as elements of space and form which would later on be absorbed and used by others when designing the 'modern house'. Other key characteristics to housing design within that era consisted of; asymmetrical layout adapted to the site and large porches which created a transition between interior and exterior space (Norberg-Schulz, 2000).

Even up to this point, the house was still defined as a volume, or as Wright claimed 'a box'. Therefore as previously mentioned, Frank Lloyd Wright realized this and began to decompose this volume. The architect then put all these parts back together in a new way which created a more meaningful experience for the user. Wright's reinterpretation of the human dwelling remains one of the most satisfactory achievements in the history of Modern Architecture.

Frank Lloyd Wright accomplished this through the process of decomposition which meant that some parts of the house were taken over as they were, whilst others were modified. Wright placed particular importance to the replacement of 'traditional walls' which meant the spatial organization was changed. The idea behind this new concept of replacing walls with vertical screens was to bring the outside world into the house and the inside out.

The pre-modern house in Great Britain had many premises in common with the American house, however were not as influential as Frank Lloyd Wrights' projects. Instead their main inspiration came from the mansions and houses of the middle ages (Frampton, 1992).

Throughout Europe the need for new architecture began to increase, which meant that when the early works of Frank Lloyd Wright were published, it gave a great incentive and foundation for European architects to follow and produce a type of architecture which had become sort after (Frampton, 1992; Norberg-Schulz, 2000). Wrights work had great influences on other important architects of the time such as Gropius, Dudok and Mies van der Rohe. A new order was formed when these

architects adapted the styles and works of Wright into their own contexts shaped with the urban environment which was common in Europe. Wrights' work had to be adapted as they were intended for suburban or rural situations which conflicted which the conditions in Europe. This generally meant that the free plan and open form had to be combined with different public scales and density of the environment. Many architects tried to overcome this obstacle and are evident in the early works of Le Corbusier (Norberg-Schulz, 2000).

An example of how Le Corbusier incorporated the concept of the modern house into a urban context can be seen through the block of flats called 'immeubles~villas' built in 1922. Amongst other Le Corbusier projects such as the 'Pompeian house' and the 'Citrohan house' (1920), it became evident that the interests of spatial organization and richness of effect which makes the house appear as an ordered form were important to Le Corbusier.

Le Corbusier stated that "the meaning of the house does not depend on our knowing the functions; architecture speaks in space and form" (Le Corbusier, 1922: 35 [Cited in Norberg-Schulz; 2000).

Other leading pioneers such as Mies van der Rohe also incorporated these qualities and helped him to realise his own concept of the modern house. The 'Tugendhat House' in Brno (1929-30) designed by Mies was considered the most radical and complete interpretation of the modern dwelling so far. This project contained architectural elements such as a semicircular staircase, large open living area, horizontal windows formed by walls of glass and translucent walls.

Together with Le Corbusier's main houses; Villa Stein and Villa Savoye (1927-29) the Tugendhat House represents the "international" phase in the development of the modern house. This was because they demonstrated the general principles of the free plan and open form (Frampton, 1992; Norberg-Schulz, 2000).

After the Second World War, the construction of single family houses was under great demand in many countries. Modern typologies were extensively used and varied. According to Post-modernism the houses of the previously mentioned "international" phase did not fully satisfy the demand for a new 'dwelling' and the designs did not possess distinct identities. Robert Venturi's pioneering work can be understood in this context as his designs represented both important contributions to the development of the solution, them being the 'free' and 'open' characteristics of the modern house and the reintroduction of the 'conventional' forms such as gable and hipped roofs (Jencks, 1992).

These factors helped the development of housing on a wide scale and produced more desired and satisfying dwellings. Modern Architecture played an influential role in developing housing and the movement, also liberated the architect in order to produce more thought after housing. Before Modernism, housing design was restricted and strict for the architect and was based on set rules of that current architectural style. This meant the opportunities to create flexibility and openness in design was minimal. In the Modernist era improving physical living conditions and meeting functional needs was the main focus and consideration of the architect.

Nevertheless these functional needs are not sufficient enough and showed a weakness in this movement as the Modern housing neglected all the symbolic or cultural representations a dwelling may have contained. Scholars such as Cooper (1974) discussed how people see their houses as a representation of themselves, which is a factor which the Post-modern Movement criticized modernism for. These developments explained in previous paragraphs relates to the formal aspects of housing. However since the 1960's, the other psychological issues such as privacy, personalization, aesthetics and personal preferences are on the agenda of housing.

2.2.2 Elements of Home

Research shows that when discussing the concept of elements of a home, concentrating on formal elements alone is not sufficient enough in expressing people's idea of an 'ideal home'. Therefore with regards to this topic, attention should not only be given to the formal properties but also to the symbolic elements which are influential and important to this concept.

These symbolic elements allow people to express and reflect aspects such as their personality and status on a house which in turn becomes a 'home'. This factor is a catalyst in formulating the idea of how people transfer their houses into 'homes'. In order to gain full understanding of this concept, symbolic issues need to be discussed.

When looking at the important aspects and qualities of a house, Bachelard (1969) claims that a house both encloses and excludes space. Therefore there are two different components; its interior and exterior façades.

Although this chapter will discuss both, due to the objectives of the study more attention will be paid to the exterior of the house showing its importance of how it allows and presents people the opportunity to directly represent themselves to the public.

Symbolic expression through the built environment provides information about identity of people and social groups who are associated with an environment. Symbolic aesthetics is mainly concerned with the associational meanings of the environment that give people pleasure. Whilst expressing a symbolic meaning, any building may turn into a cultural object or an individual's idea of their ideal home. These symbolic expressions are vital for giving information about many aspects of a person including their status, likes and dislikes and even about their personality (Rapoport, 1969).

Even though some scholars such as Altman (1981) and Moore (1989) argue that such expressions and meanings are determined by a person's previous experiences or a issue of culture, it is generally assumed that symbolic aesthetics is a major catalyst providing ways in understanding peoples internal representations of preferred and their ideal buildings or environment.

Many theories have attempted to explain why certain patterns in the built environment relate and communicate specific meanings to certain groups of people. Issues concerning social elements of the built environment and their symbolic meaning for behaviour patterns of people, personal space and personalization leads to important issues about the next factor related to this chapter.

The personalization of a house enables the owner to reflect their personal preferences and provides a sense of belonging unique to them. The idea of personal space relates to the transition of public and private areas, those such as the difference between bedrooms and formal living rooms.

People's physiological, social and psychological conditions have impacts on their perception of symbolic meanings in the built environment (Lang, 1987). A number of studies (Bachelard, 1969; Rapoport, 1969; Jung, 1989; Cooper, 1974) which were carried out in the United Kingdom, consisting of people from all income levels, were asked to describe their ideal house. The results suggested that many indicated the same concept, being a free standing square, pitched roof, detached with a garden, ultimately describing a stereotypical 'family house'.

Surveys carried out by Cooper (1974), also showed similar results as it was suggested that people who lived in metropolitan areas in the United States preferred to live in single unit family houses rather than in apartment blocks.

This reflects the issue of originality as Cooper (1974) claims that this type of building gives one no territory on the ground and provides no unique personality as the aesthetical elements of the facades are all the same.

As Cooper stresses:

> "High rise apartment buildings violate the archaic image of what a house is, and is perceived unconsciously as a threat to a person's self-image as a separate and unique personality."
>
> (Cooper, 1974: 134)

Many studies (such as Lang, 1987; Cooper, 1974; Rapoport, 1969; Moore, 1989; Jung, 1954; Brent, 1995; Blunt, 2006; Cieraad, 2006) indicate that factors such as personality differences change people's attitudes and perception towards symbolic aspects of the environment.

Rapoport (1969) discusses aspects which show how elements such as culture, previous experiences, childhood memories, self expressions and personal needs shape and determine the built environment.

A study carried out by sociologist Carl Werthman in California, US of how contemporary Californian suburbanites chose their home suggests that many people bought houses to emphasize their image of themselves both as individuals and as a person in a certain status position in society (Cooper, 1974).

Jung's (1934-1954) concepts provided new ideas in relation to housing and how a 'house' becomes a 'home'. Jung (1954) claims that, people see their houses as representations of themselves, idealizations of their dreams and can be seen as a sacred place which provides humans a constant point of reference which enables them to build their lives around. Decisions individuals make on the built environment become reflections of how they wish to be perceived.

In order to understand this process of 'house' and 'home' and how these symbolic meanings are developed, Jung's (1954) concepts of issues such as collective unconsciousness, archetypes and symbols need to be discussed.

Jung (1954) focuses on the importance of an individual's unconsciousness which he uses to link how a person's past effects his/her perception of the environment. Jung (1954) believed that this then is provided us with the second concept of 'archetype'. He describes this term as "a node of psychic energy within the unconscious", a symbol (Jung, 1954:131 [Cited in Cooper, 1974]).

According to him, there is always a hidden, profound and partly intelligible meaning behind this symbol, which is represented through this archetype (Jung, 1954). Jung (1954) claims that, 'symbolic imagery' derived from the past and was produced by past and present experiences in a person's unconsciousness. He also argues that instinctual patterns of behaviour and different perceptions can be traced back through dreams.

Relating to this concept, Cooper (1974) discusses the idea of how the house is a common symbol, which represents the whole self in the collective unconscious. Cooper (1974) expresses how individuals inflict their personalities and needs through the environment they choose to live in. Bachelard's (1969) study which is featured in Cooper's (1974) book also relates to this expression and claims how:

> "Man grasps at physical forms or symbols which are close and meaningful to him, and which are visible and definable."

(Bachelard, 1969:131 [Cited in Cooper, 1974])

Important issues discussed by Rapoport (1969), provide knowledge on aspects such as adaptation through housing and showed how human behaviour changes and adapts according to different environments. This issue can be observed through the process of people moving and acquiring new houses.

Cooper (1974: 131) argues that at first when an individual moves to a new house, feelings and emotions of uncertainty and nervousness may be evident and only after a certain amount of time people begin to feel more relaxed and comfortable. These feelings only begin to change after the individual becomes accustomed to their new surroundings and reflect themselves through personalization onto its physical fabric. Cooper claims:

> "The notion of house-as-self, explains why for most people their house is so sacred and why they so strongly resist a change. It is a process of self expression and with influences from past times and childhood memories."

(Cooper, 1974: 131)

As previously mentioned, the notion of behavioural changes reflects the process of how a 'house' becomes a 'home' (Blunt, 2006). Rapoport (1969) also stresses to the strong link between human behaviour and the form of a house. He claims that this link can be divided into two main senses: Firstly, in the sense that understanding behaviour patterns, including desires, motivations and feelings is essential in the understanding of the built form and secondly, how built forms affect behaviour and the way of life (Rapoport, 1969:31).

People with different attitudes and ideals respond differently to varied physical environments. These responses change from place to place due to differences in issues such as culture, socio-cultural elements, economic situations and physical factors. Rapoport argues that the form of the 'house' is the consequence of a whole range of socio-cultural factors (Rapoport, 1969). Socio-cultural elements can be defined in many different ways.

Redfield divided these elements into four classifications;

(i) Culture – a concept of ideas, institution and conventionalized activities of people
(ii) Ethos – the organized conception of the thought.
(iii) World view – the way people characteristically look upon the world
(iv) National character – a personality type, the kind of human being which, occurs in society.

<div align="right">(Redfield, 1953: 48 [Cited in Rapoport, 1969])</div>

Socio-cultural forces therefore become important and influential relating to human life and their environment.

As Dubos (1965) claims:

> "Man has a great propensity to symbolize everything that happens to him and then react to the symbols as if they were the actual environmental stimuli."

<div align="right">(Dubos, 1965 [Cited in Lang, 1987:34])</div>

The suggestion of how interior decoration of a house often symbolizes the inhabitant's feelings about themselves has long been recognized (Rapoport, 1969; Cooper, 1974; Jung, 1989; Cieraad, 2006; Blunt, 2006).

Observations of spatial qualities in housing, made researches realize that private spaces of residents, such as bedrooms were decorated in an attractive and highly personal way, symbolic of the self whose space it was (Blunt, 2006).

Factors such as originality had also become evident through the studies which were carried out. Cooper-Marcus (2006) discusses this issue by showing the increasing importance and premium which is given and put on originality. This issue of originality is shown by obtaining a house which was unique and different from

others. It is suggested that people who chose to replicate other houses struggle to maintain some sense of personal uniqueness.

Throughout these various studies relevant issues have been shown which represents Cooper's (1974) belief of how the 'house' can be seen as a 'symbol of the self'. As Cooper states:

> "A house façade and interior design are often selected so that they reflect how a person views himself both as an individual psyche and in relation to society and the outside world and how he wishes to present his self to family and friends."

> (Cooper, 1974: 137)

Brent's (1995) study of 'popular housing' shows comparisons of cultural and lifestyle differences of people from the United Kingdom and the United States which enabled her to discuss these two field groups and analyze their customs and behavioural patterns inflicted on the built environment. The author claims that the location of the threshold varies in different cultures, which gives symbolic meaning as to how people as individuals relate to their surroundings and to the rest of society (Brent, 1995).

In American houses the 'front yard' is usually unfenced and seen to be a part of the streetscape and surrounding environment (Brent, 1995). This reflects an American interpersonal trait of having an open character which in itself provides openness to strangers and of friendliness to people they may not know. In comparison, when the same study was carried out in the United Kingdom, the front gardens were fenced with a gate which puts the initial threshold at some distance from the house itself (Brent, 1995).

Brent (1995) describes this as a symbolic meaning of the greater English and how they are reserved at inviting strangers into their houses. These comparisons between different cultural groups, leads onto issues such as traditions and customs of humans in which are all important elements that influence preferences and aesthetical decisions forced upon the built environment. Traditions from the past such as family rituals, customs and house essentials have developed with the influence of the modern world. Referring to the United Kingdom, Brent (1995) discusses elements which formed family life and bound together the concept of 'home'.

Traditionally, elements such as the hearth were the main focus of family live in England, United Kingdom. This feature has developed with the aid of technology into central heating systems in which as high percentage of houses in England obtain. These customs from the past, although have been adapted are imprinted and portray images of stereotypical housing features in the United Kingdom (Brent, 1995; Cooper, 1974; Lang, 1987).

The use of symbolic expressions and formal elements are essential in relating to the idea of an ideal 'home' and the transition of how a house becomes a 'home'. Through this analysis and extensive research elements such as human behavioural patterns, cultural aspects, self expressions and personal needs help to shape this concept. The significance of exterior facade qualities also plays an important role in this ideal 'home' relation as it is used as a tool to give a direct representation of the owner to the general public. As mentioned in previous chapters, the relationship between the formal, physical and symbolic elements are crucial in achieving this concept.

Chapter 3

AESTHETIC THEORIES in HOUSING DESIGN

Traditional definitions of aesthetics refer to the perception of beauty in the arts and may imply extreme and intense feelings (Lang, 1987:179). Psychologists have broadened the definition of aesthetic response and refer to it as a favourable evaluative affect experienced in relation to the environment (Wohlwill, 1974).

The built environment is full of potential meanings for people and its users. These meanings are derived from the theory of aesthetics. Within the vast scope of design, branches such as Interior designers, architects and urban designers are forced to deal with this important discipline in order to produce work which is successful in creating a positive aesthetic experience for human beings.

The study of "Aesthetics" has been an ongoing process which derived from the work of Alexander Baumgarten (1735) who was the first philosopher to use the word 'aesthetics'. Baumgarten (1735) defined beauty as perfection and stressed such information as being gathered through the senses. Many theoreticians believed that aesthetics is a qualitative study, which is subjective varying from person to person and was classed as a matter of taste. However over one hundred years ago, Fechner (1876) proved that aesthetics could be studied scientifically and resulted in revealing patterns of preference.

This showed that although many theoretical and practical questions remained, the topic of aesthetics could no longer be seen as just a matter of taste. Due to renewed interest in the field, in the 1960's principles underlying aesthetics and environmental aesthetics appeared.

Within this period the formation of the International Association for Empirical Aesthetics was formed. Authors such as Canter, (1969); Nasar, (1988); Kaplan, (1989) and Mauritzen, (1968) all showed that aesthetics could be quantified and aesthetic preferences could be researched.

An aesthetic response of people can be classified under three main components, these being; (i) affective appraisal, (ii) behaviour and (iii) physiological response (Russel & Snodgrass, 1989; Izard, 1977).

An affective appraisal implies the judgement of an individual whether they like or dislike a building. Russel (1989), classified this concept of appraisal into four aspects; (i) pleasantness, (ii) arousing, (iii) exciting and (iv) relaxing. These all relate to the symbolic essence of what the physical environment can portray for human users. These issues of aesthetic responses relates to Groat's (1988) study in which he claimed that no perception is completely free of emotional judgement and an individual's perception of the environment is determined by multiple factors such as culture, social and personal nature. According to Schulz (1965) human beings are highly dependent upon seeing our surroundings in a satisfying manner. This leads to further issues of how different people perceive the environment in different ways.

The concept of behaviour within an aesthetic response is related to and affected by the other two components being, an individual's affective appraisal and physiological response. These factors become catalysts and reasons for the changes in behaviour within a certain environment (Izard, 1977).

The physiological response includes issues such as emotional episodes or reactions to an environment (Russell & Snodgrass, 1989). An emotional reaction refers to an individual's internal state and feelings for example, pleasure or their mood situation relating to a certain environment. Heise (1970) classified emotional reactions into meanings of three dimensions; (i) evaluation, (ii) potency and (iii) activity (Heise, 1970).

Humans may have a variety of evaluative responses to the environment, but these can be constrained if given a set of circumstances such as a point in time or focusing on a specific group of individuals which all show an aesthetic response has probabilistic relationships to environmental perception and cognition (Nasar, 1997). 'Perception' is the process of obtaining or receiving information from the environment, 'cognition' being the function involving mental development, the process of thinking, remembering and feeling (Hall, 1966).

Cognitive processes represent important variables in human aesthetic responses. Aesthetic preference arises from the person, environment and interaction between the two. As mentioned before, the difference in views between people may be due to factors such as; social cultural experiences, goals, expectations and difference in personalities (Nasar, 1997).

In recent research the discipline of aesthetics has been divided into two forms, of which have been defined by various theoreticians Santayana (1896), Lang (1987), Nasar (1997) and Krampen (1989) as formal and symbolic. Although both forms provide experiences for the user, their characteristics vary.

The visual character of buildings has important impacts on human experiences (Nasar, 1997) therefore increasing the importance and need of studying aesthetics related to housing environments.

3.1 Formal Aesthetics

When discussing Formal Aesthetics, it can be defined as a human aesthetic experience in relation to the formal or structural parts of a work (Lang, 1987). The theory concentrates on the physical properties and relationships such as; shapes proportions, rhythm, scale, colour and spatial relations (Lang, 1987). Formal Aesthetics begins by considering the basic elements of the geometry of the environment and then considers the organization of these into compositions. Formal Aesthetics also provide mathematical calculations and formula in order to analyze the work. This form of aesthetics has been based upon Gestalts theory of perception and heavily influenced by the Bauhaus masters during the 1930's.

The Gestalts psychology interpretation of visual perception suggests that the line and form of buildings communicate meanings directly through line and plane (Lang, 1987). Gestalts theory consists of three main concepts, which are; form, isomorphism and field forces (Lang, 1987: 86).

'Form' as described by Gestalt generates meanings relative to the characteristics of their background which is often shown in terms of figure-ground relations (Kohler, 1929).

The second concept of 'field forces' is the term used to describe forces evident in the visual field which have an area of application, a magnitude and direction. Finally 'isomorphism' describes the organization of neurological process and forms of the perceptual experience (Kohler, 1929; Lang, 1987).

Gestalt psychologists compiled a list of factors that influence perception of form. These factors are important to environmental design theory because they tell us much about how units in the environment are perceived. These seven factors were described as laws and consist of the following:

1) Proximity – Proximity is the simplest condition of organization (Hochberg 1964) and according to the Gestalt theory; objects that are close together tend to be grouped together visually.

2) Similarity - The law of similarity suggests that if elements have similar qualities, size, texture, and colour and so forth they tend to be perceived as single units.

3) Closure - The law of closure states that optical units tend to be shaped into close wholes (Kohler 1929).

4) Good continuance - The 4th law of good continuance claims that people tend to perceive continuous elements as single units.

5) Closedness – The law of closedness suggests that areas with closed contours tend to be seen as units more generally than those without them.

6) Area - The law of area states that the smaller a closed area the more it tends to be seen as a figure.

7) Symmetry - this law states that the more symmetrical a closed area the more it tends to be seen as a figure (Kohler 1929).

(Kohler, 1929; Lang, 1987)

The formal side of aesthetics has been the basis of the Modernist Movement. In housing design, pioneers of the movement concentrated on and paid more attention to the formal aspects of a house which meant that the symbolic issues were neglected.

3.2 Symbolic Aesthetics

Symbolic aesthetics, on the other hand, reflects an individual's internal representation of a building or environment that gives them pleasure. The field of symbolic aesthetics primary concern is about the symbolic meaning of things and the physical environment (Nasar, 1997). Several researches (Rapoport, 1977, 1982; Nasar, 1997; Moore, 1989) suggest that although many design professionals emphasize more on formal aesthetics, most people appreciate factors such as the environment mainly in terms of its symbols and its affordances for activities (Gibson, 1986; Venturi, R., Brown, D.S. & Izanour, S. (1996).

Rapoport (1997) claims that meaning meditates the relationship between the built form and behaviour. The author explains while expressing symbolic meaning a building may ultimately turn into an individual's ideal image of a home, which expresses information about an individual's status, likes and even personality (Rapoport, 1997).

Symbolic aesthetics can be defined as a reflection of an individual's internal representation of a building. It can also be classed as a pleasurable connotative meaning associated with the content of the formal organization (Nasar, 1997).

Symbolic aesthetics depends on a cognitive process. The meaning a person implies on a building is a reflection of that individuals' internal representation of their surroundings (Moore, 1989). Such meaning can take several forms that are denotative and connotative meaning. Denotative meaning refers to an individual's judgement of what a building actually is, for example if the building is a church, school or office building (Nasar, 1997). Connotative meaning, on the other hand, reflects the quality and character of a building. These qualities are defined by the individual's perception of the building (Nasar, 1997). Some buildings may share similar denotative meanings but vary in connotative meaning. For example, their quality, value and characteristics or the typical owner may be different (Nasar, 1997).

Groat and Despres (1991) claim that such meanings:

> "Relate to an individual's recognition or formal categorization of groups of objects that are characterized by the same formal structure."

(Groat & Despres, 1991 [Cited in Nasar; 1997])

In contrast to formal aesthetics, which relates to the concentration of elements and parts of a building, symbolic aesthetics depends on the process of how an individual realizes aspects such as the denotative meaning, the style of a structure and connotative meanings about it. This issue of style is one of the important factors within symbolic aesthetics.

An individual's experience and interaction with formal structures enable them to begin to categorize them into different 'styles'. Style then represents a mentally constructed "characteristic formal organization" (Schulz, 1965).

This issue of "style" creates the notion of how different people stylize buildings differently. Experiments carried out by Groat (1982) prove this statement by asking people from different occupational backgrounds to classify a building in which each of their criteria varied. In addition through the influence of "style" judgements of buildings purposes have found to be associated with physical features such as size, additions, roof forms, window size and number of stories (Krampen, 1989).

For building exteriors, style is an important factor which provides connotative meaning and aesthetic value for the viewer. The viewer's expectation and response to this style is what symbolic aesthetics centres itself upon (Schulz, 1965) and why the analysis of building exteriors is important for aesthetic studies.

The relationships between the two aesthetic variables, on the other hand, being symbolic and formal hold key interactions and are dependent on each other. This is because stylistic classifications depend on formal structures.

Chapter 4

THE CASE STUDY

4.1 The Geography of the Region

Yeni Boğaziçi village, formerly known as Ayios Seryios (means 'Saint Sergio' in Greek) or Aysergi is a cross-cultural residential settlement. The settlement has rich history in which evidence such as infrastructure and culture can still be appreciated. It is located two miles North West of the Salamis ruins which dates back to the Colonial Roman period and situated between the Karpaz peninsula and the city of Gazimağusa. It is a vastly developing village that is located 7 km away from Gazimağusa city.

Figure 1: Geographical Location of Yeni Boğaziçi (Source: Maps of North Cyprus, 2012[www.cypnet.com])

The geographic land characteristics of the Yeni Boğaziçi region are situated in a flat area. However some areas located away from the centre of the village and on the outskirts of this district are situated along the coastline.

4.2 Historical Background of the Area

Yeni Boğaziçi has a diverse history in terms of the many different types of civilizations which inhabited the village, those that include historical styles from the Ottoman, Greek and British Periods (Dodd, 2010). In 1958, due to internal conflicts occurred between Greek Cypriots and Turkish Cypriots all the Ayios Seryios (Yeni Boğaziçi) Turkish Cypriots moved to nearby villages and to the town of Gazimağusa, and had stayed in these locations until 1974. In 1974, as a result of ceasefire, Greek Cypriots have abounded the village and moved to the south of the Island whereas Turkish Cypriots resettled in the village. Some Turkish nationals mainly from Trabzon province and Istanbul city from Turkey were also settled in the village. Over the last twenty years, many European citizens, Turkish nationals and Turkish Cypriots from aboard have bought property, built houses and settled in the Yeni Boğaziçi region (Yeni Boğaziçi Belediyesi, 2012).

4.3 Population Characteristics of Yeni Boğaziçi Region, Gazimağusa

Due to the prime location in which the Yeni Boğaziçi region is located, being both close to the Gazimağusa city and stretching along the main Karpaz road, it has become favourable and desirable for development.

Other attractive features to this region such as the historical ruins and multiple hotels nearby also draw both tourists and locals to this area.

As a result, this region is vastly developing and increasing in population. According to the Yeni Boğaziçi municipality records (Yeni Boğaziçi Belediyesi, 2012), the total population figure for 2012 is 5,055 people.

In addition to this, according to the land-use studies conducted by the state planning organization in 2006 the total figure of dwellings for the Yeni Boğaziçi region was 1,017 (no updated statistics for land use studies are available on the government database). From the observation of the researcher it is possible to claim that during the past 6 years this number has rapidly grown.

4.4 Physical Characteristics of Yeni Boğaziçi Region, Gazimağusa

During the recent years, the Yeni Boğaziçi village has been vastly developing, spreading further and further out from the village centre. Likewise with a growing population, the numbers of both commercial and residential buildings have been increasing. The urban pattern of Yeni Boğaziçi is constructed upon an organic layout which gives value and importance. Within the urban pattern, the village has narrow and irregular streets filled with one or two story houses. The village is made up of a wide variety of building types including; old, traditional, and historic in character with comparison to the contemporary houses that this study will be focusing on. This aesthetic value not only provides visual continuity but it also reflects the strong cultural ties the village has.

Many of the houses situated in the dense centre of the village are one to two storey buildings with a typical structural system being load bearing also with some acceptations of reinforced concrete structures.

When distancing away from the village centre, up to as far as the outskirts of Yeni Boğaziçi, the density of dwellings decreases. It is also evident that the further away from the centre of the village, the larger and more contemporary the houses become. The houses situated on the outskirts of the village are generally detached villas, consisting of 1, 2 or 3 storeys. Current study particularly interests in these newly developing areas and sample houses besides respondents of the study have been chosen from there.

4.5 The Old and New Houses of the Selected Residences

In this study, the relationship between selected residents' past and present environments are important. This is due to the question of what role and to what extent did the past environment play in influencing the selected residents' houses located in their present (returned) environment. In order to understand this relationship an analysis of both environments is necessary. Therefore a description including general characteristics of the residences' old and present houses and environment will be described.

4.5.1 General characteristics of Respondents' Old Houses from Their Past Environment

The user profile concentrated on within this study is classified as British Cypriots[1], which have a Turkish Cypriot background. The uniqueness of this user profile is that they are people who have moved back to Northern Cyprus after living in England, United Kingdom for several years. According to the statistical information gathered by the researcher during pilot investigations of this study, out of the 25 selected sample houses; 48% of the participants' past environment was situated in North

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[1] 'British Cypriot' is the term given to define a group of people who were either born or who have lived in the United Kingdom for several years, which also have Turkish Cypriot backgrounds.

London, whereas 24% were situated in South London and 20% were situated in East London whilst a small 8% of participants were located in areas outside of London.

According to the Home Affair Committee (2011), after the 2011 UK Census there are approximately 300,000 Turkish Cypriots living in the United Kingdom with over 85% of them living in London city.

Table 1: Table showing percentage of Respondents past environment within the London Borough

N=25		
Selected Respondents' Past Environment	No. Of Houses	%
North London	12	48
South London	6	24
East London	5	20
Outside of London	2	8

Out of the 48% of participants that lived in North London, 10 out of the 12 houses were 3 bedroom semi detached. Likewise, houses located in South London also had similar characteristics of having 3 bedrooms semi-detached, whilst a selective few were 3-4 bedroom end of terrace row houses.

When discussing the formal characteristics of the exterior facades and decorative elements, a stereotypical characteristic style can be seen. 100% of the participants past houses were constructed of masonry brick which is the most common construction material in the UK. 70% of them containing a pebble dash / stone plaster cladding effect, with a further 100% containing pitched roofs with red tile cladding.

Whilst analysing the participants past environment through researcher's personal experience, photos and informal talks with the users, many of the exterior

characteristics are determined as being similar. This may be due to the strict building rules and relegations in various areas in London. Houses built in the UK must meet certain structural and aesthetic criteria. Due to these rules and regulations, houses very rarely hold unique qualities, instead seem to be mirrored and almost copied to form a street. On the other hand, personalization of exterior facades such as window styles, decorative features and landscaping provide the property owner a chance to add their own personal touch to the house.

It was observed that, these personal touches are important when relating to the symbolic characteristics of the participants past environment. Although small changes may be made to the houses, original features and the main character of the house are not changed in order to sustain the harmonious unity which this repetition of style produces.

The general formation of houses and street patterns can be classed as cul-de-sac areas and grid like street organizations (See Figure 2, showing the typical street pattern of one sample area in Croydon, South London where some participants were located).

Figure 2: Map of Croydon (Past environment of some research participants), UK – Showing Street pattern (Source: Google Earth 2012)

With 92% of the participants living in London city, environmental characteristics of both immediate and surrounding qualities are also detected as similar. Although this 92% is divided into different boroughs of London, aspects such as public services, community life, public transport and also the environmental problems were constant. Due to the large increasing population, orientation and placement of the houses are in close proximity to each other. For, those living closer to the centre of London it was determined that proximity patterns were being even denser (Fig 3, 4, 5 show typical street layouts in three areas of London, where some respondents used to live).

Figure 3: Photograph showing typical street pattern in Mottingham, South London, UK (Source: Google Earth 2012)

Figure 4**:** Photograph showing typical street pattern in Mile End, East London, UK (Source: Google Earth 2012)

Figure 5: Photograph showing typical street pattern in Edmonton, North London, UK (Source: Google Earth 2012)

4.5.2 General Characteristics of Respondents' New Houses from Their Returned Environment

The 25 selected houses from respondents' returned environment are located in the Yeni Boğaziçi, Gazimağusa region. These 25 samples are located on the outskirts of the Yeni Boğaziçi village and are situated along the Gazimağusa-Karpaz main road. In this study the sample houses have been categorized into four areas. The characteristics of the respondents returned environment is not being situated in immediate surroundings show a common pattern. Throughout these four areas the general characteristics of the 25 selected houses including facade qualities, construction types and environmental issues are determined as being similar. All of the selected houses are detached villas.

The environments in which the selected houses are situated in also have similar characteristics. Yeni Boğaziçi as a region is vastly expanding, starting from the centre of the village and breeching out to surrounding areas. The urban pattern as mentioned before consists of irregular streets and an organic layout. This is also evident in the four selected areas (see figures 6, 7, 8, 9).

Figure 6: A01–Street pattern (Google Earth, 2012)

Figure 7: A02–Street pattern (Google Earth, 2012)

Figure 8: A03–Street pattern (Google Earth, 2012)

Figure 9: A04–Street pattern (Google Earth, 2012)

The areas in which the selected respondents are situated in are an accessible area close to the Yeni Boğaziçi village centre and also within a ten minute drive to the city of Gazimağusa.

Within the immediate surroundings services such as connivance stores and other small retail shops are available. The general exterior facade qualities of the sample houses showed to have a plaster and paint finish with a minimalist approach to decorative features. Many of the houses had a clean cut look, with minor evidence of cladding details such as stone or title. The paint colour was selected according to personal preference and varied between all the selected houses. Common features such as large openings, vast scale plans, pitched roofs with clay/shingle tiles, ample balconies and surrounding masonry walls were all evident in each area. 100% of the houses were reinforced concrete structures with over 70% of the houses having insulation systems. Over 30% of the 25 houses had external columns for both structural and aesthetic purposes. Other characteristic features of the houses were the well maintained gardens, surrounding all four sides of the house.

Although the characteristics of these houses are observed as similar, it should also be noted that each of the houses is unique in the overall finished look. This is most probably due to personal qualities and preferences enforced on the house by the owner such as; lighting elements, window frame colour and style, entrance definitions and landscaping.

4.6 Methods of the Case Study

4.6.1 Selection of Sample Houses

For the objectives of the study, three field surveys were carried out in the Yeni Boğaziçi region which are; (i) structured interviews, (ii) semi-structured questionnaires and (iii) site inspection surveys.

Each of the selected case studies were chosen according to allocated areas along the stretch of the Gazimağusa-Karpaz Main road and is situated along the border/outskirts of the central village.

Firstly the semi-structured questionnaires was designed in order to obtain answers to a number of questions asked to twenty five house owners, with the expectation of finding out general information about their house and surrounding environment. The structured interview survey, on the other hand, was conducted among twelve of the selected case study group in order to gain a more detailed insight to their living conditions. Finally, a site inspection was carried out to record information obtained of visual characteristics of the houses situated in the four different sample areas.

The sample houses are situated in the same area which was selected on a random basis. Although the houses were selected randomly, they identified to meet with the desired characteristics of the basic criteria from this study.

The main factors of the desired criteria meant that the selected houses had to be firstly owned by the specific user group being Turkish Cypriots who have moved back to Northern Cyprus from England, United Kingdom.

Secondly the houses followed a consistent pattern of architectural characteristics and were similar in appearance. Thirdly the four selected areas along the stretch of the Yeni Boğaziçi boundary provided samples allowing a comparative analysis of architectural features which relate to the objectives of the study. These selected regions are currently-developing housing districts mainly by the focused user group.

Figure 10: Map of Yeni Boğaziçi, showing the village centre and surrounding areas (Source: Google Earth, 2012)

4.6.2 Sampling Procedure: The Respondents

The respondents of the structured-questionnaire study were selected randomly whilst visiting the sample areas. These areas can be defined along a 5km stretch of the Gazimağusa-Karpaz Main road; two areas are situated on the midpoint of this stretch, whilst the other two define the beginning and ending points of the stretch

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(See figure 10). After the selection of houses, questionnaires were handed out to the home owners who filled them out upon receiving them with the help of the researcher.

The age groups in each area ranged from 42-65 years. The participants were generally from a middle-income to high-income people with a varied group of occupations. All of the participating respondents were owners of the properties. Demographics of the respondents are provided below.

Table 2**:** Demographic characteristics of User group respondents

N=25			
Ages			40-68 years
Nationality	British Cypriot		100%
Turkish Cypriot		0%	
British		0%	
Gender	Female		55%
Male		45%	
Occupancy	1-3		8%
(years) 4-8			76%
9-14		16%	
15 and above		0%	
Education	Primary school		12%
Junior school		0%	
Secondary school		64%	
University		24%	
Graduate degree		0%	
Employment	Private Sector (e.g. teacher)		12%
Governmental 3		12%	
Company Owner		36%	
Retired		4%	
Self Employed (doctor, lawyer)		8%	
	House wife		28%

4.6.3 Measures

The initial intent of the study was based upon the question of whether and how respondents past environments influenced and effected their aesthetic responses to their present (returned) environment. Issues concerning respondents past environments, personal preferences and aesthetic judgements needed to be measured and based upon a method of collecting data to gain insight and results regarding this statement.

As mentioned in the previous paragraphs, 25 sample houses were selected for case studies located in four close by areas within the Yeni Boğaziçi region. Each of the owners from the 25 houses was given a questionnaire to fill in about their returned environment in general. 12 respondents from 25 sample houses were asked to take part in a structured interview which was designed to accumulate a more detailed account of both the respondents past and present environments. A direct site inspection study was also conducted in the environment in order to graphically record and categorize the selected sample houses.

4.6.3.1 Site Inspection Survey

In addition to the questionnaire and interview surveys, a visual site inspection was also carried out in the sample environment between the dates of 7th of May 2012 and the 10th of June 2012. The site inspection was done in order to obtain and record visual characteristics of the sample houses concerning aspects such as; stylistic features, dominant structural elements, material components and size proportion relationships.

This site inspection was necessary and valuable as it would help in understanding which of the formal elements from the respondents' past environment have been influential enough to be included or replicated in their returned environment. Consequently, through the aid of the collected visual information, it is possible to identify patterns such as stereotypes, common features and similar styles.

The site inspection consisted of firstly taking photographs of each of the sample houses from all four areas. These photographs were taken according to a previously set order. This order meant that each sample house would have the same visual recordings of important elements. These elements included:

- Photos of all facades

- Entrance definitions

- Openings

- Additional decorative features

- Surrounding landscaping

- Dominant structural/aesthetic features.

4.3.6.2 Questionnaire Survey

The first part of the questionnaire (See Appendix A) was designed to provide information about the demographic characteristics of the respondents. It included several questions about their past environment which were necessary in order to gain background information about the respondent and reasons behind their returning to Northern Cyprus. Issues such as whether the respondent had previously visited Northern Cyprus before, how often and for what reason were also asked.

The second part of the questionnaire was designed to collect information about physical/formal characteristics of the respondents returned environment. These questions aimed at physical qualities such as elements like:

- Size and age of the building

- Functional room qualities and quantities

- Site characteristics

- Functional uses

The third part of the questionnaire was based upon architectural styles of the respondents' residences, façade design and construction materials. These set of questions related to issues such as:

- Ornamentation/decoration

- Cladding and finishing's

- Construction material

- Structural systems

- Heating and cooling systems

The forth part of the questionnaire was designed on environmental aspects, in order to understand the surrounding qualities and opinions of the respondents' whether or not they were satisfied with their returned environment. The type of questioning format was designed differently in this part of the questionnaire as it was based on both facts and opinions.

Therefore set answers were designed to give the respondents a chance to select which option best represented their situation.

Environmental factors were all focused on within this section of the questionnaire, as below:

- Lifestyle requirements

- Location of residence

- Accessibility

- Exterior and interior qualities

- Neighbour relationships

In addition to these questions, based upon formal factors, the last part of the questionnaire was focused upon symbolic characteristics of the respondents' houses. Questions related to opinions about the house and other issues such as; whether the respondent was satisfied with the final outcome, if they would make changes to areas of the house, if there were any important requirements whilst designing and whether they, themselves felt that their past environment had influenced them or not. A sample questionnaire can be seen in the Appendix section (Appendix A).

4.3.6.3 Interview Survey

As mentioned before, 12 respondents from the 25 sample houses were selected to participate in structured interview surveys (See Appendix B). This meant that 3 houses from each of the 4 areas were chosen. The interview was constructed in order to firstly gain a detailed insight into the respondents' past environment.

Questions relating to all issues such as demographics, formal/physical, symbolic issues and environmental factors were all discussed. Secondly, similar questions were asked to the respondent relating to their returned environment. Each interview lasted for up to between 45minutes to an hour.

This interview was necessary in order to gain information and personal opinions about the previously mentioned issues which may not be possible to understand through the general questionnaire survey. This detailed interview becomes a vital tool in gathering information and insights to the respondents' past and returned environments and also produces data that can help in understanding whether their past environments actually influenced the respondents to create a new domain for themselves in their returned environment. The questions asked in the interview survey, although designed for in depth personal responses, were repeated to all of the participating respondents' in order to gain an overall idea and common understanding of relations regarding the studies aim.

4.7 Results and Discussions

4.7.1 Results of Site Inspection Survey

In 2012, four areas located on the outskirts of the Yeni Boğaziçi village were selected for the case study and a direct site inspection survey has been conducted in these areas, which are named as A01, A02, A03 and A04. These four areas are in close proximity and are located in a vastly developing area. The site inspection survey included 8 houses from A01, 8 houses from A02, 5 houses from A03 and 4 houses from A04 (See Figure 11).
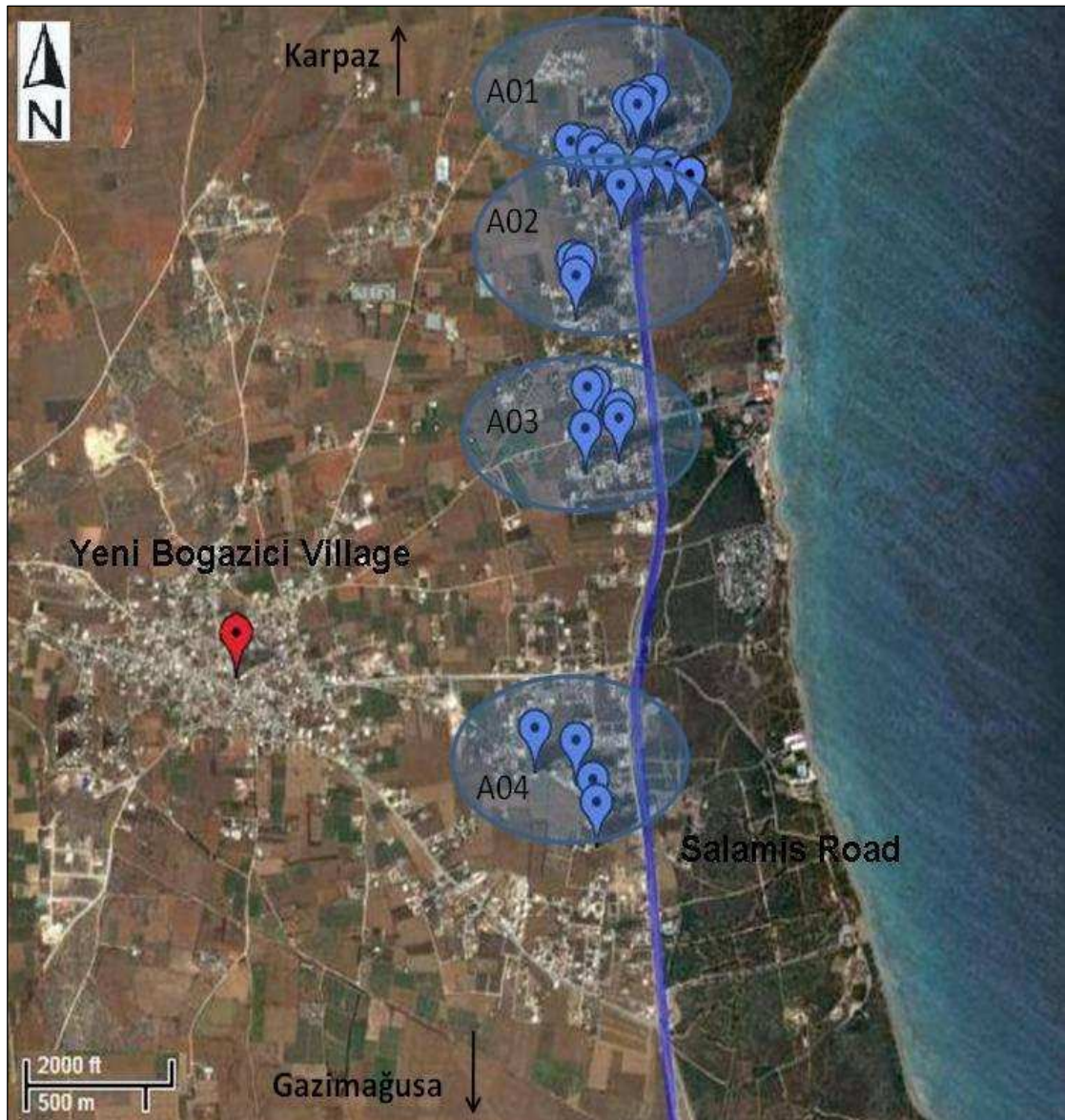
Figure 11: Map of Yeni Boğaziçi showing location of the 4 sample areas and location of selected houses (Source: Google Earth, 2012).

The sample houses were selected according to a set criteria relating to the specific user group of Turkish Cypriots who have returned to Northern Cyprus from living in England, United Kingdom for several years.

The first sample area (A01) consisted of 8 houses, was a vastly developing area, along with the second sample area (A02) which both held the highest number of the selected user profiles (See figure 12 for site layout and location of sample houses in A01). Almost each of the houses situated in A01 were different to each other and

held unique physical characteristics. Four of the houses from A01 were similar in architectural style. The first two houses (A01-5 and A01-6) were situated next to each other and were constructed with the same plan, however external elements such as decoration, landscaping and later additions to one of the houses made them different from each other. These changes were the result of difference in personal preferences. Information gathered from the residents, showed that the owners of these houses were related and used to live in the same area of London, United Kingdom.

The two other houses in A01 which also looked similar (A01-2 and A01-3) were also owned by relatives from the same family and situated in close proximity to each other. These houses consisted of similar features which was determined through analyzing the features of the façades. Elements such as the roof type, use of external columns, material, façade finishing detailing and colour schemes show the similarities of design and architectural style.

Conversely, like the other previously mentioned houses (A01-5 and A01-6) which held similar architectural styles, decorative additions such as glass blocks, wooden balusters and buttresses made the house (A01-6) appear different.

Each of the sample houses were constructed on individual plots, as 100% of the houses were detached. These plots were divided up by surrounding parapet walls, each with different aesthetical qualities, some made from masonry bricks whilst the majority were reinforced concrete. Decorative elements such as brick archways, shaped banisters and painted iron works were also evident in many of the houses surrounding walls.

Figure 12: Map of A01 – Showing location of sample houses in area (Source: Google Earth, 2012; Photos by the researcher, 2012)

The houses situated in A01 are all considered to have large scale properties in terms of square metres. The size of all 8 sample houses ranged between 220 to 320 metre squares and differed in levels of 2 – 3 storeys high.

Each of the houses had well-maintained gardens surrounding all four sides of the property, with one, A01-4, containing a private swimming pool. Each of the gardens was rich in landscaping and foliage consisting of many types of fruit trees, flowers and grass lawns.

As previously mentioned, all 8 houses from A01 held similar architectural styles with relation to features such as; plain, plastered/painted façade designs, pitched roofs, vast number of open terraces and surrounding boundary walls.

The second sample area (A02) also contains 8 selected houses and is located in close proximity to area one (A01). This area is divided into two by the Karpaz Gazimağusa main road (also known as Salamis Road). 3 of the sample houses are located on the coastal (East) side of the area, whilst the remaining 5 houses are situated on the other side (West) of the main road (See Figure 13 showing location of A02 and sample houses). This area consisted of 4 main streets in which the 8 sample houses were situated on. A02-1 is situated on Adalı Street, A02-2, A02-3 and A02-4 are all located on St.Hilarian Street, A02-5 is situated on Ankara Street, whilst the remaining 3 sample houses are located on Londra street.

From the site inspection of A02, observations and results show that the architectural style and characteristics of the houses were similar to those located in A01.
Although the sample houses are not located on the same streets, those dominant architectural styles were still evident.
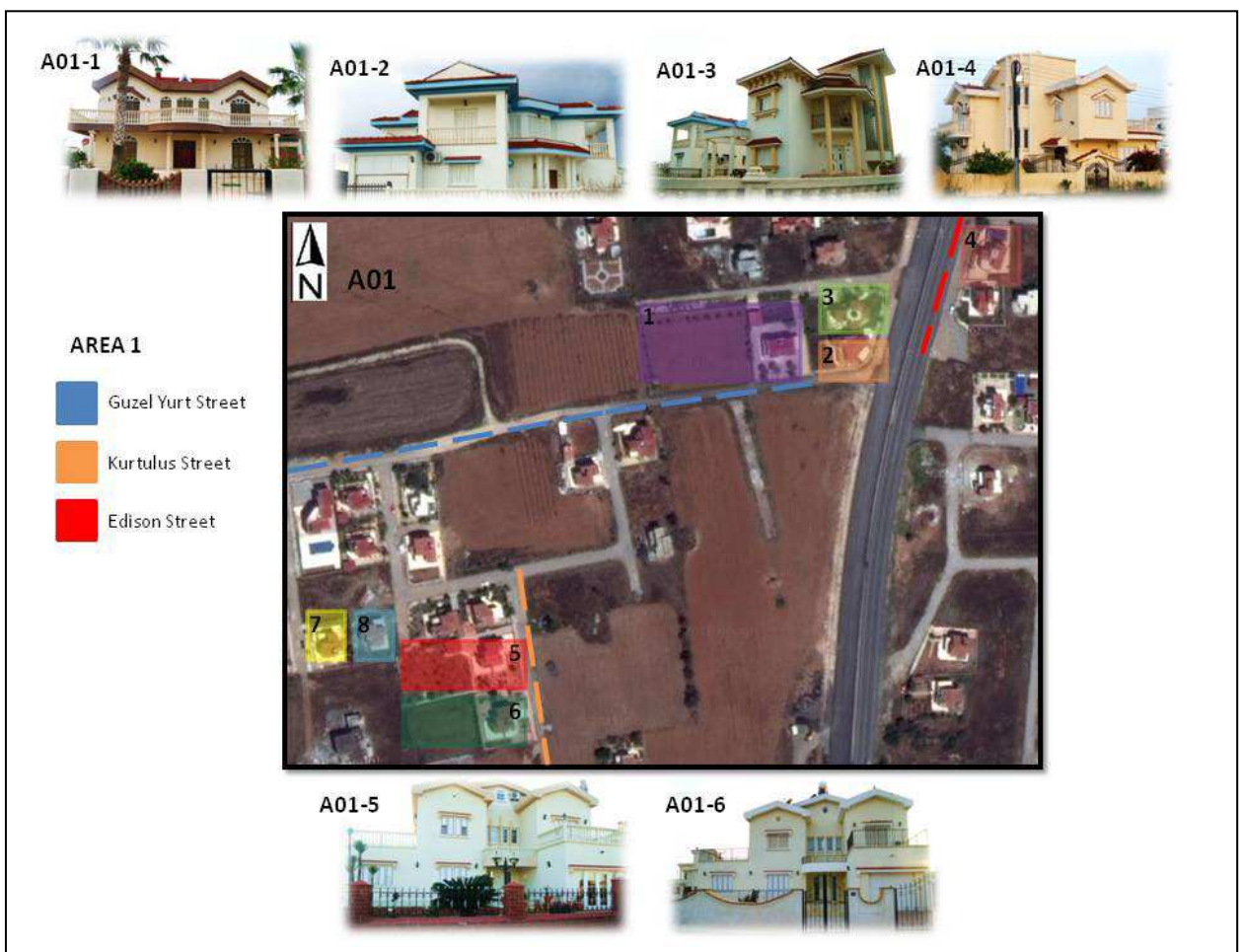
Figure 13: Map of A02 – Showing location of sample houses in area (Source: Google Earth, 2012; Photos by the researcher, 2012)

Many of the houses contained similar architectural features such as external cylindrical columns, pitched roofs, large open balconies and defining boundary walls. Façade details again like those in A01 were plastered/paint finished and did not include many decorative features. One house in this area, A02-4, which is located along St.Hilarian Street, was slightly different as it contained some traces of cut stone detailing on both the façade and surrounding wall.

House A02-5 also showed some differences in design, with the use of a large curved wall, in comparison to the others which were mainly flat. The use of high pitched roofs evident in many of the houses showed a common characteristic for this specific user type.

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The scale of these houses was also large, ranging between 210 to 350 square metres. The largest of them being A02-6, which contained a large front yard with ample parking spaces and a private swimming pool situated at the back of the house.

Houses A02-6 and A02-7 held similar characteristics and were located in close proximity on the same street. Visual analysis showed that each house chose to have dominating external columns used to define the entrance and also consisted of large openings both on the ground and first floor. The chosen colour scheme for the facades was also of the same tones of orange. The three houses (A02-6, A02-7, A02-8) situated on Londra Street were all relatively new builds, being completed in 2011. These houses also contained large scale, well maintained gardens that surround the house.

The third sample area (A03) in the Yeni Boğaziçi region is situated closer to the centre of the village than the two previously mentioned areas. In this area, 5 of the sample houses were studied (See Figure 14 to showing the location of sample houses).

The density of housing in this area was much greater in comparison to the others. The space relationships between each of the houses were very close, tightly compact and were divided with the individual boundary walls of each house. The sample houses in A03 all have similar characteristics when analyzing issues such as plan layout, roof types, entrance definitions and facade designs. Although many of the qualities of these sample houses are similar, the amount of floor levels differed and ranged from 1 to 3.

Figure 14: Map of A03 – Showing location of sample houses in area (Source: Google Earth, 2012; Photos by the researcher, 2012)

House A03-1 and A03-4 were 3 storeys high, A03-3 and A03-5 were 2 storeys high, whilst A03-2 was one of the two 1storey bungalow type of dwelling out of the 25 total sample houses.

Like other houses in A01 and A02, each house in A03 had a well maintained garden, which became a common characteristic throughout the site inspection. 3 out of the 5 houses in A03 also had large scale private swimming pools.

All 5 of the sample houses in A03 had dominating boundary walls. House A03-4 was surrounded by a 1metre high reinforced concrete wall with a further addition of green shrubs to extend the height to approximately 2.5 metres high. This meant that only

the 1st floor of the house was visible which created a very private and secure environment.

Houses A03-1, A03-3 and A03-2 surrounding walls were made from natural cut stone and were finished off with stone arch ways and iron railings. This decorative boundary created a contrast to the plain, flat façade design of the houses. Another common characteristic of each area which was also evident in A03 was the cladding/finish of the houses façades. Plaster/paint was the finishing effect on each of the sample houses, each selecting pastel tones of paint including pale yellow, cream and white.

Houses A03-1 and A03-5 held the most common and similar characteristics of both facade design and architectural style. Each house contained dominant features such as large front balconies, exterior columns and steps leading to the entrance, large openings and pitched roofs. Each house was unique in style and was large in scale. The largest of which was 550 metre squares (A03-1).

The fourth sample area (A04) consists of the remaining 4 houses. The density of this area is the least compact and generally sparse in relation to the proximity of houses (See Figure 15 showing location of houses in A04). Sancak Street is the name of the main, dominant street of A04 in which all the sample houses branch from.

Within this area, all the houses except for A04-4 are 2 to 3 storey villas. A04-4 is the second bungalow type of dwelling out of the 25 sample houses. Although being different to other sample houses in relation to scale and floor numbers, reoccurring

and similar characteristics can also been seen in A04-4. These being element such as pitched roofs, external columns and large openings for surrounding terraces. This particular house is the smallest in scale when comparing it to all the other 24 sample houses.

The other sample houses in A04 are large in scale ranging from 250 to 340 metres square. Results from the site inspection showed that, unlike other houses from A01, A02 and A03, sample houses in A04 are more unique when analyzing architectural style and design characteristics in general. Although various similarities such as the re-occurring roof style and façade design are evident, differences in the visual relationship between the sample houses vary.

10 out of the total 25 sample houses featured similar entrance definitions. These were defined by extending cantilevers which were supported by exterior columns with three steps leading to the front door. The remaining 15 sample houses entrances were defined in similar ways with larger scale more dominant cylindrical columns with 1st floor balconies providing a roof covering the entrance area.

Figure 15: Map of A04 – Showing location of sample houses in area (Source: Google Earth, 2012; Photos by the researcher, 2012)

Sample house A04-2 shows the most unique characteristics of both façade design and architectural style compared to others in the area. These differences can be seen in the design of curved facades, variation of roof type (both pitched and flat), complex plan layout and use of dynamic forms. House A04-3, on the other hand, has similar characteristics and layout to many of the other sample houses in the previously mentioned areas.

These characteristics include; similar entrance definition of exterior columns with steps leading to the front door, flat plastered/paint façade finishing, large openings, long front balconies and simple additions for decoration. Other characteristic features such as well maintained gardens and surrounding walls were also evident in A04. Two out of the four houses in this area also had private swimming pools.

After the site inspection of all four sample areas, 3 houses were selected from each area (A01. A02. A03. A04) in which the data collected from these 12 samples have been presented into tables comparing the main details of the respondents past and returned environment.

Returned Environment

Past Environment

Address: 286 Langhedge Lane,
Edomonton, North London, United
Kingdom

House Owner: Eren Derya
Address: No 1 St.Hilarian Sokak, Yeni Boğaziçi

Built in 1998 (Approx) 220m2

4 Bedrooms, 1 family bathroom, 1ensuite bathroom, Loft space, Kitchen,
Utility room, Study, Lounge, Downstairs WC, Single garage

Reinforced concrete frame system, cinder block walls, insulation, plaster
and paint facade finish, Pitched roof, red Ceramic tiles.

Built in 1950's (Approx) 100m2
End of terrace 3 bedroom, Family
bathroom, Kitchen, Lounge, Back and
front Garden

Masonry brick structure, Pitched roof with
slate tiles, Double cavity walls and
insulation.

Figure 16: House portfolio from A02 showing past and returned environment

Returned Environment

House Owner: Turgay Cemal
Address: No 15 Sancak Sokak, Yeni Boğaziçi

Built in 2004 (Approx) 300m2

4 Bedrooms, 2 bathrooms, dressing room, Kitchen, Utility room, living room, downstairs WC, study, dining area, open gallery area, double garage.

Reinforced concrete frame system, breeze block walls, plaster and paint facade finish, hipped roof, red Ceramic tiles, exterior concrete columns.

Past Environment

Address: 57 Court Farm road, Mottingham, South London, United Kingdom

Built in 1930's (Approx) 210m2
Semi detached 3 bedroom, Family bathroom, Kitchen extension, Lounge, Dining, room, downstairs WC, garage, loft space

Masonry brick stucture, Hipped & pitched roof with slate tiles, Double cavity walls and insulation. Pebble dash and plaster and paint finishing. Exposed wooden beams painted black.

Figure 17: House portfolio from A04 showing past and returned environment

Returned Environment	**Past Environment**

House Owner: Sevcan Ozalp
Address: No 19 Yunus Emre Sokak, Yeni Boğaziçi

Built in 2005 (Approx) 550m2

3 floors, 5 Bedrooms, 4 bathrooms, Loft conversion, Kitchen, Utility room, 2 living rooms, downstairs WC, study, dining area, storage room, double garage, swimming pool.

Reinforced concrete frame system, insulation, plaster and paint facade finish, Pitched roof, red Ceramic tiles, İnterior and exterior marble columns.

Address: 255 Great Cambridge road, Enfield, North London, United Kingdom

Built in 1930's (Approx) 130m2
Semi detached 4 bedroom, loft conversion, Family bathroom, Kitchen, Lounge, Dining, room, conservatory

Masonry brick stucture, Hipped roof with slate tiles, Double cavity walls and insulation. Red tile, pebble dash and exposed brick cladding on front facade.

Figure 18: House portfolio from A03 showing past and returned environment

Returned Environment

House Owner: Zalihe Ekrem
Address: No 5 Mustafa Sıtkı Sokak, Yeni Boğaziçi

Built in 2002 (Approx) 300m2

3 floors, 4 Bedrooms, 1 family bathroom, 2 ensuite bathroom, Loft conversion, Kitchen, Utility room, winter room, summer room, Balcony at front of house

Reinforced concrete frame system, insulation, plaster and paint facade finish, Pitched & hipped roof, red Ceramic tiles.

Past Environment

Address: 64 Oakwood park road, Southgate, North London, United Kingdom

Built in 1930's   (Approx) 180m2
Semi detached 3 bedroom, Family bathroom, Kitchen, Lounge, Dining room

Masonry brick stucture, Hipped roof with slate tiles, Double cavity walls and insulation. Red tile cladding on front facade

Figure 19: House portfolio from A03 showing past and returned environment

Returned Environment

Past Environment

Address: 1151 Great Cambridge Rd, Enfield, United Kingdom.

House Owner: Aliye Alban
Address: No 22 Orkide Sokak, Yeni Boğaziçi

Built in 1930's (Approx) 120m2
Semi detached 3 bedroom, Family bathroom, kitchen, living room, dining room, garage.

Built in 2009 (Approx) 290m2

2 floors, 3 Bedrooms, family bathroom, Kitchen, Utility room, downstairs WC, dining room, day room, living room and swimming pool.

Masonry brick stucture, pitched roof, wall and loft insulation

Reinforced concrete frame system, plaster and paint facade finish, pitched and flat roofs with red ceramic tiles.

Figure 20: House portfolio from A04 showing past and returned environment

Returned Environment

Past Environment

Address: Bow Cresent, Central London, United Kingdom

House Owner: Acar Remzi
Address: No 20 Yunus Emre Sokak, Yeni Boğaziçi

Built in 1920's   (Approx) 130m2
End of terrace 2 bedroom, Family bathroom, Kitchen, Lounge, downstairs WC and small loft space.

Built in 2004 (Approx) 370m2

Bungalow, 3 Bedrooms, 3 bathrooms, open plan living room, dining room, kitchen, Utility room, study, games room and storage room.

Masonry brick stucture, pitched roof with slate tiles, Double cavity walls and insulation. Exposed brick facade.

Figure 21: House portfolio from A03 showing past and returned environment

Returned Environment

Built in 2001 (Approx) 250m2

3 floors, Loft conversion, 4 Bedrooms, family bathroom, Winter room, Formal living room, Kitchen & dining room, downstairs shower room, double garage, balconies.

Reinforced concrete frame system, cinder block walls, plaster and paint facade finish, pitched roofs, red Ceramic tiles, Masonry brick fire place breast.

Past Environment

Built in 1930's   (Approx) 130m2
End of terrace 3 bedroom, Family bathroom, Kitchen extension, Lounge, Dining room.

Masonry brick stucture, pitched roof with slate tiles, Double cavity walls and insulation. Pebble dash and red ceramic tile finishing. Bay winwos and glass portch.

Figure 22: House portfolio from A01 showing past and returned environment

Returned Environment

House Owner: Canev Baykal
Address: No 4 Edison Sokak, Yeni Boğaziçi

Built in 2002 (Approx) 220m2

2 floors, 4 Bedrooms, family bathroom + ensuite, Formal living room, Kitchen, study, downstairs shower room, single garage, bedroom balconies, front and back terraces and a swimming pool

Reinforced concrete frame system, cinder block walls, plaster and paint facade finish, pitched roofs.

Past Environment

Address: Lonsdale Avenue, Edmonton, North London, United Kingdom

Built in 1940's (Approx) 130m2
Middle of terrace 3 bedroom, Family bathroom, Kitchen extension, Day room, formal lounge, loft conversion, downstairs WC

Masonry brick stucture, pitched roof. Pebble dash and exposed masonry brick finishing. Bay windows and portch for entrance.

Figure 23: House portfolio from A01 showing past and returned environment

Returned Environment

House Owner: Emine Mustafa
Address: No 12 Ankara Sokak, Yeni Boğaziçi

Built in 1993 (Approx) 220m2

4 Bedrooms, 2 bathrooms, living room, Kitchen & dining room, downstairs WC, garage, Utility room.

Reinforced concrete frame system, plaster and paint facade finish, pitched roofs, red Ceramic tiles.

Past Environment

Address: Palmers Green, North London, United Kingdom

Built in 1930's   (Approx) 120m2
Semi detached 3 bedroom, Family bathroom, Kitchen extension, Lounge, Dining room. Open plan.

Masonry brick stucture, pitched roof with grey slate tiles, Double cavity walls and insulation. Pebble dash and red ceramic tile finishing. Bay winwos and glass portch. Exposed brick on corners.

Figure 24: House portfolio from A02 showing past and returned environment

Returned Environment	Past Environment

Returned Environment

House Owner: Janel Formoza
Address: No 41 Sancak Sokak, Yeni Boğaziçi

Built in 2007 (Approx) 340m2

4 Bedrooms, 2 bathrooms, living room, winter room, day room, Kitchen & utility room, downstairs WC, garage, Loft conversion, swimming pool, balconies.

Reinforced concrete frame system, brick walls, plaster and paint facade finish, pitched roof with timber frame and wooden cladding, red Ceramic tiles.

Past Environment

Address: 82 little heath road, Croydon, South London, United Kingdom

Built in 1920's   (Approx) 125m2
Semi detached 3 bedroom, Family bathroom, Kitchen, Lounge, Dining room, downstairs WC, garage.

Masonry brick stucture, pitched roof with maroon slate tiles, Double cavity walls and insulation. Pebble dash and exposed masonry brick finishing. Masonary brick chimney.

Figure 25: House portfolio from A04 showing past and returned environment

Returned Environment

Past Environment

House Owner: Erem Avni
Address: No 3 St.Hilarian Sokak, Yeni Boğaziçi

Built in 2003 (Approx) 280m2

4 Bedrooms, 1 family bathroom, 2 ensuite bathrooms, balconies for each bedroom, Kitchen, Utility room, Study, formal lounge, Downstairs WC, 2 Day rooms, pool maintenance room and dressingroom (basement level)

Reinforced concrete frame system, cinder block walls, roof insulation, plaster and paint facade finish, Hipped & flat roof, orange curved ceramic tiles.

Address: 67 Rowan Tree Road, Enfield Town, North London, United Kingdom

Built in 1940's   (Approx) 140m2
Semi detached 3 bedroom, Family bathroom, Kitchen, Lounge, Down stairs WC, garage conversion

Masonry brick stucture, Pitched roof with ceramic tiles, Double cavity walls and insulation.

Figure 26: House portfolio from A02 showing past and returned environment

Returned Environment	Past Environment

Address: Winchmore Hill, North London, United Kingdom.

House Owner: Mustafa Mehmet
Address: No 5 Guzel Yurt Sokak, Yeni Boğaziçi

Built in 1930's   (Approx) 140m2
Semi detached 3 bedroom, Family bathroom, downstairs WC, extended Kitchen, formal living room, TV room, garage/work area.

Built in 1998 (Approx) 320m2

2 floors, 4 Bedrooms, family + ensuite bathroom, upstairs gallery/landing area, kitchen, utility room, downstairs WC, formal lounge, dayroom, study and double garage

Masonry brick stucture, pitched roof, pebble dash cladding, exposed brick, exposed tudor beams.

Reinforced concrete frame system, plaster and paint facade finish. Cinder block bricks.

Figure 27: House portfolio from A01 showing past and returned environment

4.7.2 Results of Questionnaire Survey

In total 25 semi-structured questionnaires were completed by each of the sample house owners, whose ages ranged between 42 to 65 years old (Demographics chart provided in Table 1, Chapter 4.6.2), from the four selected areas within the Yeni Boğaziçi region between 7th of May 2012 and the 10th of June 2012. Results of the structured questionnaire survey are presented in tables provided in Appendices C.

The results of this questionnaire survey represented that before officially returning back to Northern Cyprus to live in Yeni Boğaziçi, 92% of respondents had previously visited Northern Cyprus, expect for a small few (8%). A further 50% of the participants stated that they used to visit Northern Cyprus every year until they finally emigrated. The highest percentage showed that 48% of the participants chose to return to Northern Cyprus due to lifestyle and financial reasons.

Out of the 25 selected participants from the four sample areas many had returned and lived in Northern Cyprus for a minimum of 3 years and a maximum of 12 years (See Table 2).

Table 3. Amount of years participants have lived in Yeni Boğaziçi Village.

Years of Living in Region	N= 23	%
3 years	2	8
4 years	1	4
5 years	5	20
6 years	6	24
7 years	2	8
8 years	5	20
9 years	2	8
10 years	0	0
11 years	0	0
12 years	2	8

Previously site inspection studies showed that generally all of the 25 sample houses were large in scale in terms of square metres (See Table 3). Controversially, during the questionnaire survey 16% of the participants claimed they were not satisfied with the size of their house as it was in fact too big.

Table 4. Size in square metre of the Yeni Boğaziçi Sample houses.

Square Metre of the House	N= 25	%
120-160 sm	1	4
160-200 sm	4	16
200-240 sm	6	24
240-280 sm	5	20
280-320 sm	4	16
320-360 sm	3	12
360-above sm	2	8

Some of the participants mentioned that they would have preferred to live in the same house, but a smaller version. A female participant said:

> "When first designing the house I wanted to have huge, large rooms and many of them! But after living here for over 5 years, I've realized it was a mistake to make the rooms so big as it has turned into a waste of space which could have been used for other purposes." (Female, 47 years.)

All of the houses located in the sample areas were detached 1/2/3 storey houses with private gardens and surrounding walls. Over 50% of the sample houses were 2 storeys, with a further 36% being 3 storeys high. A small percentage (32%) of the total sample houses had had loft conversions or usable loft space available. Out of the 25 samples, 60% were 4 bedroom houses, 28% had 3 bedrooms with the remaining 12% consisting of 5 bedrooms.

The structural systems of all of the houses were reinforced concrete skeletal frame with solid brick walls and reinforced concrete floor slabs. 92% of the 25 sample houses exterior façades were rendered with plaster and paint, with a small 8% featuring natural cut stone.

During the site inspection survey, it was observed that similar patterns of ornamentation and a minimalist approach to decoration were evident throughout the 25 sample houses. Many participants of the questionnaire survey explained that they intentionally did not want to cover exterior facades with complicated detailing and cladding. Although a small number chose to incorporate natural cut stone to the facades it still did not become the most dominant features.

Over 56% of the sample houses were constructed with pitched/gable roofs, many claimed that this style was preferred due to the respondents' previous environments also containing this style of roof.

Table 5. Showing roof types of 25 sample houses.

Roof type of House	N= 25	%
Flat roof	0	0
Gable/pitched Roof	14	56
Hipped Roof	7	28
Mansard Roof	0	0
Other	4	16

Other features such as heating and cooling systems were also asked about in the questionnaire. 60% of sample houses contained an open fire place, with a further 40% installing central heating systems. A high percentage of participants also claimed that they had installed water boilers.

A female participant stated that:

> "It was vital for me to have central heating and a hot water boiler system installed in my house, after living in England for all those years being used to home comforts like them were important. Although when we first built the house central heating was not available at the time, so it was later added." (Female, 56 years)

Environmental aspects were also focused on in the questionnaire. The format for this section was different to the previous questions as in this part, pre-set statements were given to the respondents asking them to select an answer which best reflected their response. Likert scale answers such as; strongly agree, agree, undecided, disagree and strongly disagree were provided.

It showed that well over 60% of participants were satisfied with the location of their house. In terms of whether or not the chosen area for building had reached the house owners expectations showed that 64% agreed with this statement and a further 20% strongly agreed with this idea. Many respondents indicated that the area which their house was built in included many positive aspects which attracted them to this region. Many described the area as quiet, peaceful and attractive due to the close proximity of the sea and coastal beaches.

Issues such as accessibility to the sample areas and houses were also analyzed. 56% of respondents' claimed that they agreed that their homes were easily accessible, 24% strongly agreed with this statement, whilst the remaining 20% disagreed. This small percentage of respondents' who disagreed claimed that when their houses were originally built, accessibility was not an issue; it was only until after the installation of the dual carriage main road that problems began to occur.

When asked whether the respondents' thought either if their houses were their ideal homes or not, over 52% agreed whilst 36% strongly agreed with this statement. Many of the respondents' claimed that whilst designing their house, the concept of it being their 'ideal' or 'dream' home was a main factor. All design criteria and decisions were made according to their personal preferences and needs, which explains the high percentage of respondents' agreeing with this statement.

Interior space qualities were also discussed with the participants during the questionnaire survey whereas with 56% of respondents stated that the interior qualities of their homes were sufficient and satisfying with a further 28% strongly agreed with this and a small 16% disagreed claiming some interior spaces were not sufficient enough.

A female participant said:

> "When designing our house, some interior spaces and rooms seemed necessary, however after living in the house for over 6 years, some of those spaces are never used and their functions have been changed from the original plan." (Female, 47 years)

In general 32% of the respondents stated that they were happy with the finalized design of their homes and 60% strongly agreed with this statement with a small number (8%) disagreeing.

4.7.3 Results of Interview Survey

From the 25 sample houses 12 respondents' participated in structured-interviews (See Appendix B). 3 respondents from each of the 4 areas were selected and were chosen according to the availability and choice of participation by the house owner. Each interview lasted for approximately 45 minutes to an hour.

Unlike the semi-structured questionnaire survey, interviews allowed the researcher to gain a detail insight to the respondents' past environment.

With the aim of gaining a detailed insight to these specific user profiles past and returned environments this interview provided information which enabled the researcher to analyze many important factors to support questions and research objectives of this study.

These important factors were the key to researching and understanding the key objectives. Issues such as the following were all discussed in the in-depth interviews.

- Reasons for returning to Northern Cyprus

- Design principles and criteria of owner

- Facade design

- Spatial qualities of interior and exterior

- Construction and roof types

- Environmental issues

- Accessibility

- Street/area characteristics

- Available services

Firstly, each of the respondents was asked to describe their returned environment and old house which they lived in. Later, the respondents' were asked to express opinions about their current houses, as many of them described their current dwelling to be their 'ideal' and 'dream home'.

Each of the respondents also described their approach to designing and building their current houses. One female participant said:

> "Whilst moving back to Cyprus, it was easy to decide where to build our house as we had previously bought land in the Yeni Boğaziçi region. Due to lifestyle and financial reasons the move to Cyprus was a chance to create a new life, living in different conditions and in a house I had always dreamt about. Although I liked my old house in England, the opportunity to create and build a house customized for me was an idea I had always wanted to achieve." (Female, 50)

This became a common response from all the respondents as they suggested that the move to Northern Cyprus would be an opportunity to live a different life, under conditions which they desired. Another respondent said:

> "My past environment was suitable for me only because I learnt to adapt to the area and style of house, however in Cyprus there was no need for adaptation as it was a house built accustomed to my needs." (Male, 46)

When discussing issues such as limitations and conditions of the respondents' past environments, many described how the regulations and restrictions of housing in England, UK meant that they were confined in expressing personal preferences and unique qualities to their homes. The sense of freedom and opportunity to design according to the respondents own personal preference was a common factor and reason behind moving to Northern Cyprus.

A male participant stated:

> "Houses in London, especially in the area which I lived in all looked the same; it was hard to tell the houses apart. They had the same plan layout, facade design and general look. If you wanted to make changes you would have to apply to the local council which would grant you permission to make certain changes, sometimes this would be refused. However when designing our house in Yeni Boğaziçi up to a certain extent, we could do what we wanted. The freedom to design with lack of restrictions enabled us to design a house we always wanted." (Male, 50)

Important factors such as designing a house which was unique and personalized according to the respondents own preference could be the influential reasoning behind each of the sample houses being different to each other. The plots in which each of the sample houses are located in are all generally of a large scale. Therefore the respondents were also able to design their house according to this.

When asked about important requirements the design of the house should have, size and proportion was a common factor described by many of the respondents. A female participant said:

> "Coming from a small house in England, I wanted to make sure that my house in Cyprus would make up for the difficulties I faced with size issues and cramp conditions. Along with the freedom to design, our plot was big so I was able to design many large rooms. I wanted the house to have an airy and open feel towards it. I also wanted to have big rooms simply because I was able to due to the large amount of space available." (Female, 42)

Many of the respondents' past environments being similar in relation to scale, (all approximately ranging between 100 to 130 metre squares) shared the same views about including many large and open rooms for their new house in their returned environment. As one explained:

> "My house in the UK only had three bedrooms which was not ideal, so when designing my house in Cyprus the opportunity to create as much rooms as I wanted influenced me in the decision to have 5 bedrooms some of which are now used as guest bedrooms for relatives that come to visit on holiday." (Male, 47)

In fact 60% of respondents' houses returned environments had 4 bedrooms with a further 12% containing 5 bedrooms. Information gathered from the respondents' past environment showed that 88% of respondents' houses were 3 bedroom semi detached houses, with the remaining few containing 4 or 2 bedrooms.

Controversially, as mentioned before, a small number of respondents' claimed that they were not happy with the size of their current houses as they were in fact too big! They further argued that if they had a chance to construct these houses again, they would design much smaller houses due to the reasons such as; un-used rooms, wrong functions or generally rooms being too big.

Others, on the other hand (92%), were satisfied and happy about the size and scale of their houses.

Previously it was observed during the site inspection survey that aesthetical qualities and exterior façades of the sample houses were finished with plaster and paint. It is also investigated that many of the houses were painted in different colours. The selection of colour choice was described by many of the respondents' to be down to personal preference. One house owner said:

> "Regulations in the UK of meant that you weren't allowed to change the appearance of the front facade. It was only possible if the house had a cladding type of pebble dash in which you were able to paint it in a choice of very few colours in order to follow the rules set by the local council. However in Cyprus we were not restricted to a selection, and decided to paint the house in orange and white, purely because orange is my favourite colour!" (Male, 52)

Analysis from the site inspection provided visual evidence in defining the façade qualities and characteristics. The structured-interview provided reasoning and an understanding in why the houses were designed in such a way. Many of the façades were bare, with little decoration and can be classed as a general characteristic for these particular respondents as a large total of 92% chose this minimalist style of façade design.

Entrance definition and large opening were also a common choice of many of the sample houses. Relating to the analysis of the respondents' past environment, suggests that window and door sizes were all standard and of regular size.

Many of the respondents' described that when designing their houses, large and ample openings such as big windows, double fit balcony doors and big front entrances were amongst the design criteria. One particular house owner described that the concept and orientation of the house was configured according to these large openings in order to create a strong bond/relationship between the outdoor/indoor environments.

A high percentage of respondents' also explained the need for creating airy, bright and open rooms which reflected the reasoning behind installing numerous and large openings. Many of the sample houses also contained large balconies which surrounded the houses, some however varied in size according to personal preference. One female participant said:

> "We didn't want to create these massive balconies which would hardly ever be used, they are a nice feature to have, however we wanted everyone to spend more time outside in the garden rather than upstairs on the balconies." (Female, 55)

Interestingly many participants explained how they regretted building so many large balconies as they were hardly ever used (mainly those situated on the first floor) and could have been used for a different function.

Over 50% of the sample houses were constructed with pitched roofs. When asking the respondents reasoning behind this roof type selection, many stated that although some of the houses in Cyprus also have pitched roofs their past environments in England, UK all had pitched roofs and they liked the aesthetic qualities of this type.

One male participant said:

> "My old house in England featured a very dominating steep pitched roof which gave a lot of character to the building and effected it's all round look. I wanted to produce the same effect with my house in Cyprus so I have here also built this type of roof." (Female, 43)

Other respondents also claimed they were influenced by the previous structures in their past environment. Many also explained how they disliked flat roofs and thought the pitched roof style was aesthetically most pleasing.

100% of all the sample houses were detached villas each plot being surrounded by boundary defining walls. These walls not only separated the individual plots but also provided security and privacy for the owners. A female house owner said:

> "My old house in England had a small back garden and a front area which was only big enough for parking. The garden was fenced off on all four sides which meant the public could not see into our garden, I wanted to achieve the same effect here to provide both security and privacy. Our swimming pool is situated at the back of the house with high fencing and foliage. The English culture being very private and distant from strangers wore off on us after living there for so many years hence the importance given to privacy." (Female, 43)

Along with the surrounding walls, every sample house in all four areas consisted of well maintained gardens with over 40% of the houses containing grass lawns. One respondent explained reasoning behind this as:

> "The hot weather in Cyprus was a positive factor and was one which influenced our move, the constant bad weather in England meant we spent a lot of time indoors and not a lot of time was spent in our garden. Because of this the garden of our new house was important as we knew we would be able to spend most of our time outside! Therefore making it looks attractive and designing areas where we could lounge and also grow fruit was important for us. Having a grass lawn was also very important, although the maintenance is hard it is defiantly worth having and defiantly a small reminder of England for us!" (Male, 54)

At the beginning of the interview when asking the participants to explain their returned environments and main criteria for design many started off explaining similar issues which are explained in the previous paragraphs. However, respondents also stated that internal elements such as central heating systems, combi-boilers and having fire-places were also important to them for the image of an 'ideal home'.

40% of the respondents explained they had central heating installed which was an important criteria when designing their house. One house owner said:

> "When we first built the house central heating was not installed, we just had under floor heating, however as time went by I missed the central heating comforts that I had lived with in England so we decided to add it to our house." (Female, 42)

During the interview, respondents also mentioned about the importance of installing hot water systems to their current houses, again relating to their past environments in England, UK where 100% of the sample houses had this combi boiler system. The respondents rated these elements as important and also stated that they have seen them as a necessity for comfort and everyday life.

After collecting information about both the respondents' past and returned houses including information such as understanding factors of design issues, personal requirements, influential elements, design decisions and aesthetical qualities, environmental factors also needed to be analyzed.

When asking questions about the respondents' returned environments many of the responses were similar. In general the respondents suggested that this particular region of the Yeni Boğaziçi village was a pleasant area to live in. Its location and general characteristics were attractive and influenced the respondents to build their houses here. As a location, being in a house that is close to the sea was also a factor many of the respondents mentioned about.

Transport links was also a common issue which was discussed by the respondents during the interview. All four sample areas being located along the main Gazimağusa-Karpaz road meant that it was situated in fairly close proximity to the centre of the Yeni Boğaziçi village, a 10 minute drive to the Gazimağusa city and linked to the other regions leading to the Karpaz region, which was another positive factor the respondents liked about the area.

When comparing the respondents' past environments, 87% of them described their returned environment as being completely different. The densely packed streets found in London, UK are a complete comparison to the vast open spaces found in Northern Cyprus. One Male participant said:

> "The area we used to live in England was very crowded; it was close to the centre of London so traffic and congestion produced many problems within the area. All the houses in our street were semi detached so it felt very cramped and you always felt you were being overlooked. Problems like this

influenced us to build our house in an area outside of the main towns or cities and also away from the centre of the village. Although now this area is becoming more and more developed it is still no way near as cramped as in England!" (Female, 55)

Many of the respondents described their returned environment as quiet, peaceful, private and in general a nice place to live in. As a female participant point:

"When we first built our house in 1998, there was hardly any other houses surrounding us, there wasn't even a market nearby. This was defiantly one of the reasons we chose to build our house here. It was extremely quiet and peaceful unlike our previous environment in London which was very noisy and crowded. Even though now, many additions have been made to the area such as shops and many more houses it is still a nice place to live in. Although it was very empty when we first built here, it wasn't too far away from the village centre and the town so the location was perfect." (Female, 49)

Although 90% of the comments made by the respondents about the four sample areas were positive some negative issues relating to social activities were commonly mentioned as being unsatisfactory. From the descriptions given of the respondents' past environments, many social activities and public facilities were available. Facilities such as sports centres, cinemas, shopping centres, pubs and restaurants were all in close proximity of their past houses.

However in the respondents' returned environment, there are few facilities and fewer options for social life. The services provided in the area and small convenience shops, a pharmacy, a few restaurants and a petrol station. Although opportunities for social factors are missing some respondents claimed that this was one of the beneficial factors for them building their houses in the area.

Chapter 5

CONCLUSION

This study was set out to explore and gain an insight to people's aesthetic responses to their returned environment and to investigate whether peoples past environments influenced them when moving to their current (returned) location.

Influential architectural movements focused on in the previous chapters such as the Modernist Movement, being one of the most dominant architectural philosophies of the last century, showed the developments and influential factors concerning housing and the built environment. It was due to this philosophy that the neglect and refusal of acknowledging symbolic meanings and personal preferences showed a weakness in housing design, proving that the architects focused only on the functional requirements of the users. However recent researches showed that, issues such as personal, social, psychological and cultural references that were not included in the Modernist designs, were vital in producing architecture that would be accepted and satisfactory for human beings. Furthermore, recent research in environmental design also indicates that the ability and opportunity for humans to attach a meaning to architecture including desired forms and personal additions are equally important for a satisfactory design and to allow the symbolic transition of a house becoming a 'home'.

Based on an extensive analysis, a selected region of housing developments constructed in the Yeni Boğaziçi, Gazimağusa region provided evidence of common architectural features and design which was identified as typical and belonged to the specific user group of this study, that are British Cypriots who have returned to live in Northern Cyprus after living in England, UK for several years. These common architectural features and preferences were evaluated through three types of field investigations, such as site inspection surveys of the selected case studies, semi-structured questionnaires by all sample respondents and structured interviews in each of the four sample areas.

According to the results of the site inspection survey and semi-structured questionnaire, general characteristics of the each sample houses were identified as; large scale properties with well maintained gardens, surrounding boundary walls, plaster/painted and/or ornamented façade designs, flat and/or curved plan layouts, pitched roofs with clay or shingle tiles, minor decorative features mainly bare looking walls and large openings.

With the aid of the structured interviews, determining what role and to what extent did the past environments of the respondents' play in influencing their houses in their present (returned) environment, proved to be a dominating factor. After analyzing both the past and returned environments, issues such as strict regulations and rules from the respondents' past environment enabled them to design and reflect their personal preferences within their returned environment in different ways.

The issue of freedom to design was an important and attractive aspect for this user group as it provided opportunities to break away from the rules and regulations and build a house in which many described as their 'ideal' home. The ability to reflect their personality and status onto the design of their houses without being restricted was a commonly discussed issue throughout all the sample areas. The opportunity to also include aspects such as functions or personalized features which their past environment lacked or did not have enabled them to include these desired elements in their returned environment. This can be classed as one of the most influential factors of which role the respondents past environment played in their returned location.

In addition to these, some architectural features which were evident in respondents' past environments, such as the pitched roofs, use of exposed yellow or red masonry brick on the façade design etc. of many English houses, were shown to be influential and sentimental factors for many of the participants. After living in England, UK, lifestyle and cultural issues were also played significant factors for many of the respondents. Through the interviews, it was determined that the style of the English culture inflicted upon this particular group of people, made its mark by influencing some of their design decisions as described above and even and let them to settle their houses within close proximities which forms noticeable clusters in the sample environment.

Elements of turning a house into a 'home' was perceived and translated by this user group through the addition of personal and symbolic elements such as shape of the

roofs, decorative façade elements and minor stone- clad wall surfaces which were also evident in their past environments.

The evidence of well-maintained gardens including grass lawns was also another aspect which featured in many of the houses. This reflects to the culture of an 'English garden' which many respondents valued and wanted to re produce in their returned environment.

The evidence collected, shows how this particular user groups aesthetic preferences and lifestyles inflicted upon architecture are different to others situated in the same location. Compared to other houses such as those owned and designed by Turkish Cypriots, the differences in preferences are easily noticeable. On the basis of all of these findings, it is possible to claim that not only the physical elements, but symbolic elements in reference to the past environment or life style, plays significant role through the process of turning a house into a "home" which was the case of this study.

5.1 Recommendations for Further Research

On the basis of the findings of this study, the following suggestions can be made for further researches:

This study focused on aesthetic responses of British Cypriots to their returned environment through the process of turning a house into a 'home', and to what role their past environment played in influencing their present (returned) location. Following this study, other researchers could be conducted by using the same principle of focusing on a specific user group (of a different nationality) which have also returned to their home country after living elsewhere for several years.

In addition to these, other research such as whether these elements and processes of turning a house into a 'home' could also be studied upon by determining these elements relating to other actors of the process; such as professional architects or conductors in order to examine their behaviours towards the aesthetic demands of the users.

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APPENDICES

Appendix A: Sample of Questionnaire Survey

Personal preferences relating to design aesthetics of housing units from past and returned environments within the Yeniboğaziçi Region, 2012.

PERSONAL INFORMATION

 Name: _____
Address: _____

              _____

              _____

Age: ____

Gender: Male ☐   Female: ☐

Place of Birth: _____

Marital Status: Married ☐   Divorced ☐   Single: ☐   Other: ☐

Education qualification: _____

Occupation: _____

Family Origin: _____

Q1) How many years did you live in the United Kingdom for?_____ years.

Q2) did you ever visit or stay in Northern Cyprus before you immigrated?

Yes: ☐   No: ☐   If yes approximately how many times?
_____

Q3) what were the main reasons for previously visiting Northern Cyprus?

Work: ☐   Leisure: ☐ Visiting family: ☐   Other: ☐

Q4) for what reasons did you decide to immigrate to Northern Cyprus?

Financial: ☐   Lifestyle: ☐   Education: ☐   Work: ☐   Retirement: ☐
Other: _____

RETURNED ENVIRONMENT

Q5) How many years have you lived in Northern Cyprus for? _____ Years.

Q6) how many family members live in this house? _____ Members.

Q7) what year was the house built in? _____

PHYSICAL / FORMAL CHARACTERISTICS

Q8) approximately how many metre squares is your house?

90-120m2: ☐   120-150m2: ☐   150-180m2: ☐   180-210m2: ☐

Other: ☐ m2

Q9) Are you satisfied with the size of your house?

Yes: ☐   No: ☐

Q10) How many rooms does your house contain?
Bedrooms: ___
Bathrooms: ___
Living rooms: ___
Study: ___
Kitchens:___
Dining room:___
Other: _____

Q11) what were the main reasons behind having this certain amount and functional type of rooms?

Q12) How many floors does your house have? ____floors.

Q13) Does your house have a basement?

Yes: ☐   No: ☐   If so please name the
function:_____

Q14) Does your house have a loft conversion or useable loft space?:

Yes: ☐   No: ☐   If so please name the
function:_____

GARDEN & OUTDOOR SPACE

Q15) How many balconies does your house have? ___balconies.

Q16) Do you use these balconies on a regular basis?

Yes: ☐   No: ☐

Q17) Does your house have ground floor terraces?

Yes: ☐   No: ☐   If yes please name the
function:_____

Q18) Does your house have a private garden?

Yes: ☐   No: ☐   If yes, where is it situated? Back: ☐ Front: ☐ Side: ☐

Surrounding: ☐

If yes please select its function and what it contains:

❖ Play area for children: ☐

❖ Planting flowers and trees: ☐

❖ Vegetable and fruit: ☐

❖ Swimming pool & lounging area: ☐

❖ Drive way and access paths: ☐

❖ Other: _____

Q19) what is the main floor finishing in your garden?

Hard surface: ☐   Soft surface: ☐   Both: ☐

Please note what these finishing's are:

_____

Q20) Do you have any extra or featural aspects in your garden?: (e.g. water features, semi open areas etc):
_____

Q21) is your house surrounded by a boundary defining wall?

Yes: ☐   No: ☐   If yes, what is the main purpose for this wall?

Privacy: ☐ Decorative Purposes: ☐ Security: ☐ Personal addition: ☐

FACADE DESIGN

Q22) what form of exterior ornamentation does your house have? (e.g glass blocks, additional structural elements, artistic elements, frame work)

_____

Q23) What is the main finishing material on the exterior of your house?:

Plaster & Paint: ☐   Stone Cladding: ☐   Concrete: ☐   Natural cut stone: ☐
Other: ☐

If other please state what the material is: _____

Q24) If your house is painted please state the colour and reason for your selection:

_____

CONSTRUCTION MATERIALS

Q25) what roof type does your house have?

Flat roof: ☐   Gable Roof: ☐   Hipped Roof: ☐   Mansard Roof: ☐

Gable Roof   Flat Roof   Hipped Roof   Mansard Roof
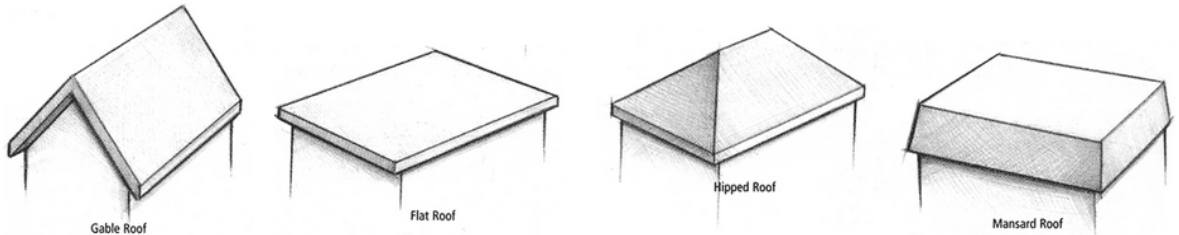
Q26) What is the main roof covering material of your house?

Red ceramic tile: ☐   Curved ceramic tile: ☐   Coloured Slate: ☐   Other: ☐

Q27) What is the main construction material of your house?

Reinforced concrete: ☐   Masonry Bricks: ☐   Stone: ☐
Other:_____

Q28) Does your house have any of the following heating & cooling systems?:

Fire place: ☐
Central heating: ☐
Sky lights: ☐
Under floor heating: ☐
Water Boiler: ☐

ENVIRONMENTAL ASPECTS

In order to answer the following questions please refer to the table below and mark which comment best represents your answer.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I am satisfied with the location of my house					
The area satisfies my lifestyle requirements					
In terms of social activities the surrounding environment meets my needs					
The area has reached my expectations for choosing to build my house here					
My house is easily accessible					
I am happy with the maintenance provided by the areas municipality					
This is my ideal house					
I am generally happy with the area and environment I live in					
The size of my house meets my family's needs					
The interior space qualities are sufficient and satisfying					
I like the aesthetic qualities of the exterior facades					
The exterior qualities of the house were unique compared to others in the area					
I have good relations with the neighbours in the area					
I am happy with finished design of my house					

Q29) What do you like most about your house?:

_____

_____

Q30) What features of your house would you change from the original plan?

_____

_____

Q31) Please note any important requirements you included when designing your house (e.g large windows, big entrance doors, large verandas, big balconies etc)

_____

_____

Q32) Do you feel your past environment played any role in designing for your house in your returned environment?

Yes: ☐   No: ☐   If yes please state what factors influenced you:

_____

_____

Q33) Please note any other important factors you wish to share about the design process of your house and reasoning's behind certain decisions which were made:

_____

_____

Appendix B: Results and comments of semi-structured interviews

Name of house owner: Erem Avni

Address of past environment:
67 rowan tree road,
Enfield town,
North London,
EN2 8PN

Date of build: In 1940's
Size of house: Approx 140m2

Rooms in house:

Ground floor: Kitchen dinner, lounge, toilet, garage conversion into a dayroom/games room, glass conservatory.

1st floor: three bedrooms (master, 2 medium sized rooms) and one family bathroom

Garden: small back garden enclosed by wooden fence panels and masonry brick walls. The back garden consists of mainly grass and a small patio area for seating. The garden was originally quite big, however after the addition of the conservatory there was little space left which made up the lawn and patio area.
There was a small front garden used as a drive way and parking area. The floor covering was brick and concrete slabs. The front garden was open and not confined by any walls, although there was a small flower bed with shrubs in it on the corner which created a small buffer zone. There was also 60cm high wall separating the drive way and unconsciously providing a border line showing the separation of the two housing units.

Construction material:
The main construction material of the house was red masonry brick. Like many houses in England it was constructed with a double cavity wall with insulation.

Formal Characteristics:
The house had a very steep and large pitched roof, almost as if it was touching the ground which made it a very dominant feature. On this large pitched structure there was also a shed type roof extruding out of the front slope. The front façade of this shed roof was covered with tiling and had two windows, one for the bedroom and the other was the bathroom. The roof was covered with corrugated slate tiles which were of similar tones to the masonry brick. The roofs eaves provided covering and definition for the entrance area to the front door and was supported by two cylindrical columns at each corner of the building. All of the windows were double glazed and small in size. The garage conversion which was turned into a games room at the front of the house had the biggest window which took up nearly half of the front façade. The house had full ventilation and drainage systems which could be seen through the exterior guttering and vents on the walls.

The house also had central heating and a combi boiler system for hot and cold water. External lights were also installed for security purposes.

Symbolic Characteristics:
The house being a semi detached, fitted in well with the surrounding environment. As it was a dense residential area, many of the houses looked similar. The constant repetition of steep pitched roofs and masonry brick building material created harmony and unity. Even though there were other types of houses, such as detached and one storey units they all seemed to relate to each other and held the same type of aesthetic characteristics. Even if, like this house, additions were made it was not obvious and respected the original features and character of the building. The addition of small features such as door numbers, hanging flower baskets, lighting units and variations in window and door styles personalized the houses and gave the owner a sense of originality in a very repetitive area. Ornamentation of the building is very minimal however cannot be classed as plain due to the rich colour and texture of the exposed masonry brick. The pitched roof portrays the typical characteristic of English houses, which in this case is partly modified with the addition of the separate shed roof.

Environmental Qualities:
Location: the house is located in a built up area on the out skirts of the towns centre. There are many parks and green areas close by and is in walking distance to Enfield's largest shopping centre. The house is situated close to an underground station which leads straight into the centre of London. It is located in a very popular area which provides many opportunities for social life and entertainment. The immediate environment where the houses are situated however is quite cramped and overlooked.

Environmental Problems:
Being so close to the towns centre, many issues such as air, noise and waste pollution were sometimes a problem. It was also very busy, so there was constant traffic and congestion on the roads, especially on the weekends and night times.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I was satisfied with the location of my house	●				
In terms of social activities the surrounding environment met my needs		●			
The size of my house met my family's needs		●			
The interior space qualities were sufficient and satisfying		●			
I liked the aesthetic qualities exterior facades	●				
The exterior qualities of the house were unique compared to the others in the area		●			
This was my ideal house		●			
Considering both interior and exterior qualities I was satisfied with my house		●			

RETURNED ENVIRONMENT

Name of house owner: Erem Avni

Address of Returned environment:
No 3 S.t Hilarian Sokak,
Yeniboğaziçi

Date of build: In 2003
Size of house: Approx 280m2

Rooms in house:

Ground floor: Kitchen, utility room, study, formal lounge, two day rooms and a toilet.

First floor: four bedrooms, family bathroom, two ensuite bathrooms and balconies for each bedroom.

Basement: Shower and dressing room, pool maintenance room, toilet

Garden: The house has a large surrounding garden. One side is designated for the drive way and parking which is closed off at the front with an iron gate. The front side has mainly soft flooring consisting of grass and flower beds, whilst the back garden is the largest part, containing the swimming pool, outside lounge area, barbeque facilities and planting. This was purposely done in order to provide as much privacy as possible. The houses plan is in an L-shape form, which has a concept of almost wrapping itself around the swimming pool.
"We wanted the house to be orientated in such as way that the pool could be viewed and accessed from each perspective of each room within the house. We even wanted the pool to be visible from the entrance hall. We wanted to create a strong relationship between the outdoor spaces and the inside of the house. The area itself being close to the sea provided us with the idea that we wanted to be close to water and the environment, hence the attention to detail and link with swimming pool."
The garden and plot is surrounded by a reinforced concrete wall with iron railings at the front of the house. However at the back the railings are replaced with wooden fencing panels similar to those used in England. These panels provide more privacy and security, meaning that the front façade of the house is open and inviting, whilst the back is more secluded and private. Tall trees and shrubs also help shield the back garden from other people. The shower and changing room was designed purposely underground in order to save space and the quality of the garden.

Construction material:

The main construction material of the house is reinforced concrete and perforated brick. The finishing on the exterior walls are plaster and paint with no other additional cladding.

Formal Characteristics:

There are two types of roof systems for this house. It has a small flat roof for the entrance area and a hipped roof covering the whole house. As previously mentioned the plan is an L-shape which has a shallow roof in strong comparison to the steep pitched roof in England. The roof is covered with orange, curved ceramic tiles. The flat roof above the front door emphasizes the entrance way to the house which is also raised and has steps leading to the door. There are many windows on each of the façades; the larger openings however are situated at the back of the house consisting of patio and balcony doors, whereas the ones at the front tend to be smaller. This was also intentional for privacy issues. The façade has very minimalist ornamentation which the owner wanted to create a clean cut look. The only detailing on the facades is the exterior lighting units and iron bars on single windows. The house has three small balconies which all face out to the back of the house and down to the swimming pool below.

"We didn't want to create these massive balconies which would hardly ever be used, they are a nice feature to have, however we wanted everyone to spend more time outside and around the pool rather than upstairs on the balconies."

Symbolic Characteristics:

This detached house is original in its concept and plan layout. Although it's exterior façade qualities may not be unique and much different to others its layout is. The owners wanted to make a statement for this house on a more conceptual symbolic level rather than its initial look. The colour and formal selection were chosen in order to fit in with the houses environment. This is achieved by its neutral colour tone and simple exterior features. It is a modest design which shows respect and consideration for the environment. Its conceptual idea of the plans layout influenced by the swimming pool shows the owners desire to form a strong bond with the outside environment. The more private functions such as bedrooms, outdoor lounging and pool are situated towards the back of the house and cannot be seen by people passing by. The owners past environment was cramped and overlooked, therefore they wanted to use this opportunity to create a private and personal area in their returned environment. The exterior is simple with no ornamentation or decoration. In contrast the interior spaces are complex and richly decorated. This also reflects the owner's private lifestyle, only allowing people to see these rich characteristics from the inside of the house. The scale of the house was due to the amount of available space and with no restrictions the owners wanted to make their house as big as possible with ample space and functional rooms. The owners are very satisfied with the final product and feel they have achieved their goals in representing their conceptual ideas. Another concept of openness, freedom and airy spaces has also been included successfully in the plan and are achieved with the use of large openings. The rich relationship between the indoor and outdoor environment was a key element the owners wanted to achieve when designing their house.

Environmental Qualities:

Location: the house is located in a sub-urban area, on the out skirts of the Yeniboğaziçi village. It is located near a newly built main road which provides the main link into the centre of Yeniboğaziçi and further down into the main town of Famagusta. It is situated approximately 100 metres away from the sea which was an important factor when choosing the location for the house and was influential when designing. Nearby there are local shops and a petrol station. The house is also situated in a very popular and vastly developing area. Over the years it has become densely populated especially by other Turkish Cypriots who have also returned to Cyprus from living in London, UK.

Environmental Problems:

Generally this area is a pleasant and popular location. However as this area has gradually, and more recently vastly developed a dual carriage road has been built which has affected the positive aspects to the area. This road has created noise pollution and accessibility has become less efficient when driving to this particular neighborhood.

Are you satisfied with the final design outcome of your house?

"Yes, ı believe I am generally satisfied with the houses design. It has reached my expectations and requests that I had. In comparison to my old house in England it is a dream home for me! If anything it is more than I wanted and even may be too big! When we bought the plot we decided to use it to its full potential, hence the large

scale and amount of rooms. It was a luxury for me to have freedom to design what I wanted and on a big scale.''

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I was satisfied with the location of my house	●				
In terms of social activities the surrounding environment met my needs		●			
The size of my house met my family's needs	●				
The interior space qualities are sufficient and satisfying		●			
I liked the aesthetic qualities exterior facades		●			
The exterior qualities of the house were unique compared to the others in the area		●			
This was my ideal house		●			
Considering both interior and exterior qualities I was satisfied with my house		●			

What is your favorite element of your house?
"My favorite part of the house is defiantly the strong bond between the inside and outdoor spaces. The orientation of the house being formed around the pool is my favorite element. Also the light and airy atmosphere the many openings create. ''

What role did your past experience play?
"I think my past environment effected many decisions I made when returning and designing my house here in Cyprus. It provided me with the chance to include aspects that my old house lacked and didn't have. It influenced me in the sense that I could be free of restrictions and limitations of those in England and design a house that I wanted. My past environment was suitable for me only because I learnt to adapt to the area and style of house, however in Cyprus there was no need for adaptation as it was a house built accustomed to my needs. When we first built the house central heating was not installed, we just had under floor heating, however as time went by I missed the central heating comforts that I had lived with in England so we decided to add it to our house. ''

Appendix C: Results of Questionnaire Survey (Personal preferences to housing Aesthetics in all four sample areas within the Yeni Boğaziçi Region, 2012).

Reasoning behind decision to Move back to Cyprus	N= 25	%
Financial	6	24
Lifestyle	12	48
Education	2	8
Work	2	8
Retirement	3	12

Previously visited or stayed in Cyprus before move	N= 25	%
YES	23	92
NO	2	8

Reasoning for previous visits to Cyprus	N= 23	%
Work	0	0
Lesiure	7	30
Visiting Family	2	8
Both	14	62
Other	0	0

Years of Living in Region	N= 23	%
3 years	2	8
4 years	1	4
5 years	5	20
6 years	6	24
7 years	2	8
8 years	5	20
9 years	2	8
10 years	0	0
11 years	0	0
12 years	2	8

Number of family members living in House	N= 25	%
1 person	0	0
2 people	8	32
3 people	3	12
4 people	10	40
5 people	4	16
6 people	0	0

Square Metre of the House	N= 25	%

120-160 sm	1	4
160-200 sm	4	16
200-240 sm	6	24
240-280 sm	5	20
280-320 sm	4	16
320-360 sm	3	12
360-above sm	2	8

Satisfied with the size of house	N= 25	%
YES	21	84
NO	4	16

Number of Bedrooms	N= 25	%
5 bedrooms	3	12
4 bedrooms	15	60
3 bedrooms	7	28

Number of storeys of House	N= 25	%
1	2	8
2	14	56
3	9	36

Loft Conversion or usable loft space	N= 25	%
YES	8	32
NO	17	68

House containing basement	N= 25	%
YES	4	16
NO	21	84

House containing private garden	N= 25	%
YES	25	100
NO	0	0

House surrounded by boundary wall	N= 25	%
YES	25	100
NO	0	0

Material type of external facade	N= 25	%
Plaster & Paint	23	92
Stone Cladding	0	0
Concrete	0	0
Natural cut stone	2	8
Other	0	0

Roof type of House	N= 25	%
Flat roof	0	0
Gable Roof	14	56
Hipped Roof	7	28
Mansard Roof	0	0
Other	4	16

Construction material of house	N= 25	%
Reinforced concrete	25	100
Masonary Bricks	0	0
Stone	0	0
Other	0	0

Heating and Cooling systems	N= 25	%
Fire place	15	60
Central heating	10	40
Sky Lights	7	28
Underfloor heating	5	2
Water boiler	18	72

ENVİRONMENTAL ISSUES

I am satisfied with the location of my house		
Sampling	N= 25	%
Strongly Agree	8	32
Agree	14	56
Undecided	0	0
Disagree	3	12
Strongly Disagree	0	0

The area satisfys my lifestlye requirements		
Sampling	N= 25	%
Strongly Agree	4	16
Agree	17	68
Undecided	2	8
Disagree	2	8
Strongly Disagree	0	0

In terms of social activities the surrounding environment meets my needs		
Sampling	N= 25	%
Strongly Agree	4	16
Agree	15	60
Undecided	1	4
Disagree	5	20
Strongly Disagree	0	0

The area has reached my expectations for choosing to build my house here

Sampling	N= 25	%
Strongly Agree	5	20
Agree	16	64
Undecided	0	0
Disagree	4	16
Strongly Disagree	0	0

My house is easily accessable

Sampling	N= 25	%
Strongly Agree	6	24
Agree	14	56
Undecided	0	0
Disagree	5	20
Strongly Disagree	0	0

This is my ideal house

Sampling	N= 25	%
Strongly Agree	9	36
Agree	13	52
Undecided	1	4
Disagree	2	8
Strongly Disagree	0	0

The size of my house meets my family's needs

Sampling	N= 25	%
Strongly Agree	10	40
Agree	13	52
Undecided	0	0
Disagree	2	8
Strongly Disagree	0	0

The interior space qualities are sufficient and satisfying

Sampling	N= 25	%
Strongly Agree	7	28
Agree	14	56
Undecided	0	0
Disagree	4	16
Strongly Disagree	0	0

I like the aesthetic qualities of the exterior facades

Sampling	N= 25	%
Strongly Agree	11	44
Agree	12	48

Sampling	N= 25	%
Undecided	0	0
Disagree	2	8
Strongly Disagree	0	0

I am happy with finished design of my house

Sampling	N= 25	%
Strongly Agree	15	60
Agree	8	32
Undecided	0	0
Disagree	2	8
Strongly Disagree	0	0

The exterior qualities of the house were unique compared to others in the area

Sampling	N= 25	%
Strongly Agree	12	48
Agree	9	36
Undecided	0	0
Disagree	4	16
Strongly Disagree	0	0

I have good relations with the neighbours in the area

Sampling	N= 25	%
Strongly Agree	9	36
Agree	15	60
Undecided	0	0
Disagree	1	4
Strongly Disagree	0	0