Symbolic Use of Traditional Architectural Features on Contemporary Mass Housing Facade in North Cyprus

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ABSTRACT

House as an important part of humans' life is able to have a huge impact on its residents' life quality. In fact, Housing as a fundamental category of architecture should be constructed by proper consideration on the residents' cultural characteristics. In this respect, investigating on the traditional houses' features of the particular region could led architects to use the competent features in contemporary houses. In this regard, using the traditional housing features in the symbolical form is the gainful approach to keep the bond between users and their modern houses.

This thesis is tried to find the housing features in Cypriot traditional houses which is used symbolically in contemporary mass housing projects. For this aim, during the study it is attempted to learn the symbol explanation and its functions for discovering the symbolic features within selected mass houses. Moreover, two recent architectural periods of Cyprus (Ottoman and British Colonial) have been scrutinized for learning the Cypriot traditional housing features. Eventually, interviews results in addition to the physical observation have been led the study to reach the accurate result.

Based on findings, this study achieved to discover some of traditional housing features which have been used symbolically in contemporary mass houses and they are demonstrated in conclusion.

Keywords: Symbol, Housing, Mass housing, Contemporary mass housing facade, Cyprus traditional houses.

ÖZ

Ev, insanların hayatında önemli bir parçadır ve sakinlerinin yaşam kalitesi üzerinde büyük bir etkiye sahiptir. Aslında konut mimarlığın temel bir kategorisidir ve yerleşiklerin kültürel özelliklerine uygun şekilde inşa edilmelidir. Bu bağlamda, belirli bölgelerdeki geleneksel konutların özelliklerinin araştırılması, mimarların çağdaş tasarımlarda mimarların geleneksel özellikleri kullanmalarına ve tasarımda yansıtmalarına olanak sağlar. Bu bağlamda, sembolik biçimde geleneksel konut özelliklerinden yararlanmak kullanıcılar ve modern evler arasındaki bağı korumak için yararlı bir yaklaşımdır.

Bu tez, çağdaş toplu konut projelerinde sembolik bir biçimde kullanılan Kıbrıs geleneksel evlerindeki detaylari bulmayı amaçlar. Bu amaçla, çalışma kapsamında sembol çalışma sırasında seçilen toplu konut içinde sembolik özelliklerini keşfetmek için sembolü açıklama ve fonksiyonları öğrenmek için çalışılır. Ayrıca, Kıbrıs'taki geleneksel evlerin özelliklerini öğrenirken son iki mimari dönemi (Osmanlı ve İngiliz sömürgesi) araştırıldı. Sonuç olarak, röportaj ve fiziksel izlenimler çalışmada doğru sonuçlara ulaşılmasını sağladı.

Bulgulara dayanarak, bu çalışma çağdaş toplu konutlarda sembolik olarak geleneksel konut özelliklerinin kullanıldığını tespit etmiş ve bunlar sonuç bölümünde detaylıca ortaya konmuştur.

Anahtar Kelimeler: Geleneksel mimari, Sembol, Konut, Toplu konut, Kuzey Kıbrıs Toplu konut

To My Family …

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I would like to express my deepest appreciate to my supervisor, Asst. Prof. Dr. Rafoone MokhtarShahi Sani, for her patient guidance, enthusiastic encouragement for this thesis. I would never have been able to complete my dissertation without her invaluable supervision.

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INTRODUCTION

1.1 Introduction

Comprehending architecture lies within recognition of its constituent elements. In fact, humans depends on various factors are constructing their buildings in dissimilar ways as well as utilizing different features and elements. Therefore, people requirements related to their lifestyle is one of the main factors that have an impact on architecture. In this respect, culture and the historical background of the people who are living in the various regions have had an effect on their architecture. Housing as a fundamental category of architecture is based on people's cultural differences. These cultural varieties are means to interpret specific memories, emotions, symbols, meanings and values that are spread with people who belong to the particular social groups. People have built their houses not only as a means of shelter but also as a place which relates to their lifestyle and culture. According to Scheidt (1998), "A house is a meaningful cultural object" which is coherent to the region's historical background as well as all other factors that make the cultural characteristics. Rappaport (1969), noted houses have utilized to procreate the space to express feeling and way of thinking, also than social processes, as well as to provide scene for defining the cultural activity in addition to prepare physical shelter. Moreover, he suggest that houses should also include the cultural features to enable communication with their residents. In turn, this creates strong connections between the house and its residents by considering the spirit of the place or by using

the houses symbolic features that could be consistent in all parts of the building. Indeed, it is necessary to recognize the signs and symbols within architecture.

This study uses coherent investigations for explaining the sign and symbol functions. To achieve this aim, scientific scholars such as Saussure (1957, 1967), Pierce (1958, 1966), Eco (1972, 1980), Bourdieu (1986, 1988), and many others who have researched and written books and articles in the field of semiotics have been used in the study. scholars that have focused on the role of symbolic features in architecture have mostly claimed, architectural components, conveying the meaning as a language of buildings. Therefore, the architectural language is being made up of form, function and feature (Lawrence, 1987; Radford, 1994).

Sign as a fundamental concept of semiotic is complicated subject that requires a careful study. The primary root of sign's word came from 'Semeion', which is a Greek word. In fact the 'Semiotics' is science of signs to describe a methodical intention for comprehending the sign concept as well as its performance. For this aim, scholars have investigated specific correlation between a sign, an object, and an interpretation to explain any processes that are involved in creating the sign meaning. Moreover, sign includes numerous types, which three of the most well-known of them are symbol, icon and index. However, related to the aim of study, have been tried to investigate on symbol and specifically architectural symbolic features more than the other types of signs.

Symbol is a kind of sign, based on Peirce's triadic associations of the sign, which rely on relevance of object representation at semiotic theory. The symbol can imply more than one meaning in the spectator's mind, and it is different from other

categories of sign with its distinguished qualities. The human communication is the foundation of causing symbols that, without them communications would be inconceivable. Geertz (1973), utilized the symbol such as a message transporter by declaring that " relation, action, or quality for every object that serves as a transporter for a notion". In this respect, symbolic features in the buildings work as a language of architecture, which sometimes are used in contemporary buildings and could refer to the traditional architectural features. However, the rate of utilizing the features have been changed by attention to the housing type.

There are many types of housing in field of architecture, which appear in different conditions to lead governments and architects to establish the new types of housing. In fact, by the growing population and increasing the peoples longing for living in cities, diverse types of housing have appeared in response to the high rate of people demand for houses. For instance, "Social Housing" and "Public Housing" as prototypes of mass housing are considered by the majority of researchers (Wassenberg, 2004; Clapham, 2005; Mullins & Rhodes, 2007; Mee, 2007). Irrespective of the different kind of proprietor, the initial types of mass housings are Public housing and Social housing that were built to solve the accommodation problem of low-income citizens. Fiscal issues and the appearance of the new social classes- such as middle class that frequently magnified at the almost 1950s- also than rural peoples' willing to live and work in the developing cities resulted to the beginning of an arena to find the appropriate solution for housing problem. In fact, it was the beginning point for the field of mass housing. In addition to public housing and social housing, any types of housing, which have been built similar to each other, are placed in this category. Since, Mass housing is a group of housing,

which is mostly built with similar layouts and features that will be explained in depth later in the following chapters of the thesis.

Industrial countries were the first pioneers of mass housing; thereafter many countries followed and used this method to escape the housing crisis that started. Accordingly, the components and materials of the mass housings commonly have been imported by government state and architectural companies from different industrial countries (Gunce, 2008). Nevertheless, the talented companies for attracting the local buyers have attempted to change some features of the houses to make them more compatible with the users' demands. As a conscious or subconscious approach, it is seen that sometimes these companies have tried to utilize the traditional housing symbolic features in some sections of their design such as the houses' layout and facade. However, most of the times, these features are not consciously utilized in houses. In simpler terms, this has happened by passing the times and entering the local demands within the design process or even construction stage.

In this respect, the present study attempts to find the housing symbolic features that were rooted in traditional architecture of houses in Cyprus. The reason for choosing Cyprus as a case study lies in the fact that in the recent decades, Cyprus has experienced the highest rate of housing demands and subsequently, rapid rate of construction. This high rates of developing the constructions -whether private houses, villas, apartments and residential complex- have been established the captivating zone for architectures and constructions companies for investing in mass housing projects. To limit this study it has been narrowed down to specifically

examining the symbolic use of traditional architectural features in contemporary mass housings' façades in Cyprus.

1.2 Problem Statement

Mass housings as standardized category of housing are constructed to be the proper response for the housing demands of social classes as well as negate the housing problem. However, by passing the decades from prototypes of mass housing, it has been become as one of the majority part of construction companies' activities. Hence, mass housing at the current time consisted of numerous kinds of housing such as the villa type, private houses, apartments and residential complex buildings. As a result, mass housing provide the good opportunity to have houses for all levels of social classes.

Therefore, mass housing could be the best solution to settle the noticeable amount of people who requires a place for living. However, most of the mass housings in different regions have been built similar to each other, irrespective of residents' lifestyle and their cultural characteristics. Indeed, the mass housing generally are built with almost no attention to their users' specifications. Such negligence could create the serious problem especially in those countries that their urbanization growth are high. Therefore, to minimize this problem it is necessary to consider on local and traditional houses features in design of mass housing to avoid constructing houses without appropriate relationship between the local residents and the mass housing settlements.

During the recent decades, many construction and architectural companies are established in Cyprus, which mass housing is one of the gainful field for them. In

this respect, some of these companies consciously or subconsciously have tried to provide the suitable housing for their customers by using the some particular local features in their houses design. Moreover, to make the appropriate capability of the traditional features with the modern style of houses, most of the companies have used the new interpretation of traditional housing features in contemporary houses. However, the significant point is that how much are these traditional features – whether with the exact similarity or new interpretation- have been succeeded to satisfy the local customers by creating the well connection between their cultural needs and their houses. Therefore, it could be very important to find common architectural features which have been utilized in contemporary mass housings for future development of mass housing in Cyprus.

1.3 Aims and Objectives

The aim of this study is to find the housing features in Cypriot traditional houses which is used symbolically in contemporary mass housing projects. To achieve the goal, the most recent architectural periods of Cyprus -Ottoman (1571-1878) and British (1878-1960)- have been investigated to learn the housing features which utilized in them.

1.4 Research Questions

To achieve the aim of this thesis, it is necessary to respond following questions:

1. What are the most common features that have been used in Cypriot traditional houses?

2. Which kinds of traditional architectural features are used symbolically in Cypriot contemporary mass housings' facade?

3. How these symbols could be used for mass housing's future development in Cyprus?

1.5 Limitations and Scope

Regardless of noticeable attempts for clarifying the symbolic foundation term within scholars, it is still difficult to find coherent consensus about the symbol usage and its functions because of its wide span. Sign is included the various types such as symbol, icon and index which symbol is the major part of the study than other subjects. To achieve the clear explanation, it is necessary to make the limitation related to the thesis title. Therefore, this study has been limited to investigate and research specifically on the symbolic features.

Second limitation of the study is related to the architectural periods and their houses characteristics. With peers on the fact that the most of contemporary use of housing traditional features had not come as far as approximately four hundred years ago, two latest periods is investigated in the thesis. Therefore, between the fourteen periods of Cyprus history, the most evident effects on the contemporary architectures is related to the most recent historical periods which are Ottoman (1571- 1878) and British Colonial (1878-1960) periods. The Ottoman Empire during his long term dominance on Cyprus influenced the residential architecture all around the island. They affected on all sections of the buildings by utilizing their layout and facade features. However, after three centuries of Ottoman sovereignty, Cyprus experienced the new period of civilization in 1878. British colonial as the latest historical period in Cyprus influenced the island architectural features. British as one of the pioneer countries in industrialization brought the new construction techniques and materials to the Cyprus. Therefore, this thesis is tries to explore the

architectural background of these two periods for comprehending their architectural effects on contemporary housing features in Cyprus.

1.6 Methodology

This study is based on searching within the literatures to learn the relevant concepts about symbol, mass housing and review of two recent traditional architectural periods in Cyprus. The study is concentrated on two major methods, which are quantitative and qualitative. The qualitative research reached in this thesis, by collecting and analyzing data in, as non-numeric that focuses on exploring, in as much detail as conceivable by using the appropriate instances.

To achieve the aim, a literature review has considered on existing definition of mass housing and architectural symbols. Afterward literature review's findings are examined in the case study. Moreover, content analysis method which widely used for qualitative research have been used as the thesis approach to analyze the literature. This method is consisted of two distinctive categories which are relational analysis and conceptual analysis (Kothari, 2004).Conceptual analysis is used to find the frequency and existence of concepts which is mostly repeated in a text by words of phrases. However, in relational analysis is trying to examine the correlations among the concepts in literature.

Second, case study analyzes the selected contemporary mass housing projects in Cyprus. For this purpose, symbolic use of traditional housing features have been explored through thirty-five contemporary houses from ten different construction companies. Sixteen of the founded features through the literature review are particularly related to the façade characteristics. The selected mass housing projects

are consisted of apartments, residential complex and villas. Moreover, by using the physical observation it has been attempted to find the -exact similarity or new interpretation- symbolic use of housing traditional features.

Furthermore, the open discussion interview with the ten academicians and company designers prepared the chance for learning the desirable information about their opinions parallel to the study purpose. Meanwhile, the academicians that participated in the interview were from different nationality (Iranian, Cypriot, and Turkish), however, all of them have lived in Cyprus at least for five years. In addition, architects and designers -who works at the construction companies in Cyprus- participated to the open discussion interview to talk about their limitation, purpose, and importance features that they commonly have utilized in their design.

Afterwards, the study examine the local resident housing taste for reaching the reliable consensus in the thesis. Sixty-eight Cypriot inhabitants are asked for participating in an interview, in order to obtain their interest about the three different houses by attention to the rate of utilized traditional housing features in the houses images. Finally, all of the obtained findings and results have been evaluated by using the SPSS software.

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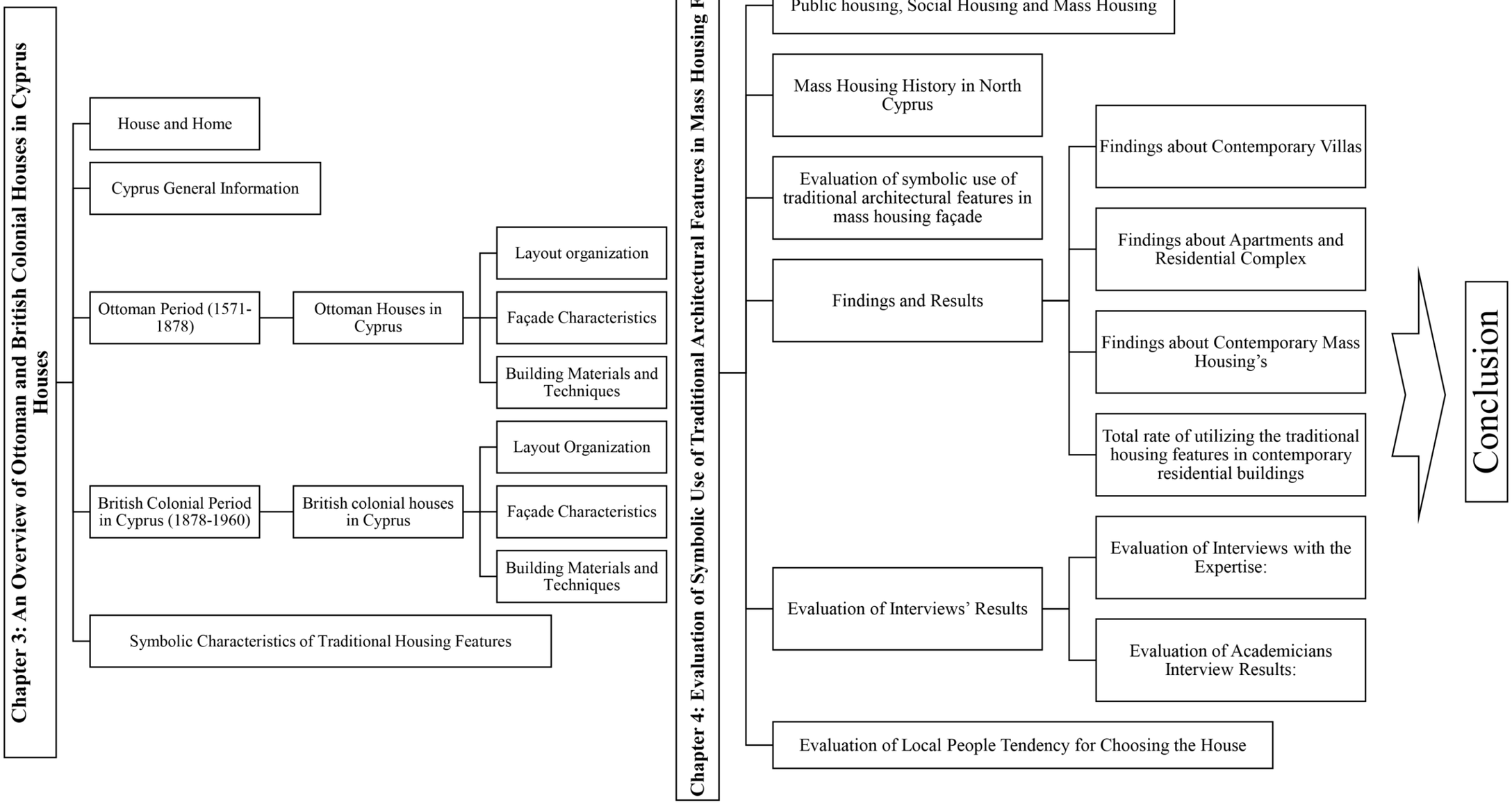
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Chapter 2

SIGN AND SYMBOL IN ARCHITECTURE

2.1 Semiotic

The science which seeks to define the conceivable connection and relation between the signs in the system's format is referred to Semiotics (Chandler, 1972). The origin of word semiotics come from the sign. In fact, the root of this word is a Greek word which is called 'Semeion'. Semiotic is science of signs to explain a methodical intention to realized what signs are and how they work or any process involving a specific correlation between a sign, an object, and an interpretant (Berger, 2007). Semiotics is probably the more prevalent used term; however, some scientist and theorists of this field such as Saussure (1966) used the term semiology. To make more clear explanation for the sign, it is helpful to use of principal approaches from famous scientist Ferdinand de Saussure (1957, 1967), and American philosopher Charles Sanders Peirce (1839, 1914), that both were curious to know how meaning is creating and communicating.

2.2 Peirce Semiotic Theory

Peirce (1958) claimed that each sign are included three related sections, which are "object", "sign", and "interpretant". For better understanding the sign and its related parts it could be useful to make the proper instance. As an instance, the sign could be mentioned as the indicator, for example, a drawn figure or even expression the 'smoke' could be a sign for fire. The object is the drawn figure or written word, or smoke signifier the fire. The innovative and unique specification of Peirce's account

is the interpretant that is the best thought for realizing the requirement of the object to connect the sign. Interpretant is not only a dyadic bond between object and sign because a sign meaning is clear in the interpreters and users mind (figure1).

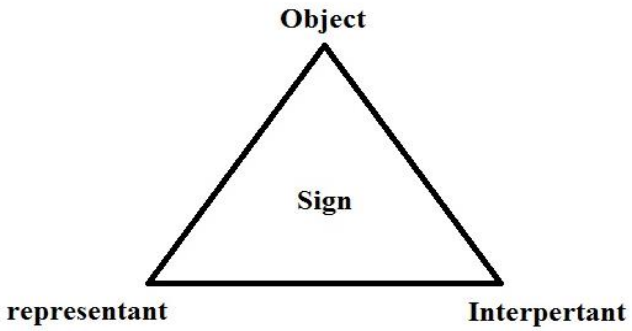


Figure 1: Peirce Triadic Model of Sign (Peirce, 1958)

Peirce (1985), also, provides a definition regarding semiotics, which is well known as Peircian semiotics and applied for the purpose of unification of communications. Peirce (1985), clearly describe the existing connection among these three essentials:

> *"A sign, or representamen, is something, which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. That sign which it creates I call the interpretant of the first sign. The sign stands for something, its object. It stands for that object, not in all respects, but in reference to a sort of idea, which I have sometimes called the ground of the representamen". (Peirce, 1985: 228)*

Peirce (1958) in defining the key role of the signs wrote that the connection between concept, objects, and its interpretations is shown by signs. Based on Peirce's (1958) explanations regarding the value of signs, we can assume that a concept demonstrates specific connotations to a person or an object through a single sign due to some reasons and justifications. Therefore,

> *"It is necessary to distinguish the Immediate object, or the object as the sign represents it, from the dynamic object, or really efficient but not immediately present object" (Peirce, 1966: 343).*

By considering above statement, meanings generated through the creation and interpretation of 'signs'. In fact, according to Peirce, "we think only in signs" (1931, 1958). Signs take the form of pictures, words, odors, sounds, acts or objects. However, such things have no inherent meaning and turn into signs only when the human give them meaning. As a result, sign is anything that a person 'signifying' it to interprets by considering to something that stands for something other than itself. Human beings interpret things as signs largely subconsciously by pertaining them to familiar systems of community. It is the significant signs use, which is the foundation concept of the semiotics.

2.3 Saussure and Sign

Ferdinand de Saussure (1958) has put the close connection among linguistic signs through the following statement,

> *"A difference generally implies positive terms between which the diversity is established; but in language, there are only differences without positive terms. Whether we take the signified of the signifier, language has neither ideas nor sounds that existed before the linguistic system, but only conceptual and phonic differences that have issued from the system" (Saussure 1959: 120).*

As Raber (2003) explains the concept of the linguistic sign from Saussure's (1959) point of view is seen as a "double entity" that unifies a concept with a sound image rather than a thing with a name. The characteristics of the sound image is described as a fact that receives a tangible form in either written word or spoken which all are arbitrary chosen.

Bearing in mind that a single linguistic sign does not equalize an item with a name, however, it unifies an item and an image or a sound, Saussure (1959) argues a single linguistic sign comprises a double entity in its nature. In fact, what he meant is that a process in which an image or a sound obtains an actual written or spoken form, which are arbitrary in nature and does not connote any meaning.

The suggestion for a comprehensive realization of the various expressions of signs, from Saussure's point of view, is considering the item as signified and sound-image as a signifier. According to Saussure, "Signs are purely psychological furthermore, signs only make sense in a formal abstract system" (1966: 67). Saussure divided linguistic sign into dyadic tradition, signifier (sigifiant) and signified (signifié), which the connection between the signifier and the signified is arbitrary. (Figure 2).

Figure 2: Saussure's Dyadic Model of Sign (Saussure 1967)

In the model of the Saussure, the sign is all over the results that the signifier with the signified process creates (Saussure, 1966). 'Signification' is the relevance between the signifier and the signified that Saussurean diagram delineated with the arrows. The horizontal discontinuous line indicated the two main components of the sign. As a linguistic example, a stop as a traffic sign is a red circle or octagon with the word that used the letters to show 'stop' on it. The octagon, the red color at

background and the letters, which make up the word stop that have been chosen arbitrarily to represent the idea of stopping. Indeed, consisting elements in a sign are a signifier as the word ‘stop’ and a signified as the concept that aware the drivers have to stop there. Saussure declared that the specific signifiers attached to particular signifieds by using the treaty, rather than indispensability, it means this choosing is arbitrary. Different languages are evidence of this fact, which different signifiers attached to the identical objects.

2.4 Saussure and Peirce (elements of sign)

Regarding the semiotics, there are significant differences between Peirce’s and Saussure’s concept of the notion of signs. As a result, there are considerable amounts of ambiguities in categorization of the connections between those components that include signs (Lyons, 1977).

Saussure (1959) believes that signs presents some main characteristics. For instance, he emphasized the arbitrarily nature of the sign construction, as well as representing the fact that there is no any connection between signifier and signified at their origins. Therefore, there is not any obstacles for calling a tree with the other names such as “albero” as an Italian name. The fact is that the concept of tree plays no role in identifying a name for it (Saussure, 1959). De Saussure (1959) believes “a system for equating things of different orders” through same by means of modifications.

An extremely compelling argument has been suggested by Saussure (1915, 1983) stating that the basis connotation of each concept are established in the thought of audiences, right at the moment when sign is associated with the concept. Based on

the impressionist nature of the signal and a signification, the meaning, from Saussure's point of view, is entirely mental.

Literature reported results in contrary with Saussure's concept of binary model. For instance, Peirce (1897) suggestion regarding sign models includes multidimensional processes with three elements (sign, object and inerpertant). In fact, two out of his three suggested elements are similar to the suggested sign and signification processes by Saussure.

From Peirce's (1897) point of view, a sign and its interpretation are the same as they were in Saussure's classification, however, in contrast to Saussure's opinion he does not consider the semiotic procedures exclusively mental. In fact, Peirce (1894, 1940) believes that a sign is "a vehicle conveying into the mind something from without" (Peirce, 1894, 1940). In order to be able to describe it out of nothing, he considers a third factor, which is an object. The role of the object, from Peirce's (1897) realization is simply a provider of connection between sign and its interpretations, which needs to be something in the real world (Gottdiener, 1995).

Therefore, the Peirce's model mainly pays attention to the fact of putting a sign in a situation that connotes an actual phenomenon in the real world. Saussure's idea, in contrast to Peirce, mainly emphasizes on the fact of putting a sign in connection to other signs. As a result, Peirce's categorization of the signs provides a situation for each single sign to be surrounded not only by mental connotations, also by a harsh and strong physical context (Peirce, 1940).

2.5 Sign in Other Scholars' Point of View

Sign as a fundamental concept of semiotic; has been worked in many scientific fields. In this respect, there are some of the scholars' who have written about the sign and its function in relation to their purpose. In Hiltunen's (2008) perspective, interetation as well as signal dimensions and an issue, formed the shape of the future sign. Kuusi (2011) demonstrated on the position and the shape of the three interrelated elements of Hiltunen triadic sign's model with regard to the Peirce's triadic model of sign in figure 4.

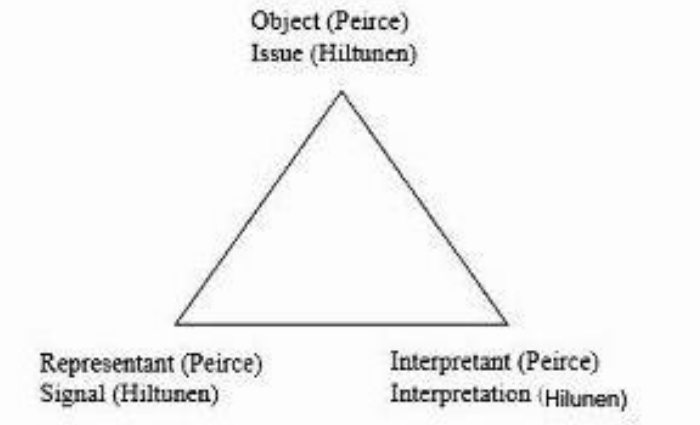


Figure 3 & Figure 4: Sign's Triadic Model of Peirce (1868), And Future Sign of Hiltunen (2008)

As can be seen from the figure 3 and 4 a category of signals (or representants as a Peirce's idea) and issues (objects as a Peirce's idea) have formed three dimensions of sign. In fact, Hiltunen uses deeper thinking of sign that is based on Peirce model. She demonstrates that, the three dimensional sign incorporates signals (representants) and issues (objects).

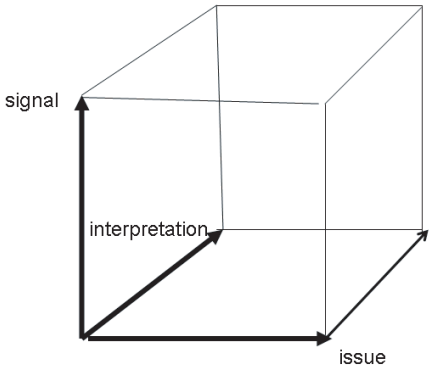


Figure 5: Three-Dimensional Future Sign of Hiltunen (2008)

Peoples' exhibiting themselves occur in a process of giving two sets of signs. Goffman (1959) believes groups of signs is deliberately given whereas individuals appear a group of signs unintentional. He argues that giving signs is the process that people intentionally make use of signs for the purpose of delivering some messages that are highly connected with those signs. On the other hand, the reason behind giving inadvertently sign includes set of actions without the intention of carrying on communication. Goffman (1959) uses the term "front" that includes settings, as well as personal front in conscious and subconscious application of the signs by people in the process of self-presentation. He argues that the appearance and behavior are a representation of the front whereas, setting refers to the context in which individuals desire to show themselves. The setting is presented by the taste in furnishing, decorating, and layout the house. A prominence factors that Goffman (1959) is trying to do is raising our consciousness over a wider range of the interpretations of these signs.

Regarding human interactions with signs, Barthes (1994) noted that people easily accept those signs that they see with their own eyes. Barthes (1994) believes that the reason behind this ease in acceptability of the signs is that people put more value to

things that are visible and comprehensible. As a result, the observed signs by people, gain credit, their connotation is determined, accepted by people, and shared in the society. In this regard, Barthes (1994) noted,

> *"To decipher the world's signs always means to struggle with a certain innocence of objects. We all understand our language so naturally that it never occurs to us that it is an extremely complicated system, one anything but natural in its signs and rules: in the same way, it requires an incessant shock of observation in order to deal, not with the content of messages, but with their making..." (Barthes, 1994: 158)*

Therefore, as Eco (1976) mentioned, to involve in this realm, its requires to scrutinize the whole cultural perceptions as if they convey a sign so that one can comprehend the message that express through that sign for the communication's target. Based on Barthes (1967) argues, signs are the representation of the relationship between concepts and their intended meaning.

2.6 Symbol, Icon and Index as Various Types of the Sign

Data from several sources have identified that signs are different in their nature. Therefore, they might receive various terminologies. For instance, some previous studies (Shannon, 1948; Peirce, 1985) have informed that icons and symbols can be categorized in different forms simply by considering how meaning is allocate to a sign and to identify how aware the user of the signs. The reason behind why iconic signs demonstrates meaning through graphical structure is due to the fact that there is an intense connection between sign and object. This can be proved by referring to the fact that mapping some structures for an object by a sign provide a situation for viewers to see those structures simply representing some information. In this case, it can be stated that sign has an iconic function (Garrod, et al., 2006). Peirce (1955) theorized various methods of establishing communication: Iconic, which shows the

extent of similarity, is one of the methods of establishing communication. In this method, as Clowes (2007) argues, a standard photograph represents a concept by appearing similar characteristic of the object.

Bearing in mind the important role of the semiotic definitions proposed by Peirce, many scholars redefine his argument in their own understanding. Among which, refers to Grayson & Martinec's (2004) clarification who suggests constitutes of a semiotic phenomenon are connected to each other's by iconic connections, and each sign represents the entity. Schembri (2010) noted that due to the fact that sign users want to establish their own assassinations with the sign of an item, the documentation of this connection is aspirational.

The second method creating communicational message is by indexical procedures in which there is a one-to-one connection regardless of any similarity between pointer and point. The important point to notice is that the indexical connections depend on causal connections. Sinha (1988) provides an example of the casual connections in the concept of smoke representing fire.

There are rather complicated steps in how signs are analyzed in social situations. For phenomenological analysis of the characteristics of an object, it is necessary to discover how the semiotic position of an item is changed in a specific period of time. In this regard, literature provides some studies the results of which noticed,

> "Making sense of indexicality commonly involves ad hoc hypotheses" (Gell, 1998: 15).

The fact is that the majority of signs include iconic, indexical and symbolic potentials. Due to the fact that an icon represents various connotations in different contexts, could be realized that its intrinsic characteristics which is metaphorically designed (Eco, 1976). As a result, they act differently in conveying the message. Therefore,

> *"An icon has such being as belongs to past experience. It exists only as an image in the mind. An index has the being of present experience. The being of a symbol consists in the real fact that something surely will be experienced if certain conditions were satisfied. Namely, it will influence the thought and conduct of its interpreter" (Jakobson, 1990: 420).*

Chandler (2001) suggests photograph as a tangible example of a sign that can easily goes to three groups. He believes that photograph is an icon because it is similar to an object that it represents. In addition, a photograph is an index representing an occasion happening in a specific time in the past. Although, photograph could be a symbol because of different meanings that could be included. Chandler's (2001) thought is in line with Peirce's way in showing a sign that includes actual world anchoring.

The reality there is considerable differences between symbols from one side, and icon and index, from the other side. For clarification, the symbol definition and its function, it could be necessary to have study on symbol more deeply in the next subchapters.

2.7 Symbols

Regardless of numerous efforts for clarifying the symbolic term, still there is hardly to find the thorough consensus among scholars about the performance of the symbol. As Egenter (2005) argues, absence of certain common view might be related to the

variability and variation of concepts that exist such as icon, index, and etcetera. Notwithstanding extremely effort for classifying the symbolic factors, still, it is not an easy task to clarify its factors.

Whatever called a symbol is a term, a name, a feature or even a picture that could be familiar in everyday life. In fact, any symbol has a unique meaning in addition to its conventional meaning. Furthermore, each symbol involves unclear, unknown, or even hidden meanings from people.

In an attempt to demonstrate the processes through which symbols obtain connotation, Peirce (1966) refers to three idiosyncratic steps. This process initiates with a choice of an item from various opportunities, then the selected object will be described regarding its characteristics, and finally, a rational connection needs to be assigned to the object based on its function.

Based on his explanation regarding the possible relation among the Peirce argues about the symbol, could be assumed that an occurrence cannot be a symbol easily. The necessity for this occurrence to become symbol is the situation when that occurrence is open to interpretations. The possibility of the various interpretations of the symbols can reveal the fact that symbols not entail the obvious meaning of an object with different interpretations that resulted in the emergence of all possible meaning for that specific object.

> *"The conventionality of a true symbol rests on the shared understanding by the communicating participants that the symbol is a token representing some referential class and that the particular token represents a particular (aspect of) a shared*

> *situational context, and, ultimately, a shared universe of discourse". (Sinha, 2004: 223)*

According to what was stated by Sinha (2004), formerly, Clowes, (2007) concludes that intersubjective connotation in which speakers express themselves by symbolic act can be the most appropriate place for conventional symbol to form a system.

For example, Krampen (2007) suggests that the color of red in the triangle theme of traffic light is a symbol that taken from an earlier time connotation a danger. A year after his suggestion regarding the connotation of the red in traffic signs, he argued,

> *"The word Symbol has so many meanings that it would be an injury to the language to add a new one. I do not think that the signification I attach to it, that of a conventional sign, or one depending upon habit (acquired or inborn), is so much a new meaning as a return to the original meaning" (Krampen, 2007: 297).*

Based on the general consensus among scholars, the concept of the symbol is either a name or it simply is a well-known picture that in addition to its meaning, connotes a peculiar sense. In an attempt to describe the characteristics of this concept, one might think of an ambiguous notion that is not clear, also sometimes, it is hidden from people.

Bearing in mind that having a symbolic perception as an extremely narrow agreement upon symbolic studies, there are crucial controversies about some theories (C. N. Schultz, C. Jencks, K. Lynch) which had resulted various foundations. In other words, as Popelová (2006) maintains, the agreement among symbolic considerations simply focus on the fact that individuals need to sustain such an awareness regarding the aesthetic aspect of their perception that can bring them more

intricate structural developments. In the current time, the mentioned goal is only achievable through establishing a closer connection with one's surrounding context through useful standpoints.

Symbolic objects, according to Ittelson (1996), are universal characteristics of the current life that are represented their intended meaning with the assistance of symbols. In fact, symbols are intentionally shaped to transfer meanings. In this respect, the assumed purpose of the symbols can only be successfully achieved when people make use of the assigned objects while interpreting the symbols (Barr et al. 2002).

2.8 Symbol and Its Origin in Jung and Freud Views

Sigmund Freud (1989), maintained that the dreams create the symbols, traditional story about supernatural beings, the story involving fantastic forces and beings like the witches also linguistic utterances expresses in hidden form unresolved childhood involvement suppressed in the subconscious of individuals.

One of the supporters of the Sigmund Freud is a well-known physician, Carl Jung (1875–1961), who, later on, studied dreams, myth, values, and etcetera. In addition, he studied Freud's psychoanalytic view regarding the mining of dreams. With the use of the collective unconscious, he attempted to describe typical patterns of symbols exist in literature, dreams, etc.

Parts of the attempt to represent mythology as an expression in the form of humans' basic psyche symbols, Jung (1947), stated

> *"It is possible to live the fullest life only when we are in harmony with these symbols; wisdom is a return to them. It is a question of neither belief nor knowledge but of the agreement of one's thinking with the primordial images of the unconscious". (Jung, 1947: 70)*

Therefore, it can be realized that a concept in the form of an image or word is symbolic when he suggests some connotations clearer than its direct meaning.

Carl Jung claims that the "collective unconscious" is the source of understanding symbols. He wrote that language of the psyche is symbols, which purpose are for communicating and giving meaning to life. Jung investigated the method that Symbols emerge cross-culturally in mythology and dreams. This is including a type of metaphorical thinking that common to "all humanity".

To clarify the Jung idea it will be helpful to have a little explanation about the psyche by using his description,

> *"The psyche makes of three layers, the inner core is consciousness, the middle layer is the personal unconscious and the outer layer is the collective unconscious" (Jung, 1983: 25).*

He found that the unconscious mind likes to reveal itself obviously in the language of symbols, be it through dreams, mythology, or other esoteric means. The ego does not tell the truth between the personal unconscious and the last layer of psyche's onion, which is the conscious area.

Jung claims that when a word or an image implies something more than its obvious and instant meaning, it becomes as a symbol. The reason of using symbols is to signify ideas that are beyond others understanding. "The unconscious aspect of any event reveals to human in dreams, where it appears, not as rational thought, but as a

symbolic image." (Jung, 1961: 21). The being unconscious within the psyche is usual to all humanity.

Freud designed his primary work to investigate the symbolic connection between dreams and neurotic symptoms, from a certain point of view, and not pleasant features of conscious experience. In Jung's view, dreams are not an artificial expression of the present situation of the dreamer's mental world, but it is the direct and natural expression. He refused allegation of Freud that dreams deliberately conceal their meanings. Jung said that dreams talk in a unique language of symbols that are from the unconscious mind for giving meaning to the natural world. Humans are in trouble of understanding dreams, Jung said, it happens just because the symbolic language is not the same as the language of people waking awareness.

Dreams do not say only personal contents, but also collective or universal contents; this is one of the most distinctive features of his dream's theory. Jung believed that dreams repeatedly hold archetypes, universal psychic images that lie under all human thought. Archetypes reflect a natural knowledge in the human unconscious deeply; archetypal images in dreams can prepare the dreamer with the special insight. Jung believed that religious and mythological traditions have a value of archetypal images, and he mentions to these traditions in telling the nature and role of dreams directly.

Symbols are not demonstrations of phase of matters in the world simply. In fact, according to Lacan (1968), at the level of the symbolic, there is no signified. There is just process in the world of the symbolic. People use myths and symbols to bootstrap themselves into the honestly human world. Therefore, the human world becomes an infinite world by quality of the symbolic.

It is worth mentioning that an initial consideration of the symbolic appreciation in the world that proposed by Jung (1947). In his reflection on this concept, he began with the characteristics of the authentic life of individuals, and he mainly focused to the point that actual life only happens when people acquire the ability to comprehend the symbolic meaning in the world. Jung (1947) believe that this specific comprehension of symbolic meaning all around the world cannot be achieved unless people realize that this capability is one of the components of their natural psyche which highly needs reasonable care. In an attempt to represent the importance of the interpretation of symbolic meaning, could refer to the role of the fact that is happening all around the world, also it has a deep relationship between human and built environment.

Jung (1947) believes that broader unconscious feature fails to accurately explained, and there is hardly hoping that someday one can define it. Therefore, an ultimate aim of the designers, in a symbolic followers' point of view is to convey a message. Hogenson (2001) strongly believed that Jung's concept of the symbol, considering the behavioral characteristics of creatures, is highly context related.

2.9 Cultural symbols

Cultures are using the symbols in the various ways such as flags, certificates, and signals to identify themselves also communication. Therefore, foundation of symbols is human. In simple words, communication without symbols would be impossible. In this respect, the most symbolic sight of human culture is language. Moreover, religion, politics, literature and art are other aspects that symbols also plays the significant role in them. In addition, basic state of being female or male is the symbol by attention to the cultural or social diversities. In fact, these differences have been created and conveyed by distinct ethics, nationality or even social groups. Moreover,

human beings have the ability to create meaning; classify their knowledge, manifested emotions and control society by the using the numerous symbols (Geertz, 1973).

In this regard, particular group of scholars has been thought about cultural background of symbols such as Schefold (1997), and Dieterlen (1954), whom claims symbols are the significant key factors for social developments. According to Schefold's cultural symbols are demonstrated in individuals' house that is traditionally constructed by a three-dimensional principle which are, constructing the space, create the boundaries for protecting it and finally living in it. Therefore, the notion of cultural space is formed via primary vernacular models. The concept has existed to create the houses, and subsequently complemented –progressively- by influence of surrounded environment all over the world. Indeed, house is one of the elementary cultural symbols which is appeared from surrounded environmental issues rather than universal one (Egenter, 2004).

In fact, designers attempt to connect several symbols in order to establish the communication between the designer and users (Nadin 1988). Literature confirms that there is an agreement among a group of scholars (Gottdiener, 1995; Gottdiener and Lagopoulos, 1986) that the creation of the space in urban sections is attached to meaning construction, which is a deliberately assigning meaning to symbols for the purpose of creation of unique characteristics for a place. Increasing the characteristics of a place is a process in which designers create typical features of a place; whereas, place character is organized through a combination of various arrays that for being differentiate places (Molotch et al., 2000).

Kim (2010), argues that particular characteristics of a place include physical, organizational and cultural components. In this regard, Molotch et al. (2000) stated that places are different in their production and reproduction in an ‘‘urban structuration processes” with regards to their social features that are formed by ‘‘character” and ‘‘tradition”.

Symbols existing in nature, similar to geographical space, include some components such as ‘discursive-material formations’ (Davis 2005; Yapa 1996). Alderman (2002) argues that those components obtain symbolic power when combined into ‘the geographic fabric of everyday life’. The modern life style of the human is an acceptable place for behavioral and psychological aspects of the individual cognition, such as values, norms, and beliefs to occur. As Chase (1994) maintains, those factors that give “symbolic cultural meaning” to all actions and characteristics of the human being are called a web of beliefs. In a more pure distinction, Harré (2002) noted, “There is nothing else to social life but symbolic exchanges and the joint construction and management of meaning, including the meaning of bits of stuff.”

2.10 Symbolic Capital

Reay (2004) argues that Bourdieu associates his works in 1993, which is a social space as the organization and formation of the habitus in the field of architecture. Bourdieu (1986) defines a group of four factors as the basic elements of the forms of capital: economic, cultural, social and symbolic (Bourdieu, 1986).

In a similar approach, Reay (2004) argues that Bourdieu’s explanation regarding the creation of the symbolic capital in a social context is a natural procedure. Reay (2004), also believes that Symbolic capital is a tool for validating various forms of

interchange within which prestige is characterized as a method to differentiate members of a particular group. Therefore, in the field of architecture, the symbolic capital has the potential to construct the identity and social status of individual that resulted in either convergent to others as a point of sameness or divergent as a sign of being different.

In fact, the transmitted information in the format of their meanings occur within individuals' belongings in their surrounded environment in the entire steps of social communications. Myers (2002) successfully provides the general accounts of the "Self-presentation" by assuming it as a situation in which each member of the society is interested in demonstrating a favorable appearance of themselves to outsider audiences, such as other people, as well as insider audience, such as their own. In other points of view, "Self-presentation" is a process that happens in an environment in which there is various forms of stages for social interaction and people try hard to hold powers over others by the help of manipulating the available symbols (Goffman, 1959). As a result, could argues that people have an unconscious effort to build their building by using their own symbols to divide themselves from others.

In this regard, Jakobson (1968), under the aphasia discussions, argues that lack of ability to report a phenomenon, can be compensate with some symbolic features. This substitution is vital for situations that we seek to compensate a phenomenon by the application of the Symbolic Capital. Below, the concept of Symbolic Capital is discussed in details.

Bourdieu (1988) develops two concepts, which are habitus and field. He refers to the former as the factor that can manage actions and thought whereas; he believes that

the thought is the place that shaped foundation of the existing struggles in the society. From Bourdieu's (1988) point of view, habitus of the people's daily life emerges with the help of space and it is the reason behind the construction of the various forms of the identity, thought, and awareness.

Recently, some researchers have shown common agreement regarding the general benefits of symbolically established behavior. In fact, they (Donald, 1991; Wadley, 2001; Henshilwood & Marean, 2003; Hovers et al., 2003) believe that a symbolically established behavior provide a chance for people to gain information external from their brains.

Regarding the assumption of the constructed forms, Lawrence and Low (1990) believed "As symbolic, sites condense powerful meaning and values; they comprise key elements in a system of communication used to articulate social relations." The notion of symbolic offering by an interactionist focuses on the existence of human in an environment surrounded, by some factors such as a common language and many other social objects. Interactionists constantly emphasizes this fact that is an internal meaning in any architecture, and people are who assign the related meaning to it (Blumer, 1969).

One of the most significant current debates in symbolic studies refers to the arguments over structure versus agency. From one side is Bourdieu's (1977) point of view who claims people apply various symbolic arrangements in their private houses so that they can have a chance to maximize their preferred living situations. Whereas, from the other side, various interpretations of Giddens's (1990) concept, who believes that the agency is a fundamental factor, can be applied in various

interpretation of symbols. This is due to the fact that people can demonstrates themselves through symbolic features, by applying different symbolic features in their houses.

There is also a third view point in a more recent time by a group of scholars (Cooley, 1902; Mead, 2002) who claim that human beings have the capability to form and shape various forms of meaning related to not only themselves, but other objects and people around them. In fact, the supporter of this view strongly believe that this creation and recreation of the meaning is an ongoing process, which is happening in the society at every single seconds of the social life. This interpretation of meaning can be explained through building structure as well. It is becoming increasingly difficult to ignore the fact these symbols connote various form of meaning to different people and people are able to redefine and change the meaning of all artifacts.

The wide range of symbolic concept made it possible for viewers to find some concepts such as motherland as a reality in all around the world. Xiaojun (2004) clearly defines this issue with referring to the transformation of the economic capital land to symbolic capital that consequently resulted in the emergence of the different social groups in society. The nature of this transfer has been reported as adjustable when expropriation the lords' land as a symbol of validation. In this regard, Bourdieu, (1977) believes this process is a perpetual process that includes a circle-like direction and comprises absolutely vital rules for changing the capital form to symbolic.

2.11 Sign and Symbol in Architecture

According to Eco (1972), the realm of semiotic architecture which it has predominantly deal with, is directly relevant to the question that how codes and signs are represented in architectural designs. As a consequence, a cultural meaning's group has become of enormous concerns by those symbols and signs. This can be explained through Gottdeiner and Hutchison's (2000) discussion whom believes that architectural semiotics as the significant category consists of some subdivision. spatial semiotics, is one of them, which undeniably examines, the reflectance of the culture through urban designs (Smith, 2006).

Although, the reason behind the significance of the semiotics in architecture is defined by Eco's (1980) reportage appropriately, who pointed out "apparently most architectural objects do not communicate, but function" which stimulates architectural attention towards this fact that whether can those architectural functions implied as communication? Accordingly, as Eco (1980) discussed, considering on architectural functions from semiotic aspects would not just permit architects to explain them obviously, but this attention, would suggest an opportunity for them to recognize further functions.

In fact, Architecture is a system of stylistic settlements that attempt to transfer the messages to audiences, which are the users of the buildings (Eco, 1980). In justifying various forms of repeating and reaffirming form of meaning in the field of housing, architecture can be assumed to be one of the well-known forms of mass communication. In this regard, architecture is a system which transfers the messages

to the users who expects to recognize a kind of acceptable terms (Eco, 1980). In this respect, Eco (1980) believes

> *"Architectural discourse… starts with accepted premises, builds upon them well-known or readily acceptable 'arguments,' and thereby elicits a certain type of consent". (Eco, 1980: 41)*

Researchers have consistently shown that having an adequate understanding of the concept of the practical role of things strongly made their form in the format of design to obey the existing symbolic value. Recent developments in the field of housing and its connection to symbols that suggested by Featherston (1991) have led to a renewed interest of assuming that scholars previous knowledge about cultural association of meanings with social lifestyle of people is mostly derived from the initial designs of over substance.

Central to the entire discipline of symbolic forms is the statement of "true sources of light, the prerequisite of vision, and the wellsprings of all formation" (Cassirer, 1953). The importance of symbolic structures has been shown by many scholars in the field by declaring that symbolic factors provide a chance for people to observe the reality in the actual life. In addition, Rimmer (1997) took a further step and in a rather philosophical direction, defines the symbolic assumptions as exact issues in consciousness, time, and space.

In this respect, the major point that Goffman (1959) consistently refers through the introduction of dwelling process is revealing the obvious effect of long-term ownership within personal content. Indeed, house's components are main the personal symbol. As a result, the dwellings that comprise features in agreement with

peoples ‘personal’ self-concept is making the good opportunity for them to exhibit themselves. In fact, modified housing features during the houses lifetime are provided a chance for them, to exhibit themselves in their own preferred ways (Sadalla & Sheets, 1993).

2.11.1 Symbols and Houses

Several scholars such as the Marcus (1995), and Israel (2000), argued houses consisted of numerous cultural and personal symbols which are strongly make the relationship between the inhabitants and their houses. In this respect, Israel (2000) truly emphasized on the point that the houses which have been built with almost no attention on users profiles could not be the appropriate home for their residents. He noted, to provide the suitable houses design it is necessary to have a cognition about the past history of the place, particularly coherent to those aspects that have the positive influences on houses’ users. Home in the Marcus (1995) point of view, can be ascribed multiple meanings in addition to fulfil many practical and emotional needs by its components and features. She added, people consciously or subconsciously use their home to express something about their personality, lifestyle and culture. They are adding or changing the some features during the houses life time which reflect their culture and tradition. Marcus (1995) as one of the Jungian follower, in the paper “The House as a Symbol of the Self” claimed

> *"... most of us do create some space in the world that is ours and, whether consciously or unconsciously, we shape and decorate it to express our values" (Marcus, 1995: 50).*

In this regard, any socio-cultural groups with the diverse environmental experiences are using differ symbolic features and components in their houses (Nasar, 1989). On the other hand, these groups are sharing the certain meaning that resulted of common

cultural experiences. According to Nasar (1989), those symbolic meaning that commonly utilized in the different social groups' houses are appeared in their houses style. However, these additional features that used in different houses styles are variable, in respect to the cultural and environmental experiences of the different social groups.

As Oliver (2006), argued traditional buildings are conveying the different meanings through the consisted components and features. Therefore, using the symbols that refers to the traditional architecture is one of the most significant ways for defining cultural characteristics of the buildings' inhabitants. Symbols could provide proper bond between humans and the built environment. In this respect, Trancik (1986) claimed, cultural symbols could use in modern forms to make the adaptation with the context of contemporary urban spaces. Hence, these architectural symbols with modern forms are able to make the relation between the users and their buildings (Sani, & Shotorbani, 2013).

2.12 Overview of Chapter

Sign as a fundamental concept of semiotic has been worked in many scientific fields. Peirce (1958) argued sign is including the three related parts, which are sign, object, and interpretant. In fact, he claimed that signs is the connection between concepts, objects, and its interpretations. As a result, sign is anything that a person 'signifying' it to interprets by considering to something that stands for something other than itself. However, Saussure divided sign into dyadic tradition, signifier (sigifiant) and signified (signifié), which the connection between the signifier and the signified is arbitrary. Whatever, people are intentionally using the signs for is purposing to deliver the messages that are highly connected with those signs.

Data from several sources have identified that signs are different in their nature. Index, Icon, and symbol are three various types of the sign which act differently in conveying the message. Icons are representing the concept by appearing similar characteristic of the object. It exists only as an image in the mind. In indexical procedures there is a one-to-one connection regardless of any similarity between pointer and point. The important point to notice is that the indexical connections depend on causal connections. The reality there is considerable differences between symbols from one side, and icon and index, from the other side. Whatever have been called the symbol is a term, a name, a feature or even a picture that could be familiar in everyday life. In fact, any symbol has a unique meaning, in addition to its conventional meaning. Furthermore, each symbol involves unclear, unknown, or even hidden meanings. It is becoming increasingly difficult to ignore the fact that symbols connote various form of meaning to different people and people are able to redefine and change the meaning of all symbols.

Jung (1947), said that dreams talk in a unique language of symbols that are from the unconscious mind for giving meaning to the natural world. In an attempt to represent the importance of the interpretation of symbolic meaning, could refer to the role of the fact that is happening all around the world; also it has a deep relationship between human and built environment. As a result, Jung (1947), argues that people have an unconscious effort to build their building by using their own symbols to divide themselves from others.

The creation of the space in urban sections is attached to meaning construction, which is a deliberately assigning meaning to symbols for the purpose of creation of unique characteristics for a place. Therefore, an ultimate aim of the designers, in a

symbolic followers' point of view is to convey a message. In fact, designers attempt to connect several symbols in order to establish the communication between the designer and users. As a result, in architecture there is an attempt to transfer the messages to audiences, which are the users of the buildings.

Symbolic capital is a tool for validating various forms of interchange within which prestige is characterized as a method to differentiate members of a particular group. Therefore, in the field of architecture, the symbolic capital has the potential to construct the identity and social status of individual that resulted in either convergent to others as a point of sameness or divergent as a sign of being different.

People are applying the various symbolic arrangements in their private houses so that they can have a chance to maximize their preferred living situations. This is due to the fact that people can demonstrates themselves through the symbolic features, by applying different symbolic features in their houses.

Chapter 3

AN OVERVIEW OF OTTOMAN AND BRITISH COLONIAL HOUSES IN CYPRUS

3.1 House and Home

Scholars believes that the field of housing is the fundamental social life's issues. Moreover, lots of researchers such as Dunn and Hayes (2000) endeavored to describe its significance in individuals' life by indicating it in place of the irrefutable fact in life management. There are many scholars which examined the term home from various directions. For instance, some studied explored its origin also than linguistic factors due to realize its context. Studying over the word "home" is possible to investigate on recorded works of Rykwert and Hollander (1991) who noted that the word "home" is rooted in the Indo-European word family which is kei that means something invaluable. In fact, it is originated from German language which is named heem or heim that refers to a place for rest. They also have gone a step further by referring home to its German language nation of the word which the home is not merely a place for accommodate the family, in fact it should able to transfer the feeling to its users that they are being at home. Likewise, Benjamin (1995), defines home as a place where not only accommodates people physically, in fact it could be able to make the strong cultural bond within itself and its users.

Recently, literature has transpired more findings about the origin of "home". Accordingly, Gifford (2002) believes that historically, the term home goes back to the 16th century, and it referrers to individuals' the general concept of a family being

in a place together. In addition, recent literature shows the idea of scholars regarding the concept of home as a dominant term, which highly connected with people (Paadam, 2003).

Blunt & Dowling (2006) in their study stated, probably home is the fundamental categories of housing. While a variety of definitions of the term home has been suggested, researches put a strong value on the definition of Somerville (1992) who defined home as multifaceted concept.

In addition, Dawson and Rapport (1998) defined home as the "cultural norms and individual fantasies" that have the capability of bringing "together memory and longing, the ideational, the affective and the physical, the spatial and the temporal, the local and the global, the positively evaluated and the negatively" (p.8). The idea of culture in Rapport and Dawson's (1998) definition comes from the Somerville's (1989) description. In his opinion the culture as the society encompasses fundamental elements with culture as an independent phenomenon in it. Clapham (2005), believes

> *"The house derives meaning from its setting as well as its own characteristics. Feelings about the house will be influenced by the perceived physical and social environment outside the front door" (Clapham, 2005: 155).*

It is worth mentioning that there are almost two different definitions regarding the terms house and home each of which convey various connotation and are applicable for its own context. In this regard, scholars made us be cautious while using them and not to replace them with each other.

Several attempts have been made to clarify the relationship between home and house. The clarification between the concepts of the house and home has been established through scrutinizing the design, physical construction, and house sorting by historians and architects in unstable historical and cultural. In the second half of the 19th century, the expanded concept of the home had given both physical and moral directions (Giddens, 1984, Bowlby et al., 1997). In addition, home was seen as a place where there is the strong possibility of controlling time and space and "structured functionally, economically, aesthetically and morally" as well as "communitarian practices" are feasible (Rapport and Dawson, 1998; Douglas, 1991).

Mallett (2004) believes that one of the most significant current discussions in comprehension and differentiation between the house and home includes two consistent ideas. The first is combining the concept of the house and home by a great majority of researchers without reflecting any critical view. Second idea as Mallett (2004) stated;

> *"… assert that the spatial organization of domestic dwellings both influences and reflects forms of sociality associated with and/or peculiar to any given cultural and historical context". (Mallett, 2004: 66)*

Other comparison between the house and home has suggested by recent scholars in the field (Clapham, 2005), who proposes house as only the body of the building "without meanings ascribed to it" whereas, he grants home as a concept which connotes a group of symbolic meaning. He added,

> *"A home is not a neutral setting. A home carries meanings that arise out of, and in turn influence the use of the physical structure". (Clapham, 2005: 117)*

For describing the significance of home and house connotations could refer to Myers (2002), who argues that the connotation of the words are referred to the psychological factors. One of the factors is ‘schemata’ or ‘schema’ that is completely based on a mental system which is appeared through the words. In fact, each of the words is processed and classified in distinct groups of places, situations, people, names, and etcetera (Myers, 2002).

Schema is a process which appears through the culture for performing diverse types of applications. For instance, schema is utilized for understanding, systematizing, and classifying the knowledge which is created and accepted by peoples. In addition, it will be handled for simplify the process of the transfer message and subsequently it reduce the possibility of confusions (Lee, 2003).

As a result, the schema theory is applied relevant with the word housing connotations. In this regard, it has been described by Nasar (1988) and Cold (2001) as aesthetics approach, which is consisted of two groups which are symbol and formal aesthetics. Nasar (1988) noted the formal group is only deal with the physical specifications such as shape, color, form , size and any other physical features. In contrast, symbol aesthetic is the composition of meanings between personal point of view and these factors. Hence, the meanings, which are made by architectures could be utilized as an efficient method to divide the particular social group from others as well as identifying the architecture users. Robinson (2006), clearly reflected this fact,

> *“The special world which we live in, tells us whom we are. We find ourselves through it, we react to it, and it response to us. By manipulating it, we affirm our identity”. (Robinson, 2006: 23)*

Several researches have tried to define the principal role of the housing in forming the individuals' identity during social life (Harvey, 1989; Despres, 1991; Smith, 1994) and in creating the social position (Harris & Pratt, 1993; Marcus, 1995). In addition, in explaining the linking between housing and identity, a group of researchers (Kimber, 1966, 1971; Anderson, 1972) argued that identity is a determining factor in the house's organization as well as its obstacles according to their own cultural perception (Arreola, 1981).

Sadalla and Sheets (1993), believes that the observation of the house style is an effective method in demonstrating the characteristics of the inhabitants in the building. In fact, based on the house style, residents can be explained as people with totally different characteristics. They can be extremely creative or non-creative, introverted or extroverted, warm or cold, etc.

The researches have high attention on housing field for increasing the housing quality to establish a well-designed houses to make the strong bond between houses and their users (Halpern, 1995). According to the Dowling & Blunt's (2006), whom introduces the home as "a method of constructing and comprehending forms of dwelling and belonging". Moreover, other researchers have gone a step further by mentioning the significance features of home. In fact, they claimed that any changes in the housing field is directly related to the time conditions such as economical and sociological criteria, in addition to the cultural contexts of the people who belong to that region (Paadam, 2003).

3.2 Cyprus General Information

Cyprus with the 9,251 square kilometers is third largest island after the Sicily (25,460 Km2), and Sardinia (24,090 Km2) at the Mediterranean Sea. This island has the 773 square kilometers coastline at the east side of Mediterranean basin. However, the special point that distinguished this island from other islands is the strategic location and subsequently the rich history of Cyprus. Cyprus is located between three continents which are Europe, Asia and Africa. Three nearest neighboring countries of Cyprus are turkey with 75 km distance at the north, Syria with the 105 km distance at the east and Egypt with the 420 km distance at the south of the island. The capital city in the Northern Cyprus is Nicosia (Lefkoşa). Famagusta, Lefke and Girne are the three other major cities which are located at the seaside.

Figure 6: Cyprus Location in the Map (URL4)

The history of the countries influenced the architecture, whether in the design stage or construction process. Architectures are the one of the main sources for investigation on culture, tradition and lifestyle of the people belong to the particular

geographical region. Many world powers in different periods of time effected the Cyprus history because of the specific position of the island. For instance, Assyrians, Persians, Roman, Byzantines, Venetians, Ottomans and British used to rule the Cyprus through the history of the island. At the current time, the north part of the island is under the rule of Turkish Republic of Northern Cyprus (TRNC) with 37 percent of the island, and the south part is ruled by the Republic of Cyprus with the 61 percent territory (Hadjistephanou and Vassiliades, 2004). In fact, until 1973 north and south parts of the Cyprus experienced the same history.

Table 1: Table of the Cyprus Periods (URL5)

Name of Period	From	To
Pre-Neolithic	ca. 9825 BCE	ca. 8200
Neolithic	ca. 8200	3900 BCE
Chalcolithic	ca. 3900	2500 BCE
Prehistoric Bronze Age	ca. 2500	1600 BCE
Late Bronze Age	ca.1600	1050 BCE
Iron Age	ca. 1050	475 BCE
Classical	475	325 BCE
Hellenistic	325	58 BCE
Roman	58 BCE	330
Byzantine	330	1191
Lusignian	1192	1489
Venetian	1489	1571
Ottoman	1571	1878
British	1878	1960
Cyprus Republic	1963	1974
Cyprus Turkish Federal State	1974	1983
Turkish Republic of Northern Cyprus (TRNC)	1983	

Between the fourteen periods of Cyprus history, the most evident effects on the contemporary architectures is related to the most recent historical periods, Ottoman and British Colonial periods. Therefore, in this thesis it is tried to explore the architectural background of these two periods for comprehending their architectural effects on housing facade features in Cyprus.

3.3 Ottoman Period (1571- 1878)

According to the history Ottoman Turks came to Cyprus in 1571. Turkey was the center of the Ottoman Empire which was one of the powerful ruler around the world. Moreover, Ottoman Empire is one of the long term empire which expanded its boundary to the vast geographical parts of the world. In fact, Ottoman Empire transformed from regional empire to the world power in 1453, after the fall of Constantinople and destroyed Byzantium (Goodwin, 1991).

One of the Ottoman conquests was Cyprus in 1571. Ottoman Empire planned to conquer the Cyprus, approximately from fifty years earlier than the time that they succeed. Ottoman Empire by sending the armada in 1488, attempted to conquer the Cyprus from the east side, but they defeated in this war because of the timely intervention of the Venetians militaries. Thereafter, the empire armada were stayed around the island to find the prepare opportunity for the attack. The Venetians situation were harder when Ottoman Empire conquered Egypt in 1517. Since the Sultan Suleiman II (King of Ottoman Empire) used to be ready for conquering the Cyprus, Venetians started to build the new fortification around the Nicosia (Lefkosa). Venetians used to fortification the Nicosia under the responsibility of engineer Julio Savorniano, which started his work in 1567. However, it was not completed before the Ottomans attack. Finally, Nicosia was conquered in 1571 by one hundred thousand of Ottoman's soldiers (Mikropoulos et al, 2008).

Figure 7: Walled City in Nicosia, War of Ottoman and Venetian in 1571, (Mikropoulos. A, et al, 2008)

Thereafter, Cyprus were ruled by the Ottoman Empire. According to Jennings (1993), Turkish people used to rule and live peacefully with the Christians, Jews, and Armenian (Majority of the island population was the Christians) in the island. Islam was the foundation of Ottoman Empire. Therefore, Ottoman after conquered the island, started to promote the Islam all over the Cyprus (Brambilla, 2013). Moreover, Turkish rulers converted many churches to the mosques. Ottoman Empire -such as the other rulers- used to exhibit its power by constructing the new buildings around the Cyprus which were appropriate for Turkish people culture and their religion (Ozay, 2011).

3.3.1 Ottoman Houses in Cyprus

Many monumental legacies from Ottoman period are observable around the island such as mosques, inns, caravanserais, aqueducts, Turkish baths, Muslim theological schools and commercial places. However, deep influences of this period on houses

features and Cypriot culture is the main legacy of Ottomans in Cyprus. Since the Ottoman conquest the Cyprus, Turkish people as new settlers of island used to build their own houses, which related to their lifestyle. They prefered to build the houses appropriate for Turkish culture and Islam as their religion. At the beginning of Ottoman period in island, people to build their houses and other construction needed to use of building masters, which were coming from Anatolia. Thereafter, Turkish people that settled in Cyprus were undertaken this job (Mesda, 2011).

Ottoman houses were corresponding the Turkish lifestyle and their culture in Cyprus. The Ottoman Empire during his long term dominance on Cyprus influenced the residential architectures all around the island. Nevertheless, in this chapter by using the related researches and studies about the ottoman houses and comparing the sufficient information with the survived houses in Cyprus, it has been attempted to reach the reliable information.

3.3.2.1 Layout Organization

The house's layout in the period was influenced by the rooms ordering due to make the strong privacy for the house's residents. The Ottoman houses were built by effecting of the Muslims believes and Turkish culture. For instance, the garden houses were designed to inspire the heaven with the massive garden walls around it to prepare the reclusion for the family members. To get closer to the actual information and thesis aims, it is necessary to study the layout details of the Ottoman houses.

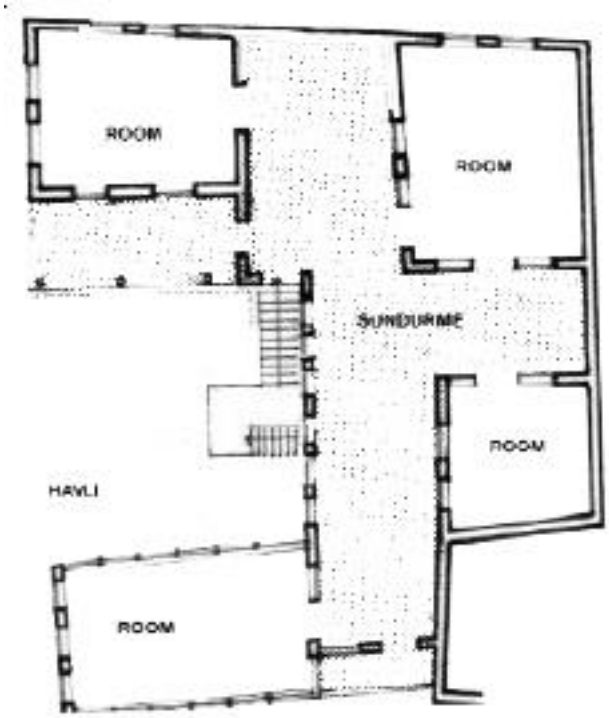


Figure 8: The Sample of Ottoman House's Layout (Pulhan, 2008)

The Entrance

Seki alti is the entrance area at the lower level of the floor where the door is located. In fact, *Seki alti* is vestibule in addition to be the room service area. The inner side of the doors surface usually made by decorative features however, the outer side was left simple. In addition, some of the room entrance ceiling and the house's doors was formed by the arch. Nevertheless, the arch form above the entrance was not functional to bearing the ceiling weight. In fact, the arch type of the entrance was only the decorative features (Goodwin, 1971).

Sundurme

Sundurme is the special setting which is generally use for transition from indoor to the outdoor. This space is coherent to the traditional urban houses of Cyprus which is usually located in front of the row of rooms as a semi open space toward the garden. As Pulhan (2006) noted *sundurme* playing the important role in Cyprus traditional houses' layout organization.

The Rooms

The Ottoman houses have had their own characteristics and features which distinguished them from previous houses in Cyprus. The urban houses had a courtyard between the rooms. According to Eldem (1969), room is the significant characteristic of the Ottoman houses due to their shape and number. The rooms shape and their number directly influenced the houses layout. They were designed the rooms in tetrahedron shape, rectangular or square (Kucukerman, 1991; Kuban, 1995). According to Pulhan and Numan (2001), room in the traditional houses was an activity space for families. Rooms in ottoman layout are connected to each other with the small hall between them. In fact, they did not have a direct connection to each other. Moreover, they had only one door for entrance. Transferring from rooms have been possible only by sofa. Turkish people designed the rooms such as the single discrete house.

Figure 9: Ottoman Houses' Room, at Current Time Changed to the Kalafatoglu Konak Hotel (URL7)

Sofa

The second significant features in Ottoman's houses are *sofa* (hall) that mostly influenced on classification of houses plan. The designing layout of rooms and *sofa* are created the distinctive characteristic for the Ottoman houses (Boğaç, 2005). In fact, *sofa* used as the passage for rooms which closed from one or two sides or located at the middle. In addition, sofa designed with the wide dimension to make the suitable meeting place for family. This function of the sofa in Ottoman houses create the different characteristic that distinguished Ottoman houses from other region houses style (Eldem, 1969; Kuban, 1993). In addition, raised platform at the sofa corners was provided the seating place for the houses residents. Eyvan is the extension projection of inner hall in the houses.

Figure 10: Ottoman Sofa (Hall) With the Fire Place (URL8)

Figure 11: Ottoman Sofa (Hall) Between the Rooms (URL9)

Figure 12: Ottoman Sofa in Cyprus House (Dervish Pasha Museums)

The Service Area

The Ottoman houses commonly had the kitchen (mutfak), granaries room, bathroom (hamam), laundry and store room. They were built the service areas generally around the courtyard as a separate part from main house's building. Therefore, they had no strong effect on the houses layout organizations (Eldem, 1969).

One of the significant service areas in the houses layout was the kitchen, which was built appropriate for the women's daily activities. Kitchen (mutfak in Turkish language) located in the courtyard independently from the main house's building to decrease the risk of fire. To make the better situation for the household women it was connected with the other services room such as the pantries and the granaries (Kuban, 1995).

Figure 13: Mutfak (Kitchen) As the Separate Unit near the Main House's Building (URL10)

Staircases

Staircases in Ottoman houses were located at the outer hall which was positioned in front of the *sofa* to link the ground floor to the first floor. In fact, the staircase location were different by attention to the construction year in this period. For instance, the houses were built at the beginning of the ottoman period, staircases was located at the outside of the house from the courtyard to the upstairs but since seventeen century it has been located in the inner sofa (hall) (Eldem, 1969; Boğaç, 2005).

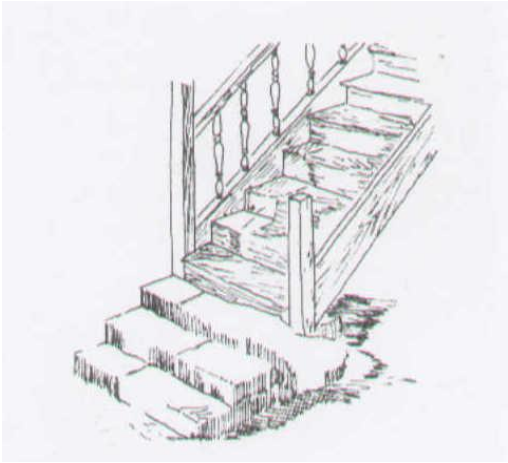


Figure 14: STAIRCASE DETAILS (Kuban, 1995)

Figure 15: Staircase (Dervish Pasha Museums)

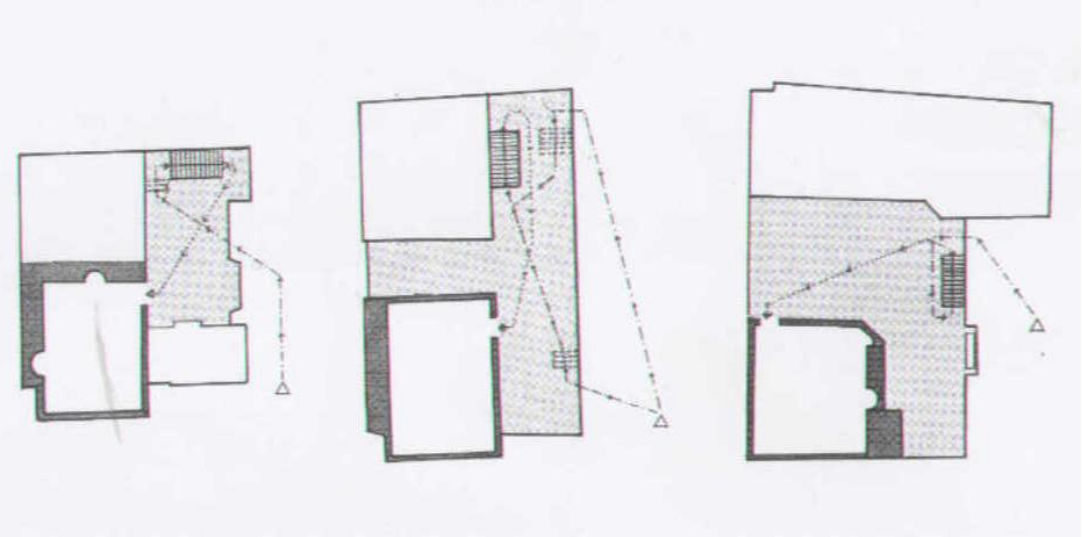


Figure 16: Composition of Satires from the Courtyard (Kuban, 1995)

3.3.2.2 Façade Characteristics

Ottoman houses have the specific characteristics in the facade design that depend on construction year had some differences on their details. The earliest houses that had been built in the sixteenth century were enclosures, and their only facade was facing towards the courtyard or the garden (Kuban, 1995). Thereafter, by several changes that emerged in the houses layout and features. The dichotomy characteristics of the houses facade led to create the different design for the private and public facing of facade. The inner facade that looking to the garden or courtyard were functionally organized. Moreover, the development of the houses facade had been shaped during the houses lifetime that led to reduce the separation of garden and street façade (Kuban, 1995).

Figure 17: Ottoman Street Was Shaped with Houses (URL11)

Figure 18: Ottoman Street Was Shaped with Houses (Wall-City, Nicosia)

The street facade was prevented the **dichotomy** between the **ground part and the upper floor** of the house. The houses facade shaped the Ottoman street and alley by its corresponding rhythm. The **overhanging** of upper level and the ground floor **features** -which emerged because of the houses layout- were significant characteristic of the Ottoman houses. However, the general specifications were not changed. In fact, most of the Ottoman houses –depend on the region that was built- had the same texture and features. The openings, decorative features, walls, colors and materials characteristics that had been used in their facade are surveyed and explained in the related subchapters below.

The Walls

Ottoman preferred to make the strong privacy for their houses, which was resulted the high and **massive walls around the houses** (Numan, Doratlı & Önal, 1996). The entry wall included the **niches and cupboards**. Moreover, the middle wall in rooms was made up with niches for water-jug and lamps (Goodwin, 1971).

Figure 19: Inside of The House's Walls with Niches (URL12)

The Door

The door of Ottoman's houses is opened **directly** from the street or **indirectly** from the courtyard to the street. In fact, regardless of the door location, which opened directly to the house or opened to the courtyard, the gate or the house door is the sign of the private domain (Eldem, 1969). The courtyard door commonly designed with the **rectangular frame and double leaf door and masonry topped** in the some cases by the **large eaves** (Kuban, 1995).

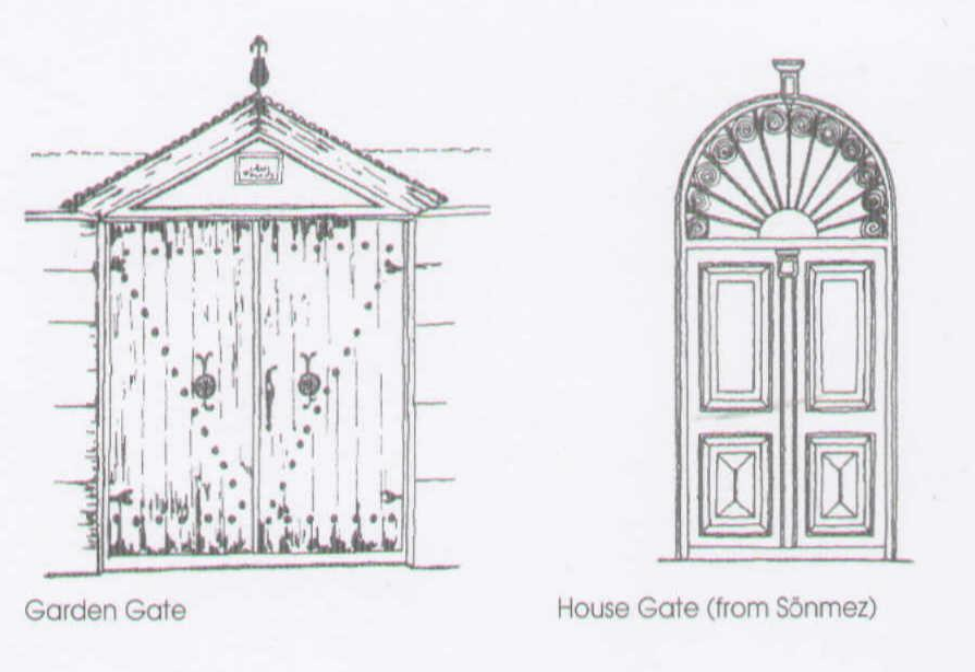


Figure 20: Garden Gate and the House Two Leafs Door (Kuban, 1995)

Windows

Windows were opened toward the courtyard, sofa and garden mostly built in the same formation. In fact, in the 16th century windows facing the street which were not common from past. However, windows of rooms were different in size in compare with the windows which were opened toward the courtyard, sofa and garden. In fact, the **room windows were smaller** than the other house's windows.

The room windows have been designed for ventilation and lighting but to make the private space, windows used to build **above the eye level**. Thus, in Ottoman period room windows have been designed as decorative features (Eldem, 1969). In some cases in the period, they were used of **two row windows** in their houses which the upper windows were smaller and decorative (Kuban, 1995).

Figure 21: The Room Windows (Uluegin, 1998)

Moreover, **rectangular windows were closed by proportion 1:2** which was create the **vertical form**. In fact, at the time it was the common proportion use for windows in many countries. However, the arched windows have never been a usual traditional features in Ottoman houses except for small head windows which came to the Ottoman territory as a European style.

Figure 22: Ottoman Vertical Windows (Uluegin, 1998)

Figure 23: Ottoman Vertical Windows (Uluegin, 1998)

Bay Window (Cumba)

The porch entrance halls and bay window rooms at the first floor were used as living spaces. The bay window -local people named ‘cumba’ or ‘cikma’- is the **protruding box in front of the first floor** of the houses, which was built as a veil to make the opportunity for women to see the street without being seen. In fact, **cumba is the extension of the house toward the street** which generally have been built or covered by wood in Ottoman houses. Moreover, bay window made the better condition to catch the sunlight for projecting rooms (Goodwin, 1971). Moreover, *cumba* as a determined façade feature -particularly in Cyprus urban houses- convey the location of *sundurme* which reflect the special organization through the façade (Pulhan, & Numan, 2005).

Figure 24: The Cumba as an Ottoman Houses features (URL13)


Figure 25 & Figure 26: Cumba in Traditional Houses' Facade (Walled-City, Nicosia, Northern Cyprus)

Façade Decorative Features

The building masters were not having a strong tendency to use of decorative features in the past periods. Their houses facades were **horizontally divided by cornices and vertical pilasters** underlining the geometry of their timber structure. In fact the straight lines which dominated in their design were resulted of using a wooden structure. However, some of the buildings were painted with the limited colors. Thereafter, as a Kuban (1995) mentioned, "the rhythm of structural elements, **geometric patterning** of the infill, **simple decorative treatments** of the balustrades, and **shutters** or **window lattices** were the main decorative features of the sober exterior". Indeed, most of the decorative features were used in functional aspect.

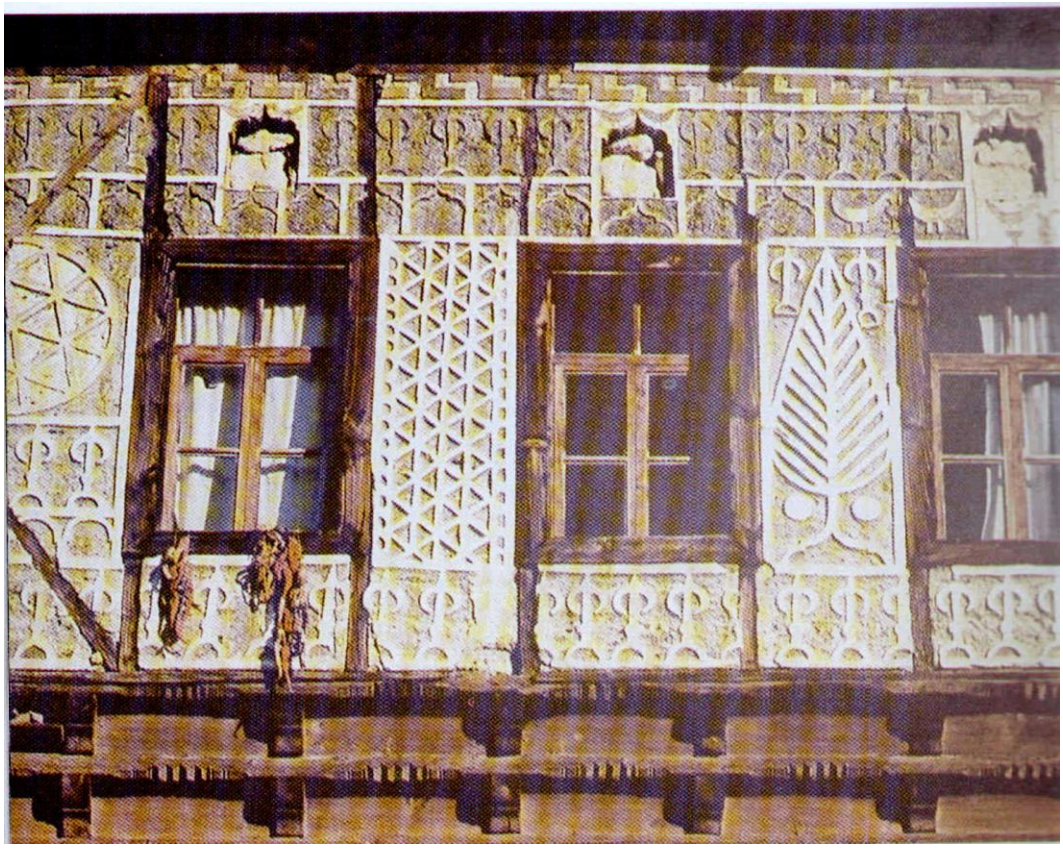


Figure 27: Façade Decorative Features (Kuban, 1995)

Figure 28: Windows' Shutters in Ottoman House (URL14)

Nevertheless, during the 1703 to 1730 followed by rococo and baroque styles, some foreign artists had been invited for applying the decorative features on the

building facade. The decorative features being to appear by using the **cantilevering elements** such as the **brackets** and the **eaves** which were applied as architectural orders. However, most of the houses kept their **geometrical simplicity** instead of the decorative features.

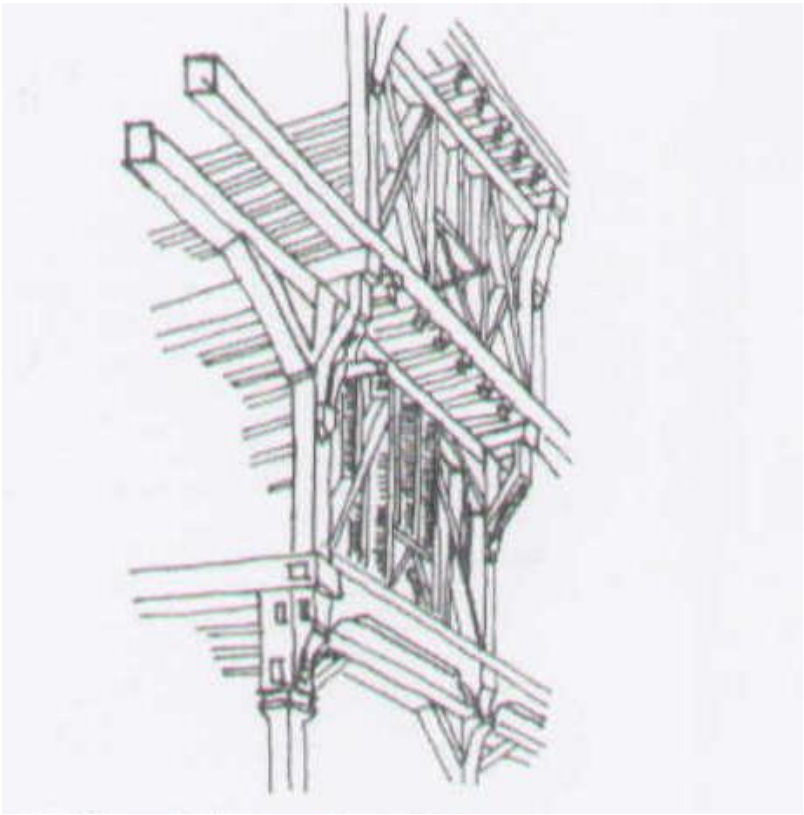


Figure 29: Brackets Construction (Kuban, 1995)

The **overhanging elements** were the most characteristic features that used in houses facade for their structural specifications. The **balcony** or **loggia** (*çıkma*) that was the extension of the floor which was one of the significant **overhanging elements** in Ottoman architectural style. They were supported by **diagonal elements** into the wall which called *furuş* in Turkish language. *Furuş* were directly installed into the wall or braced by the wooden beam in the wall. Thereafter, by converting the simple diagonal form of *furuş* to the **narrow boards with the**

circular or polygonal, manifested the decorative elements for supporting the loggia or balcony.

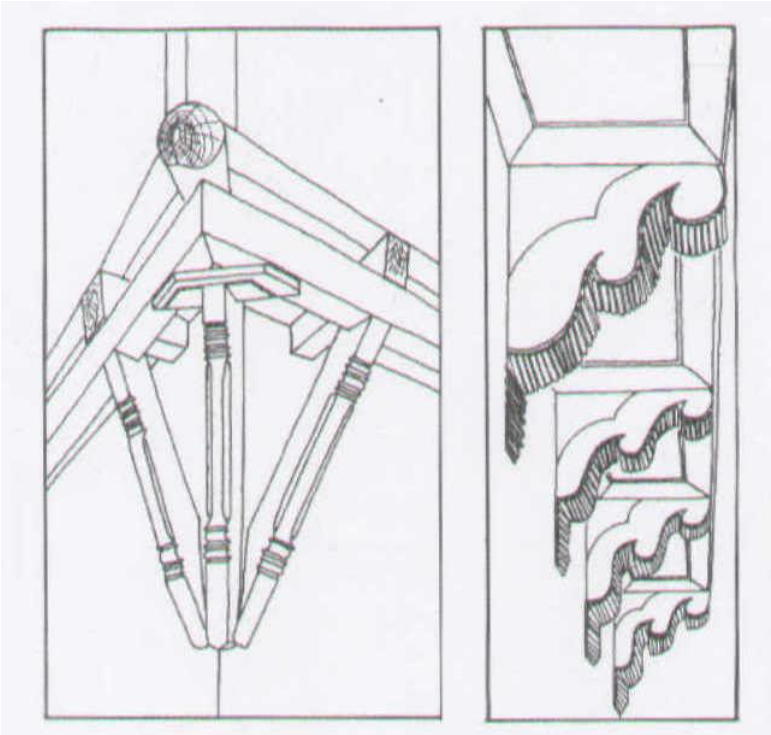


Figure 30: Types of Brackets (Kuban, 1995)

Figure 31 & Figure 32 & Figure 33: Three Common Types of Brackets in Cyprus Houses Facade

During the nineteenth century Turkish people used the ***kafes*** in front of the houses windows that according to Kuban (1995), it was obviously the outcome of socio-religious demands. In fact, Kafes is movable element which it was **rectangular frame included the diagonal hollow narrow laths**. Kafes was covered the half of

the window with its **simple square shape** in addition to make the possibility for house residents to remove it from windows.

Façade Color

By investigation on survived houses that belong to the Ottoman period, it seems that the color were not the significant features in Cypriot houses. However, travelers from the period, spoke about the various colored houses in Istanbul which was the capital city for Ottoman Empire (Kuban, 1995).

According to Castellan (1811), Ottoman Turkish people used to paint their houses with bright colors which was mess up the common harmony of the street. The colors which used to paint for houses were **yellow**, **red**, **white** and **blue**. However, it was illegal to use of colors for Christian population and followers the other religious. Thereafter, during the last decades of the eighteenth century, some of the building had been painted with the new colors such as **pink, yellowish** and **olive green** (Kuban, 1995). Nevertheless, scholars did not mention the reliable information about the use of colors in the earlier century of this period.

Figure 34: Ottoman House in Istanbul with the Pink Color of Façade (URL15)

3.3.2.3 Building Materials and Techniques

Stone have been used for constructing the houses as the main material. Turkish masters were used the **yellow stone** at the ground floor and timber frame at the first floor. In fact, the stone masonry system has been used at the ground floor, and the timber frame at the first floor were used with 'Baghdadi' or 'Bağdadi' construction system which was plastering over the wooden lattices (Kuban, 1995; Atun and Pulhan, 2009; Mesda, 2011). In fact, they were made the timber frame at first, then fill it with the mud-brick, adobe or stone. In addition, wood carcass were used to bearing the cross side loads. The gaps between the timbers frame had been filled with the rubble. In addition, wood carcass was filled by the stone with the square form or mud-brick. People in the rural parts related to the living area –hills or plains- were changed the materials in this construction technique. In fact, people that lived in the hilly parts used the stone, and mud- bricks were used mostly at the plain parts (Kuban, 1995).

According to Kuban (1995), the characteristic of the Ottoman house's roof was its simplicity. The building masters were not developed the complicated roof forms however, they paid the high attention to the house plan. They were built the roofs with the large eaves to protect the walls as well as increase the roof stability. The roofs commonly supported with the walls by simply horizontal joists (Kuban, 1995). Cypriot people were used limestone (Village Marble) to cover their houses floor (Mesda, 2011; Atun and Pulhan, 2009). The roof of the hoses mostly covered by the thatch to provide the water tight layer for protecting the houses from rain.

The service area commonly constructed with the masonry system as a separated construction into the courtyard. The houses builder preferred to use of stone to construct the kitchen for protecting it from fire risk.

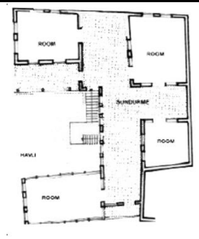
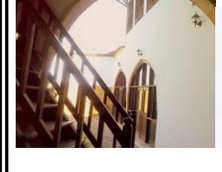
Figure 35: Baghdadi Construction System (Ahunbay, & Aksoy, 2005)
Figure 36: Timber Frame Filled With Adobe in Ottoman Houses (Kuban, 1995)

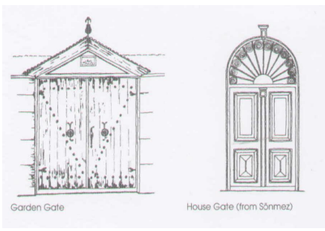
The service area commonly constructed with the masonry system as a separated construction into the courtyard. The houses builder preferred to use of stone to construct the kitchen for protecting it from fire risk.

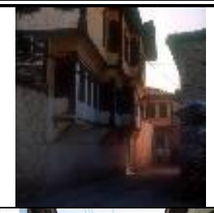
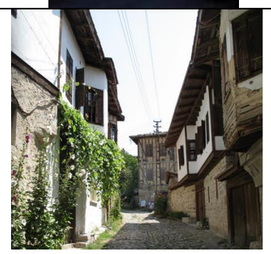
3.4 Summaries of Ottoman Period and Its Influences on Housing's Features

Ottoman Empire after conquest the Cyprus influenced the island construction with the wide transformation, whether by affecting on the houses layout or their facade features. In fact, Ottoman period by considering the Turkish lifestyle and Islam had been achieved to extend its attitude all over the Cyprus. Accordingly, the characteristics of the housings have been brought in the table below as a brief summary for the ottoman housings' features.

Table 2: Ottoman Period and Its Effects on Housing Features in Cyprus

Ottoman period 1571- 1878			
Layout Organization	Room	Rooms were designed around the sofa and based on house layout could be located around courtyard - Tetrahedron shape- No direct connection to each other	
	Hall (Sofa)	Located at the middle of the rooms with the raised platform at the sofa corners.	
	Veranda (Eyvan)	Designed as extension part of sofa	
	Entrance	*Seki alti* is the entrance area at the lower level of the floor where the door is located.	
	Service Area	Kitchen (mutfak), Granaries room, Bathroom (hamam), Laundry and Store room- as a separated unit at courtyard	
	Staircases	Located at the outer hall which was positioned in front of the sofa or located at the outside of the house from the courtyard or located in the inner sofa.	 

Ottoman period 1571- 1878			
Layout Organization	Courtyard (Hayat)	Located at the middle of house layout and surrounded by rooms	
Façade Characteristics	Door	Opened directly from the street or indirectly from the courtyard to the street with the rectangular frame and double leaf door and masonry topped in the some cases by the large eaves.	
	Windows	Room windows were smaller than the other house's windows- In some cases, they were used of two raw windows in their houses which the upper windows were smaller and decorative. Moreover, almost all of the windows are vertical with the proportion 1:2	
	Bay Window (Cumba)	Extension of the house toward the street as a room extension part of room of which generally have been built or covered by wood.	
	Color	Yellow, Red, White, Blue, Pink, Olive green	

	Ottoman period 1571- 1878		
Façade Characteristics	Horizontal Separation	Utilizing the horizontal elements or lines to separate the floors	
	Walls	Massive walls that inside of it included the niches and cupboards- Commonly inside plastered with the white plastering	
	Shutters	The developed form of lattice that was changed during the Ottoman period to be the shutter	
	Balcony	Wide balcony at the first floor	
	Overhanging Elements	cantilevering elements such as the brackets and the eaves and projections	
	Decorative Features	Geometric patterning - diagonal elements under the balcony with the narrow boards and circular or polygonal formation.	

3.5 British Colonial Period in Cyprus (1878-1960)

After approximately three centuries of Ottoman sovereignty, Cyprus experienced the new period of civilization in 1878. After the "War of Succession" in 1713, Britain had been worked on ascendancy the whole of Mediterranean mainland. She had been interested in the Mediterranean Sea, simultaneously with extension of her colonization. In fact, the longing of Britain for takeover the Cyprus -especially for commercial aims- related to the beginning of 18th century (Ucarl, 1978). However, on that time Britain was in trouble because of the French and Egypt which had been dominated on Dalmatian coast. Therefore, Britain to decreasing French dominance on the Mediterranean basin, burned down the French fleets at Abukir in 1798. Eventually, she had established the superiority over the Mediterranean. At the last decades of 19th century, Britain established the new political approach by emphasizing on the "temporary bases" to secure and grantee the routes of commercial ships that were coming from India and other countries which were been under the Britain colonization. Indeed, she used to settle the British people (most of them were Britain soldiers) in Mediterranean islands to actualize the "temporary bases". One of the significant islands for Britain was Cyprus, because of its particular strategic location.

In 1806, the Ottoman and Russia war was begun which made the proper opportunity for Britain to enhance her pressure on Ottoman Empire that was lost its power on that time. Indeed, Britain sent her armada to Istanbul in 1807. However, because of the some reasons Britain fleets forced to retreat from Dardanelles. Since Britain to reach her colonial states required to have strong dominance on the Mediterranean routes; hence she tried to examine the other directions. For instance, she started to

increase her impact on Egypt to control the Suez Canal (Ucarl, 1978). Finally, Britain achieved to dominate the Cyprus with intelligently political way, which was convinced the Ottoman Empire to donate the Cyprus dominance instead of military aids in the face of Russia threats. Thereafter, British ruled the Cyprus for nearly eight decades (1678-1960).

3.5.1 British Colonial Houses in Cyprus

Britain in Cyprus started her domination from 1878 with the aim of extending her economic objectives. Nevertheless, for showing her domination, Britain needed to promote her own political, economic and cultural criteria all over the island. One of the significant approaches that she used for achieving the aim was built the constructions -as a sign of her dominance- in Cyprus with the different usage and purpose. In fact, Britain shaped the Cyprus architectures in the large scale to build the appropriate construction related to her purpose. Indeed, during the period many buildings were built which some of them are remained until contemporary time.

British architectural period in the Cyprus has been divided by the several scholars in the two periods, early British (1878 to 1921) and late British (1921 to 1960) (Ozay, 2005; Hafizoglu, 2000). However, regardless of the separation, one of the importance point of the British colonial into the island were the several buildings that they left behind as their legacy. British brought the new construction materials and techniques to the Cyprus. In fact, the British period was the starting point for modernization in island.

During the early period, British focused on searching the Cyprus for establishing the mine and the other gainful sources. Therefore, in the early British, Ottoman construction material and technique were continued especially in the residential

buildings. Thereafter, their influences on houses were begun by changing on the facade features such as the windows form and additional ornamentations. British and Cypriot architects started to design the houses by mixing the British and Cypriot architectural styles in the late period (Hafizoglu, 2000).

Figure 37: Houses from Early British Period (Ozay, 2005)

They have been developed the architectural value in Cyprus by establishing the two major departments. The old construction was restoration under the Art and Antiquity

department supervision. The Art and Antiquity department was responsible for the revival the monumental architectures which were in danger of destruction. The second department was Public Works Departments (PWD) which was responsible for the construction of new buildings to build them proper for Cyprus architectural context. In fact, PWD designed and built the numerous architectures –spatially public buildings- during the late period (Schaar, et al, 1995).

During the early British period, the most of the attention was on built the administrative buildings. Indeed, there were limited numbers of houses which were built in the beginning. However, gradually they have begun to build the housing by combining the Cypriot traditional architectural style and the new technique and material that have been brought to the island (spatially after the world war at the late period). The first housing project was the Government House in Nicosia which was burned in 1931 during the rebellion (Given, 2005).

After the World War I, British tried to solve the accommodation problems for her officials in Cyprus. Therefore, only the limited houses have been provided merely for senior officials. However, the lower-level officials forced to rent the houses from Cypriot by self-responsibility. Thereafter, British government in Cyprus asked of PWD to design and build the numerous houses for satisfying her officials as well as solving the housing problem (Hafizoglu, 2000). Indeed, Gaffiero as an engineer and Gimson as a designer accepted the responsibility of developing the houses projects as well as other architectural development in 1920. They built the almost thirty houses in the island during the three years as an initial British colonial housing style in Cyprus (Schaar et al, 1995).

After the rebellion in 1931 which the two incipient housing construction were burned, Britain decided to build the new government houses for the second time. However, the significance point of government house at the second time was the combination of local and traditional architectural style with the British architectural style to build the appropriate houses for the British officials.

According to Tozan (2008), by increasing the British population (most of them were soldiers), the government decided to build low-cost houses to settle them in the least possible time. Therefore, the houses projects are divided to the two main categories in the period. The first category was the housing projects with the aim of providing the luxury houses for the governmental authorities, and the second category was the mass housing projects with the low-cost construction. Later, the British architectural style influenced the local private houses in Cyprus.

3.5.1.1 Layout Organization

As mentioned above, British mostly effected on construction technique. Indeed, the houses layout were not involved many alternations in the period. The Ottoman houses layout were commonly used for British houses construction in Cyprus. Likewise, in the Ottoman houses with the single storey, the hall door opened directly toward the street. In addition, rooms were designed around the sofa such as previous. However, houses layout in some parts of the island (such as the houses in Çamlik Road in Famagusta), consisted of some differences (Ozay, 2005). These differences were emerged in the houses because of the dichotomy usage of them which were used for the residential and official purposes at the time. Thereafter, by beginning the late period the houses layout were involved to the some changes that create the period characteristics on hoses plan.

The Entrance

Entrance of the houses were mostly defined with the porches which located under the bay window. However, the single storey houses that did not have the projection or bay window on top of the door the entrance door was opened directly to the street (Boğaç, 2005).

Floor and Ceiling

British has been used the **limestone for covering** the houses floors. They have been used the **colored stone** with the **geometric pattern** spatially in the sofa and the inner of the houses entrance. The room's floor commonly were covered with the **wooden layer**. The house's ceiling were constructed with the timber structure with the **timber panel on the surface** for covering the exposed beams (Ozay, 2005).

Figure 38 & Figure 39: House's Floor Covering in Larnaca (Changed to the Hostel at the Current Time)

3.5.1.2 Façade Characteristics

British have built many buildings which consisted of similarity with the Cypriot construction characteristics. However, they did not construct the administrative buildings with the regional characteristics of the previous period of Cyprus except of **window shutters** and stone use which, stone was used for durable, fortified and affordable.

The Walls

The walls were commonly built with the sandstone behind the mud-brick. Stone as the basement of the British construction widely used to construct the exterior walls. Load bearing walls were built with the mud brick, stone or both of them. In addition, the rubble used as the walls foundation. The thickness of the load bearing walls were variable between the 40 to 50 centimeters, and the foundation part of the walls were constructed with the variable thickness between the 75 to 90 centimeters (Hafizoglu, 2000). The **inner face of the walls were plastered with white washed**. However, **bond stone at the corners** were left freely **without any plastering**.

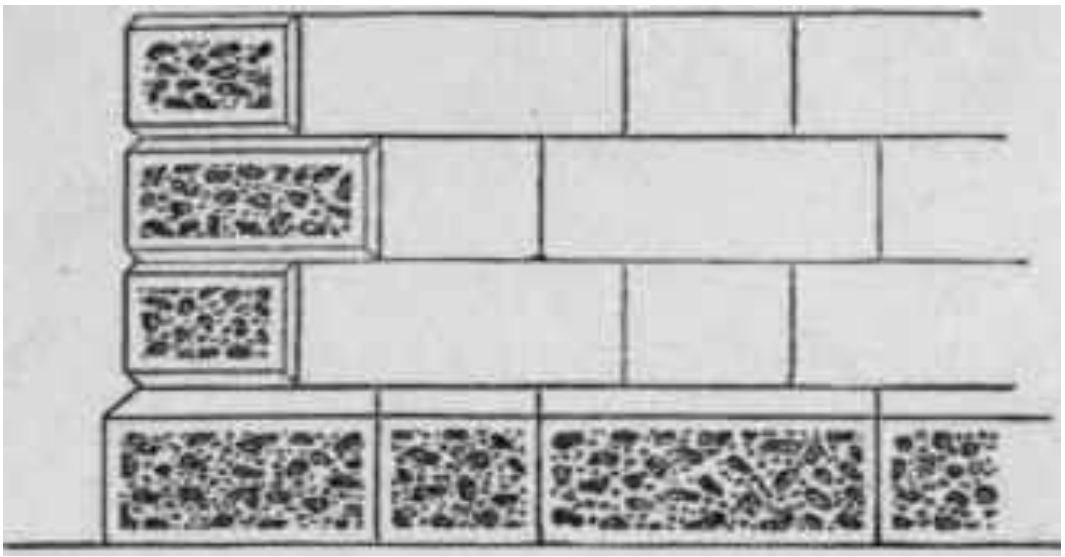


Figure 40: Exposed Bond Stone at the Corner

Figure 41: Exposed Bond Stone at the Corner

Entrance and Door

Door frame -spatially- in the early period commonly designed with **round arched or rectangular form**. Stone was used at the upper side of doorway frame like the door surrounding. They were used the **Doric columns** in two sides of doors for supporting the arch as well as a decorative feature (Ozay, 2005). The significant characteristic of the door form in the period was used of **keystone at the center of the top side of the door**. The **keystone** was designed with the **symbols**, **figures** or **diamond** as the door frame ornamentations. In addition, keystone as an ornament features used in the rectangular doorframe like the arch type.

Figure 42: Entrance Door of Single Storey House (Walled-City, Famagusta)

In the late of period, **iron** and **glass** work were appeared in the entrance door that manifest the message of the new period for Cyprus architectural style. The entrance doors with the two or one leaf were made of iron with the glass part. The glass part of the door generally had the iron wrought at the outside of the door (Ozay, 2005).

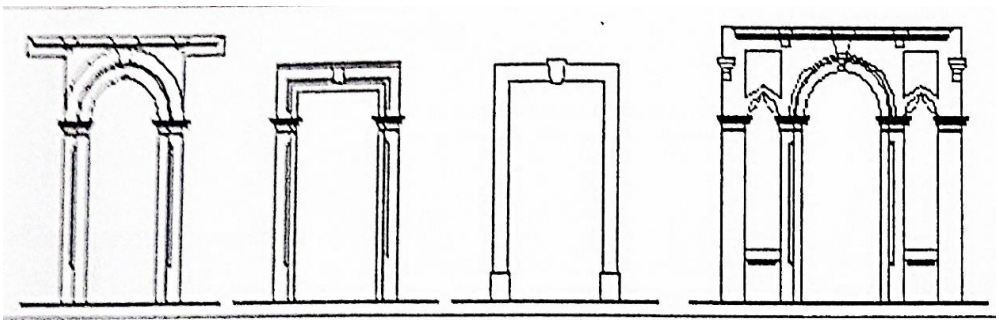


Figure 43: Various Types of the Door Frame (Ozay, 2005)


Figure 44 & Figure 45: House's Entrance Door without the Cumba at the Upper Floor (Walled-City, Famagusta)

Thereafter, iron was mostly used for producing the door, balustrades, shutters and roofs.

Windows

Windows are designed similar to the door frame with the **stone surrounding**. Regardless of the top side of the door frame -that have been designed with the arch type or rectangular form- windows were generally designed with the **rectangular stone frame.** In addition, they have been used of **keystone**, **hollow triangle** or **simple form** for upper side of the windows. In some cases, the vertical **rectangular frame of windows continued to the floor level or to the ground** (Ozay, 2005).

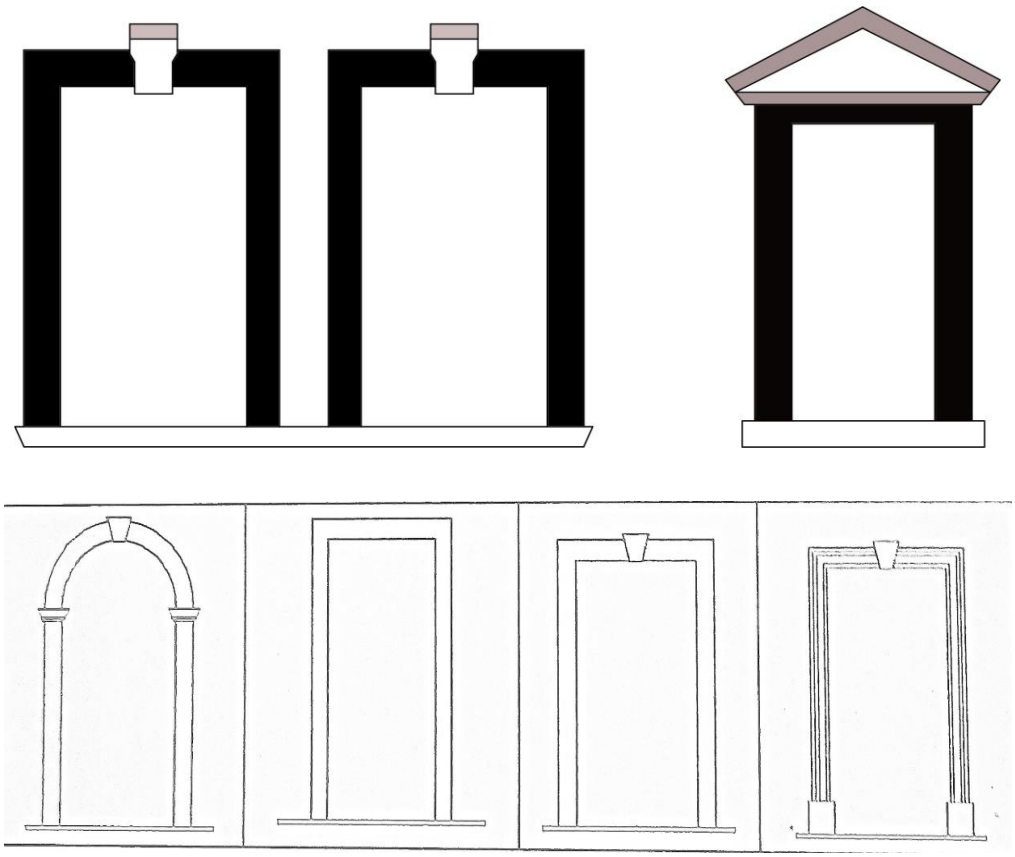


Figure 46 & Figure 47: Three Different Types of the Windows Frame (Ozay, 2005)

Windows Shutters

The shutters were applied in front of the windows such as the previous period. However, the only difference was the proportion of them that related to the windows dimensions, the **shutters** were getting **taller** and **widened** than before.

Figure 48: Vertical Windows With Timber Shutters (Walled-City, Famagusta)

Façade Decorative Features

At the corner of houses facade, they were used of **Doric columns** in addition to **pilasters or rustications** style. The **dentils cornice** has been used as decorative features under the ceiling eaves and **wide balcony** as well as **entablature**.

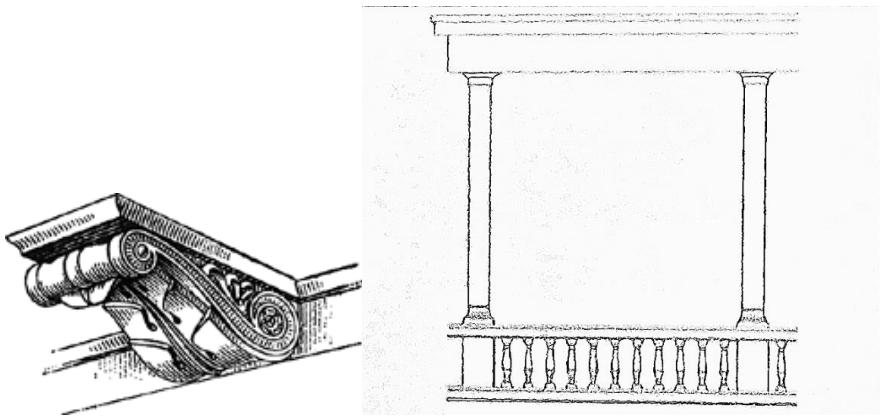


Figure 49: Dentil Cornice and Doric Columns

Figure 50: Dentil Cornice and Doric Columns (Walled-City, Nicosia)

Meanwhile, the **ironworks** as the faced ornaments were widely applied at the facade elements. The **balustrades** were selected and applied to the proper location by attention to the entrance door type.

Façade Color

The color of the facade were related to the materials were **brown**, **white**, **yellow** or **gray**. However, the **yellowish** was the most popular color for the houses especially at the late period (Schaar, et al. 1995).

Figure 51: Yellow Stone Use in Late British Period House (Ozay, 2005)

Figure 52: House's Façade from British Colonial Period (Walled-City, Nicosia)

3.5.1.3 Building Materials and Techniques

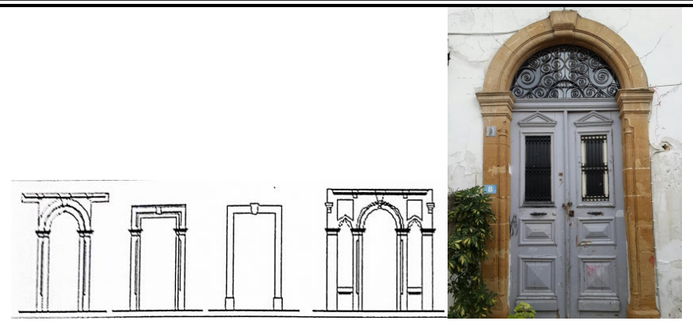
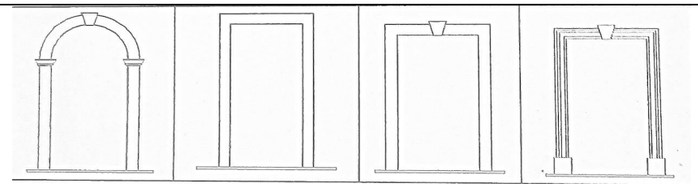
British as a one of the pioneer countries for industrialization after the industrial revolution brought the new construction techniques in the island (Cap, 1935). British chose the **stone** as the main construction material because it was an abundance in the island as well as economically affordable. In addition, the use of

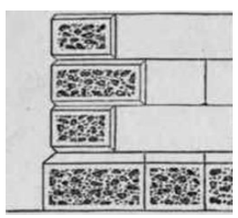
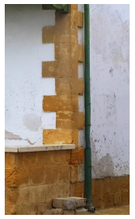
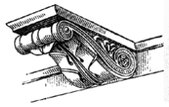
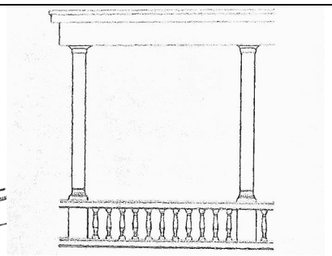
stone for constructing the buildings was easy and fast as well as durable, fortified and appropriate to observe the impressive appearance for major government buildings. Thereafter, British by combining the **concrete** and **sandstone** began to build the buildings by the new construction technique and material. Since the concrete was spread as a new and ease material for constructing the buildings, gradually the stone role was decreasing in the late period and subsequently to the contemporary time concrete has been reached the highest level of use. Indeed, during the late period stone lost its importance in construction technique but still it was used as a decorative feature. Since, the concrete and other new materials had been begun to make the new building characteristics.

3.6 Summaries of British Colonial Housing's Features

Accordingly, houses that built in the period were utilized the British colonial architectural characteristics. However, the layout of the residential buildings were mostly similar to the Ottoman period houses' plan. In fact, British achieved to change the some features that was resulted of the new technique as well as new materials that brought to the island after the World War I. in the table… below have been attempted to summarize of utilized housing features in British period through the Cyprus.

Table 3: British Colonia Period and Its Effects on Housing Features in Cyprus

British Colonial 1878- 1959			
Layout organization	Room	Rooms were designed around the sofa	
	Hall (sofa)	Commonly located at the middle of the rooms	
	Veranda	Designed as extension part of sofa	
	Service area	Such as the separated unit at courtyard	
	Entrance	Defined with the porches, opened directly toward the sofa	
	Terraces	Large terraces at the ground floor	
Façade characteristics	Door	Round arched or rectangular form for the entrance door, Keystone at the center of the top side of the door, Iron and Glass work were appeared in the entrance door	
	Windows	Rectangular stone frame- Keystone, Hollow triangle or Simple form for upper side Rectangular frame of windows in some cases continued to the floor level or to the ground	
	Color	Gray, White, Yellow	

British Colonial 1878- 1959			
Façade characteristics	Walls	Inner face of the walls were plastered with white washed sandstone Bond stone at the corners were left exposed without any plastering	  
	Balcony	Wide balconies in some cases designed at corners of building	
	Decorative features	Shutters- Doric columns- Dentils cornice- Entablature for columns Keystone designed with the symbols, figures or diamond.	 
Materials	Construction materials	Stone- Sandstone- Timber- Concrete	 
	Floor	Limestone or colored stones with geometric pattern for covering	
	Ceiling	Wooden layer or timber panel	

3.7 Symbolic Characteristics of Traditional Housing Features

According to the symbol explanation and particularly symbolic architectural features that have been discussed through the second chapter of the thesis could argue that by passing the time, some of the traditional housing features are lost their exact functions. In fact, most of the traditional features that had been used functionally in two recants periods of Cyprus (Ottoman and British periods) are used mostly as a Cypriot people taste. In simple words, the traditional features are utilized in the local people houses symbolically as part of their culture to make the bond between the inhabitants and their houses. For instance, keystone is the trapezoid shaped stone which had been placed at the final construction level of arches to lock the other stones into their positions that was used in the traditional houses, however, in the contemporary houses façade it is only used in symbolic form. An Arch is mostly used for caring the roof weight with greater span that in traditional houses commonly had been used in front of the veranda as a decorative features however this element is mostly used at the upper floors' balconies and top of the entrance door in contemporary houses façade (figure 41). Horizontal elements which were mostly appeared in the Cyprus traditional houses because of the construction methods that was used for constructing their houses. The horizontal separator elements are used in most of the multi-storey residential building to divide the floors at the facade surface by using the distinguished color or material (figure 42).

Figure 53: Contemporary Use of Arch in Cyprus Houses

Figure 54: Horizontal Separators

Other feature is brackets –as mentioned above- which were used under the balconies and overhanging elements to carry the weight or as a decorative features that in the contemporary architecture translated to the new form and only have been

used in symbolic form (figure 43). Cumba or bay window is the protruded part of the façade which was built to being the veil for the women who want to visit the outdoor without being seen that in contemporary houses is used by designing the protruded frame all around the balcony which is symbolically inspire the traditional form of Cumba. Moreover, the entrance columns which had been used functionally are used in the contemporary houses mostly as decorative feature.

Figure 55: Symbolic Use of Brackets in Contemporary House (Famagusta)

Wide balconies are the common traditional feature which are used in contemporary houses unnecessarily specially in apartments and residential complexes that limitation of usable area for the houses is substantial point (figure 44).

Figure 56: Wide Balconies in Front of the Contemporary Residential Building (Famagusta)

In addition, Because of the constriction technique and the usage materials in traditional houses, Windows were designed in vertical form and proportion 1:2 and in some cases -spatially in British period- they were continued to the floor level which are applied in contemporary houses only in symbolic form. For instance, in the some cases it is applied by connecting the two or more windows to each other by using the different color or protruded frame.

In addition, in the most of contemporary houses in Cyprus overhanging elements are applied through the balconies or decorative façade elements that have been inspired the overhanging elements which were used in traditional houses façade. By attention to the beginning section of the chapter, these symbolic use of traditional housing features in contemporary houses are led to build the proper home for the local residents.

Chapter 4

EVALUATION OF SYMBOLIC USE OF TRADITIONAL ARCHITECTURAL FEATURES IN MASS HOUSING FACADE

4.1 Public Housing, Social Housing and Mass Housing

The initial history point of mass housing come from the industrial revolution that have been happened in earliest 18th century, when the earliest industrial companies established. Therefore, many of people leaved their towns and villages and immigrated in industrial cities for working at these companies and factories. For this reason, the population of cities began to increase and the population of rural decreasing from approximately 90 percent to less than 10 percent after industrialization (Pitts, 2004). The new arrivals family certainly solved the workforce, on the other hand, they were created the problem that was lack of proper place for their living. Probably the first idea about mass housing was came from companies owner's for accommodates their workers and their families. The first solution to settle the workers and their family was the initial type of apartment, which was built completely different with the existed houses before industrial revolution. Thereafter, this type of housing that was built by governmental budget to accommodate the low-income people in social class as a social housing (Deilmann et al, 1982; Pitts, 2004).

During and after the industrial revolution the population of cities were increased as a result the rate of the construction rapidly increased to response the house

requirements of the immigrants. Most of the buildings, which built in this period, were very poor in construction level with the unsuitable conditions (Towers, 2005). As a result, this housing type created the dissatisfaction for its users because of the poor construction, bad condition and inattention to inhabitants' characteristics and their life style.

The World War I (1914-1918) and World War II (1939- 1945) were the critical point for housing field. These two unfortunate disasters make the great arena for the architects and the countries governments to find the best solution for accommodate the numerous people who were lost their houses during these world wars. The United Kingdom as a one of the countries that had suffered great damages immediately looked for the architects who have the best idea to solve the housing problem. In this regard, one of the architect claimed the high-rise building could be the solution to respond the numerous homeless who needs the place for living at the time (Serageldin, 1988).

Fiscal issues and the creation of the new social category in society -such as middle classes that frequently magnified at the almost 1950s-resulted to the beginning of an arena where some houses required to be reconstructed. The houses constructions' diversity prepares an opportunity for people to own a house entirely rather than using shared spaces with other social groups (Mallett, 2004).

Scholars frequently argues that the 1950 to 1960 was the heyday decade for social housing when it managed as a useful planned to create the great volumes of housing for achieving the solution of acute housing requirements (Priemus & Dieleman,

1999). Thereafter, social housing or public housing (American term) became as specific category of housing.

In the architectural area, housing is defined the umbrella term, contains of several idea which “Social Housing” and “Public Housing” have been exposed to discussion among the many researchers (Wassenberg, 2004; Clapham, 2005; Mullins & Rhodes, 2007; Mee, 2007) as the prevalent idea which expressed in the literature. In fact, social housings are those houses projects that have been established by official organizations for this group of people such as homeless, poor, drug addicts, and palsy who have economics problems.

In fact, Mass housing as a spatial category of housing is constructed to make the proper respond of housing requirements for the social class of society. Mass housing as a well solution to the growing population that is, create the standardized product to settle the people. Therefore, mass housing at current time include the numerous kinds of housing such as the villa type, private houses, apartments and residential complex buildings in addition to the other form of housing that mentioned above. In this respect, mass housing defined as an intelligently response to the people from different social class who needs the place for living. As a result, at the modern period, mass housing residents are from all levels of social class as poor people to the well-off class of society.

4.2 Mass Housing History in North Cyprus

The initial history of mass housing in Cyprus is resulted by the various transformation such as the political, societal, economical, and technological during the late of the nineteenth century. During the British Colonial period in Cyprus, and

after World War II parallel with the industrialization, important economic transform appeared which resulted to change the island agricultural economic base to commercial transformation (Atun and Pulhan, 2009). The longing of the rural people to live and work in the big towns through the Cyprus make the necessity to build the large number of houses. The early background of the social mass housing is relevant to the social transition period among the Ottoman and British colonial dominance in Cyprus (Pulhan & Orcunoglu, 2005). The initial development of mass housing was designed by the European planning in the ottoman period to immigrate the low income families (Numan, 2000). Thereafter, in the British period –as mentioned above- to settle the government officials as well as low-income and workers' families after World War I who immigrated to the towns from rural parts. Later, housing in the term of mass housing were constructed for preparing the living place for numerous refugees who lost their houses during the civil war. The civil war happened in 1963 between the Greek and Turkish inhabitants of Cyprus. Since, numerous social housings have been built under the government responsibility, and limited cooperative companies to accommodate the Turkish people who required the houses immediately. The initial mass housing projects were constructed in the major cities such as the Nicosia and Famagusta in northern Cyprus after the Cyprus dispute (Gazioglu, 1996). Numbers of multi-storey houses -in the term of social housing- had been built in Nicosia from 1986 to 1993. These houses' blocks were built to provide the 1500 units for settling the middle income governmental officers. These row type of houses' blocks were the prototype of the social houses which were built by the government of Turkish Republic of North Cyprus in North Cyprus (Mokhtarshahi, 2011). Thereafter, government of North Cyprus tried to build the social housings in other major cities such as Famagusta city.

In the recent decades, mass housing projects mostly have been constructed by the cooperative companies all over the Northern Cyprus for both of the local and foreign people. Cyprus as the unique island is the appropriate place for companies to extend their activity. Therefore, the mass housing projects have been developed rapidly (particularly in the major cities) all over Northern Cyprus.

4.3 Evaluation of Symbolic Use of Traditional Architectural Features in Mass Housing Façade

According to the numerous companies which have developed the mass housing projects in Cyprus, in this part tried to survey and investigate on the houses features in contemporary settlements. However, by attention to the aim of this study mostly focused on facade symbolic features to learn the similarity between the houses from latest periods and the contemporary houses. Therefore, to reached the thesis objections, 35 tables have been prepared which are randomly selected the mass housing projects all over the north Cyprus.

The most common architectural characteristics during the Ottoman and British periods have been compared with the contemporary houses which selected from mass housing projects in different towns and cities all over the Northern Cyprus. To achieve the aim, by utilizing the tables that have been found in the third chapter about the houses features in the two latest periods have been tried to examine the findings in contemporary houses facade.

The reason behind the choosing various companies which have been selected in the tables is to learn the utilized features that used with different architects' and designers' ideas in North Cyprus. Therefore, 35 houses information with elevation

photo, layout, and site layout have been brought from ten mass housing construction companies in Appendix. In the inventory tables (Appendix), have been found the exact similarities as well as contemporary use of Cypriot traditional houses symbolic features in the houses' facades and layouts. Northernland Architectural Design and Construction Company, Kavanlar İnşaat Ltd, Levent Homes Ltd, Sevilla construction, Dovec construction, Erbatu Construction, Unity group Ltd, Umay construction, Royal Palm and Halken Construction & Estate Co. Ltd are the ten selected companies which have developed the mass housing settlements in Nicosia, Girne, Famagusta, Lefke, Guzelyurt and some other towns near the major cities in North Cyprus.

The findings of the physical observation are based on sixteen façade features which have been described in table 4 in following section. In fact, by attention to the common traditional features that have been discovered in chapter three has been tried to evaluate the rate of using the features in contemporary mass houses' façades. Arch, horizontal elements, protruded window, windows frame, shutter, overhanging elements, keystone, door shape (entrance), wall, brackets, balcony, terrace, windows form and proportion, cumba, dentil and cornice, and column are the main keywords in these tables.

4.4 Findings and Results

Based on observational and field studies results, housing traditional features which have been used in the contemporary façade of houses (exact similarities or contemporary interpretation), are given the charts below. The features which evaluated in the following charts are described briefly in the following table (Table 4).

Table 4: Description of Housing Traditional Features

Traditional buildings feature	Specifications
Arch	The arches have been used as decorative features at entrance or in front of the balconies or under the eaves
Horizontal elements	The horizontal elements have been used as decorative features mostly to divide the ground floor from upper floors or in some cases to indicate the floors from each other in the façade of the buildings
Protruded window	Windows which protruded from façade surface
Windows frame	Utilizing the frame around the windows which mostly made of stone or in some cases indicated with different color
Shutter	Shutter have been commonly used with the two leafs door in front of the windows

Traditional buildings feature	Specifications
Overhanging elements	protruded parts of façade such as the bay window, eaves, etcetera
Keystone	Keystone is the common traditional features that have been utilized in the center of top side the window and door frame
Door shape (entrance)	Rectangular frame and double leafs door with the glass part and large eave at the top of the door
wall	The massive stone wall at the ground floor or around the house yard
Brackets	Decorative brackets utilized under the balconies or eaves
Balcony	Utilizing of balconies in most of the floors
Terrace	The part of the ground floor that is positioned above ground level
Windows form and proportion	The vertical windows which are used with (approximately) proportion 1:2
Cumba	The protruded room at the top side of entrance
Dentil and cornice	Have been used as the decorative features under the eaves
Column	Doric columns that have been used around the building and even in front of the balconies, terraces and entrance

4.4.1 Findings about Contemporary Villas

Accordingly, by comparing the features' that found in table above (table 39) with the selected residential buildings in mass housing projects the following charts have been obtained. The similarities between façade features of traditional and contemporary houses are evaluated in following charts.

Chart 1: Use of Traditional Housing Features in Contemporary Villas

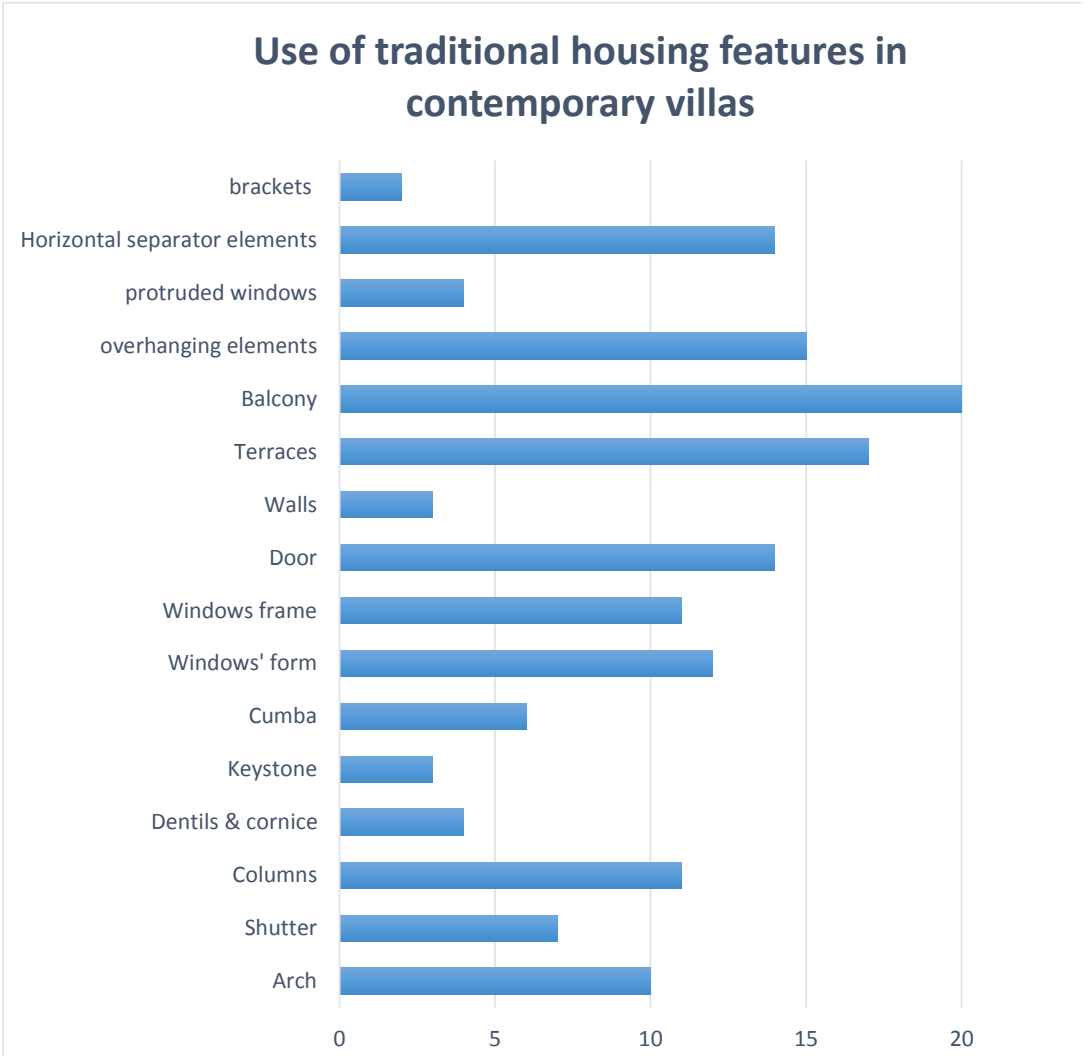


Chart 1 is relevant to the use of traditional housing features in contemporary villas. in this chart have been attempted to observe the housing features value specifically in the villas as one of the mass housing's categories. According to the chart 1 all of the Cypriot traditional housing features are stated in table 39. However, it could be difficult to find the all of them together in one villa. Nevertheless, the significant point is utilizing rate of them in the contemporary houses. As a result, fewer rate of usage is relevant to eaves brackets in this category of mass housing. Instead, door shape, horizontal separator elements, balcony, terrace, overhanging elements, and vertical windows (approximately with the proportion 1:2) are the most popular

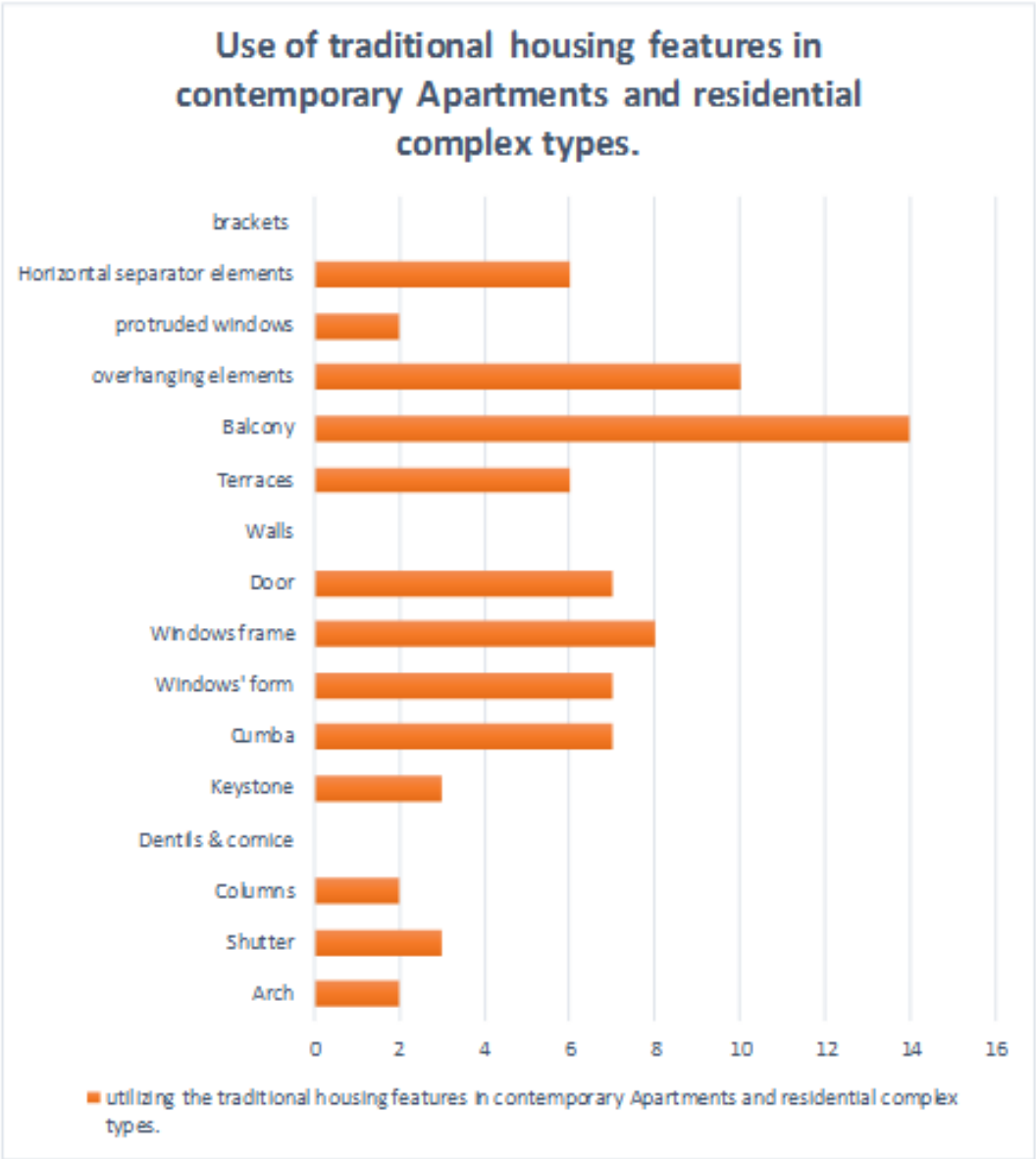
features in villas. Moreover, arches as the decorative features approximately have been used in half of the selected cases.

4.4.2 Findings about Apartments and Residential Complex

In this chart (chart 2) it is observed the most used features in the apartments and residential complex. Accordingly, construction companies tend to apply the balcony in the apartments more than other features. Overhanging elements are positioned at the second level of importance before the windows protruded frame. However, some of the housing features have not used such as the other characteristics. For instance, Dentil and cornice, eave's brackets, and traditional shape of ground floor walls have not found in the selected apartments. Windows' form and proportion, *cumba*, horizontal separator elements, and terraces were observed in the less than half of the apartments and residential complexes. Finally, some of the housing traditional features such as keystone, arch, window shutters, columns, and protruded windows are positioned at the lower level of usage in the apartments and residential complexes façade.

Moreover, to make the strong community and relationship from indoor space to the outdoor, dimensions of the windows in some cases are changed which are transformed to the door without balconies as it was applied in traditional architecture of Cyprus (Pulhan, and Numan, 2005).

Chart 2: Use of Traditional Housing Features in Contemporary Apartments and Residential Complex Types.

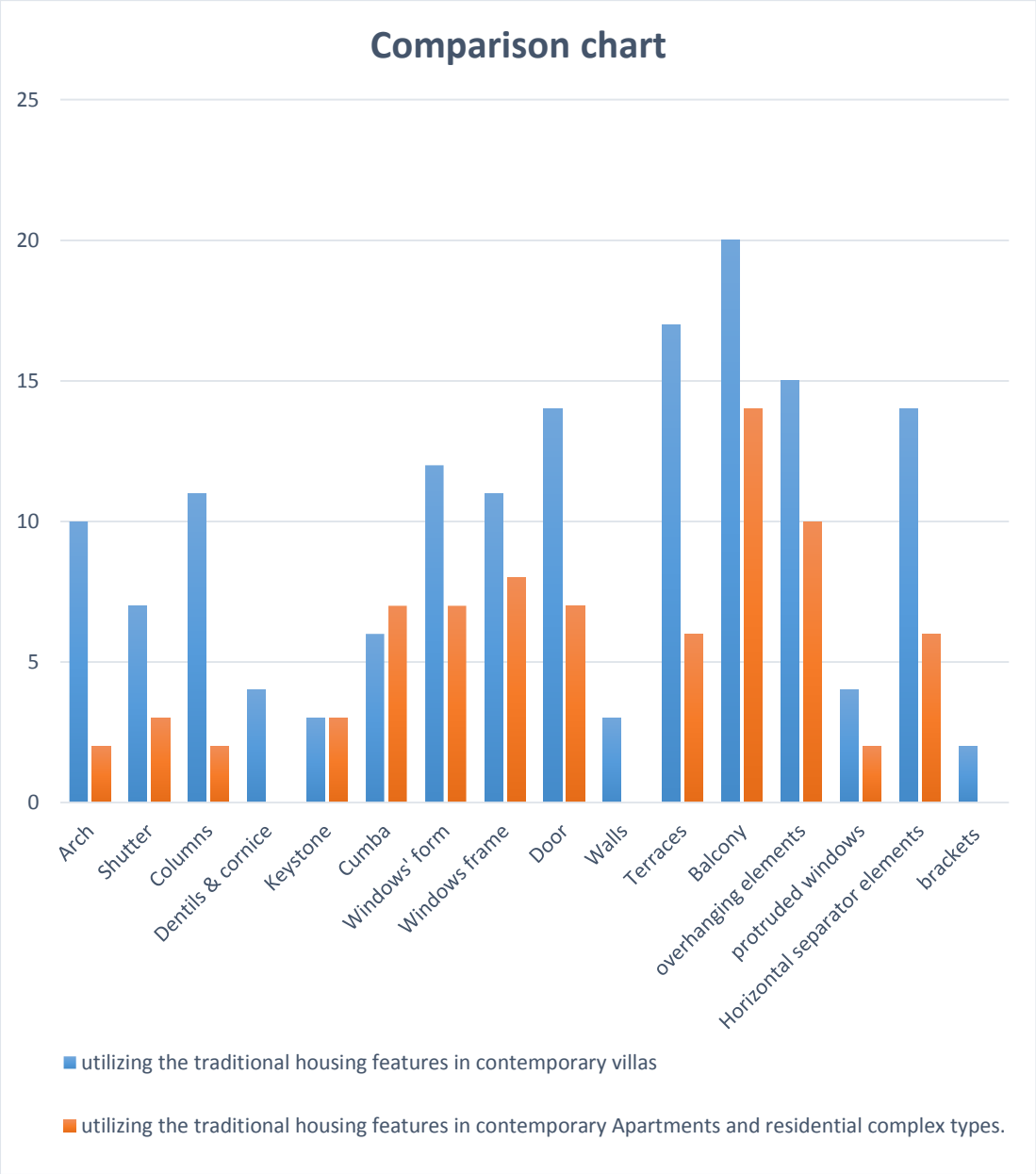


4.4.3 Findings about Contemporary Mass Housing's

According to the declared traditional features in the tables above, it could be claimed that balcony and overhanging elements are used more than other features in all types of mass housings through the Cyprus. However, the most of differences between the apartment and villa type in terms of the traditional Cypriot housing characteristics are related to the traditional form of the ground floor walls in addition to the columns, shutter, cornice and arch. In fact, these features have been used in villas

more than apartments. Therefore, rate of traditional features have been changed in mass houses by attention to the type of housing. In the chart 3 it is attempted to observe the differences measure between the selected villas and apartments according to the using rate of Cypriot traditional housing features.

Chart 3: Comparison Chart between Villa Type and Apartment Type of Houses



4.4.4 Total Rate of Utilizing the Traditional Housing Features in Contemporary Residential Buildings

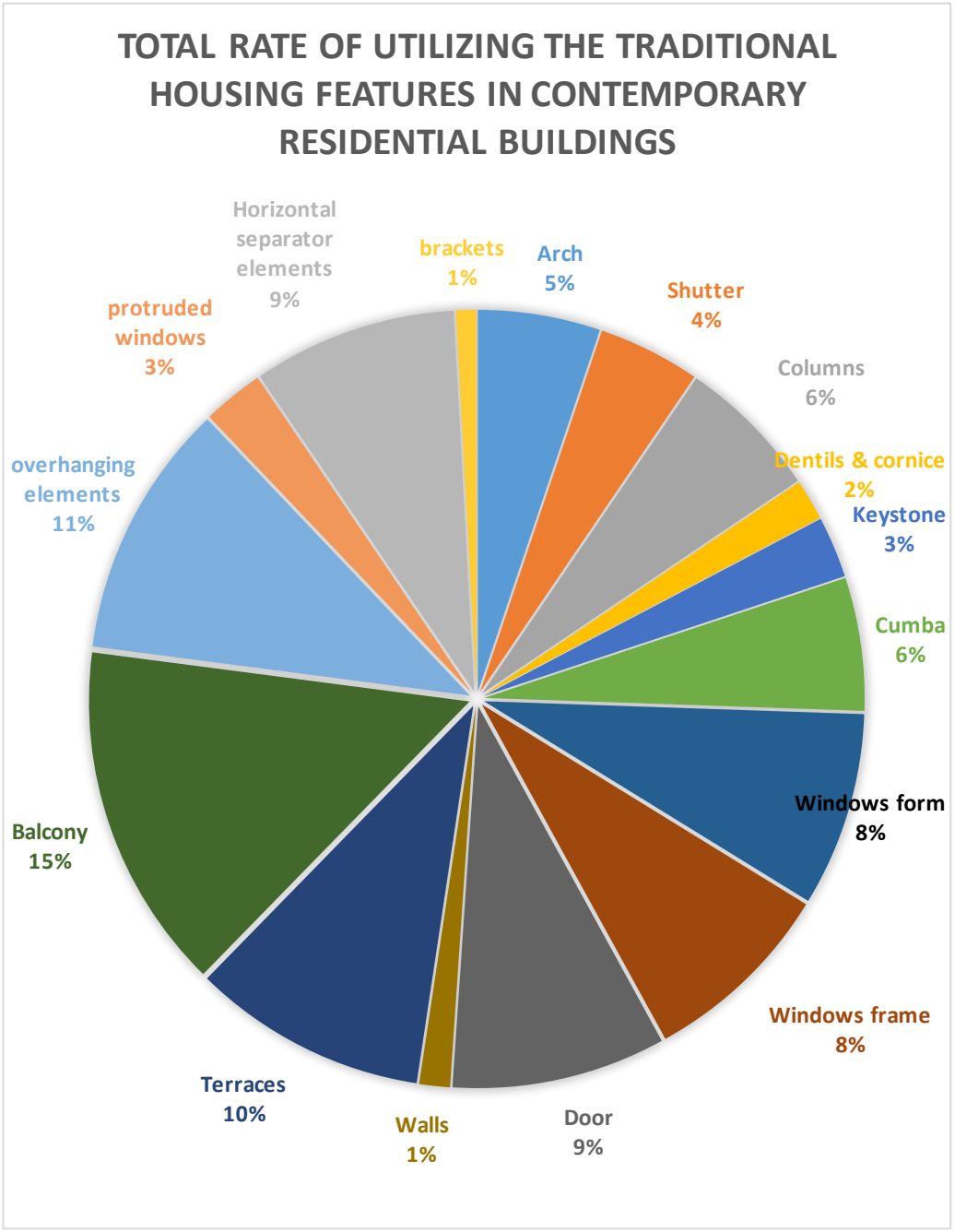
During the surveyed mass houses which have randomly selected from all over the North Cyprus, chart 4 has been obtained. In fact, chart 4 observed the rate of the traditional housing features that have been used in the contemporary houses facade. As a result, balcony (15 percent) and overhanging elements (11 percent) are inseparable and significant features whether in layout or facade of the building which are the most popular features in the contemporary houses. In fact, balconies are used in most of the cases that commonly protruded from façade surface to demonstrate the overhanging elements. However, in some cases –particularly in villas type of mass housing- balconies are designed at the same level with the façade surface that caused to differ in the usage percentage of these two features. Terraces (12 percent), door shape and horizontal separator elements (both of them are 9 percent), Windows form and proportion like the windows frame percentage (8 percent), and cumba such as the column percentage (6 percent) are standing respectively in lower level of popularity than balconies and overhanging elements. According to achieved percentage for terraces usage could argue that balcony and terrace are approximately positioned at the same level of popularity in the contemporary mass housing usage. Nevertheless, the reason that terrace is placed in the lower level than the balcony might cause of the type investigated mass housings which terrace is generally applicable in the villa type.

According to the obtained results which have observed in below pie chart, arches (5 percent), shutter (4 percent), keystone (3 percent) and protruded windows (3 percent) have been used in the investigated cases approximately between 5 to 3 percent of usage. In the other hand, walls with the traditional shape (or even in new symbolic

interpretation) such as the brackets, dentil and cornice are the fewer features that used in the new facade with approximately under the 2 percent of usage.

However, the housing features' quantity in housings' facade are depend on the type of housing –apartments or villas- were different in relation with the facade capacity to utilize them. For instance, through the 35 cases that selected for observing the usage rate, 'walls' with the traditional form -which have been used in previous Cypriot houses- dose not have proper quality to use in apartment type. Therefore, only one percent of total investigated mass housings are utilized the high walls at the ground floor as a Cypriot housing traditional feature.

Chart 4: Total Rate of Utilizing the Traditional Housing Features in Contemporary Residential Buildings



4.5 Evaluation of Interviews' Results

The open discussion interview with the ten academicians and company designers in this chapter prepared the chance for learning about their opinions parallel to the study observation. This interview which is consisted of nine general questions that 4 questions asked of academicians and 5 other questions asked of companies' designers which are led the discussions to take the competent results. The academicians who participated in the interview are from architecture departments of Eastern Mediterranean University. However, to learn the results from various point of views, interviewed academicians have been selected from different architecture subfields which are the interior design, urban design and architecture science.

4.5.1 Evaluation of Interviews with the Expertise:

Question 1. Which kind of architectural style do you prefer to use in your design? Why?

In response to the first question, most of the designers emphasized on a modern style. They have commonly believed that the people in the modern world for their daily activities need to live in houses with the modern style. Therefore, they have to design the houses without the appropriate attention to the inhabitants' culture as well as traditional architectural housing features. They have argued the longing of customers to buy the houses with modern style led them to omit the traditional features in their design. Indeed, during the interview they were directly or indirectly mentioned that they have a strong tendency to design the residential settlements without any features or elements similar to the previous Cypriot houses characteristics.

Question 2. What are the housing features that related to Cypriot traditional architectures have been used in your houses design?

Second question of the interview is completely related to the Cypriot houses traditional features. Interviewed designers have been answered balcony and traces are frequently used in their design, which are observed in houses facade. However, they do not have the opportunity to use of the Cypriot layout characteristics in the contemporary house because of the limitation in houses plan area specifically in apartment types of housing. Indeed, they merely have the chance to exhibit the limited Cypriot features on facade section. Moreover, some of the designers are claiming that these features are not only belong to the traditional Cypriot houses by mentioning to the wide balconies and entrance columns. In the other hand, one of the designers argued, merely in some cases that costumers demanded the house with the spatial elements and features they would design the house with the aim of satisfying the costumer.

Question 3. How is the public tendency (what do you think about the Cypriot people housing taste in selecting houses to live in)?

The concept of the third question is in the opposite point of view with the first question. However, the answer of this question has led the interview to obtain the exact result for the study purpose. Therefore, by attention to the designers opinion the Cypriot are tend to have houses with the modern style and wide glazing area. In addition, most of the Cypriot have high attention on houses layout that prove this point they are seriously looking for the houses which provide their cultural and their lifestyle requirements. However, designers believed that today's needs are mostly

distinctive with all previous requirements of people. Therefore, designers do not have any necessity to use of houses traditional features in the contemporary houses.

Question 4. What are the differences between the individual houses design and mass houses design?

Question four have been made time for thinking freely about the house and the specific features that only could use in the private house. In fact, designing the private house does not have too many limitation such as mass housing projects that certainly created the various limitation for designers. They frequently responded question by recognizing the numerous differences between the private houses and mass houses. As the result, they were argued that due to the client tastes and expectations they have the chance to change and develop their design at the design stage or even during the constructing process. Vice versa, for designing the mass housings they do not have the opportunity to be informed about the customer's ideas. Indeed, architects and designers do not have any other choice except of trust their previous experiences that they obtained during the numerous individual houses which they designed before. In fact, number of private houses, which designed by the designer before starting the mass housing project is the significant and determinant factor for reaching the success.

Question 5. If you have the chance to design the Cypriot houses without any limitation, what are the Cypriot housing elements and features that you prefer to use?

The last question's answer greatly determined the recognition and knowledge of company's designers about the Cypriot houses' features and specifications.

However, during the interview they did not give the clear responds to the question. They were mentioned to the some features such as the wide room that were not exclusively related to the Cypriot houses.

4.5.2 Evaluation of Academicians Interview Results:

Question 1. In your opinion, what are the necessity for designing the houses by attention to the region that houses have been built?

According to the first question most of the interviewed academicians claimed that the considering for the region climatic issue, environmental characteristics and local identity influence the building design. However, to achieve the appropriate housing design it is necessary to have deep investigation on human factors and local characteristics of the region, before starting the design. In fact, inattention to the local people's life style and their culture during the design process or even in the construction stage certainly led the design in the wrong direction that subsequently would create the discontent for building's residents. Indeed, to reach the successful housing design it is necessary to have surveying on various effectiveness factors of region.

Question 2. What are the Cypriot housing architectural features that have been used in Cyprus contemporary houses?

The second question particularly related to the Cypriot traditional houses features. The academicians who participated in interview noted the some Cypriot traditional features and elements that frequently used in contemporary houses all over the Cyprus. Wide balconies, terraces, veranda, entrance sofa, windows shutter and shading elements are the significant features which were commonly repeated during

their interview. However, according to their architectural subfield and their birth place, the housing features that they named were different. For instance, one of them that was not from Cyprus and even not Turkish mentioned the more features because in his opinion these features are not used in the houses of other countries such as Iran (interviewee's birth place).

Question 3. What are the strengths and weaknesses of contemporary houses which have been built all over the Cyprus?

By attention to the general information about the subject of study that, they answered the third question related to their subfield. In their opinion, the contemporary architectural layout for residential buildings in Cyprus, is close to the modern architectural style of some European countries. There are a few characteristics in these residential buildings that they are belonged to the Cypriot architecture. That is why even some of these residential buildings cannot respond the residents' fundamental demands. In fact, architects only have the limited area to construct the buildings, therefore they forced to ignore many elements that have been used in traditional houses. For instance, the courtyard is one of the houses' features that completely crossed out in contemporary houses. In addition, these buildings do not have the strong relation with the Cypriot cultures and their life style, specifically in apartments' type.

Question 4. What are your architectural suggestions for designing the mass houses related with Cypriot life style and culture?

The concept of the last question is generally similar to the first question. However, fourth question is specifically related to the mass housing settlements through the Cyprus. They believed, mass housing should design and build by attention to the Cypriot cultural features. In fact, the successful architectural housing design could be achieved by considering and integrating the contemporary needs and cultural requirements in the mass houses. However, it does not mean to use the traditional features extensively.

4.6 Evaluation of Local People Tendency for Choosing the House

This is an evaluation to understand what people prefer to have as housing unit.in order to figure out their preferences, three different images from housing units were selected. According to the three following printed houses figures that exhibited for 68 Cypriot people, various results have obtained in the chart below. Houses are selected by attention to the rate of Cypriot traditional housing features which have been used in the contemporary houses façade.

Figure 57: First House's Figure in Addition to Its 3D Layout (Kaymakli Villas–Kızılbaş Klisesi, Nicosia)

By attention to the tables, the first house image shows the house with the minimum rate of using the traditional housing symbolic features in its façade (figure 57).

Figure 58: Second House Image (Crystal Crescent– Bogaz Village, Girne)

The second image (figure 58) shows the façade of house which has used some of the traditional housing symbolic features in its façade. For instance, yellowish stone frame around the balconies' doors and windows in addition to used keystone are some of the traditional housing features that have been used in the house façade. However, in this image, the rate of the housing features which have been used in the façade are not less than first house image as well as no more than the third house image.

Figure 59: Third House's Image (Bellapais Villas, Lefcosa-Girne Road).

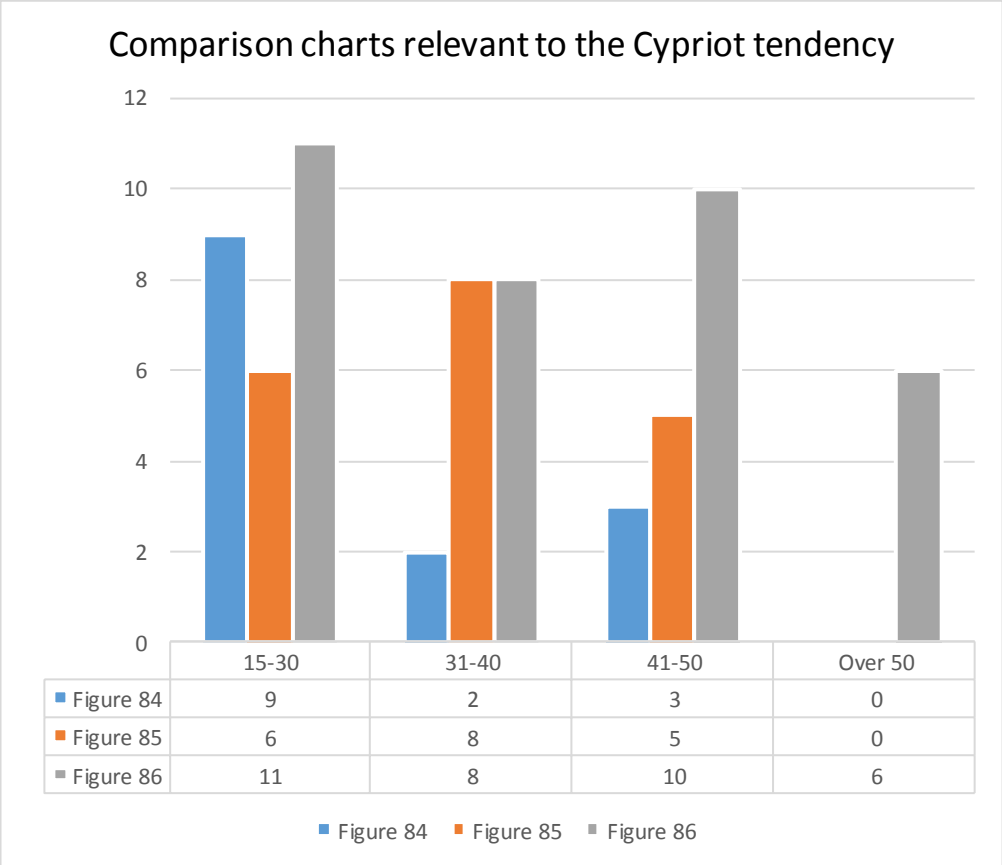
Third house's image which is designed with the more traditional housing features than two other figures of houses (figure 59).

Therefore, by showing above houses images to 68 Cypriot people, various results have obtained in the following charts. The chart 5 has been divided to the four groups of people by attention to their age. The first category is related to the 15-30 years old Cypriot inhabitants which are mostly tend to choose the houses with the fewer rate of traditional feature such as the figure 57 or with the high level of using the traditional features, like the third figure. In fact, they have negated the houses at the middle level of utilizing the Cypriot traditional features. However, number of the people in the category who prefer the third house were more than two other houses' figures.

The second classified age group (30-40) have tended to choose the second or third houses were equal. However, the number of people that prefer the figure one was much less than other. Likewise, third grope (41-50) did not show the strong tendency about the first figure. Instead, the people with 41-50 years old mostly preferred to live in houses with the third figure characteristics.

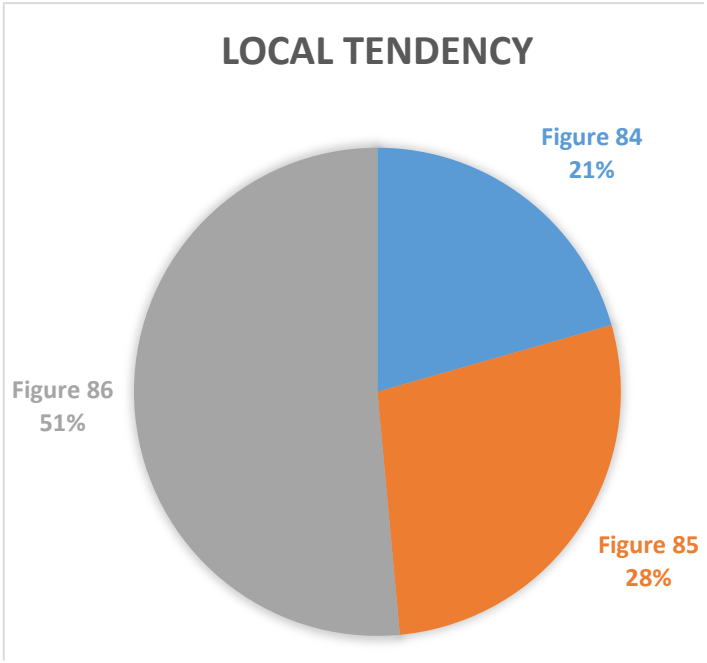
The last group of participated people (over 50 years old), completely elected the third figure as the best housing figure between the other printed houses figures. Therefore, they strongly have emphasized on the point that the houses with most traditional features are more attractive for them.

Chart 5: Comparison Charts Relevant To the Cypriot Tendency



Finally, in the following chart (chart 6), evaluated the total rate of local tendency for choosing the houses. Accordingly, image three (figure 59) which is consisted of more traditional housing features (such as cumba, vertical windows, entrance columns, and etcetera) has placed in the first level of local interest with the 51 percent of total vote. Figure 46 with the fewer utilized of traditional is positioned at the third level (21 percent) and the second figure (figure 57) is placed at the middle of interest percentage.

Chart 6: Total Abundance Rate of Local People Tendency



Accordingly, in the chart 6 it is appeared people would love to use traditional features. In fact, it is exactly opposite to what practitioners are thinking about people choice of housing.

Chapter 5

CONCLUSION

House as an significant part of humans' life is able to have a huge impact on its residents' life quality. In fact, Housing as a fundamental category of architecture should be constructed by proper consideration on the residents' cultural characteristics. However, achieving this goal would not be possible unless architects and designers will and the sufficient knowledge and attention on the features which are related to the cultural background of their users. Therefore, one of the necessity for design of a proper house is the recognition of the features and elements that cultural bond between residents and their houses. In this respect, investigating on the traditional houses' features of the particular region could led architects to use the competent features in contemporary houses.

Mass housings as an important category of contemporary architecture is consisted of different types of housing such as the private house, villa, apartment, and residential complex. However, mass housing commonly have been built with little attention to the characteristics of their users and subsequently their cultural requirements. Therefore, it is necessary to investigate on local and traditional houses features to reach the appropriate cognition about those features that in contemporary houses could create the relation between houses and users' culture.

Furthermore, during the study it was tried to learn the "symbol" explanation and its functions for discovering the traditional features which are used symbolically in contemporary houses. In fact, several attempts have been done by the scholars to clarify the symbolic performance in mass housing settlements. For instance, "The analysis of symbolic performance in mass housing settlements" is one of the subjective studies which had been done by Erman (2004) about the mass housing projects in Adana, Turkey. However, most of the studies are based on subjective research directly related to the study purpose. This thesis has tried to find the systematic approach for establishing the objective study relevant to the symbol. For this aim, the study attempted to find the coherent literatures related to the thesis subjects. Accordingly, two subjects -architectural symbols and mass housing- had been scrutinized in depth within two chapters. Meanwhile, the most recent traditional architectural periods in Cyprus - Ottoman (1571- 1878) and British Colonial (1878-1960) - have been investigated to find their utilized housing features. In this regard, content analysis method had been used as the thesis approach to analyze the literature.

The mass housing projects in the island have been extremely developed during the recent decades. According to the high numbers of architectural and constructions companies which are longing to extend their activity in the field, is expected that mass housing will develop even with the higher rate at future. The reason which made the mass housing as an importance architectural field in Cyprus is based on providing the houses for the majority of the population. In this regard, negligence in using of proper housing features -to make the connection between local residents and their houses- could create the serious problem.

In this respect, by attention to the traditional housing features which have been scrutinized in the fourth chapter, two tables founded for explaining the specifications of Ottoman and British houses features (table 2 and tabl3 3). Thereafter was tried to find the -exact similarity and contemporary interpretation- within the selected mass housing and traditional features by utilizing the physical observation. For the aim, 35 inventory tables had been established for 10 different architectural and construction companies (Appendix) to examine the founded features in mass housing projects. As a consequence, two different charts had been founded which were shown the prevalence rate of each features by attention to the type of houses in mass housing projects. As a result, it turned out -except use of balcony and overhanging elements- the rate of utilizing the traditional features are different according to the housing types. In fact, differences between them have been appeared to cause some limitations. Afterwards, total rate of used traditional housing features in contemporary residential buildings of mass housing projects was demonstrated in chart 4 as a substantial result for the section.

Moreover, interview with the academicians and practitioners is the other approaches that was employed in the field study. The results of the open discussion interview were revealed the differences between the academicians and practitioners idea related to use of traditional architectural features in contemporary mass housing. In this regards, academicians claimed, attention to the culture of the users is one of the necessarily factors to achieve the well-design houses. Investigation on tradition of the people who are living in a particular region is the way that lead to recognize the suitable elements and features which are able to make coherent connection with the residents' culture. On the other hand, practitioners and architects of the construction companies asserted that ignorance the any cultural and traditional features is the key

of success for their houses. Most of the practitioners who participated in interview noted that they are only tend to utilize the modern style for designing the houses to satisfy their customers as well as attracting the more buyers.

Accordingly, it was impossible to find the coherent consensus through the academicians and practitioners interviews. Eventually, to reach the aim it had been tried to discover the local people tendency for choosing the house. In this respect, the survey asked from 68 Cypriot people for participating in an interview, in order to figure out their interest about the three different houses by attention to the rate of utilized traditional housing features in the houses images. As a result, during the structured interviews it turned out that they tend to live in houses not only with the modern characteristics but also they strongly preferred to have houses with the traditional and cultural features. In simple words, they want to have houses which have the modern and traditional characteristics together.

Therefore, by attention to the results of mass housing physical observation which was evaluated in chapter 5 it is also reinforced the opinion of academicians and local people. In addition, according to the findings and results which were achieved from inventory tables was found that companies' practitioners are only speaking about modernity and modern style for houses design but in reality they are using traditional features. However, in order to satisfy the modern taste of housing market, they are using the traditional features in many cases, not with exact similarity. In other words, they have translated the traditional features to make the capability with the contemporary houses. In fact, they are translating the traditional features – consciously or even subconsciously- to the modern language of architecture. Indeed, by attention to the characteristics of symbol that were brought in the second chapter,

traditional housing features are symbolically used in contemporary residential buildings of mass housing projects.

Eventually, to reach the appropriate house's design in contemporary time it should be considered the both aspects of houses necessities. In this regards, in following table (table 5 and 6), it has been tried to categorize the contemporary interpretation of traditional features which have been used in mass houses in Cyprus. In the table 40, by comparing the traditional housing features and contemporary use of the features it has attempted to found the symbolic form for them. Accordingly, the recommended symbolic features would be able to make the connection between houses and Cypriot residents' culture at present time and future.

This thesis is tried to prepare the proper approach for studying about the role of symbols within architecture. The most of the study focus was on role of symbolic features on mass housing façade. In addition, it has been tried to provide the little investigation on houses layout. In this respect, scrutinizing on the houses layout organization, interior specifications and urban development are other fields which needs careful studies for mass housing future development. On the other hand, this thesis is only concentrated on two recent architectural periods of Cyprus, however, it could be gainful to have appropriate investigation on other earlier periods and their influences on contemporary houses for further studies.

Moreover, using the traditional features in symbolic forms –as mentioned above- is the significant way to make the connection between the users and their houses. Therefore, thesis suggested to architects and designers to utilize this approach for reaching the proper contemporary houses design. In this respect, as Vellinga (2006),

suggested, tradition should be considered as a creative adaptation of experience to the needs of the present. Indeed, it would be very beneficial to open the related field in the educational courses of architecture for teaching the ways which lead to learn the traditional architectural features and subsequently utilizing them with the suitable symbolic form in contemporary houses. In this regard, architects would have the chance to learn the correct way of translating the traditional features for modern language of architecture.

Table 5: Symbolic Use of Traditional Housing Features in Compare with Symbolic Use of Features in Contemporary Houses

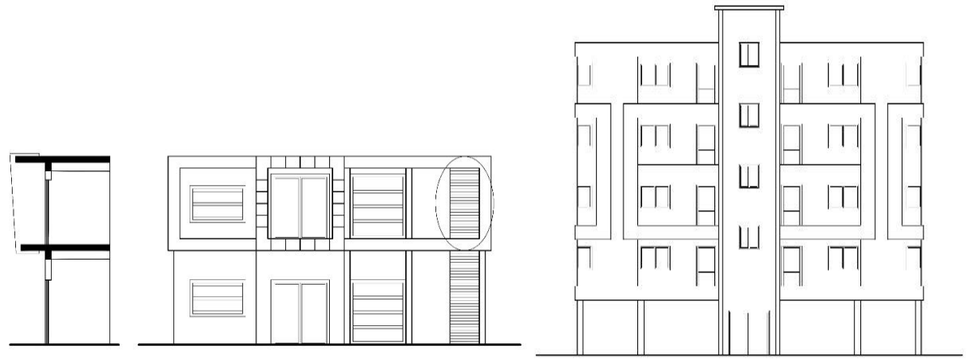
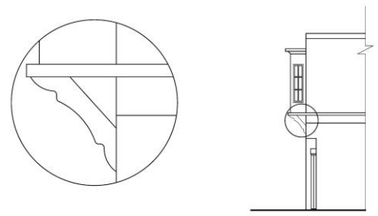
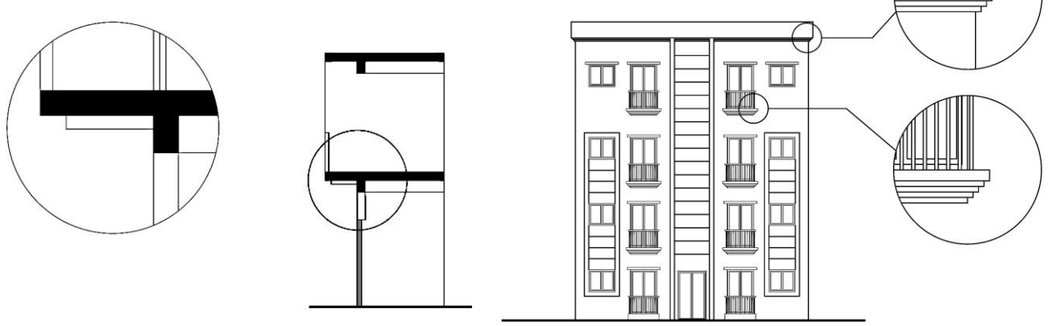
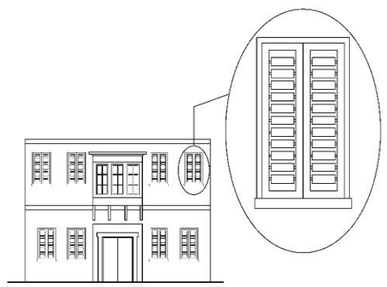
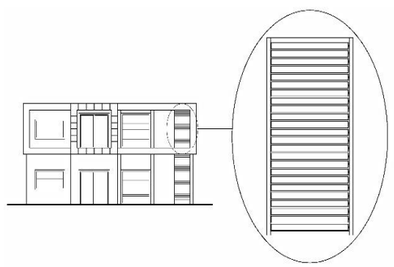
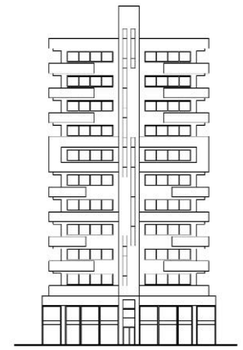
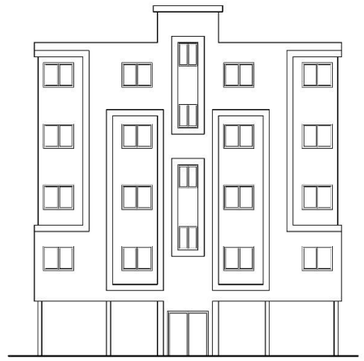
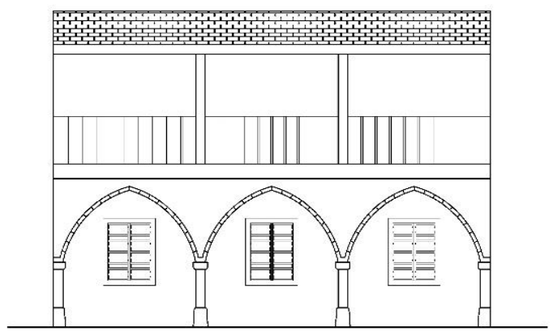
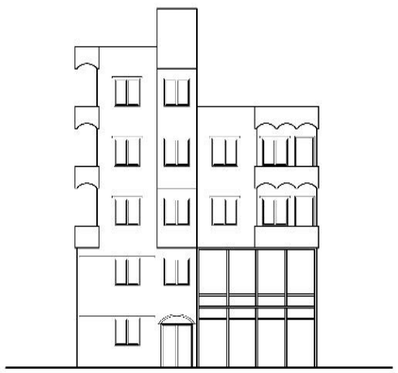
Feature	Traditional use of feature	Symbolic use of housing feature in contemporary houses
Cumba		
Bracket		
Shutter		

Table 6: Symbolic Use of Traditional Housing Features in Compare with Symbolic Use of Features in Contemporary Houses

feature	Traditional use of feature	Symbolic use of housing feature in contemporary houses
Overhanging elements and horizontal separator		
Vertical windows		 
Arches		

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URL12: http://www.flickr.com/photos/mytripsmypics/5163148915/in/pool-ottomanarchitecture

URL13: http://i73.photobucket.com/albums/i238/Kusadasibiz/Forumarticles/house.jpg

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APPENDIX

Appendix A: Evaluation of Contemporary Mass Housing in Cyprus

Northernland Architectural Design and Construction Company

Northernland is one of the numerous construction and architectural company in north Cyprus. This company established at Yenişehir, Famagusta in September 2003. The company projects mostly have developed around the Famagusta city to with the aim of constructing the houses settlements with the original design and appropriate for Cypriot citizen. However, they have extended their activity area during the latest years to the Bogaz, Iskele, Karpaz, and Kyrenia. Some of the Northernland houses projects are Northern Gardens, Alasya Park (2007), Pearl Village (2008), Saklıkent (2010), and Kentplus (2011) which are selected in this study.

Figure 60 & Figure 61: Alasya Park (2007), and Pearl Village (2008)

Figure 62 & Figure 63: Saklıkent (2010), and Kentplus (2011)

Northernland is attempted to design and construct the fresh living environment in Cyprus for attracting the most local and international buyers. In addition, the company's managers are argued that Northernland is one of the reliable companies in Cyprus which is concerned for offering the true and thorough information about the houses projects as well as after sales service.

To prepare the houses with the satisfaction place for costumers and their family company has the high attention on the houses features and details according to the buyer's recommendations. Furthermore, Northernland giving the ten years guarantee for the structural elements to provide the relief and confidence about the house's future. Moreover, Northernland provide the comfort houses by applying the central heating, solar panels, and proper ventilations facilities in all of the constructed houses.

Figure 64: Location of Selected Mass Housing Project

Table 7: Inventory Table of Golden Pearls

General information

Company name: NorthernLAND Real State- Architectural Design & Construction
Address & phone number:
No:1- Ali Edip Apt. - Nicosia Main Road, Famagusta- Northern Cyprus- Mersin 10 Turkey +90 392 365 3444 - 5444 Fax: +90 392 365 3443
e-Mail: info@northernlandcyprus.com
Housing type: Apartment □ Villa ■
Project name and address:
Golden Pearls, 8 Ötüken Street, Yenişehir, Famagusta, Mersin 10 Turkey

More information

Car park for 4 cars - Dining room- Double-glazed wood grained effect- Solar water heating system- 3 tons water storage tanks with hydro vane pumping system- Central satellite system- - Swimming pool- Balconies for all bedrooms - chimney

Façade characteristics

Yes■ No□ - Arch: decorative arches
Yes■ No□ - Shutter: Wood grain shutters
Yes■ No□ - Columns: Doric columns at the houses entrance and first floor
Yes□ No■ Dentils & cornice
Yes□ No■ Keystone
Yes□ No■ Cumba:
Yes■ No□ - Window: vertical windows with the simple aluminum frame and proportion 1:2
Yes□ No■ - Windows frame:
Yes■ No□ - Door: Rectangular frame and double leafs door with the glass part and large eave at the top of the door
Yes□ No■ - Walls: yellow stone boundary walls with iron decorative railings
Yes■ No□ - Terraces: Large terraces front and rear
Yes■ No□ - Balcony: wide balcony in front of the building for two bedrooms
Yes■ No□ - overhanging elements: by considering the eaves all around the buildings
Yes□ No■ - protruded windows
Yes■ No□ - Horizontal separator elements: eaves all around the building

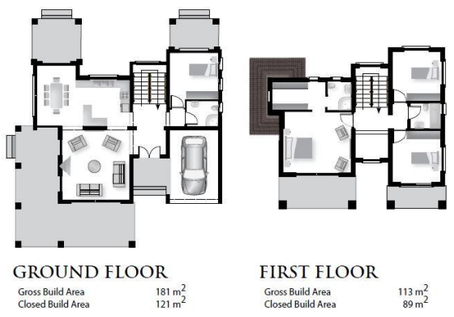
Roof type and shading elements

□ Flat roof
□ Gambrel roof
■ Hipped roof
□ Shed roof
Yes■ No□ - Shading: timber shading at the back side of the building

Site layout

Elevation (inside)

Plan



Elevation (street view)

Façade Color

■ White
□ Gray
■ Yellow
□ Red
□ Brown
□ Blue
□ Pink
□ Olive green
□ Other colors:

Covering materials

Ceramic tiles for the bathroom
Natural marble floor
Mosaic covering for the yard ground

Layout organization

Yes■ No□ - Room: 4 Bedrooms
Yes□ No■ - Hall: Entrance hall
Yes□ No■ - Veranda
Yes■ No□ - Service area: Luxury kitchen inside of the house in addition to Family bathroom and Guest WC/Shower
Yes■ No□ - Entrance: indirectly from the yard to the entrance hall

Table 8: Inventory Table of Saklikent Project

General information

Company name: NorthernLAND Real State- Architectural Design & Construction
Address & phone number:
No:1- Ali Edip Apt. - Nicosia Main Road, Famagusta- Northern Cyprus- Mersin 10 Turkey
+90 392 365 3444 - 5444 Fax: +90 392 365 3443
e-Mail: info@northernlandcyprus.com
Housing type: Apartment □ Villa ■
Project address:
Saklikent, Famagusta-Lefkosa Road, DAU St., Famagusta, North Cyprus

More information

Car park for 2 cars - Double glazing windows- Composite cladding- Solar heating- Central satellite system- Central generator system- Wall cabinet in all bedrooms- Selection of flooring- Ensuite bedroom with dressing room- Central internet system- Central booster system- Common pool

Façade characteristics

Yes□ No■ - Arch:
Yes■ No□ - Shutter: Fixed shutter at the street face of façade could be the new interpretation of traditional shutter
Yes□ No■ - Columns:
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes■ No□ - Cumba: protruded cubic form at the top of the entrance inspire the Cumba in new interpretation
Yes■ No□ - Window: vertical windows applied at the two sides of the building
Yes■ No□ - Door: iron door with the glass part in the upper half
Yes□ No■ - Walls:
Yes■ No□ - Terraces: terrace is located at the backyard
Yes■ No□ - Balcony: Balconies for all bedrooms
Yes■ No□ - Overhanging elements: the street view and garden face of the façade is full of them
Yes□ No■ - protruded windows:
Yes■ No□ - Horizontal separator elements: applied in front of the windows

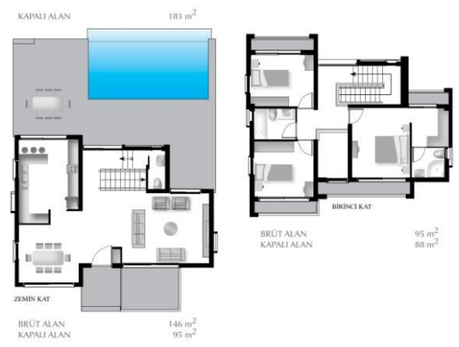
Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
□ Shading:

Site layout

Elevation (inside)

Plan



Elevation (street view)

Façade Color

■ White	□ Blue
■ Gray	□ Pink
□ Yellow	□ Olive green
□ Red	□ Other colors:
■ Brown	

Covering materials

Ceramic tiles for the bathroom
Ceramic and natural marble flooring
Natural marble windowsills

Layout organization

Yes■ No□ - Room: 2 and 3 bedrooms
Yes■ No□ - Hall: corridor between the rooms is inspire the traditional hall (sofa)
Yes□ No■ - Veranda
Yes■ No□ - Service area: in the ground floor and first floor in addition to the private one in the master room
Yes■ No□ - Entrance: indirectly from the yard to the entrance hall

Table 9: Inventory Table of Alasya Park

General information

Company name: NorthernLAND Real State- Architectural Design & Construction
Address & phone number:
No:1- Ali Edip Apt. - Nicosia Main Road, Famagusta- Northern Cyprus- Mersin 10 Turkey
+90 392 365 3444 - 5444 Fax: +90 392 365 3443
e-Mail: info@northernlandcyprus.com
Housing type: Apartment ■ Villa □
Project name and address:
Alasya Park, Gazi Mustafa Pasha Blv, Famagusta, Mersin 10 Turkey

More information

Open car park- Solar heating- Single glass windows- Children park- Dining room

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns:
Yes□ No■ - Dentils & cornice
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes■ No□ - Cumba: protruded surface of the façade with cubic form which is divided with the red color
Yes■ No□ - Window: vertical windows at the lateral sides Apartment
Yes■ No□ - Window frame: white protruded frame for windows which are locate at the south side of the building
Yes■ No□ - Door: iron and glass with the vertical concrete protruded frame
Yes□ No■ - Walls:
Yes□ No■ - Terraces:
Yes■ No□ - Balcony: wide balcony in front, rear and corners
Yes■ No□ - overhanging elements: horizontal overhanging elements such as balconies and protruded windows
Yes■ No□ - protruded windows: some of the windows are protruded in front of the street façade
Yes■ No□ - Horizontal separator elements: by using the horizontal protruded elements

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
■ Shading: concrete shading at the last floor and roof terrace

Site layout

Elevation (inside)

Plan

Elevation (street view)

Façade Color

■ White	□ Blue
■ Gray	□ Pink
□ Yellow	□ Olive green
■ Red	□ Other colors: violet
□ Brown	

Covering materials

Ceramic tiles for the bathroom
Natural marble floor
Mosaic covering for the yard ground

Layout organization

Yes■ No□ - Room: 1, 2 and 3 Bedrooms
Yes■ No□ - Hall: corridor between the rooms is inspire the traditional hall (sofa)
Yes□ No■ - Veranda
Yes□ No■ - Service area: kitchen inside of the house in addition to Family bathroom and Guest WC/Shower
Yes□ No■ - Entrance: from street with elevator and staircase

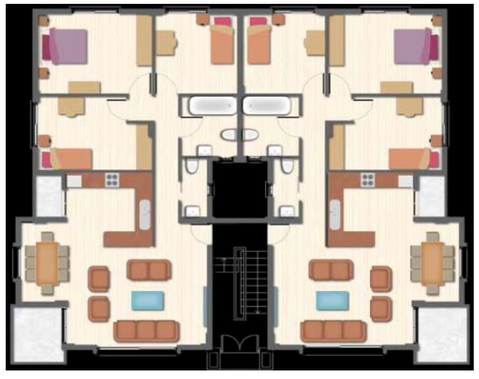
Table 10: Inventory Table of Kentplus

General information

Company name: NorthernLAND Real State- Architectural Design & Construction
Address & phone number:
No:1- Ali Edip Apt. - Nicosia Main Road, Famagusta- Northern Cyprus- Mersin 10 Turkey
+90 392 365 3444 - 5444 Fax: +90 392 365 3443
e-Mail: info@northernlandcyprus.com
Housing type: Apartment ■ Villa □
Project address:
Kentplus - Lefkoşa-Gazimağusa Anayolu

Site layout

Plan



More information

Open car park- Solar heating- Single glass windows- Children park- Swimming pool- Dining room

Elevation (inside)

Elevation (street view)

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns:
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes■ No□ - Window: vertical windows applied at the two sides
Yes□ No■ - protruded windows:
Yes■ No□ - Windows frame: make the vertical frame around the horizontal front and rear windows that inspirit the vertical windows
Yes■ No□ - Door: steel door with the glass part in the upper half and rectangular protruded frame around the entrance door
Yes□ No■ - Walls:
Yes□ No■ - Terraces:
Yes■ No□ - Balcony: Balconies at the all corners
Yes■ No□ - overhanging elements: balconies at the corners are protruded and create the overhanging elements at the façade
Yes□ No■ - Horizontal separator elements:

Façade Color

■ White	□ Blue
■ Gray	□ Pink
□ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
□ Shading:

Covering materials

Ceramic tiles for the bathroom
Ceramic flooring
Natural marble windowsills

Layout organization

Yes■ No□ - Room: 3 and 2 bedrooms
Yes■ No□ - Hall: saloon and hall in all flats
Yes□ No■ - Veranda
Yes□ No■ - Service area: Kitchen- Bathroom - Kitchen balcony-
Yes□ No■ - Entrance: rectangular projected frame around the entrance door

Table 11: Inventory Table of Northern Gardens

General information

Company name: NorthernLAND Real State-Architectural Design & Construction
Address & phone number:
No:1- Ali Edip Apt. - Nicosia Main Road, Famagusta- Northern Cyprus- Mersin 10 Turkey
+90 392 365 3444 - 5444 Fax: +90 392 365 3443
e-Mail: info@northernlandcyprus.com
Housing type: Apartment □ Villa ■
Project address:
Northern Gardens – Bogaz, Famagusta

Site layout

Plan

More information

Northern Gardens is a holiday village with 55 residences, consisting of 47 detached and 8 terraced villas- Dining room- Double-glazed wood grained effect- Solar water heating system- 3 tons water storage

Elevation (inside)

Elevation (street view)

Façade characteristics

Yes■ No□ - Arch: decorative arch type at the rounded entrance
Yes■ No□ - Shutter: aluminum shutters with the wooden color
Yes■ No□ - Columns: entrance columns
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes■ No□ - Window: vertical windows with protruding vertical frame
Yes■ No□ - Door: timber door with the glass part in the top half of the door and iron work
Yes□ No■ - Walls:
Yes■ No□ - Terraces: located in front of the building
Yes■ No□ - Balcony: Balconies in front and behind of the first floor
Yes■ No□ - overhanging elements: represented by eaves
Yes□ No■ - protruded windows:
Yes■ No□ - Horizontal separator elements: appeared with eaves

Façade Color

□ White	□ Blue
□ Gray	■ Pink
■ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Roof type and shading elements

□ Flat roof
□ Gambrel roof
■ Hipped roof
□ Shed roof
□ Shading:

Covering materials

Ceramic tiles for the bathroom
Ceramic flooring
Natural marble windowsills
Mosaic covering for yard

Layout organization

Yes□ No■ - Room: 1 bedroom at ground floor 2 bedrooms at first floor
Yes■ No□ - Hall: entrance hall at ground and first floor
Yes■ No□ - Veranda: located at the right corner of ground floor
Yes□ No■ - Service area: Kitchen-Bathroom - Kitchen balcony
Yes■ No□ - Entrance: rounded entrance and upper than ground level

Kavanlar İnşaat LTD.

Kavanlar İnşaat (construction) Ltd. is the other company which is working in mass housing construction field in Cyprus. The headquarter office of the company is located in No: 3, Beylerbeyi Road, Beylerbeyi Yolu Elmalı St., Beylerbeyi, Girne, North Cyprus. At first, this construction company was started its work at Turkey, since extended the activity in Cyprus by participation in construction projects in island. The initial history of Kavanlar Company was begun from approximately 35 years ago however, they established their office in Cyprus five years later.

The main cities that they developed the mass housing projects are Girne, Famagusta and Nicosia until now, also the managers of company are trying to establish the new projects in Lefke, lapta and Guzelyurt.

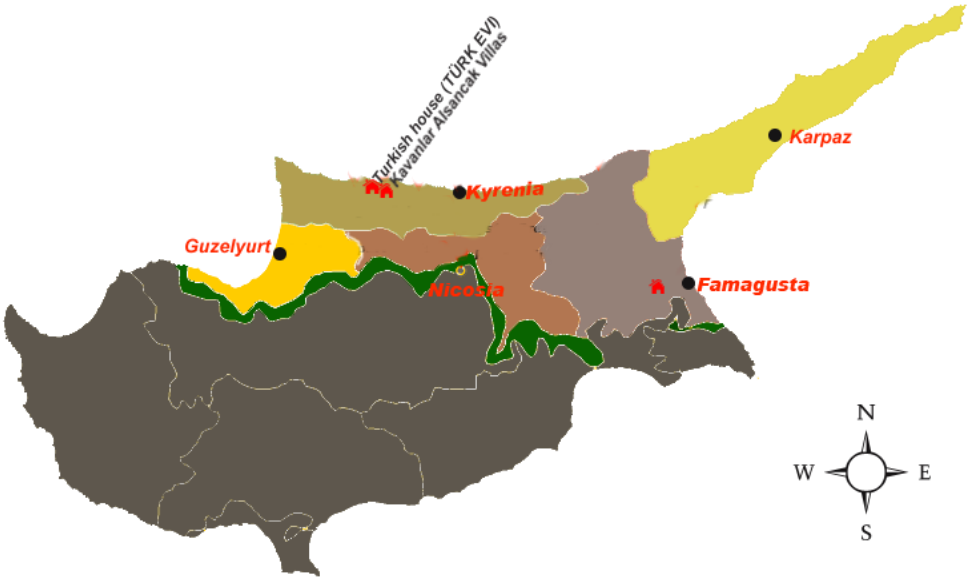


Figure 65: Location of Selected Mass Housing Projects

This company is working with the Cyprus registered members to prepare the better houses for Cypriot people. During the thirty decades works as a construction developer Kavanlar group has tried to build the appropriate houses for satisfying their customers. Moreover, Kavanlar group has high rate of experience in its career by working in other construction fields such as universities, hotels, public assemblies and healthcare. However, the majority of their activity is on housing field such as the housing settlements, living complex, villa and apartment. For instance, Alsancak Villa, Bellapais Villa, Karsiyaka Kavangolow, and Kavankoy living complex are some of their numerous mass housing project in Cyprus. However, Kavanlar Alsancak Villas and Turkish house in Girne (TÜRK EVI) are selected for the study.

Figure 66 & Figure 67: Alsancak Villa & Turkish house in Girne (TÜRK EVI)

Table 12: Inventory Table of Kavanlar Alsancak Villas

General information	**More information**	**Façade characteristics**	**Roof type and shading elements**
Company name: Kavanlar İnşaat LTD. **Address & phone number:** Şehit Ergün Köncü Sokak 41050 - İzmit | TÜRKİYE - +90 (262) 311 68 68 pbx - 311 44 45 - 312 80 42 Fax : +90 (262) 312 80 43 E-mail : info@kavanlar.com.tr **Housing type:** Apartment □ Villa ■ **Project address:** Kavanlar Alsancak Villas– Alsancak- Girne	Chimney and outside barbeque – solar panel-	Yes□ No■ - Arch: Yes□ No■ - Shutter: Yes□ No■ - Columns: Yes□ No■ - Dentils & cornice: Yes□ No■ - Brackets: Yes■ No□ - Keystone: key stone shape at top of the door and window frame Yes□ No■ - Cumba: Yes□ No■ - Window: Yes■ No□ - Windows frame: Yes□ No■ - Door: Yes□ No■ - Walls: Yes■ No□ - Terraces: located in front of the houses Yes■ No□ - Balcony: Balconies in front and rear of the first floor Yes■ No□ - overhanging elements: represented with huge eaves Yes□ No■ - protruded windows: Yes■ No□ - Horizontal separator elements: brown lines at the façade surface	□ Flat roof □ Gambrel roof ■ Hipped roof □ Shed roof □ Shading:
Site layout	**Elevation (inside)**		**Covering materials**
			Ceramic tiles for the bathroom Ceramic flooring Mosaic covering for yard
Plan	**Elevation (street view)**		**Layout organization**
			Yes■ No□ - Room: 3 bedrooms Yes■ No□ - Hall: entrance hall at ground and first floor Yes□ No■ - Veranda: Yes□ No■ - Service area: Kitchen-Bathroom - Kitchen balcony Yes□ No■ - Entrance:

Façade Color	
■ White	□ Blue
□ Gray	□ Pink
■ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Table 13: Inventory Table of Turkish House (TÜRK EVI)

<table>
<tr><td>General information</td><td>More information</td><td>Façade characteristics</td><td>Roof type and shading elements</td></tr>
<tr><td>Company name: Kavanlar İnşaat LTD.
Address & phone number: Şehit Ergün Köncü Sokak 41050 - İzmit | TÜRKİYE - +90 (262) 311 68 68 pbx - 311 44 45 - 312 80 42 Fax : +90 (262) 312 80 43
E-mail : info@kavanlar.com.tr
Housing type: Apartment □ Villa ■
Project address:
Turkish house (TÜRK EVI)– Alsancak- Girne</td><td>Chimney and outside barbeque – solar panel- Overflow Swimming pool with roman style- Staircase with wrought iron handrail- Damp proof system</td><td>Yes■ No□ - Arch: decorative arch applied at rear of building
Yes□ No■ - Shutter:
Yes■ No□ - Columns: Doric columns
Yes■ No□ - Dentils & cornice: cornice utilized under the eaves and balconies ceiling
Yes□ No■ - Brackets:
Yes□ No■ - Keystone:
Yes□ No■ - Cumba:
Yes■ No□ - Window: some of the windows are vertical with the proportion 1:2
Yes■ No□ - Door: two leafs door with wooden material and iron works at middle
Yes□ No■ - Walls: Decorative stone walls surrounding villa
Yes■ No□ - Terraces: located in front of the houses
Yes■ No□ - Balcony: Balconies in front and rear of the first floor
Yes■ No□ - overhanging elements: the eaves all around the building
Yes■ No□ - protruded windows: at the first floor facade
Yes■ No□ - Horizontal separator elements: eaves and cantilevered elements all around the building</td><td>□ Flat roof
□ Gambrel roof
■ Hipped roof
□ Shed roof
□ Shading:</td></tr>
<tr><td>Site layout</td><td>Elevation (inside)</td><td rowspan="3">Façade Color
■ White
□ Gray
■ Yellow
□ Red
□ Brown
□ Blue
□ Pink
□ Olive green
□ Other colors:</td><td>Covering materials</td></tr>
<tr><td></td><td>  </td><td>Ceramic and Laminate flooring
Mosaic covering for yard</td></tr>
<tr><td>Plan</td><td>Elevation (street view)</td><td>Layout organization</td></tr>
<tr><td></td><td>  </td><td>Yes■ No□ - Room: 3 bedrooms
Yes■ No□ - Hall: entrance hall at ground and first floor
Yes■ No□ -Veranda: in front of the hall
Yes■ No□ -Service area: Kitchen- Bathroom - Kitchen balcony- separated toilet and shower at yard
Yes■ No□ - Entrance: designed with rectangular frame and porch</td></tr>
</table>

Levent Homes ltd.

Levent Construction Ltd. was established in 1985. The manager of company claimed the Levent is the largest construction company in North Cyprus. The main office of company is located at No: 143, Ziya Rizki Caddesi, Girne, in North Cyprus. The company achieved to get the many standards related to the construction quality and architectural design.

This company have running the many housing project in the term of mass housing settlement in North Cyprus. Their residential settlement projects domain including the all cities among the North Cyprus whether big or small cities. Some of their residential projects are Sea Breeze Apartments and Lapta View Villas in Girne, Kaymakli Villas in Nicosia, and Bogaz Cove Villas in Famagusta.

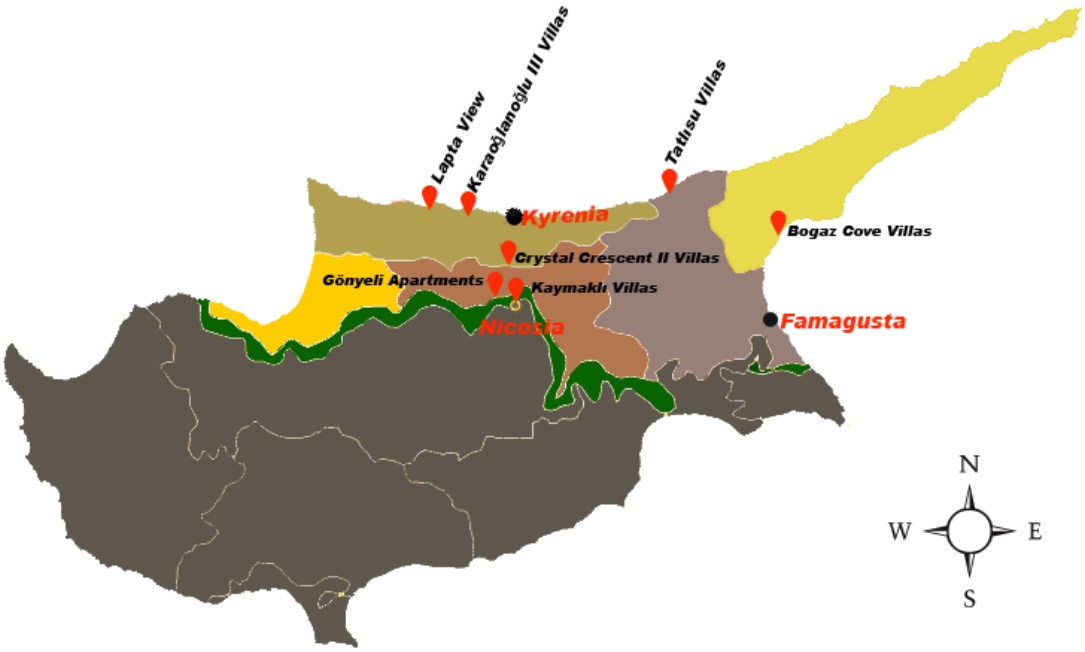


Figure 68: Location Of Selected Mass Housing Projects

Levent Homes has constructed the wide range apartments and villas with the two or three bedrooms in North Cyprus. In addition, to create the high confidence for its costumers Levent Company founded the related raw materials production factories among the island. The company architects and designers have claiming in Levent apartment tried to bring the latest materials and technique as well as modern design, which is one of the significant necessity for contemporary houses.

Figure 69 & Figure 70: Sea Breeze Apartments and Lapta View Villas in Girne

Figure 71 & Figure 72: Kaymakli Villas in Nicosia, and Bogaz Cove Villas in Famagusta.

Table 14: Inventory Table of Tatlisu Villa

General information

Company name: Levent Homes ltd.
Address & phone number:
Ziya Rizki Caddesi, No: 143, Kyrenia, KKTC, Via Mersin-10, Turkey
E-mail: info@leventhomes.com
Tel: +90 392 8151121
Housing type: Apartment ■ Villa □
Project address:
Tatlisu Villa- Küçük Erenköy, Girne

More information

Double glazed windows - Fireplace- parking space- large dining room toward the garden- air conditioning

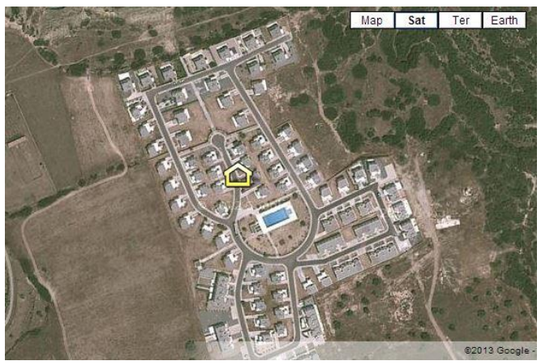
Façade characteristics

Yes■ No□ - Arch: decorative arch type at the entrance
Yes■ No□ - Shutter: aluminum shutters
Yes■ No□ - Columns: Doric columns under the shading elements
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes■ No□ - Cumba: bay windows' bed rooms at the first floor
Yes□ No■ - Vertical Windows:
Yes□ No■ - Door: timber door
Yes□ No■ - Walls:
Yes■ No□ - Terraces: the terrace equipped with pergola
Yes■ No□ - Balcony: Balconies in front and rear corners
Yes■ No□ - overhanging elements: bay windows' rooms which are inspired the overhanging elements
Yes□ No■ - protruded windows:
Yes□ No■ - Horizontal separator elements:

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
■ Shading: rear and in front of the houses at the top of the veranda

Site layout



Elevation (inside)

Covering materials

Ceramic tiles for the bathroom
Ceramic flooring
Mosaic covering for yard

Plan

Elevation (street view)

Façade Color

■ White
□ Gray
□ Yellow
□ Red
■ Brown
□ Blue
□ Pink
□ Olive green
□ Other colors:

Layout organization

Yes■ No□ - Room: 3 bedrooms
Yes■ No□ - Hall: entrance hall at ground floor and first floor
Yes■ No□ - Veranda:
Yes□ No■ - Service area: kitchen and guest toilet on the ground floor in addition to storage room and bathroom on the first floor
Yes■ No□ - Entrance: upper than ground level and opened toward the small hall

Table 15: Inventory Table of Karaoglanoglu III Villas

General information

Company name: Levent Homes ltd.
Address & phone number:
No: 143, Ziya Rizki Caddesi, Girne, Cyprus, Via Mersin-10
E-mail: info@leventhomes.com
Tel: +90 392 8151121
Housing type: Apartment □ Villa ■
Project address:
Karaoglanoglu III Villas– Girne belt way, Girne

More information

Fireplace in the dining room- Central heating- Private garden- Garage

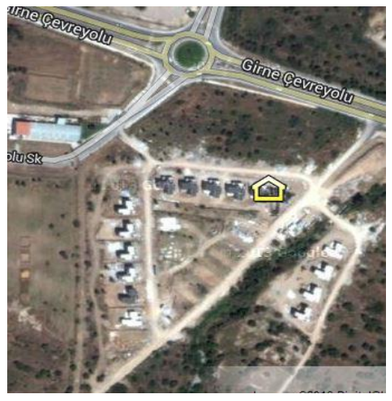
Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns:
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes■ No□ - Window: vertical windows with the proportion 1:2
Yes□ No■ - Windows frame:
Yes□ No■ - Door: simple iron door
Yes■ No□ - Walls: natural stone at street face of ground floor
Yes□ No■ - Terraces:
Yes■ No□ - Balcony: Spacious Balconies at rear of the first floor
Yes□ No■ - overhanging elements:
Yes□ No■ - protruded windows:
Yes■ No□ - Horizontal separator elements:

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
□ Shading:

Site layout



Elevation (inside)

Plan

Elevation (street view)

Façade Color

■ White
□ Gray
□ Yellow
□ Red
□ Brown
□ Blue
□ Pink
□ Olive green
□ Other colors:

Covering materials

Ceramic tiles for the bathroom
Ceramic flooring
Natural marble windowsills

Layout organization

Yes■ No□ - Room: 3 bedrooms without any connection to each other
Yes□ No■ - Hall:
Yes□ No■ - Veranda:
Yes■ No□ - Service area: Kitchen at ground floor toward the back yard- Bathroom - Kitchen balcony- guest toilet
Yes□ No■ - Entrance:

Table 16: Inventory Table of Crystal Crescent

General information	**More information**	**Façade characteristics**	**Roof type and shading elements**
Company name: Levent Homes ltd. **Address & phone number:** No: 143, Ziya Rizki Caddesi, Girne, Cyprus, Via Mersin-10 E-mail: info@leventhomes.com Tel: +90 392 8151121 **Housing type:** Apartment ■ Villa □ **Project address:** Crystal Crescent– Bogaz Village, Girne	Car park- private garden- Heat and Water Insulation Roofing- Double glazed windows- Air conditioning- water storage tank	Yes■ No□ - Arch: decorative arch type at entrance Yes■ No□ - Shutter: aluminum shutters Yes□ No■ - Columns: Yes□ No■ - Dentils & cornice: Yes□ No■ - Brackets: Yes■ No□ - Keystone: simple keystone at the top center of windows frame Yes□ No■ - Cumba: Yes■ No□ - Window: vertical windows with the proportion 1:2 Yes■ No□ - Windows frame: stone protruded frame Yes■ No□ - Door: wooden entrance door Yes□ No■ - Walls: brick walls Yes□ No■ - Terraces: Yes■ No□ - Balcony: Balconies in front and rear of the first floor Yes□ No■ - overhanging elements: Yes□ No■ - protruded windows: Yes□ No■ - Horizontal separator elements:	□ Flat roof □ Gambrel roof ■ Hipped roof □ Shed roof □ Shading:
Site layout	**Elevation (inside)**		**Covering materials**
			Terrazzo tiles Flooring for both of Interior and Exterior
Plan	**Elevation (street view)**	**Façade Color**	**Layout organization**
		■ White □ Blue □ Gray □ Pink ■ Yellow □ Olive green □ Red □ Other colors: □ Brown	Yes■ No□ - Room: 3 bedrooms Yes□ No■ - Hall: entrance hall at ground floor Yes□ No■ - Veranda: Yes□ No■ - Service area: Kitchen-Bathroom - Kitchen balcony Yes□ No■ - Entrance:

Table 17: Inventory Table of Gonyeli Levent Apartments

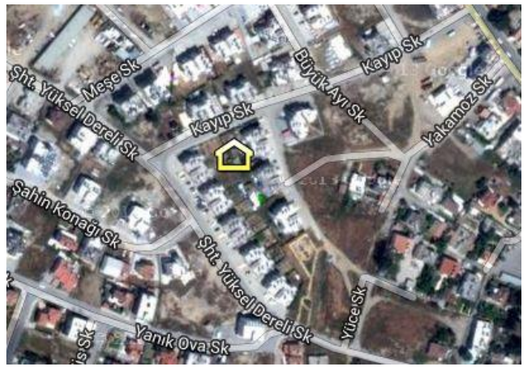
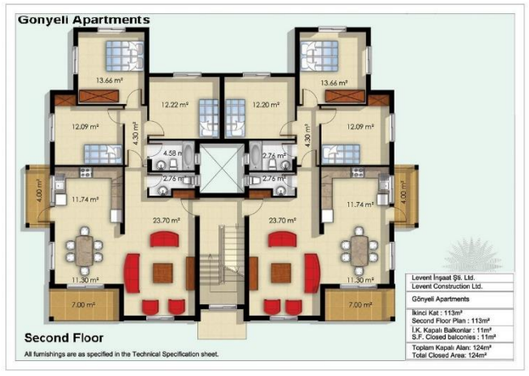
General information	**More information**	**Façade characteristics**	**Roof type and shading elements**
Company name: Levent Homes ltd. **Address & phone number:** No: 143, Ziya Rizki Caddesi, Girne, Cyprus, Via Mersin-10 E-mail: info@leventhomes.com Tel: +90 392 8151121 **Housing type:** Apartment ■ Villa □ **Project address:** Gonyeli Levent Apartments– Gönyeli, Nicosia-Girne highway, Nicosia	12 block same block- Heat and Water Insulation Roofing- Double glazed windows- water storage tank	Yes□ No■ - Arch: Yes■ No□ - Shutter: only positioned in front of the windows at the ground floor Yes■ No□ - Columns: in front of the all balconies Yes□ No■ - Dentils & cornice: Yes□ No■ - Brackets: Yes■ No□ - Keystone: at the central top of the rectangular windows frame Yes□ No■ - Cumba: Yes□ No■ - Window: Yes■ No□ - Window frame: stone protruded frame Yes■ No□ - Door: steal two leafs door with the glass part in the top half of the door Yes□ No■ - Walls: Construction concrete & brick walls Yes□ No■ - Terraces: Yes■ No□ - Balcony: corner Balconies in front of apartment in addition to one bedroom balcony Yes□ No■ - overhanging elements: Yes□ No■ - protruded windows: Yes□ No■ - Horizontal separator elements:	■ Flat roof □ Gambrel roof □ Hipped roof □ Shed roof □ Shading:
Site layout	**Elevation (inside)**		**Covering materials**
			Ceramic wall tiling above base units Ceramic wall tiles and Non-Slip Ceramic floor covering for Toilet Terrazzo tiles Flooring for both of Interior and Exterior
Plan	**Elevation (street view)**		**Layout organization**
			Yes■ No□ - Room: 3 bedrooms Yes■ No□ - Hall: corridor between the bedrooms made the privacy for them in addition to inspire the middle hall in traditional usage Yes□ No■ - Veranda: Yes□ No■ - Service area: Kitchen-Bathroom - Yes□ No■ - Entrance:
		Façade Color	
		■ White □ Gray ■ Yellow □ Red □ Brown	□ Blue □ Pink □ Olive green □ Other colors:

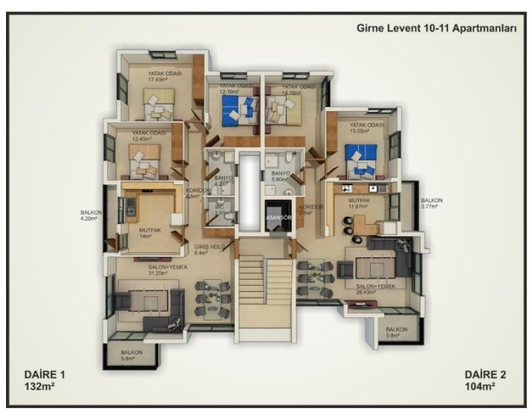
Table 18: Inventory Table of Girne 3 bed Apt

General information

Company name: Levent Homes ltd.
Address & phone number:
No: 143, Ziya Rizki Caddesi, Girne, Cyprus, Via Mersin-10
E-mail: info@leventhomes.com
Tel: +90 392 8151121
Housing type: Apartment ■ Villa □
Project address:
Girne 3 bed Apt – Gazi Osman Pasa St, Girne

Site layout

Plan



More information

Water based plastic paint used over plaster- garage- air-conditions

Elevation (inside)

Elevation (street view)

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns: entrance columns
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes■ No□ - Cumba: protruded frame at the top of the door could be inspire the cumba in new interpretation
Yes□ No■ - Window:
Yes□ No■ - Door:
Yes□ No■ - Walls:
Yes□ No■ - Terraces:
Yes■ No□ - Balcony: located at front and one side of the building
Yes■ No□ - overhanging elements: cantilevered balconies at the building corners
Yes□ No■ - protruded windows:
Yes□ No■ - Horizontal separator elements:

Façade Color

■ White	□ Blue
■ Gray	□ Pink
□ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
□ Shading:

Covering materials

Ceramic tiles for the bathroom and kitchen
Terrazzo floor tiles used for covering the all of the floor spaces even bedrooms

Layout organization

Yes■ No□ - Room: 3 bedrooms
Yes■ No□ - Hall: corridor between the rooms is inspire the traditional sofa (hall)
Yes□ No■ - Veranda:
Yes■ No□ - Service area: kitchen and bathroom
Yes□ No■ - Entrance:

Table 19: Inventory Table of Bogaz Cove Villa Type 1

General information

Company name: Levent Homes ltd.
Address & phone number:
No: 143, Ziya Rizki Caddesi, Girne, Cyprus, Via Mersin-10
E-mail: info@leventhomes.com
Tel: +90 392 8151121
Housing type: Apartment □ Villa ■
Project address:
Bogaz Cove Villa Type 1– Karpaz highway, Iskele, Famagusta

More information

Heat and water Insulation Roofing- Double glazed windows- Air-conditioning- water storage tank

Façade characteristics

Yes■ No□ - Arch: decorative entrance arch in front and rear of villa
Yes■ No□ - Shutter: brown steel shutter over the balcony door and windows
Yes■ No□ - Columns: entrance decorative columns
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes■ No□ - Window: vertical windows are utilized at the right and left sides of building
Yes■ No□ - Door: wooden entrance door
Yes■ No□ - Walls: the ground floor surrounded wall with the yellow color inspire the high and massive walls which were used in traditional housing
Yes□ No■ - Terraces:
Yes■ No□ - Balcony: wide balcony in front of the master room and kitchen
Yes□ No■ - overhanging elements:
Yes□ No■ - protruded windows:
Yes■ No□ - Horizontal separator elements:

Roof type and shading elements

□ Flat roof
□ Gambrel roof
■ Hipped roof
□ Shed roof
■ Shading: Pergola type of shading

Site layout

Elevation (inside)

Covering materials

Ceramic tiles for the bathroom and kitchen
Terrazzo floor tiles used for covering the all of the floor spaces even bedrooms

Plan

Elevation (street view)

Façade Color

■ White	□ Blue
□ Gray	□ Pink
■ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Layout organization

Yes■ No□ - Room: 3 bedrooms
Yes□ No■ - Hall: entrance hall
Yes□ No■ - Veranda:
Yes□ No■ - Service area: kitchen and bathroom at both of the ground and first floor
Yes□ No■ - Entrance:

Table 20: Inventory Table of Kaymakli Villas

General information	**More information**	**Façade characteristics**	**Roof type and shading elements**
Company name: Levent Homes ltd. **Address & phone number:** No: 143, Ziya Rizki Caddesi, Girne, Cyprus, Via Mersin-10 E-mail: info@leventhomes.com Tel: +90 392 8151121 **Housing type:** Apartment □ Villa ■ **Project address:** Kaymakli Villas– Kızılbaş Klisesi, Nicosia	Chimney- backyard- Heat and water Insulation Roofing- Double glazed windows- Air conditioning- water storage tank	Yes□ No■ - Arch: Yes□ No■ - Shutter: Yes■ No□ - Columns: balcony columns Yes□ No■ - Dentils & cornice: Yes□ No■ - Brackets: Yes□ No■ - Keystone Yes■ No□ - Cumba: protruded space at the top of the entrance represented the cumba Yes□ No■ - Window: Yes□ No■ - Windows frame: Yes□ No■ - Door: Yes□ No■ - Walls: Yes■ No□ - Terraces: located in front of the dining room Yes■ No□ - Balcony: located at corner, in front of the bedroom Yes■ No□ - overhanging elements: the whole of the first floor is represented the overhanging elements Yes□ No■ - protruded windows: Yes■ No□ - Horizontal separator elements: parking roof is acting such as the horizontal separator	■ Flat roof □ Gambrel roof □ Hipped roof □ Shed roof □ Shading:
Site layout	**Elevation (inside)**		**Covering materials**
			Ceramic tiles for the bathroom and kitchen Terrazzo floor tiles used for covering the all of the floor spaces even bedrooms
Plan	**Elevation (street view)**	**Façade Color**	**Layout organization**
		■ White □ Blue ■ Gray ■ Pink □ Yellow □ Olive green □ Red □ Other colors: □ Brown	Yes□ No■ - Room: 3 bedrooms Yes■ No□ - Hall: Yes□ No■ - Veranda: Yes□ No■ - Service area: 1 bathroom at ground floor and two bathroom at first floor Kitchen only at ground floor but not as the separated unit Yes□ No□ - Entrance:

Sevilla Construction

The company was founded in North Cyprus in 2004. The main office of the company is located at No.70/2, Next to Zeus Hotel, Mustafa Çagatay Cad. Girne, in North Cyprus. Sevilla Construction Company With the ten years works experience is one of the youngest company through the island. In fact, by attention to the numbers of housing construction, Sevilla is one of the fast growing company which is design and build the residential settlements in the north of the island. However, the managers of the company have not arranged the any plan for extend their activity in other cities. Therefore, this company only constructed the houses in Girne until the current time.

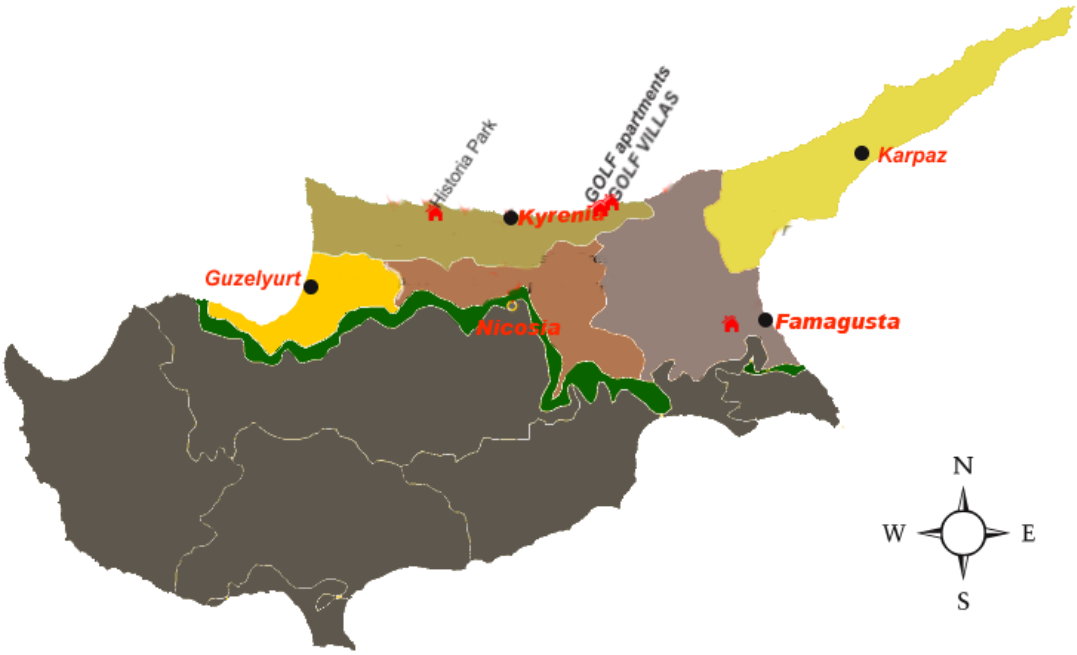


Figure 73: Location of Selected Mass Housing Projects

As marked in the map above, the selected mass housing projects which are selected from Sevilla Construction Company are Golf Villas, Golf apartments in Esentepe, and Historia Park in Çatalköy.

Figure 74 & Figure 75: Golf Villas and Golf APARTMENTS in Esentepe

Figure 76: Historia Park Type 4 in Çatalköy

Table 21: Inventory Table of GOLF VILLAS

General information

Company name: SEVILLA CONSTRUCTION
Address & phone number:
No.70/2, Next to Zeus Hotel, Mustafa Çagatay Cad. Kyrenia, North Cyprus
+90 392 816 05 77- +90 533 870 05 77
Web Address: www.sevillacyprus.com
Email: info@sevillacyprus.com
Housing type: Apartment □ Villa ■
Project address:
GOLF VILLAS– Esentepe, Girne, north Cyprus

More information

Double glazed- 3 ton water tank- Fireplace- swimming pool-

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes■ No□ - Columns: entrance columns
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes■ No□ - Keystone: applied as decorative feature in top of the door and windows frame
Yes□ No■ - Cumba:
Yes■ No□ - Window: some of them are vertical
Yes■ No□ - Window frame: yellow stone frame around the windows in addition to utilize for balconies and door frame
Yes■ No□ - Door: two leaf doors for entrance
Yes□ No■ - Walls:
Yes■ No□ - Terraces: located at the left side of the first floor
Yes■ No□ - Balcony: located at both corners of first floor
Yes□ No■ - overhanging elements:
Yes□ No■ - protruded windows:
Yes□ No■ - Horizontal separator elements:

Roof type and shading elements

□ Flat roof
□ Gambrel roof
■ Hipped roof
□ Shed roof
■ Shading: Pergola type of shading used for Terrace

Site layout

Elevation (inside)

Covering materials

Ceramic tiles for the bathroom
Ceramic flooring
Ceramic flooring
Marble stairs

Plan

Elevation (street view)

Façade Color

■ White	□ Blue
□ Gray	□ Pink
■ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Layout organization

Yes■ No□ - Room: 3 bedrooms
Yes□ No■ - Hall:
Yes□ No■ - Veranda:
Yes■ No□ - Service area: storage room, kitchen, two bathrooms
Yes■ No□ - Entrance:

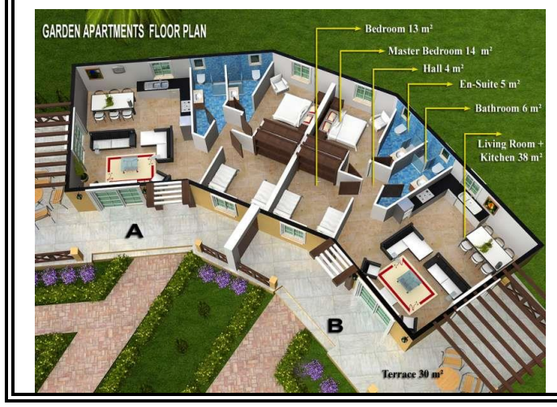
Table 22: Inventory Table of GOLF Apartments

General information

Company name: SEVILLA CONSTRUCTION
Address & phone number:
No.70/2, Next to Zeus Hotel, Mustafa Çagatay Cad. Kyrenia, North Cyprus
+90 392 816 05 77- +90 533 870 05 77
Web Address: www.sevillacyprus.com
Email: info@sevillacyprus.com
Housing type: Apartment ■ Villa □
Project address:
GOLF apartments– Esentepe, Girne, north Cyprus

Site layout

Plan



More information

Double glazed- 3 ton water tank- Fireplace- swimming pool-

Elevation (inside)

Elevation (street view)

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns:
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes■ No□ - Window: some of them are vertical windows with proportion 1:2
Yes■ No□ - Window frame: protruded yellow frame
Yes■ No□ - Door: one leaf timber doors
Yes□ No■ - Walls:
Yes□ No■ - Brackets:
Yes■ No□ - Terraces: all around
Yes■ No□ - Balcony:
Yes□ No■ - overhanging elements:
Yes□ No■ - protruded windows:
Yes■ No□ - Horizontal separator elements

:

Façade Color

■ White	□ Blue
□ Gray	□ Pink
■ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
■ Shading: Pergola type of shading used for Terraces

Covering materials

Ceramic tiles for the bathroom
Terrazzo floor tiles used for covering the all of the floor spaces even bedrooms
Marble stairs

Layout organization

Yes□ No■ - Room: 2 bedrooms
Yes□ No■ - Hall:
Yes□ No■ - Veranda:
Yes□ No■ - Service area:
Yes□ No■ - Entrance:

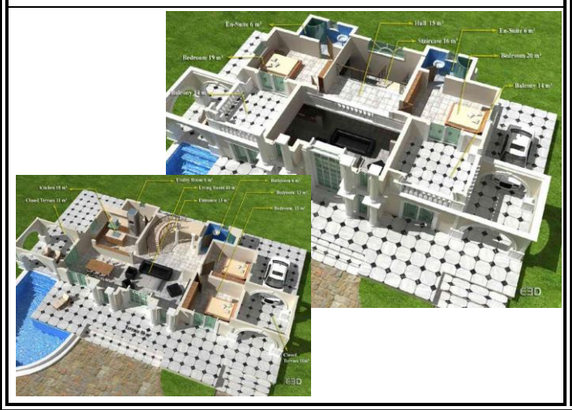
Table 23: Inventory Table of Historia Park

General information

Company name: SEVILLA CONSTRUCTION
Address & phone number:
No.70/2, Next to Zeus Hotel, Mustafa Çagatay Cad. Kyrenia, North Cyprus
+90 392 816 05 77- +90 533 870 05 77
Web Address: www.sevillacyprus.com
Email: info@sevillacyprus.com
Housing type: Apartment □ Villa ■
Project address:
Historia Park – Çatalköy, Girne, north Cyprus

Site layout

Plan



More information

Double glazed windows- Solar panels- water tank-

Elevation (inside)

Elevation (street view)

Façade characteristics

Yes■ No□ - Arch: under the balconies and entrance
Yes□ No■ - Shutter:
Yes■ No□ - Columns: entrance Doric columns
Yes■ No□ -Dentils & cornice:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes□ No■ - Window: different proportion are utilized for window but none of them are not in exact proportion 1:2 or even approximately similar to the traditional usage
Yes■ No□ - Window frame: white frame around the windows
Yes■ No□ - Brackets: diagonal narrow brackets under the entrance ceiling
Yes■ No□ - Door: arched entrance door
Yes□ No■ - Walls:
Yes■ No□ - Terraces: located at backyard
Yes■ No□ - Balcony:
Yes□ No■ - overhanging elements:
Yes□ No■ - protruded windows:
Yes■ No□ - Horizontal separator elements: straight horizontal lines between two floors

Façade Color

■ White	□ Blue
■ Gray	□ Pink
□ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
■ Shading: Pergola type of shading used for entrance

Covering materials

Ceramic tiles for the bathroom
Natural marble windowsills
Terrazzo floor tiles used for covering the all of the floor spaces even bedrooms
Mosaic covering for yard

Layout organization

Yes■ No□ - Room: 4 bedrooms
Yes■ No□ - Hall: entrance hall
Yes■ No□ - Veranda: located at the backyard in front of the pool
Yes■ No□ - Service area: kitchen, bathroom and storage room
Yes■ No□ - Entrance: opened to the hall (sofa)

Dovec Construction

Dovec Construction was established in 1989. The main office is located at Muharrem Döveç Apt, Salamis St, Famagusta, in North Cyprus. The Company has built over six hundred personal living areas through the Cyprus. Dovec during the 20 years of its experience tried to attract Cypriot and foreign buyers by constructing the houses according to investors taste. In addition, Dovec Construction Company achieved to be the one of the few companies in Turkish Republic of Cyprus to have a First Class TRNC Building Construction Certificate award from PWD ministry. This company is working in some of the subcategory of architectural field such as constructing shops, offices, apartments, and villas.

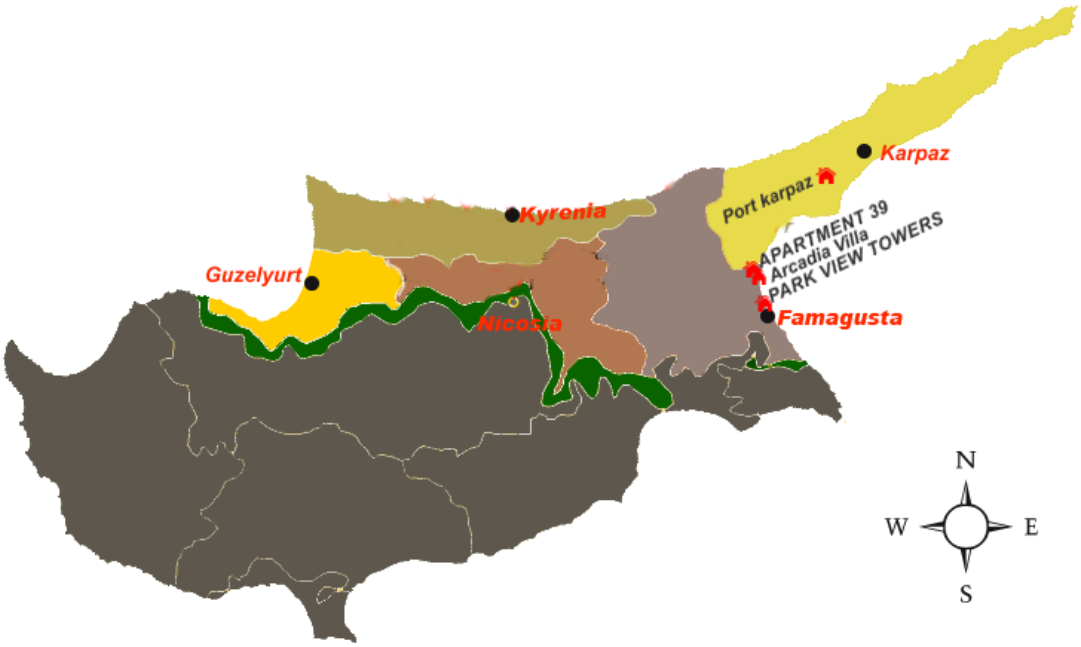


Figure 77: location of selected mass housing projects

Dovec Company is running the numerous housing projects in Famagusta, Iskele Bogazı and Yeniboğaziçi until now. Park View Towers in Yeniboğaziçi village, Port Karpaz in Fmagusta, Apartment 39 in Bogaz, and Arcadia villa projects in

Bogaz, are some of the Dovec housing projects which offered the apartment and villa types to its customers.

Figure 78 & Figure 79: Park View Towers in Yeniboğaziçi Village and Port Karpaz in karpaz, Famagusta

Figure 80 & Figure 81: Apartment 39 in Bogaz, and Arcadia Villa Projects in Bogaz

Table 24: Inventory Table of APARTMENT 39

General information

Company name: Dovec Construction
Address & phone number: Muharrem Döveç Apt,Salamis St, Famagusta, North Cyprus Office
+90 392 365 13 67 - Fax: +90 392 365 13 68
E-mail: info@dovecconstruction.com
Housing type: Apartment ■ Villa □
Project address:
APARTMENT 39– Bogaz, Famagusta

More information

Double glazing- Intercom- Central Satellite System- Solar powered water heater system

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns:
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes■ No□ - Cumba: cubic shape with the gray color at the top of the entrance inspire the cumba
Yes□ No■ - Window:
Yes□ No■ - Door:
Yes□ No■ - Walls: two leafs door
Yes□ No■ - Terraces:
Yes■ No□ - Balcony: located in front and rear
Yes■ No□ - overhanging elements: there is no overhanging elements but by framing the large part of the façade the impressions is very similar to the overhanging part in elevation
Yes□ No■ - protruded windows:
Yes□ No■ - Horizontal separator elements:

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
□ Shading:

Site layout

Elevation (inside)

Covering materials

Ceramic tiles for the bathroom
Terrazzo floor tiles used for covering the all of the floor spaces

Plan

Elevation (street view)

Façade Color

■ White	□ Blue
■ Gray	□ Pink
□ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Layout organization

Yes■ No□ - Room: 2 bedrooms
Yes■ No□ - Hall: entrance hall
Yes□ No□ - Veranda:
Yes□ No□ - Service area: Bathroom and WC
Yes□ No□ - Entrance:

Table 25: Inventory Table of PARK VIEW TOWERS

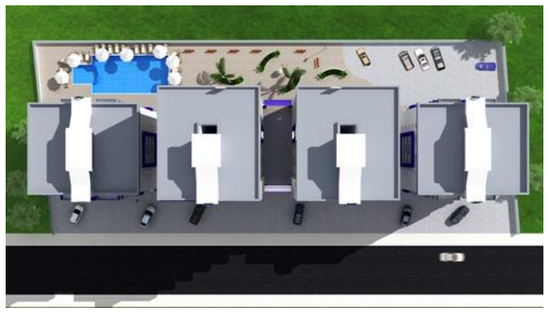
General information

Company name: Dovec Construction
Address & phone number: Muharrem Döveç Apt,Salamis St, Famagusta, North Cyprus Office +90 392 365 13 67 - Fax: +90 392 365 13 68
E-mail: info@dovecconstruction.com
Housing type: Apartment ■ Villa □
Project address:
PARK VIEW TOWERS– Yeniboğaziçi village, Famagusta

More information

Swimming Pool, Restaurant, Snack Cafe, Central Satellite System

Site layout



Elevation (inside)

Plan

Elevation (street view)

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns: entrance columns
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes■ No□ - Window: the vertical form of windows which appeared by using the color form of frame around the 2 or more windows
Yes■ No□ - Door: rectangular protruded frame around the door which is represented the traditional door shape with the new interpretation
Yes□ No■ - Walls:
Yes□ No■ - Terraces:
Yes■ No□ - Balcony: in front and rear of buildings
Yes■ No□ - overhanging elements: decorative overhanging elements
Yes□ No■ - protruded windows:
Yes■ No□ - Horizontal separator elements: ground floor is divided from upper floors with the straight lines

Façade Color

■ White	■ Blue
■ Gray	□ Pink
□ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
□ Shading:

Covering materials

Ceramic tiles for the bathroom
Terrazzo floor tiles used for covering the all of the floor spaces

Layout organization

Yes■ No□ - Room: 3 bedrooms
Yes■ No□ - Hall: corridor between the rooms inspire the sofa (hall)
Yes□ No■ - Veranda:
Yes□ No■ - Service area:
Yes□ No■ - Entrance:

Table 26: Inventory Table of Port Karpaz

General information

Company name: Dovec Construction
Address & phone number: Muharrem Döveç Apt,Salamis St, Famagusta, North Cyprus Office +90 392 365 13 67 - Fax: +90 392 365 13 68
E-mail: info@dovecconstruction.com
Housing type: Apartment ■ Villa □
Project address:
Port karpaz – karpaz, Famagusta, famagusta

More information

Water tank- earthquake resistance- air conditioning- solar collector- fire place

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns:
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes■ No□ - Cumba: protruded cubic form at the top of the entrance door
Yes■ No□ - Window: vertical windows with the proportion 1:2 beside the building
Yes■ No□ - Window frame: yellowish windows frame
Yes□ No■ - Door:
Yes□ No■ - Walls:
Yes■ No□ - Terraces: located at the rear
Yes■ No□ - Balcony: wide balconies in front and behind the first floor
Yes■ No□ - overhanging elements: over hanging balconies frame in front and rear of the building
Yes□ No■ - protruded windows:
Yes■ No□ - Horizontal separator elements: horizontal elements in front and behind the building that recognized the ground floor from first floor in the façade

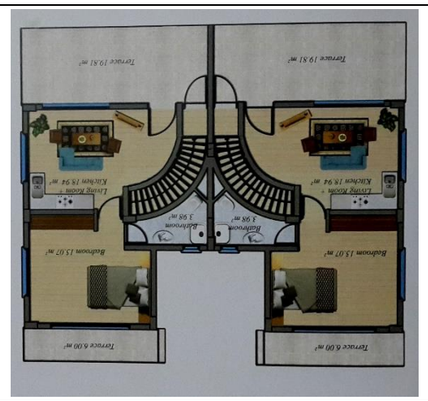
Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
□ Shading:

Site layout

Elevation (inside)

Plan



Elevation (street view)

Façade Color

■ White
□ Gray
■ Yellow
□ Red
□ Brown
□ Blue
□ Pink
□ Olive green
□ Other colors:

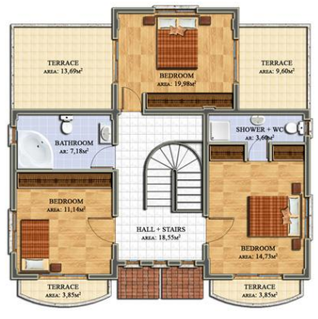
Covering materials

Ceramic tiles for the bathroom
Terrazzo floor tiles used for covering the all of the floor spaces

Layout organization

Yes□ No■ - Room: 2 bedrooms
Yes□ No■ - Hall:
Yes□ No■ - Veranda:
Yes□ No■ - Service area:
Yes□ No■ - Entrance:

Table 27: Inventory Table of Arcadia Villa

<table>
<tr><td>General information</td><td>More information</td><td>Façade characteristics</td><td>Roof type and shading elements</td></tr>
<tr><td>Company name: Dovec Construction
Address & phone number: Muharrem Döveç Apt,Salamis St, Famagusta, North Cyprus Office
+90 392 365 13 67 - Fax: +90 392 365 13 68
E-mail: info@dovecconstruction.com
Housing type: Apartment □ Villa ■
Project address:
Arcadia Villa– Bogaz, Famagusta</td><td>Aluminum double glazed windows- Water tank-earthquake resistance- air conditioning- solar collector- Garage</td><td rowspan="3">Yes□ No■ - Arch:
Yes■ No□ - Shutter: aluminum shutter with the white color
Yes□ No■ - Columns:
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes□ No■ - Window: none of them are not utilized with the traditional form and proportion
Yes■ No□ - Door: rectangular wooden double leafs door
Yes□ No■ - Walls:
Yes■ No□ - Terraces: located at the backyard
Yes■ No□ - Balcony: rear and in front of building
Yes■ No□ - overhanging elements: eaves and protruded parts of balconies from façade surface
Yes□ No■ - protruded windows:
Yes□ No■ - Horizontal separator elements:</td><td>■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
□ Shading:</td></tr>
<tr><td>Site layout</td><td>Elevation (inside)</td><td></td></tr>
<tr><td></td><td>  </td><td></td><td>Covering materials</td></tr>
<tr><td></td><td></td><td></td><td>Ceramic tiles for the bathroom
Mosaic tile covering for yard</td></tr>
<tr><td>Plan</td><td>Elevation (street view)</td><td rowspan="2">Façade Color
□ White □ Blue
□ Gray □ Pink
■ Yellow □ Olive green
■ Red □ Other colors:
□ Brown</td><td>Layout organization</td></tr>
<tr><td> 

FIRST FLOOR PLAN
AREA: 83,05M²</td><td>  </td><td>Yes■ No□ - Room: 3 bedrooms without any direct connection
Yes■ No□ - Hall: entrance hall that located among the rooms
Yes□ No■ - Veranda:
Yes■ No□ - Service area:
Yes■ No□ - Entrance:</td></tr>
</table>

Umay Construction Ltd.

Umay Construction Company is working in both of the design and build the housing construction in Famagusta. Umay office is located in No: 4. Ali Edip Apt. Çemberi Karşısı, Famagusta, North Cyprus, According to its architect Umay Company is trying to design and build houses for preparing the comfort home for buyers. The houses settlements that designers of the company are designed mostly have high attention on climatic condition of Cyprus and qualified materials to build the appropriate houses for Cypriot.

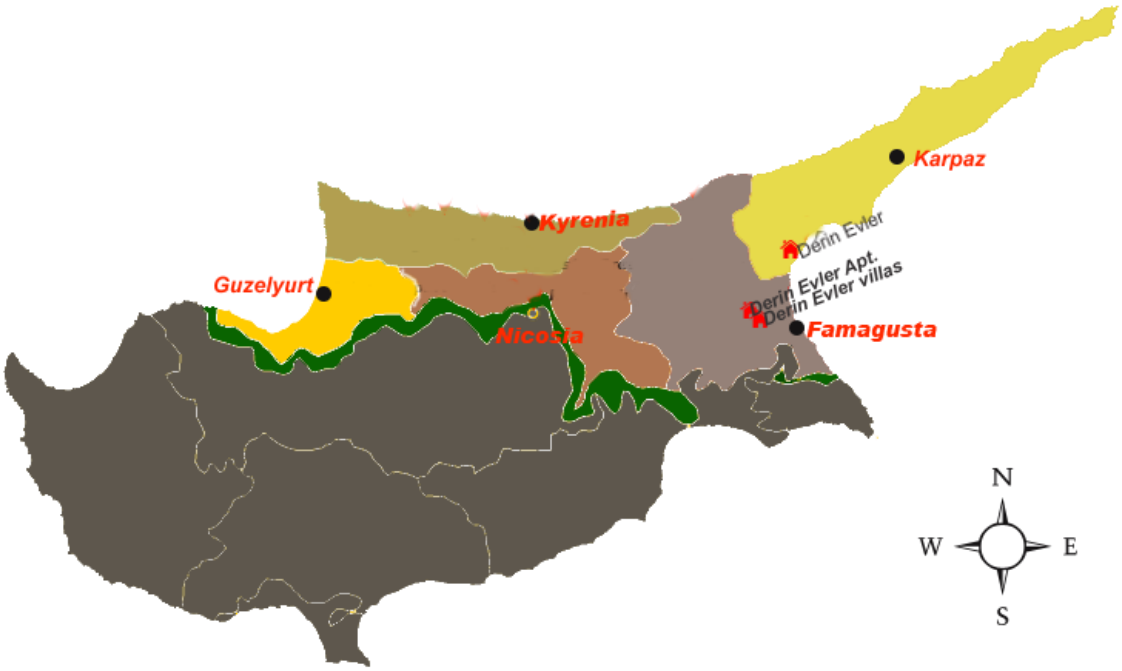


Figure 82: Location of Selected Mass Housing Projects

Derin Evler villa and apartment types in Nicosia highway, Famagusta and Derin Evler in Bogaz which are selected in this study.

Figure 83 & Figure 84: Derin Evler Villa and Apartment Types in Nicosia Highway, Famagusta

Figure 85: Derin Evler in Bog

Table 28: Inventory Table of Derin Evler

General information

Company name: Umay Construction Ltd.
Address & phone number:
No : 4. Ali Edip Apt. Çemberi Karşısı, Famagusta, Cyprus, Mersin 10
Phone 0 90 392 365 59 66- 444 84 80
Email info@umayconstruction.com
Website: http://www.umayconstruction.com
Housing type: Apartment ■ Villa □
Project address:
Derin Evler – Nicosia highway, Famagusta

More information

backyard- Heat and water Insulation Roofing- Double glazed windows- Air conditioning- water storage tank

Site layout

Elevation

Plan

Elevation (street view)

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns:
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes■ No□ - Cumba: protruded parts of the balconies is very similar to traditional form of cumba
Yes□ No■ - Window:
Yes□ No■ - Window frame:
Yes□ No■ - Door:
Yes□ No■ - Walls:
Yes■ No□ - Terraces: in front of the ground floor
Yes■ No□ - Balcony: for all of the bedrooms, living room and kitchen
Yes■ No□ - overhanging elements: protruded frame around the balconies
Yes■ No□ - protruded windows: located at the to sides of the building facade
Yes■ No□ - Horizontal separator elements: protruded parts of the floors which is divided the ground floor from first floor

Façade Color

■ White	□ Blue
■ Gray	□ Pink
■ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
□ Shading:

Covering materials

Ceramic tiles for the bathroom
Terrazzo floor tiles used for covering the all of the floor spaces
Composite covering for overhanging windows

Layout organization

Yes■ No□ - Room: 3 bedrooms
Yes■ No□ - Hall: corridor between the rooms such as the traditional position of the sofa (hall)
Yes□ No■ - Veranda:
Yes□ No■ - Service area:
Yes□ No■ - Entrance:

Table 29: Inventory Table of Derin Evler

General information

Company name: Umay Construction Ltd.
Address & phone number:
No : 4. Ali Edip Apt. Çemberi Karşısı, Famagusta, Cyprus, Mersin 10
Phone 0 90 392 365 59 66- 444 84 80
Email info@umayconstruction.com
Website: http://www.umayconstruction.com
Housing type: Apartment □ Villa ■
Project address:
Derin Evler – Nicosia highway, Famagusta

More information

backyard- Heat and water Insulation Roofing- Double glazed windows- Air conditioning- water storage tank

Site layout

Elevation

Plan

Elevation (street view)

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns:
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes■ No□ - Cumba: protruded box at the top of the entrance inspire the cumba in new interpretation
Yes□ No■ - Window:
Yes□ No■ - Window frame:
Yes□ No■ - Door:
Yes□ No■ - Walls:
Yes■ No□ - Terraces: placed in front of the ground floor
Yes■ No□ - Balcony: positioned in front of the all bedrooms
Yes■ No□ - overhanging elements: positioned in all sides of the façade surface by cubic form as an extended parts of bedrooms or even balconies
Yes□ No■ - protruded windows:
Yes□ No■ - Horizontal separator elements:

Façade Color

■ White	□ Blue
■ Gray	□ Pink
■ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
■ Shading: in front of the entrance

Covering materials

Ceramic tiles for the bathroom
Terrazzo floor tiles used for covering the all of the floor spaces
Composite covering for overhanging windows

Layout organization

Yes□ No■ - Room: 2 bedrooms
Yes□ No■ - Hall:
Yes□ No■ - Veranda:
Yes□ No■ - Service area:
Yes□ No■ - Entrance:

Table 30: Inventory Table of Derin Evler – Bogaz

<table>
<tr><td>General information</td><td>More information</td><td>Façade characteristics</td><td>Roof type and shading elements</td></tr>
<tr><td>Company name: Umay Construction Ltd.
Address & phone number:
No : 4. Ali Edip Apt. Çemberi Karşısı, Famagusta, Cyprus, Mersin 10
Phone 0 90 392 365 59 66- 444 84 80
Email info@umayconstruction.com
Website: http://www.umayconstruction.com
Housing type: Apartment □ Villa ■
Project address:
Derin Evler – Bogaz, Famagusta</td><td>backyard- Heat and water Insulation Roofing- Double glazed windows- Air conditioning- water storage tank</td><td>Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns: entrance columns
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes□ No■ - Window:
Yes□ No■ - Window frame:
Yes■ No□ - Door: steel door with glass part and iron work
Yes□ No■ - Walls:
Yes■ No□ - Terraces: positioned at backyard
Yes■ No□ - Balcony: in front of the living room and bedrooms
Yes■ No□ - overhanging elements: Undue pars of balconies in addition to the eaves
Yes□ No■ - protruded windows:
Yes□ No■ - Horizontal separator elements:</td><td>■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
■ Shading: in front of the entrance</td></tr>
<tr><td>Site layout</td><td>Elevation (inside)</td><td></td><td>Covering materials</td></tr>
<tr><td></td><td>  </td><td></td><td>Ceramic tiles for the bathroom
Terrazzo floor tiles used for covering the all of the floor spaces</td></tr>
<tr><td>Plan</td><td>Elevation (street view)</td><td></td><td>Layout organization</td></tr>
<tr><td>  </td><td>  </td><td>Façade Color
■ White □ Blue
□ Gray □ Pink
□ Yellow □ Olive green
□ Red □ Other colors:
■ Brown</td><td>Yes□ No■ - Room: 2 bedrooms
Yes□ No■ - Hall:
Yes□ No■ - Veranda:
Yes□ No■ - Service area:
Yes□ No■ - Entrance:</td></tr>
</table>

Erbatu Construction

Erbatu Construction Company is another young company in Cyprus which is started by establishing the agency office in Famagusta. Erbatu Construction Company office is located in No 1, near the universal bank, Osman Fazil Polatbasa mosque square in Famagusta. Thereafter, this company extended their activity by participation in some houses construction projects. Since, Erbatu was started the own projects to be the one of the numerous construction company which are working at the housing field over the Cyprus. The main activity area of the company is Famagusta, however, according to the owner of the company they are seriously working on organizing the plan to extend their activity area from Famagusta to other cities over the north Cyprus.

Figure 86: Location of Selected Mass Housing Projects

Three housing projects are chosen as an instance which are Aysergi Tower in Yeni Boğaziçi, Gandular 9 in Famagusta city center and Tuzla tepe in Tuzla.

Figure 87 & Figure 88Aysergi Tower in Yeni Boğaziçi, Gandular 9 in Famagusta City Center

Figure 89: Tuzla Tepe in Tuzla, Famagusta

Table 31: Inventory Table of Aysergi Tower

General information

Company name: Erbatu Construction
Address & phone number: No 1, near the universal bank, Osman Fazil Polatbasa mosque square, Famagusta
+90392 365 59 90- fax: +90392 365 5999
e-mail: erbatuemlak2009@hotmail.com
Housing type: Apartment ■ Villa □
Project address:
Aysergi Tower – Yeni Boğaziçi, Famagusta

More information

Water tank- earthquake resistance- air conditioning- solar colector

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns:
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes■ No□ - Cumba: different color at the top of the entrance and center of the building with the cubic shape is represent the cumba
Yes□ No■ - Window:
Yes■ No□ - Windows frame: protruded vertical windows frame which inspire the vertical windows
Yes□ No■ - Door:
Yes□ No■ - Walls:
Yes■ No□ - Terraces: located at the left side of the first floor
Yes■ No□ - Balcony: located at the middle of the façade surface
Yes■ No□ - overhanging elements: balconies which are protruded from facade
Yes□ No■ - protruded windows:
Yes□ No■ - Horizontal separator elements:

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
□ Shading:

Site layout

Elevation (inside)

Covering materials

Ceramic tiles for the bathroom
Terrazzo floor tiles used for covering the all of the floor spaces

Plan

Elevation (street view)

Façade Color

■ White
■ Gray
□ Yellow
■ Red
□ Brown
□ Blue
□ Pink
□ Olive green
□ Other colors:

Layout organization

Yes■ No□ - Room: 3 bedrooms
Yes■ No□ - Hall: corridor between the bedrooms which is inspire the traditional hall
Yes□ No■ - Veranda:
Yes□ No■ - Service area:
Yes□ No■ - Entrance:

Table 32: Inventory Table of Gandular 9

General information

Company name: Erbatu Construction
Address & phone number: No 1, near the universal bank, Osman Fazil Polatbasa mosque square, Famagusta
+90392 365 59 90- fax: +90392 365 5999
e-mail: erbatuemlak2009@hotmail.com
Housing type: Apartment ■ Villa □
Project address:
Gandular 9 – city center- Famagusta

More information

Water tank- earthquake resistance- air conditioning- solar collector- Water Pressure Tank- Parking Lot PVC- Double Glazing windows- Wire Infrastructure- Aluminum Railings in Kupec Terrace Bathroom

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns:
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes■ No□ - Keystone: used in windows frame as decorative feature
Yes□ No■ - Cumba:
Yes■ No□ - Window: in front of the façade with proportion 1:2
Yes■ No□ - Window frame: yellowish protruded frame around the windows
Yes■ No□ - Door: protruded rectangular door frame
Yes□ No■ - Walls:
Yes□ No■ - Terraces: located at the left side of the first floor
Yes■ No□ - Balcony: Polyhedral balcony
Yes■ No□ - overhanging elements: the eaves at the upper floor
Yes□ No■ - protruded windows:
Yes□ No■ - Horizontal separator elements:

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
□ Shading:

Site layout

Elevation (inside)

Plan

Elevation (street view)

Façade Color

■ White	□ Blue
□ Gray	□ Pink
■ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Covering materials

Natural Landscape
Ceramic tiles for the bathroom
Terrazzo floor tiles used for covering the all of the floor spaces

Layout organization

Yes□ No■ - Room: 3 bedrooms
Yes□ No■ - Hall: entrance hall
Yes□ No■ - Veranda:
Yes□ No■ - Service area: double WC
Yes□ No■ - Entrance:

Table 33: Inventory Table of Tuzla tep

General information

Company name: Erbatu Construction
Address & phone number: No 1, near the universal bank, Osman Fazil Polatbasa mosque square, Famagusta
+90392 365 59 90- fax: +90392 365 5999
e-mail: erbatuemlak2009@hotmail.com
Housing type: Apartment □ Villa ■
Project address:
Tuzla tepe – Tuzla , Famagusta

Site layout

Plan

More information

Water tank- earthquake resistance- air conditioning- solar collector- Double Glazing windows

Elevation (inside)

Elevation (street view)

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes■ No□ - Columns: two columns in front of the building
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes■ No□ - Cumba: positioned in front of the building
Yes□ No■ - Window:
Yes□ No■ - Door:
Yes□ No■ - Walls:
Yes■ No□ - Terraces: placed in front of the building
Yes■ No□ - Balcony: wide balcony in front of the building for living room in addition to the small balconies behind the first floor for bed rooms
Yes□ No■ - overhanging elements:
Yes□ No■ - protruded windows:
Yes■ No□ - Horizontal separator elements: the beam in front of the façade acting as separator elements

Façade Color

■ White	□ Blue
■ Gray	□ Pink
□ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
■ Shading: applied at the top of the door entrance

Covering materials

Ceramic tiles for the bathroom
Terrazzo floor tiles used for covering the all of the floor spaces

Layout organization

Yes□ No■ - Room: 3 bedrooms
Yes□ No■ - Hall:
Yes□ No■ - Veranda:
Yes□ No■ - Service area:
Yes□ No■ - Entrance:

Unity Group Ltd.

Unity Group Ltd. was established with the main office in the old harbor of Girne, North Cyprus, in May 2004. The company is included of seven subsidiaries and departments which were works under the Unity Ltd to achieve the company success in Cyprus. Therefore, the company is dealing with all of the related business group and company through the north Cyprus. In addition, the company to sell the numerous projects that they directly have built or indirectly participated in the construction process, they founded the state agency in Cyprus major cities. Indeed, This Company is owned the largest state agency through the north of the island.

It could be difficult to indicate the exact locations of company projects on the map because Unity Group is working and participating to the many project all around the island. However, most of the project which is built directly by the company is located at Girne.

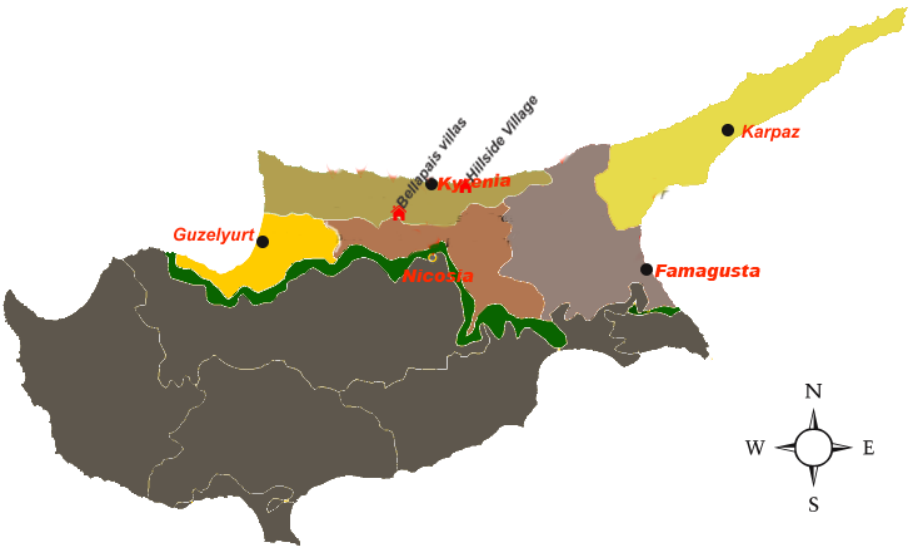


Figure 90: Location of Selected Mass Housing Projects

Therefore, Bellapais villas located in Lefcosa - Girne road and Hillside Village in Girne are chosen housing projects from numerous projects of Unity Group Company.

Figure 91 & Figure 92: Bellapais Villas Located In Lefcosa - Girne Road and Hillside Village in Girne

Table 34: Inventory Table of Bellapais villas

General information

Company name: Unity Group Ltd.
Address & phone number:
North Cyprus Property. harbor, Girne, Cyprus, Mersin 10
E-mail: info@north-cyprus-properties.com

Website: www.north-cyprus-properties.com
Housing type: Apartment □ Villa ■
Project address:
Bellapais villas – Lefcosa-Girne road -35 minutes to Ercan Airport- 5 minutes to Kyrenia Harbour Bellapais, Girne

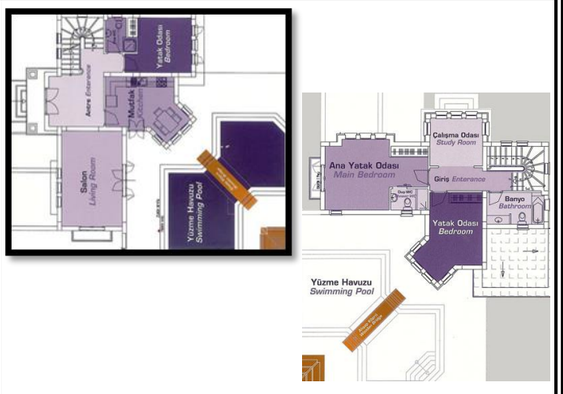
More information

Double glazing windows- Pergolas around swimming pool- Fitted laminated wardrobes in bedrooms- Solar panels and 2 tons water tank

Site layout

Elevation (inside)

Plan



Elevation (street view)

Façade characteristics

Yes■ No□ - Arch: around the backyard as decorative features in addition to prepare the privacy for house
Yes■ No□ - Shutter: applied in front of the first floor windows
Yes■ No□ - Columns: entrance columns
Yes□ No■ - Dentils & cornice:
Yes■ No□ - Brackets: diagonal brackets
Yes■ No□ - Cumba: utilized at the top of the entrance with the exact usage of traditional cumba
Yes■ No□ - Window: designed with proportion 1:2
Yes■ No□ - Window frame: protruded stone frame
Yes■ No□ - Door: two leafs wooden door with glass part
Yes□ No■ - Walls:
Yes■ No□ - Terraces: all around the villa
Yes■ No□ - Balcony: at two sides of villa
Yes■ No□ - overhanging elements: designed all around the façade surface
Yes■ No□ - protruded windows: located toward the backyard
Yes■ No□ - Horizontal separator elements: indicated by eaves

Façade Color

■ White	□ Blue
□ Gray	□ Pink
□ Yellow	□ Olive green
□ Red	□ Other colors:
■ Brown	

Roof type and shading elements

□ Flat roof
□ Gambrel roof
■ Hipped roof
□ Shed roof
■ Shading: in front of the entrance

Covering materials

Terrazzo floor tiles used for covering the all of the floor spaces

Layout organization

Yes■ No□ - Room: 3 bedrooms + 1 en-suite
Yes■ No□ - Hall: small hall among the bedrooms
Yes■ No□ - Veranda: placed at the backyard
Yes■ No□ - Service area: toilet placed in the backyard in addition to the inside toilets
Yes■ No□ - Entrance: opened directly to the sofa

Table 35: Inventory Table of Hillside Village

General information

Company name: Unity Group Ltd.
Address & phone number:
North Cyprus Property, Girne harbor, Girne, Cyprus, Mersin 10
E-mail: info@north-cyprus-properties.com

Website: www.north-cyprus-properties.com
Housing type: Apartment □ Villa ■
Project address:
Hillside Village – Girne

More information

earthquake regulations- Damp proof and insulation- Double Glazing windows- Air conditioning- swimming pool- Underfloor gas central heating

Façade characteristics

Yes■ No□ - Arch: decorative arch for entrance
Yes■ No□ - Shutter: aluminum shutters with wooden texture
Yes□ No■ - Columns:
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes■ No□ - Window: vertical windows at two sides of houses
Yes■ No□ - Door: two leafs steel door with glass part
Yes■ No□ - Walls: massive stone walls and higher than first floors
Yes■ No□ - Terraces: positioned at backyard
Yes■ No□ - Balcony: wide balcony behind the building
Yes□ No■ - overhanging elements:
Yes□ No■ - protruded windows:
Yes□ No■ - Horizontal separator elements:

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
■ Shading: in front of the entrance

Site layout

Elevation (inside)

Plan

Elevation (street view)

Façade Color

■ White	□ Blue
□ Gray	□ Pink
□ Yellow	□ Olive green
□ Red	□ Other colors:
■ Brown	

Covering materials

Internal ceramic flooring
Terrazzo floor tiles used for covering the houses out door

Layout organization

Yes□ No■ - Room: 2 bedrooms
Yes□ No■ - Hall:
Yes□ No■ - Veranda:
Yes□ No■ - Service area:
Yes□ No■ - Entrance:

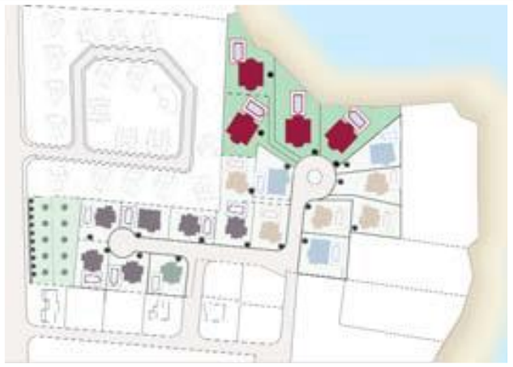
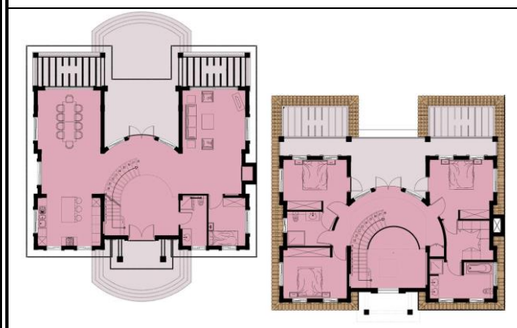
Royal Palm

Royal palm is one of the well-design houses settlements in Girne which is built and designed under the supervision of Royal Palm as a British company. The headquarter office of the company is located in London at 262 Waterloo Road, London SE1 8RQ UK. In fact, the Royal palm project is the only housing project that build over the island from Royal Palm Company with the aim of preparing the opportunity for British people who is longing to have unique house in Mediterranean coast.

Figure 93: Location of Selected Mass Housing Projects

Figure 94 & Figure 95 & Figure 96: Royal Palm types 1, 4 and 5 in Girne

Table 36: Inventory Table of Royal Palm Type 1

General information	**More information**	**Façade characteristics**	**Roof type and shading elements**
Company name: Royal palm **Address & phone number:** London Office, 262 Waterloo Road, London SE1 8RQ UK 07973 419544 Email: info@royalpalms.co.uk **Housing type:** Apartment □ Villa ■ **Project address:** Royal palm type 1 – Girne	backyard- Heat and water Insulation Roofing- Double glazed windows- Air conditioning- water storage tank- central heating and cooling- fire place- swimming pool	Yes■ No□ - Arch: at entrance as decorative feature with the hipped roof at top Yes□ No■ - Shutter: Yes□ No■ - Columns: entrance columns Yes□ No■ - Dentils & cornice: Yes□ No■ - Brackets: Yes□ No■ - Keystone Yes□ No■ - Cumba: Yes■ No□ - Window: vertical windows with proportion 1:2 Yes■ No□ - Window frame: protruded windows' frame Yes■ No□ - Door: steel door with glass part and iron work Yes□ No■ - Walls: ground floor walls are higher than upper floor however, these walls are not massive or even constructed with the natural stone shape Yes■ No□ - Terraces: at backyard Yes■ No□ - Balcony: at the rear side of building Yes■ No□ - overhanging elements: inspired by eaves Yes□ No■ - protruded windows: Yes■ No□ - Horizontal separator elements: designed with the eaves that clearly divided the first floor from ground floor in the façade	■ Flat roof □ Gambrel roof □ Hipped roof □ Shed roof ■ Shading: in front of the entrance
Site layout	**Elevation (inside)**		**Covering materials**
			All internal walls and ceilings rendered in two coats Cement: sand plaster and gypsum satin plaster External surfaces plastered and completed with acrylic painting Travertine marble for covering the floors
Plan	**Elevation (street view)**		**Layout organization**
			Yes■ No□ - Room: 4 bedrooms without any direct connection Yes■ No□ - Hall: at the first floor between rooms Yes□ No■ - Veranda: Yes□ No■ - Service area: Yes■ No□ - Entrance: opened toward the inner sofa(hall)

Façade Color	
■ White	□ Blue
□ Gray	□ Pink
□ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Table 37: Inventory Table of Royal Palm Type 4

General information

Company name: Royal palm
Address & phone number:
London Office, 262 Waterloo Road, London SE1 8RQ UK
07973 419544
Email: info@royalpalms.co.uk
Housing type: Apartment □ Villa ■
Project address:
Royal palm type 4 – Girne

Site layout

Plan

More information

backyard- Heat and water Insulation Roofing- Double glazed windows- Air conditioning- water storage tank- central heating and cooling- fire place- swimming pool

Elevation (inside)

Elevation (street view)

Façade characteristics

Yes■ No□ - Arch: at the back side of building
Yes□ No■ - Shutter:
Yes■ No□ - Columns: Doric columns at backyard
Yes■ No□ - Dentils & cornice: under the eaves
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes■ No□ - Window: vertical windows existed only at the ground floor
Yes■ No□ - Window frame: protruded vertical frame around the windows
Yes■ No□ - Door: two leafs wooden door
Yes□ No■ - Walls:
Yes□ No■ - Terraces:
Yes■ No□ - Balcony: designed at first floor toward the backyard
Yes■ No□ - overhanging elements: created by the eaves
Yes□ No■ - protruded windows:
Yes■ No□ - Horizontal separator elements: inspired by eaves

Façade Color

■ White	□ Blue
□ Gray	□ Brown
□ Yellow	□ Olive green
□ Red	□ Other colors:

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
■ Shading: in front of the entrance

Covering materials

All internal walls and ceilings rendered in two coats Cement: sand plaster and gypsum satin plaster
External surfaces plastered and completed with acrylic painting
Travertine marble for covering the floors

Layout organization

Yes□ No■ - Room: 3 bedrooms
Yes□ No■ - Hall:
Yes□ No■ - Veranda:
Yes□ No■ - Service area:
Yes■ No□ - Entrance: opened toward the small hall to create the privacy for houses users

Table 38: Inventory Table of Royal Palm Type 5

General information

Company name: Royal palm
Address & phone number:
London Office, 262 Waterloo Road, London SE1 8RQ UK
07973 419544
Email: info@royalpalms.co.uk
Housing type: Apartment □ Villa ■
Project address:
Royal palm type 5 – Girne

More information

backyard- Heat and water Insulation Roofing- Double glazed windows- Air conditioning- water storage tank- central heating and cooling- fire place- swimming pool

Site layout

Elevation

Plan

Elevation (street view)

Façade characteristics

Yes■ No□ - Arch: at the back side of building
Yes□ No■ - Shutter:
Yes■ No□ - Columns: Doric columns at backyard
Yes■ No□ - Dentils & cornice: under the eaves
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes■ No□ - Window: vertical windows existed only at the ground floor
Yes■ No□ - Window frame: protruded vertical frame around the windows
Yes■ No□ - Door: two leafs wooden door
Yes□ No■ - Walls:
Yes□ No■ - Terraces:
Yes■ No□ - Balcony: designed at first floor toward the backyard
Yes■ No□ - overhanging elements: created by the eaves
Yes□ No■ - protruded windows:
Yes■ No□ - Horizontal separator elements: inspired by eaves

Façade Color

■ White	□ Blue
□ Gray	□ Pink
□ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
■ Shading: in front of the entrance

Covering materials

All internal walls and ceilings rendered in two coats Cement: sand plaster and gypsum satin plaster
External surfaces plastered and completed with acrylic painting
Travertine marble for covering the floors

Layout organization

Yes□ No■ - Room: 3 bedrooms
Yes□ No■ - Hall:
Yes□ No■ - Veranda:
Yes□ No■ - Service area:
Yes■ No□ - Entrance: opened toward the small hall to create the privacy for houses users

Halken Construction & Estate Co. Ltd.

Halken Construction was founded in 1996 in Cyprus. Solidarity and collaboration of different occupational entrepreneurs resulted the establishing the office in No.9, Halken Apartmanı 8, Salamis St, Famagusta. As a result, The Company is founded by eight investors and administered with board of directors.

During 28 years' experience in design and build the mass housing projects, Halken has tried to use of materials with the high quality to prepare the suitable houses for its customers. In addition, the managers of the company claiming that the aesthetics design of houses settlements is one of the significant factors which is considered in their projects. Moreover, they are trying to select and use of suitable materials, as well as appropriate design for Cypriot because most of their buyers are local.

Figure 97: Location of Selected Mass Housing Projects

Since Halken establishment, approximately four hundred projects have built until the current time. However, most of the projects are built in Famagusta. Therefore,

the most of the Halkan activity area is in Famagusta subsidiary towns. For instance, Mutluyaka in Bogaz, Akasya Homes Tuzla and Halken tower located at Larnaka Road are some of their projects around the Famagusta city.

Figure 98: Halken Tower Located st Larnaka Road

Figure 99 & Figure 100: Mutluyaka and Akasya Homes Tuzla

Table 39: Inventory Table of MUTLUYAKA

General information

Company name: Halken Construction & Estate Co. Ltd.
Address & phone number:
No.9, Halken Apartmanı 8, Salamis St, Famagusta, Cyprus Mersin 10 Turkey
+90 392 444 4848 Fax: +90 392 365 5892
e-Mail: info@halkencoltd.com
Housing type: Apartment □ Villa ■
Project address:
MUTLUYAKA – Bogaz, Famagusta

More information

backyard- Heat and water Insulation Roofing- Double glazed windows- Air conditioning- water storage tank

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns: entrance columns
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes□ No■ - Window:
Yes□ No■ - Door:
Yes□ No■ - Walls:
Yes■ No□ - Terraces: at backyard
Yes□ No■ - Balcony:
Yes■ No□ - overhanging elements: eaves are acting as overhanging elements
Yes□ No■ - protruded windows:
Yes□ No■ - Horizontal separator elements:

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
■ Shading: located as a divided unit at the yard

Site layout

Elevation (inside)

Covering materials

Ceramic tiles for the bathroom
Wooden covering
Terrazzo floor tiles used for covering the all of the floor spaces

Plan

Elevation (street view)

Façade Color

■ White
■ Gray
□ Yellow
□ Red
■ Brown
□ Blue
□ Pink
□ Olive green
□ Other colors:

Layout organization

Yes■ No□ - Room: 3 bedrooms
Yes■ No□ - Hall: corridor used as a passage for bedrooms inspire the traditional sofa
Yes□ No■ - Veranda:
Yes□ No■ - Service area:
Yes□ No■ - Entrance:

Table 40: Inventory Table of Halken Tower

General information

Company name: Halken Construction & Estate Co. Ltd.
Address & phone number:
No.9, Halken Apartmanı 8, Salamis St, Famagusta, Cyprus Mersin 10 Turkey
+90 392 444 4848 Fax: +90 392 365 5892
e-Mail: info@halkencoltd.com
Housing type: Apartment ■ Villa □
Project address:
Halken tower – Larnaka Road

More information

backyard- water Insulation Roofing- Double glazed windows- Air conditioning- water storage tank- electricity backup

Site layout

Elevation

Plan

Elevation (street view)

Façade characteristics

Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns: entrance columns
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes□ No■ - Keystone
Yes□ No■ - Cumba:
Yes□ No■ - Window:
Yes□ No■ - Door:
Yes□ No■ - Walls:
Yes■ No□ - Terraces: at backyard
Yes■ No□ - Balcony: designed at the two corners in front of the building
Yes□ No■ - overhanging elements:
Yes□ No■ - protruded windows:
Yes■ No□ - Horizontal separator elements: represented by the ground floor roof

Façade Color

■ White	□ Blue
■ Gray	□ Pink
□ Yellow	□ Olive green
□ Red	□ Other colors:
□ Brown	

Roof type and shading elements

■ Flat roof
□ Gambrel roof
□ Hipped roof
□ Shed roof
■ Shading: at the latest floor

Covering materials

Ceramic tiles for the bathroom
Terrazzo floor tiles used for covering the all of the floor spaces

Layout organization

Yes□ No■ - Room: 3 bedrooms
Yes■ No□ - Hall: entrance and middle
Yes□ No■ - Veranda:
Yes□ No■ - Service area:
Yes□ No■ - Entrance:

Table 41: Inventory Table of Halken Akasya Houses

<table>
<tr><td>General information</td><td>More information</td><td>Façade characteristics</td><td>Roof type and shading elements</td></tr>
<tr><td>Company name: Halken Construction & Estate Co. Ltd.
Address & phone number:
No.9, Halken Apartmanı 8, Salamis St, Famagusta, Cyprus Mersin 10 Turkey
+90 392 444 4848 Fax: +90 392 365 5892
e-Mail: info@halkencoltd.com
Housing type: Apartment □ Villa ■
Project address:
Halken Akasya Houses - Tuzla, Famagusta</td><td>backyard- Heat and water Insulation Roofing- Double glazed windows- Air conditioning- water storage tank</td><td>Yes□ No■ - Arch:
Yes□ No■ - Shutter:
Yes□ No■ - Columns: entrance columns
Yes□ No■ - Dentils & cornice:
Yes□ No■ - Brackets:
Yes■ No□ – Keystone: designed at the top side of windows
Yes□ No■ - Cumba:
Yes■ No□ - Window: vertical windows in front and behind the building
Yes■ No□ - Windows frame:
Yes■ No□ - Door: rectangular form with the two leafs wooden made door
Yes□ No■ - Walls:
Yes■ No□ - Terraces: at backyard
Yes■ No□ - Balcony: toward the backyard and right side of the building
Yes■ No□ - overhanging elements: appeared by eaves
Yes■ No□ - designed protruded windows: at the ground floor
Yes□ No■ - Horizontal separator elements:</td><td>□ Flat roof
□ Gambrel roof
■ Hipped roof
□ Shed roof
□ Shading:</td></tr>
<tr><td>Site layout</td><td>Elevation (inside)</td><td rowspan="3">Façade Color
■ White
□ Gray
■ Yellow
□ Red
□ Brown
□ Blue
■ Pink
■ Olive green
□ Other colors:</td><td>Covering materials</td></tr>
<tr><td></td><td>  </td><td>Ceramic tiles for the bathroom
Wooden covering
Terrazzo floor tiles used for covering the all of the floor spaces</td></tr>
<tr><td>Plan</td><td>Elevation (street view)</td><td>Layout organization</td></tr>
<tr><td></td><td>  </td><td>Yes□ No■ - Room:
Yes□ No■ - Hall:
Yes■ No□ - Veranda: designed at backyard
Yes□ No■ - Service area:
Yes□ No■ - Entrance:</td></tr>
</table>