(MASTER THESIS)

ROOM CABINETS IN TRADITIONAL TURKISH HOUSES: CASE STUDY OF KULA

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Bornova – İZMİR 2013 This study titled "Room Cabinets in Traditional Turkish Houses: Case Study of Kula" and presented as Master Thesis by Yarkın ÜSTÜNES has been evaluated in compliance with the relevant provisions of Y.U Graduate Education and Training Regulation and Y.U Institute of Science Education and Training Direction and jury members written below have decided for the defense of this thesis and it has been declared by consensus / majority of votes that the candidate has succeeded in thesis defense examination dated 25.01.2013.

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TEXT OF OATH

I hereby certify with honor that this MSc/Ph.D. thesis titled "ROOM CABINETS IN TRADITIONAL TURKISH HOUSES: CASE STUDY OF KULA" was written by me, without aid that would not comply with scientific ethics p and academic traditions, that the bibliography I have used is that indicated in this thesis and that appropriate reference has been given whenever necessary.

25/01/2013

Yarkın ÜSTÜNES

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GELENEKSEL TÜRK EVLERINDEKİ DOLAP ÜNİTELERINİN KULA ÖZELİNDE İNCELENMESİ

ÜSTÜNES, Yarkın

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1950'li yılların sonrasında uygulanan kentleşme politikaları sonucunda, zamana karşı telafisi olmayan yok olma tehlikesi ile karşı karşıya kalan kültürel mirasımız, dönemlerinin yaşam biçimini yansıtan somut örnekler olarak birer belge değeri taşırlar. Toplumun sosyal, ekonomik ve kültürel yaşamını mekana yansıtması nedeniyle tarihi konutların taşıdığı bu belge değeri, evrensel koruma söyleminde içinde bulunduğu çevrenin, sosyal, kültürel ve ekonomik yaşamını yansıtan, böylece daha sonraki nesillere bu konu hakkında doğrudan bilgi aktaran bir değerler bütünüdür. Bu önemine karşın tarihi yapılarımızın birçoğu halkın geleneksel yaşam biçimlerinden çağdaş yaşam biçimine geçme isteği ve günümüze oranla bu yapıların çok daha zayıf malzemelerle yapılmış olmaları nedeniyle maalesef günümüze kadar ulaşamamıştır.

Tarihi dokusu ve geleneksel konut mimarisi ile Kula, 18. ve 19. yüzyıldaki geleneksel Türk evleri hakkında bilgi edinmemize olanak sağlamaktadır. Günümüzde yaklaşık 900 kadar tescilli yapısı bulunan ve Anadolu'daki emsallerine göre önemli bir değer taşıyan bu ilçe, söz konusu konut yapısı sayesinde, geçmişteki hayat koşulları, maddi imkanlar, örf, adet ve gelenekler hakkında bilgi veren toplumun birer aynası niteliğindedir. Mimari açıdan dönemin yapı teknolojisi, el sanatları ve dekorasyon düşüncesi hakkında da bilgi edinmemizi sağlayan bu yapıların yansımaları yapının içinde de görülmektedir.

Bu tez kapsamında dönemin mimari yaklaşımı, yapı malzemesi ve teknikleri, dekorasyon anlayışı ve detay çözümleri hakkında bilgi sahibi olmamızı sağlayan dolap üniteleri Kula özelinde incelenmiştir. Dolaplardaki ahşap işçilikleri, süslemeler, yapım yöntemleri detaylıca ele alınmıştır. Bugüne kadar herhangi bir çalışmanın yapılmadığı odalardaki bu yüklüklerin özgünlüğünü kaybetmeden korunabilmesi için fotoğrafları çekilip, rölöve ve envanterleri çıkartılarak gelecek kuşaklara aktarmak üzere belgelendirilmiştir. Çağdaş bir çalışmanın ancak geleneksel mimari yaklaşımları koruyup onlara sahip çıkarak olabileceği düşüncesiyle yapılan bu çalışma sonucunda, geçmişteki örnekler de göz önüne alınarak günümüzdeki modern dolapların nasıl bir değişiklik geçirdiği açıklanmıştır.

Anahtar Kelimeler: Geleneksel Türk Evi, Kula, yüklük, depolama ünitesi

ABSTRACT

ROOM CABINETS IN TRADITIONAL TURKISH HOUSES: CASE STUDY OF KULA

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Our cultural heritage, which inevitably has been facing the danger of extinction as a result of rapid urbanization after 1950, has document value by epitomizing life styles of the periods witnessed. This document value, carried by historical houses reflect the social, economic and cultural life of the society to space, is a set of values which transfer information to the next generations. They also reflect the social, cultural and economic life of the environment involved, within the discourse of universal protection. Despite this importance, our historical buildings could not reach up to the present due to the demand of people to transit from a traditional lifestyle to a modern one. It is also due to the fact that many of these structures were made with much weaker materials than those of today.

Kula, with its historical urban texture and traditional residential architecture, allows us to find information about the traditional Turkish Houses of the 18th and 19th centuries. This district, today has up to about 900 registered structures bear a significant value when compared to it counterparts in Anatolia, acts like a mirror that provides information about the past conditions of life, construction materials, customs and traditions of the society. The reflections of these structures allow us to obtain information about the construction technology, handcrafts and decorations of the period.

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Within the scope of this thesis, closets allow us to obtain information about the architectural approach, building materials and techniques, decoration concepts and detailed solutions of the period were examined in the case of Kula. Wooden artisanship construction methods and decorations were studied in detail. In order to transfer to future generations, photos, building surveys and inventories were carried out. These will help to preserve the closets in these rooms without losing their originality. Up to the present no work has not been done on this subject. Modern design can only be better with knowledge in the past. Therefore the construction of our design heritage gain significance. This study examined traditional house closets and tried to extract clues for our present day design and

Keywords: Traditional Turkish House, Kula, Cabinets, Storage Units

practice.

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I would like to thank also to my parents, for their boundless love and support. Most special thanks go to my father Hakan ÜSTÜNES and friend Sibel YILDIZEL for their unconditional support, encouragement, understanding, and patience during the hard times of this study.

Finally I dedicate this thesis to my parents who unremittingly supported me during my years of study. They made this work possible.

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CHAPTER 1 - CONCEPTUAL FRAMEWORK

This first chapter tries to put the research topic in its setting of the Turkish Traditional house and their settlements. The subject is also looked at from the view point of religion, customs and traditional social and economic life of the old Turkish cities. This preliminary chapter also introduces the basic research subject, goals and objectives of the study, as well as its research methods and its scope.

1.1 Introduction

Historic cities and their dwellings represent elements of our cultural heritage. They include social economic and other values which are embedded in their physical environmental. With the monumental and civil architecture these settlements provide us information about civilizations which no longer exist. In addition historic buildings and their various components also provide information about building technologies and the way of life of their users. Such buildings also provide guides to present day designers with their intrinsically unusual designs and applications.

The present research has adopted the system, design, construction and usage of wardrobes (or closets) which are seen as important elements of the interior of the rooms of the Turkish house. Kula was chosen as the key study area due to the fact that it contains about our nine hundred registered (listed) buildings of historic and architectural value.

Kula, which has been recorded in historic documents by the name "Klanudda" since 56 B.C. The first documents are related to city have been recorded by the famous Turkish traveler Evliya Çelebi. This person who visits Kula in 1671 mentions that the settlement neighborhoods 1200 houses, 24 mosques, 3 baths, 6 khans, 200 shops and 11 elementary ("sibyan") schools. The city has shown a flourished economic life by being located on the "Kings Trail" and the commercial round to join İzmir to Ankara. Thus Kula has been a rich

commercial center since the earliest stages of its history. Yet, with the development of new transportation chandelles its commercial significant has digest true time. Today Kula is an economically weak settlement although agriculture (foods, vegetables, cotton and tobacco) and animal husbandry as well as carpet and rug weaving are significant activities at present. The city also has abundant subtly of national hot water springs which are unevenly under used. Kula also has an internationally unique volcanic landscape with its 58 volcanic cons spread over an area 12x30 kilometers. The population of city has incrementally increase through time during which it has lost a good portion of its economically active population. This has left the elderly behind and led to distraction of historically and architecturally valuable traditional Turkish Houses.

They prominent examples of historic buildings we see today were want the properties of the affluent commercial people although the urban conservation area designated in early 1980's, covering an area of 80 hectares. Yet, fortunately, the socio - economic states of its population has prevented urban renewal which we notes in other Turkish cities. Yet the old and poor nation of those people who are left behind has been unable to maintenance of buildings. New housing demands borne as a result of a new way of life, created a new wave of distraction and rebuilding in the republican period and especially after the 1980's.

Various physical changes have thus taken place in historic buildings destroying their original characteristics. Some serious affords have been spend in the last 30 years in order to protect the existing cultural and architectural heritage although today one cannot see a serious integration except a few singular examples. Kula has been chosen as the key study area as perhaps know other Turkish settlement exhibits such a consecration of listed buildings. It was also chosen because of its proximity to İzmir. Thirdly, it was chosen because despite abundant research, little has been done for the subject of this topic.

Studying the room cabinet of the houses in this research also provide us information about people's ways of life, their economic well-beings, handicrafts and intentions in decoration.

This research investigates and documents the various types of room cabinets found in the rooms of the historic Turkish houses. Their conservation, like those of other elements of three buildings, present us clues about the way people lived in these dwellings, decoration methods and other information about religion and traditions. A shower or bathing unit embedded in closets is a unique and intelligent design example and has not yet been seen in present day solutions. This research investigates these and similar features which might indicate designguides in our future designs.

1.2. Purpose of the Study

Rapid population migration into cities from rural areas after 1980's not only created environmental problems but also historical buildings. Sincere in initiatives about conservation in Turkey started at the beginning of 1980's. Despite new laws and regulations institutions, satisfactory results were not obtained in heritage conservation.

A number of studies have been conducted about Kula's historic and traditional architecture and many of things concentrate on dwelling units. A number of publications have been useful in conductive this research. The first of these titled "Plan Types of Turkish Houses (Türk Evi Plan Tipleri)", was published as early as 1984. This work bases on drawings from all over the Turkey, classifies plan schemes and in interpretation. This pioneer work highlights the various types of housing units found in Turkey.

And other study, carried out by Yılmaz Tosun 1969 specifically looks at the houses in Kula. His book titled "Kula Houses in National Architecture" (Milli Mimarimizde Kula Evleri) is a useful document. In his work Tosun studies the general futures of Kula and fourteen houses in detail. He also provides photographs and drawings of these houses and their details.

The third significant publication titled the Turkish House "in Search of its Space" (Kendi Mekan Arayışı İçindeki Türk Evi) has been prepared by Prof. Ö. Küçükerman in 1978. In his book he looks into the roads concept of the Turkish

House, the periods in which certain plan types evolved and the concept of a room with its details. The provides a wealth of examples from various parts of Turkey a companied by joins photographs and detailing's.

Küçükerman was perhaps to first person who studied the wardrobes (or closets) found in rooms, there stage of development and the design character. Architect Cengiz Bektaş has provided as a fifth publication named "The Turkish House" this was published 1986. The concept of a house was discuss with in a historic contexts. He mentions that the closets served "all the needs of a daily life". Examples of a view of these are given and a companied photographs.

In 1998 published Reha Günay a book titled "The Turkish House Tradition and Safranbolu Houses" (Türk Ev Geleneği ve Safranbolu Evleri). This is indeed a valuable study where the author has spent more than year researching Safranbolu houses. A similar study was provided by Ferhan – Hülya Yürekli in 2005 they were examine İskilip buildings. This book titled "The Turkish House Observations – Reinterpretations" (Türk Evi Gözlemler – Yorumlar). Not only looks at traditional dwellings but also compares them with English and Japanese architecture.

Despite the abandons of publications on the Turkish house and Kula buildings in general know individual publication with respect to cabinets used in houses. Consequently this publication make me consider as a original initiative.

1.3. The Content Research

This publication is compose of five chapters in the first of which the reader is informed about the research subject. Secondly, the goes on objectives of the study are explained and thirdly the method of study is explained. The second chapter the issue is handed at the scale at the hall of dwellings while they are investigated within a historic process. This section also deals with a factors and design character which have affected formed the Turkish house in Anatolia.

In the third chapter the cultural elements of the closets are depth with, in a historic perspective while there the developments process is explained and each compounded of the closets is specifically named and discuss. Also with in this chapter the various locations of closets were examined as different plans and cross sections. The foregoing was compose of general analyses. The fourth chapter is devoted to the key study, i.e the closets of the rooms of the Turkish house in Kula. Since closets exist with a number of other functional units within a room (shelf's, storage niches, fireplaces, ect.) these were also looked at while studied the former.

In the fifth and last chapter all the findings of the study are put together, other possible areas of future research are indicated and conclusions are drawn about clues given by historic solutions for new designs.

1.4. The Method of Research

A general survey of literature about the Turkish house was indispensable in order to get acquainted with the house of Turkish settlements, and the general physical, social economic environment. However, the core of the research lays in the forth 4 chapter. Where the researcher spent consider time visiting buildings measuring and photographing closets in various houses. People livings in this units and certain approaches of the municipality were also interviewed although these were not done a systematic manner, but rather casually. This was mainly because a certain number of houses cannot be entered to studied them. The officials of Kula's municipality were helped in carrying out research in the houses surveys. Nine houses were entered and at least fifteen closets were detailed documented and studied.

Several of the local people were interviewed in order to obtain some detail information. Our field and literature survey indicated that there was no in depth research on closets existing in houses. In order to realize the above mentioned research five visits were conducted to Kula, but of these only four turned out to be useful due to several reasons.

CHAPTER 2 - THE TRADITIONAL RESIDENTIAL TEXTURE AND THE TURKISH HOUSE

2.1. The Definition of the Turkish House and its Types of Plans

The type of house with wooden frames, protrusions, wide eaves, which are seen in many regions of Anatolia, European Turkey, and the Balkans, is known as the Turkish House. Many of the works written on the Turkish House, primarily focused on the social and ethnic aspects of this topic. Although within the historical development of the Turkish House, it was shaped according to the regional texture and environmental data, the main principles were defined by means of generalizations.

In order to study the established habitats and the changing social lives of the Turks who had settled in Anatolia, it is essential to find reliable answers to the questions about how they benefited from the accumulations of the civilizations which existed on these lands throughout centuries, and what kind of contributions they made to these accumulations. The settling of Turks in Anatolia started a new habitation process. Information about the beginning of this period is considerably disorderly and inadequate. This situation results from the fact that the historical texture depending on wood and brick, which are weak materials, protected because of the need for its continuous renovation (Arel, 1999). The constructions of 150-200 years ago which managed to survive until today, on the whole are the remains of of the villas and mansions of the ruling class, and mosques, caravanserais, citadels that have a monumental value. In contrast, there are not documents and too many findings for us to figure out in what type of houses the common people lived and and what kind of life they led in these houses. The social development and the analysis of the communal structure provides in sufficient proportion the possibility to define all the development of the process which takes place from tent and nomad-tent to room. At this point, the significant point is on what the concept of the Turkish House is based. The person who established a definition by putting forth the concept of the Turkish House for the first time was Sedad Hakkı Eldem.

"The Turkish House, which initially found its unique character in Anatolia and eventually developed by adopting various external elements in different locations of Europe after the Ottoman conquests... in these locations where peoples who accepted the Turkish race and the Ottoman culture settled and lived, became the dominant type in place of the others" (Eldem 1954).

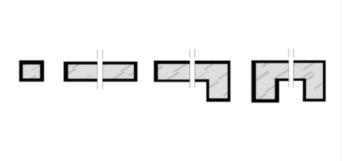
Although there are different opinions and definitions other than this definition, basically Sedat Eldem's definition is accepted to be the valid one. As it had been mentioned earlier, since generally the Turkish House during its historical process was made out of weak materials, the examples available in our time, with the exception of the houses that date back to 150 -200 years ago, are mostly the constructions that were built during the end of the 18th century. This situation brings along with it the result that not much information is available about the previous periods, such as 15th and 16th Century examples. Nevertheless, with the available data it has been possible to establish a Turkish House concept and to develop various typologies. Concerning this issue, the most important definition is, as has been mentioned above, has been the one that belongs to S.H. Eldem. As far as typology is concerned, there are groups available that S.H. Eldem and Doğan Kuban have formed with different methods.

S.H.Eldem developed a typology by defining the Turkish House according to its common characteristic of the placement of the hall (sofa) location. Within the framework of this typology, he divided the Turkish House into four main groups (Eldem, 1954).

2.1.1. Plan without a Sofa

This is considered as the most primitive Turkish House. The rooms do not have any connections with one another. It has a plan schema of aligned rooms. Each room has access from outside. This type is generally for the houses which are protected by a garden gate and garden walls and which have interior courtyards, front gardens or side-gardens. This type was applied in the middle, southern, and eastern regions of Anatolia. It can be said that this type is related to the economic conditions too. For example, this type has not been seen in İstanbul. The type without the hall (sofa) also has two-storey ones. Access to the upperstorey is possible by means of a ladder.

Figure 2.1. Plan without a sofa (Küçükerman, 1985)



2.1.2. Plan with an Outer Sofa

This is the second type of Turkish House. The connection to the rooms is provided by a shared location called "sofa". It was applied commonly practiced in the houses with courtyards and gardens in the rural areas of Anatolia. This is a plan type that reflects the first stage of the plan development. Symmetry is rarely seen. The plan is generally free of strict order. The hall (sofa) opens to the exterior world with one or three facades without walls. In this way, it is a fine reflection of the Turk's life in nature, in other words, the reflection of the nomadic tent-life onto the stationary lay-out. Later, by the placement of the extensions to both ends of the sofa, the plan type showed a development into L and U shapes.

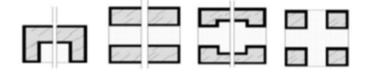
Figure 2.2. Plan with an outer sofa (Küçükerman, 1985)



2.1.3. Plan with an Inner Sofa

This type of hall appearing during the second stage of the plan development has been obtained by lining up rooms on either side of the hall. This is the most wide-spread traditional Turkish House. It has become prominent since the 18th. century; yet, it spread about during the 19th. century. The indoor-hall type plan allowed the placement of more rooms, and with the rooms lined side by side, the walls diminished. This was a commonly preferred plan-type because of its economical and health benefits.

Figure 2.3. Plan with an inner sofa (Küçükerman, 1985)



2.1.4. Plan with a Central Sofa

The central hall plan type is a house type that has been used since Central Asia and while it has been applied to the construction types such as madrasahs, mosques, villas in Anatolian Turkish architecture, it has been applied to the ruling-class houses in large cities since the 18th. century and later in the environs of the cities. Compared to other types, this type has been put to practice later. With the placement of the hall at the center, the house plans turned into squares or square-like rectangles. Four rooms were placed in the four corners of the building

and between the rooms service areas such as a staircase, a vaulted room (eyvan), a cellar, a kitchen were placed.

While initially the hall was rectangular, in time the corners were cut diagonally forming octagonal, polygonal, oval shapes. The hall being protected, allowed the house to be well-heated and because of this, this type was preferred in cold regions.

Figure 2.4. Plan with a central sofa (Küçükerman, 1985)

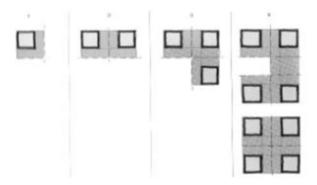


Other than this definition, the definition brought into existence by Doğan Kuban is also acceptable. The approach that forms the basis of the definition is determined according to the number of the units and the connection between the shared space and the units, while accepting the fact that the rooms that make up the Turkish House are the independent life units of the house. By accepting the fact that a module is formed between the basic life unit and the passage or the central space, a grouping is determined. The passage or the central space helps to establish the distribution of the life unit or its connection with the other spaces. Thus, the Turkish House is examined in four groups.

The Smallest Single Unit, The plan-types that are shaped as the most basic unit made up of one room and the central space that this room opens out to, The Two-Unit Arrangement; the plan scheme that is made up of two rooms and the central space that these rooms open out to. These plans are the plans in which the I plan schemes are intensified, The Three-Unit Arrangement; the plan scheme that is made up of three rooms and the central space that these rooms open out to. These plans are the plans in which the L plan schemes are intensified, The Four-Unit Arrangement; The plan-scheme that is basically made up of four or more

rooms and the central space that these rooms open out to. Usually U or O planschemes are included in this group.

Figure 2.5. Traditional Turkish houses plan schemes (Küçükerman, 1985)



The accuracy of both definitions are being disputed from various angles. In that context, the Turkish House can be considered as the life experience that is formed within the history of the dwellings of a community which existed on the Anatolian lands during a historical process. This state "being unique to human beings and consisting of life experience" which declares the insurmountability of defining the Turkish House using very general concepts leaves a lot of open ends and various deficiencies in all kinds of typological definitions.

2.2. The Development of the Turkish House within the Historical Process in Anatolia

A social development process manifests itself within the development of the environment in which people live. The environments that can be constructed have been socially shaped by means of culture, moral values, hierarchical layout and other than these determinants, the power of the scientific developments such as science and technology that determine the technical and the practical life, make these environments permanent. At this point permanence is important because an accumulation that is supposed to be transferred to the coming generations is being formed. As the Turkish House is examined, it is noticed that this house is formed

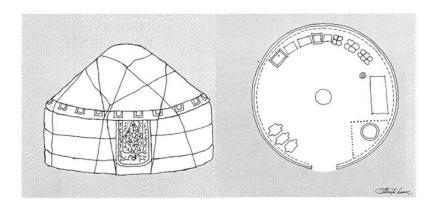
by means of some contrasts and that the basic typological development and order gains meaning through these contrasts.

Rooms- shared areas, closed areas - open areas, ground floor - first floor, the main room - the other rooms, summer areas - winter areas, the harem - the gentlemen's apartments. The contrasts between these areas in terms of function and usage are also supported symbolically and the area is defined socially as well. These are at the same time the values that the community imposes upon the individual, the family, and the area. The area is defined according to the physical and domestic possessions of the individual bearing in mind the following contrasts as follows; Indoor- outdoor, social – daily, upper – lower, the one who serves-the one who is served, man – woman. This determines "which area" will be used "when", "who by", "how" and in this arrangement it has been also effective on the internal structuring and the interrelationships of the area units (Küçükerman, 1996).

But more basically these main contrasts that shape the formation of the Turkish House are the reflection of the Tent-House relationship. This appeared in the transition process from nomadic to settled communities and the shaping of the different needs that appeared throughout that process. The Turks show a life-style that fulfill all the requirements of a nomadic way of living on Asian lands before the Anatolian settlement dates. The concepts of area and homeland being independent from the soil and dependent on the climate, brought along with it the shaping of the restrictive, protective, and introvert (withdrawn) living environment in a tent that can totally be considered a single-roof life. The arrival of the Turks in Anatolia also under the effect of the social transition that started with their acceptance of Islam, blended with the data of "Nomadic Life", "Islamic Values", and "Anatolian Data" and the first and the most important development occurred in the formation of a different and unique way of living.

At the basis of nomadic life the concept of family community and the tents that are used as life units. These basic tents have acquired the names such as "yurt", "ev", "iv", "oyak", "gerge", "çetir", "çadir", ext.

Figure 2.6. Central Asian dwelling tent ("yurt")



When you enter the tent, you will see in the middle of the tent a fire-place or an ember-area (korluk) where there is always fire. This spot is used for keeping warm and cooking. Right across the entrance there is a place called "tör" where chests, storage bags are kept. On the right hand side of the entrance to the tent, a section called "saba" can be found. This section is usually separated by a knitted mat and it is used as a cellar and it is named as "çiğ". Near this section the is the bed section called "kerevit". In the single tents of the families right across this bed and on the left hand side of the tent a bed for the groom and the bride is found. To the right hand side of the "kerevit", a pole is found on which valuable belongings are hung. On the left hand side of the entrance to the tent, flaps (kanat) are found to hang on saddles and harnesses.

Other than these, in every tent daily materials such as supply bags, leather sacks, weaving looms can be found (Küçükerman, 1996). There are various assumptions about the process of the transition to the wooden frame system which lies between this period and the period being formed as the period known in our time as Traditional Turkish Houses. The most basic assumption is that these tents were eventually being cited as houses. These tents were cited as "otav", "otag", "kerekü", "alaçık" which were made up of nomadic tents ("yörük"). They had the structure of a wooden framework completed by a cover over it. During this period these houses were divided into two according to their construction system (Uğurlu 1990).

Framework House (Çatma Ev); This is a construction type which is composed of twenty vertical, twenty horizontal sticks with sharpened points being fixed at the intersection point appearing in each of the two directions.

Agglomerate House (Topak Ev); The sticks with sharpened points form a ring with an angle of 45 degrees to the floor and they are tied together at the ends and the contact points. Then, the construction is covered with felt material and a wooden mast is placed in the middle to complete the construction. His type of construction was replaced by one-storey brick or stone mountain houses and in place of these the first examples of our present Turkish House appeared which had a stone floor and wooden upper storeys. While the transition from the nomadic life-style to the permanent settlement life-style was taking place, there were different tendencies in the Turkish community. Some Turks have tried to continue with the nomadic life-style for a long time; some started to cultivate land by establishing new settlements in different regions; and some created an arrangement by settling down in the old settlements and sharing the existing settlements among themselves. As a result of these developments, the Turkish settlements exhibited a disorderly character. The most important factors that determine the general characteristics of the Anatolian settlements are the regional, geographic effects. It will be difficult for any community, to be inclined towards a development which is independent from the basic regional data in accordance with the intensity of that data. As the regional data decrease, the shaping and the development of the settlement start to gain diversity. The natural data of Anatolia brought about with itself multi-diversity to the settlements like itself too. A lot of typological developments that also affected the communal development took place ranging from material to construction, from outward-bound tendency to inward bound. As examples, wooden constructions rising from the ground in North Anatolia, inward-bound stone and brick constructions in Central Anatolia have been effective in the shaping of the stone and composite-structures in Western and Southern Anatolia.

In time, with the developing social structure too, the tent gave way to the room. The Summer-Winter change of the nomadic life style played an effective role in the development of the new residence type. As a result of this, the migration because of the climate continued in the storeys within the house or between the second available house in the vicinity. As to the development within the structure, the tents that were setup, turned into rooms and each room gained a house function peculiar to the family. In every construction, with the opening of rooms to a common area, the hall (sofa) by means of one door, the life style within the structure presented the independence of the life style within the structure in proportion to its communal nature. This showed that "the family community" concept which is the most basic characteristic of being attached to the traditions, found a place for itself in this new development also (Küçükerman 1996).

Generally The Turkish House has few storeys. The basic arrangement has been programmed as a one-storey arrangement. However, the brick houses have one-storey and the others have two or more storeys. In time, the number of storeys increased and in accordance with the basic arrangement, each new storey was more prominent than the lower one. Because of this, typological characteristics have been determined in the main storeys. As the arrangement of the settlement on which the construction has been built, was shaped as wide and open spaces, the constructions in return had the main storeys lowered so as to intertwine with the nature. But when the settlement was shaped as the narrow, intense city texture the main storey was raised from the ground as much as possible. When the individuals, within the framework of all these effects limited the adequate area for themselves in random schema, the organic formation of the general texture took place. There is no concept of a definite and regular land plot. As a result of this, the constructions and their environs have been solved in unique ways within themselves but even so typological language uniformity and establishment principles remained constant. Along with this natural development, the general character of the newly formed texture too started to shape itself in a unique manner. By means of the narrow streets without trees opening out to spacious squares with abundant trees, fountains, fire-places or to squares with mosques, street doors opening out to gardens enriched by various plants and trees, courtyards that have a link with the outer world only through this door; multistorey residences with each storey serving another purpose, and protrusions that connect the outer street to the residence, the traditional residence textures being shaped by the regional differences took their place in the history of Turkish dwellings.

2.3. The Factors Affecting the Formation of the Turkish House in Anatolia

The determination of the Ottoman Turkish house relies on the Turkish culture and way of living before the acceptance of the Islamic religion. Various factors affected the formation of the Ottoman-Turkish house which has been influential in the region stretching out to the interiors of the Adriatic coastline in the West; in the North to Hungary; in the East to Caucasia going down to the Persian Gulf and Egypt.

These factors are:

- Natural Factors (Topography, climate, building materials)
- Social & Cultural Factors (Religion and privacy, social life and traditions)
- Economic Factors.

2.3.1. Natural Factors

Topography; the Anatolian soil sheltered all the civilizations that have been mentioned in the history of dwellings that has been continuing throughout hundreds of years, with the topographic structure that differed in every corner. Although these communities with the same cultural and social structure in history have found a common development possibility, for their textural development always within the rich topography of Anatolia, they differed continuously as far as their physical structures were concerned. Areas such as valleys, mountains, river banks, slopes, mountain skirts have been inhabited. In similar topographies, as different communities always formed settlement textures near each other, the

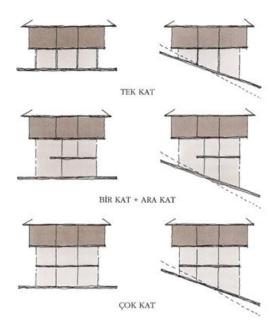
communities sharing common roots in different topographies formed textures that were very different from one another.

The primary task of the settlements is to meet the needs of sheltering. The secondary task is to provide for the requisite demands of the environment to lead a desired life. This situation is important for determining the settlement area. The traditional residence texture, used these two concepts as the determining elements in its formation and used the social and cultural structure with the physical conditions of the settlement area as the shaping elements. The settlements developed according to the production, trade, strategic placement or the historical importance coming from the past. As examples, Kula because of its trade; Tire because of its historical-cultural values and the grand-vizier coming from Tire giving importance to the area; Bergama because of its strategic importance; Birgi because of its development based on religious beliefs have survived. All these are the results that have been formed in accordance with the topographic possibilities of the above-mentioned settlements. That the region has agricultural lands, that it is located in a rough slope and a wide valley, directly affects the general texture.

In addition to the adaptability of the ground floor, the Turkish House shows an organic texture resulting from topography. The construction of the upper storeys according to the basic construction principles, allows one to evaluate the traditional residence texture at two different planes. The most evident difference between these planes is that one is formed by nature, the other is formed by human beings. The upper storeys are made up of areas having right angles. If we want to compare the planes, the first plane is made up of an organic ground floor with garden walls that are totally independent and that have been shaped by a disorderly limitation concern and streets that are the areas of a common area with a similar organic construction texture belonging to the community. The second plane is made up upper storeys. These storeys have a definite order and have no dependence on the first plane as far as form is concerned and their form has been shaped by wooden construction techniques.

This is the basic principle of the traditional residence texture. No matter what the natural conditions are, the first plane always prepares a foundation for the second plane. The first plane shapes these conditions in its own structure either organically or depending on certain conditions. Even though the second plane is placed in an independent manner, the first plane prepares its foundation. This situation creates an important design criterion for the development related to topography. This means that in the second plane, with a development related to the basic criteria that make up the architectural character, the structure of the land is left in the second plane, no matter what the land conditions are and even though land compensations are given for the texture formation in the first plane.

Figure 2.7. The relation between the floors and natural surrounding (Küçükerman, 1978)



Generally, certain basic principles are shaped by the experiences developed in time, in the shaping of the settlement topographically. The first one of these is the tearing away of the plane (on which there is the residence on a sloped land) from the natural plane starting from a specific point. This situation brings about the leveling that fits the slope in the texture. This leveling affects the other factors such as the view, the orientation. While the settlements that develop on mountainous regions usually present a disorderly texture, the settlements on flat

areas are shaped as orderly settlements. This situation creates residences on slopes overlooking the view; on flat areas the structure is directed towards the inner courtyard. As a result, in textures that develop in settlements on slopes, the street texture differs according to the area structure. The streets that are located parallel to the slope, as long as the slope is minimized, are shaped being tied to one another with short intermediary connections. In this situation, the constructions are placed on slopes where the slope allows this. In contrast to this, although on flat areas a more rigid and orderly street texture formation is expected, this is not possible. Throughout their history since the Turks displayed a disorderly settlement character, when they moved onto the permanent settlements, under the effect of the same disorderliness they occupied areas as much as they needed them in a haphazard manner, as gardens. In the remaining flat areas and slopes, a more disorderly and organic texture appeared. The typical examples of slopes and flat areas are Tire and Kula respectively.

Climate; one of the most important factors in the formation of traditional residences is the climate. The climate, as well as affecting the general texture characteristic, is also the most important determinant of the outdoor and indoor living. The most basic habit of determining and changing the living area according to the season, a habit that has been continuing since the nomadic lifestyle, has been shaped within the texture as winter-summer house or winter summer room or floor. Among the sections that have been affected by the climate conditions of the traditional living, the most affected areas are the shared living areas. The fact that most of the living takes place in this area has an important role in this. In hot and humid regions, these areas are placed facing the cooling winds in accordance with the general texture characteristic. In hot and dry areas, the shared living areas that have been placed in wards, are from time to time shaped as cool and shady areas with the help of various water elements. The best example for this is the Diyarbakır House in Diyarbakır which has a tough land climate. In cold regions the placing takes place around the fire-places and charcoal-pan areas. In this area, the source of heat is inside and it has to be protected as much as possible.

The halls that are unique Turkish House areas, present climatically, from a typological point of view, a determining characteristic since these common areas are placed in upper storeys and are important factors for the plan-schema. According to this fact, in plan-types without halls, the connection of rooms with one another is made from outside the house. This is a commonly seen schema in very hot climate-regions. For the indoor plan-types there is the thought of having an area protected against the outdoor effects. Due to this, this plan-schema is seen in cool and cold regions. As far as the central hall plan-type is concerned, since the hall is placed exactly at the center of the rooms of the construction, this schema can be applicable in cold regions (Küçükerman, 1996).

As can be understood from these observations, the sections used according to seasons in the Turkish House which is shaped in different ways in different regions within a wide climate graph, are moved to different storeys. For example the section which is inhabited in summer, is an area with big and numerous windows, high ceilings, and it is large and cool being open to breezes. They are found most commonly, in upper storeys. The well-protected shelter sections are used for winter purposes. These sections that are closed to harsh and cold winds with thick walls and small windows (not too many) are placed generally in the interior parts of the house. In three-storey houses, the winter storey is the main storey as seen in Safranbolu houses.

In addition to these, the most important climatic factor "Sun" directly affects the shaping of the Turkish House. The walls facing the North and being thicker and having lesser number of windows (not too many windows) which are small is a precaution taken against the cold air that wild come from the facade without the sun. In contrast to this, the walls facing west, especially inapt areas, are kept as short and narrow as possible in accordance with the angle of the facade length.

One of the most important elements in the control of the sun is the roofeaves. Although the ground-floor of the Turkish House is closed to the street and has nearly no openings, providing maximum exposition to the sunlight in the upper storeys, is the primary plan. But at this point, in winter the sunlight must be allowed into the construction intensely and in summer this should not be so intense. To provide this, the roof-eaves must be produced in an appropriate angle and length. The eaves must block the light-rays coming directly to the building in summer and they must be open to the horizontal light-rays of the summer. To be able to accomplish this, the necessary knowledge about the light rays must be acquired. One must know in which angles these lights rays come depending on the season. This application has been formed by the experience and accumulation of hundred years not by scientific studies though; but the correctness has been verified many times by the present scientific studies. The angles of the sun rays coming to the earth during various seasonal changes are definite. The findings have been shaped as follows: During the mid-Summer 77*46', During the mid-Winter 30*52', During the Spring (Equinox) 54*19' (Özbek 1990).

When we observe the traditional residence texture, we see how these angles that define seasonal changes, shape the development of the length of the eaves, the height of the windows, the garden walls. All these determine the placement shape of the windows which provide the inclination towards the exterior environment and a good climatization disregarding the climate conditions. The protrusions structured in the construction are not there just to provide the lifeconnection with the street but also they are used as sun and light-control elements. In summer, they become a cooling front-volume and they become a section which allows exposure to the sun in Winter. On the other hand, the inner walls of the windows have been enlarged at a certain proportion to increase the light amount of the construction. There are certain precautions to be taken against humidity as well in the Turkish House. There are various precautions against humidity which damages intensely the wood used in the wooden constructions in an architecture. Within the traditional texture, the most commonly seen precaution is the heightening of the ground-floor so that the connection of the construction with the ground is completely cut off (Küçükerman 1996).

In addition to these, the roofs have also been shaped in various ways according to the effects of the climate. In hot regions straight roofs; in rainy

regions broken-wooden roofs; have been used to provide the necessary airing for the wood so that it does not rot in accordance with the effects of the climate. The roofs were covered with brick, earth, and sometimes wood (Günay 1999). Within the framework of all these evaluations, two basic seasonal divisions in which the main life of the Turkish House takes place, can be generalized as follows:

The Summer Room(s);

- Airing, suitably directed as far as the sun is concerned
- Placed so that it will correspond to the respective corners of the upper storeys
- Wall, flooring, ceiling thin and permeable
- Open and large areas with a lot of storey-height
- Large windows opening out
- Must be arranged in a more orderly fashion since it is used for a long time.

The Winter Room(s);

- Closed to the cool breezes, directed so that it gets the sun
- Placed so that it corresponds to the storeys-in-between and rooms-inbetween
- Thick, and material with least possible permeability
- Low storey height, narrow and small areas
- Small windows with shutters
- The interior arrangement must be simpler (Küçükerman, 1973).

The climate is effective on the texture and residence shaping but it is not a definite determinant.

Building materials; most important factor underlying the residential and the textural formations are the building materials. Throughout history, especially in regions where mining could not form a whole with construction technologies, the natural materials that were found in the region, as well as the environmental conditions, also affected the development of settlements. In regions where trees were available, wood; in regions where volcanic activities were intense, volcanic tuffs or stones; in regions where these were not abundant, brick materials were used. As a result, all the regional settlement and building types were shaped in accordance with the technical possibilities of the materials. As examples: Kula's being established in a region of volcanic heaps allowing the use of volcanic-tuff type "Köfeke" stone; in the forest texture of the Black Sea region, the use of wood brought along with it the formation of constructions with different plan-schemas. Different from these although Kayseri, Niğde, Mardin, Konya are situated in similar climate regions, in Kayseri, Niğde, and Mardin regions masonry gained importance but in Konya, a wood-dominated texture was formed (Özbek 1990).

In settlements, generally the most easily available material was used. As different constructions were formed using the same material, also different materials from nearby regions were brought in to be used in various places for decorative purposes. But the most basic attitude of every traditional texture to material was using durable materials such as stone primarily for public buildings, or buildings that have religious or communal importance. As a result of this, in residences materials with less durability such as wood, brick were used. In this context, the most basic materials used in the traditional residence textures can be grouped as brick, wood, and stone (Kuban 1975).

2.3.2. Social & Cultural Factors

The religion and privacy; one of the most effective factors in shaping the Turkish House is religion. Due to the effect of Islam residences were separated into different areas as "haremlik" and "selamlik" for women and men. "Privacy" that resulted from the life-style that produces what it consumes and shows an inward-bound nature, had an important place in the arrangement of the interiorareas. The religious constructions for Turks were made out of stronger, more lasting materials and were created by the community power. However residences were made out of simple and cheap materials.

Traditions and religion brought the philosophy of "being content with little" and along with this, the Turks with a mystical outlook on life and considering this world transitionary, did not pay attention to durability and thereby they tried to build stone, brick, and wood residences that would meet the needs of one generation. The "privacy" concept that appeared with the religion factor in the Turkish house, manifested itself primarily in plan-type and it made itself felt in every area where life was going on. In big and crowded families, in the houses of people with official or religious duties, considering the amount and the continuity of the house-guests, a plan was shaped. This area had "haremlik" and "selamlik" sections. There were two separate entrances to the house and there were two separate halls. In majority, the "haremlik" section was bigger than the "selamlik" section (Eldem, 1968). By means of this plan-schema, the house-guests could be directed to the main room without seeing the house inhabitants. Although in later periods, in the traditional Islamic residence examples, windows opening out to the first-storey could be seen, in traditional architecture the entrance-storey had generally sham-walls without windows. On the walls of the ground-floors that were used as stables, barns and storage-rooms, there are only openings dormerwindows (menfez). Similarly, the garden walls are high and shaped in such a way that the interior cannot be seen from the road. By means of such a design, all the tasks such as garden chores, daily chores that had to be fulfilled in the area were comfortably done. This inward-bound design was shaped as a result of the "privacy" needs of the lady of the house.

25

In Turkish houses, a room embodies nearly all of the house functions and it is almost like a separate "house" within itself. That is why the privacy of the room was also important. Generally, there is no through-way to the room from the hall. It was made possible for the entrance to the room to be controlled from inside. The door was generally placed in the corner of the room and was closely related to the wardrobes (Küçükerman, 1985). An aesthetical solution was brought to the open position of the door and when the door is open it was made possible for the part of the door facing the specially designed hall, to form a whole with the built-in wardrobes (Yıldırım, 2006). In traditional Turkish houses, entrance to the room is made up of two sections and it is fulfilled by changing direction twice (Günay, 1998). A similar application is seen at the entrances of the houses in Arabic countries. Entering the room, a wooden folding-screen or the side-faces of the wardrobes are encountered. In this way, the person entering the room cannot completely see the interior part of the room at first sight and those who are in the room can make their preparations to meet the newcomer.

The concept of "privacy" in a Turkish House can draw attention by means of other elements as well. Different sounds are emitted by the knocker at the door. Thus, it can be understood whether the person knocking at the door is a woman or a man and the door is answered accordingly. Another element is the lattice. While it is possible to see the outside from inside, perceiving who is behind the lattice is hindered.

Not only did the concepts of "privacy" and "religion" affect the plans of the traditional residences but also they were effective in the design of the wardrobe units that Küçükerman qualifies as "supplementary environment". While analyzing the interior arrangement of the rooms, the wardrobes with their open and closed storage systems that allow the room to be used multifunctionally, are designed at the same time to meet all the needs of a family. Rooms such as the bedroom, the living-room, the bathroom have been used for all purposes without any functional limitations. Therefore items used for these purposes were kept in wardrobes. The side-covers in these rooms, in addition to fulfilling the storage functions answered the privacy needs as well. The wash-places named

"yunmalik" or "gusülhane" that have been separated by a cover in the lower part of the large-closet, enabled the family members living in each room to take a bath. In this way, families living in the rooms could have the opportunity of meeting their needs by means of these laid-in wardrobes without leaving their rooms. Another important design that appeared out of the privacy need was the rotating-cupboards. This design allowed the fulfillment of the service to male house-guests within the privacy principles. The circular shelf-system that could rotate around a central point was found inside a cupboard with lids at two sides of the cupboard. In this way, the lady of the house can place what she is serving on the shelf on her side and rotate the cupboard. The other people in the room take these offerings and serve the guests. Thus, the lady of the house manages to complete her service without being seen. A similar example is seen in the "Kaymakamlar Evi" (The District Governor's House) in Safranbolu.

The understanding of privacy, which was shaped by the permanent settlement and the acceptance of Islam created a significant turning point in Turkish culture and thereby in the development of civil architecture. The characteristics of the plan of the traditional Turkish Houses, the usage of floors in houses, halls, the "Haremlik - Selamlık" rooms, the lattice-windows on the doors, rotating cupboards, built-in closets, doors, door-knockers, and accessories can be accepted as the reflections of the understanding of privacy on the traditional Turkish Houses. All these examples are important design elements that have been shaped in time or have been specially designed as a result of the effects of culture.

The social life and traditions; long-existing "big family arrangement" among Turks has continued generation after generation. The father, the mother, sons, brides, grand-children, grandfathers, grandmothers, unmarried uncles, aunts made up this big family; yet, the family divided within itself into units made up of husband and wife. Because of having also a productive structure, the large family arrangement required big and large numbers of areas. The storage rooms to preserve in an edible manner the vegetables and fruits produced in summer months; the sections for looms to weave "kilim"s and carpets are among the

requisite areas. For small units formed by sons and brides there was also a need for independent separate areas.

"Among the Ottomans, outside the family life the men and women were segregated and were seen as two different groups. A woman carried out her productive work and all kinds of communal activities at home; she spent her life at home" (Arseven, Celal Esad, Türk Sanat Tarihi).

The interiors and the exterior world were completely separated by means of heightening the garden's walls to the level of the first-storey; life was spent in a closed-in atmosphere due to the public regulations. That the women and men led separate lives, resulted in separating the house in sections; the section where women lived was called "harem" and the men lived in sections called "selamlik" (gentlemen's apartment). In the relations between these, "privacy" as an Islamic concept was reflected onto the designs and areas.

2.3.3. Economic Factors

Economic factors also have a great share in determining the shape and dimensions of the Turkish House. In regions that are occupied with handicrafts, the working places and the storage-areas (where the looms and tools for these handicrafts are placed) have been effective in the designing of the houses by determining a needs point. Besides these, in live-stock farming regions or in houses where animals are kept, the ground floor was generally saved for these tasks and this resulted in the appearance of the main-storeys. With the increasing economic power and the life-standards starting in the 19th, century in the capital İstanbul and in its vicinity; and with the influence of external styles, houses with numerous rooms with central planning were built. This situation led to the planschema change as well as creating status indicators out of the elements and wardrobes used in the house.

2.4. Design Principles of the Traditional Turkish House

The major factor that directed planning of the traditional Turkish House is function. Parts of the houses reflect functionality and harmony. The communal beliefs and traditions necessitated the withdrawal of the house to itself. Nevertheless, by means of some solutions, tendency to open out towards the external environment, the streets and away from the construction is seen (Küçükerman, 2007). This is a house type that appeared as a result of the life-style of the traditional Turkish House. Here, it became an objective to meet the needs in the family life bearing in mind the tiniest details.

The foundations of the Turkish House plan-schema gained its true identity in the period when the Ottoman Empire started to expand and continued to develop nearly for 500 years. These constructions are generally the wood-frame examples and have fillings in between or "lath and plaster" (bağdadi) examples. These houses have generally two-storeys. The ground floors are constructed to be "dull", high and made of stone to maintain security. In the house type seen within the Turkish House framework, the ground-storey is balanced on heavy carrying walls or wooden masts. The upper-storey is with wood frame. If there is a middlestorey, it has a low ceiling and it is either half or full-storey. The upper-storey gained in time a lively appearance with a lot of windows and protrusions. Previously, the windows did not have any panes. As panes became widespread, frames that open out to the sides in flaps (with shutters) were made. Under the Western influence the vertical sliding-windows appeared. The ceiling was divided geometrically and sometimes it was decorated with paint. The roof is always inclined towards four sides. This is the most significant differentiating characteristic.

The Turkish House plan-scheme is not the kind of construction in which a specific blue-print is identically applied. Many reasons such as the region's life and production type, the available construction material and construction technology that has evolved accordingly, the characteristics of topography and the land, the richness and the structure of the family have directly affected the house

designs. In the Turkish House, wood as the main construction material; woodenframework as the construction method have been chosen. As well as being the continuity of a tradition, this method is suitable for the Anatolian and European Turkey's plant life and also since the region is an earth-quake area, the method is also useful. It is also suitable for regions where wood is scarce since it requires less wooden material than the stacked-wood method. The filling material could have been any material that is available in the region. Also, since this method was suitable for quick setting-up just like a tent, it answered easily and speedily, the needs of a continuously moving and spreading community. Again because of the same reason, the wooden construction details were simple, and instead of complicated fitting details, easy fittings and combination with nails were preferred. The thick cut-wooden elements and carefully designed details seen in the German, Italian, Japanese communities are not seen in the Turkish House. It is no coincidence to observe the same simple construction method in the construction details of the American community which expanded continuously to the West. At the same time, this construction method facilitated the building of districts that disappeared within a second because of fire incidents. In the woodenstructure method, also the community's outlook on life has a role to play. Human life is transitory. Then, it is quite normal for the house to be transitory also. Greed for property is unreasonable. On the other hand, it was thought that public buildings and religious constructions had to be permanent and therefore constructions were made out of stone. Thus, the houses that were restored as they got old, were in harmony with the art of the times and also they met the needs of the family.

The wooden-frame construction allowed opening out to the exterior atmosphere and thus presented possibilities of building open halls, opening more windows, and possibilities for protrusions and large eaves as well. This type of construction allowed checking on the climate, breathed well in humid atmosphere, did not allow the dampness to intensify, and did not allow the interior parts to be damp. This construction also affected directly the designs of the buildings and in this way facilitated the more comfortable constructions of the bay windows which were the most important and prominent characteristic of the Turkish House. The

bay-windows which were often built on the street-face, at the garden-street corner, on facades facing the garden even in the case of symmetry being compulsory; had the basic purpose of (while creating a rich angle of view) facilitating he maximum possibility of benefiting from the daylight in every hour of the day. These protrusions are the interest points on the facades. Since the interior-exterior characteristic in the Turkish architecture is the reflection of the interior area importance onto the exterior, the bay-windows have a lot of windows. The possibility of having three-direction views, light, sun, and visibility is created both on the protrusion-head and the sides of the protrusion. These protrusions can be grouped as simple console protrusions, mounted—console protrusions and immovable protrusions. The interior of the bay-windows are arranged for sitting purposes by spreading out carpets, cushions, pillows, embroidered covers. Wooden seats have been named oriental-sofas. These are 40-50 cm in height, and are unique to Turks.

CHAPTER 3 - ROOM CABINETS IN THE TRADITIONAL TURKISH HOUSES

3.1. History

Furniture and wardrobe units that are among the basic indicators of cultural structure, are not just for sheltering purposes and for meeting the basic needs of life which appeared as communities started to live in permanent settlements in different cultures, for different functions and in different periods of time; but their existence is a case that was brought about by socialization. In time, these elements formed a point in our life styles which are turning into shapes.

It has been proven by the available sources and museum samples that furniture, that cannot be isolated from architecture and the traditional Turkish House plan-schema; has been produced thousands of years ago. According to these findings, the first samples, dating back to B.C. 11, were conservation and storage units made out of stone and wood in the permanent settlements of the Near East and Anatolia. It is accepted that the first productions of this period are the ancestors of the furniture and the wardrobe units of the future times.

The concept of furniture in Anatolia actually started to shape itself with the migration of the Hittites established by King I. Hattuşili between B.C. 1660 – 1630. This historical period has lasted in the internal Anatolia plateau for nearly 200 years in B.C. VIII. century between 700-500. Wooden furniture pieces have been found among the numerous artifacts in the excavations continuing since 1300, in the Gordian King Tomb belonging the Phrygian Kingdom. It has been accepted that these samples are the olds unique furniture units in Anatolia and that they have been the guides to the future wardrobe concept.

The influence of the Seljuk's who lived in Anatolia in 11th Century can be seen, in the designing and decoration of wardrobe units in traditional Turkish Houses. The woodwork, the geometric and flower motifs, the stars, that have been used in the first appearing examples of the Turkish furniture art, will be used in

the future in the embellishment of the wardrobes and storage areas in the traditional Turkish Houses.

3.2. Examination of the Development of Room Cabinets

In the traditional Turkish House, one of the most important elements that affect the identity of the room area is the wardrobe elements that have been designed in a "closed or open" manner and can be defined as "side covers". When the development of the wardrobes and side-covers within then Turkish House is examined, the following established order is seen.

When the oldest examples of the traditional Turkish House are observed, it is seen that the wardrobes inside the rooms had precisely defined functions. The main function is keeping the most important daily goods in the room. The wardrobes of this period had extremely simple functions as can be understood from the specific names such as: a large closet, a pitcher-shelf, a napkin-shelf, a lamp-shelf, coffee-pot-shelf, a coffee-cup-shelf, a wooden turban-stand, a closet for long tobacco pipes, an "idler's hole" (tembel deliği). The simplicity in these names is seen in the establishment of the wardrobe system. Both the structure and the dimensions were analyzed in the most suitable way for allowing only functionality. By observing all these it can be understood that in the houses and in the rooms that were the first examples of settlements in Anatolia, the wardrobe units had the purpose of keeping only specific objects. (Küçükerman, 2007)

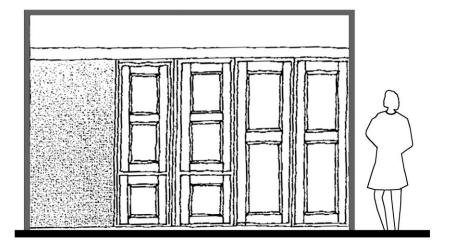
It is seen that this safe-keeping idea has changed with the applications developing in time. The wardrobes were not storage-laces any more. On the contrary, they started turning into show-cases to display valuable objects. The three stages of development must be examined to follow in detail this change in the wardrobe functions (Küçükerman, 2007)

3.2.1. The First Stage

The cabinets set-up in rooms with very low ceilings, were generally shaped in an uninterrupted manner, between the floor and the ceiling. This application was generally seen either in very primitive houses or in sloppy places. In a way, this is the simplest wardrobe idea. It is a very easily applicable cheap solution. They nearly do not have any ornaments (Küçükerman, 1978).

As the ceiling height increases, different applications are observed. The first one is, covering the part between the upper part of the wardrobe and the ceiling with a wall. The front face of the wardrobe and the wall displays a single vertical plane. Another one is raising the wardrobe to a height that can be used. A space is left in the upper part. In both case, no solution is aimed at to use the upper part of the wardrobe (Eldem, 1954)

Figure 3.1. The first stage example for room cabinets



3.2.2. The Second Stage

In rooms with high ceilings, the space above the usable height of the wardrobe had the function of an open-wardrobe. In the front face of the upper part mast- places (direklik) in different shapes could be found. In some regions, this

section is used for purposes like "meyvelik". In some applications, this section is also shaped as a wardrobe. Thus, a high and enclosed functional area is obtained. The upper section in some positions and situations is covered with covers and lattices. These can be seen in "city" applications and the covered parts of the wardrobe are very common (Küçükerman, 1985).

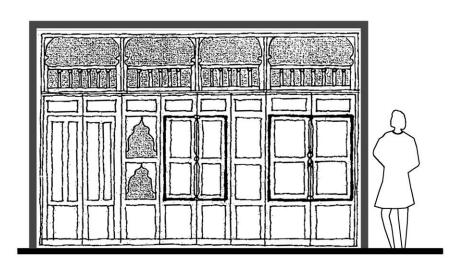


Figure 3.2. The second stage example for room cabinets

3.2.3. The Third Stage

There have always been special solutions for the wardrobes set up in rooms with very high ceilings. Because of the height of the wall, the height of the wardrobe has to stop at a specific point. Generally, only very special rooms like this will have such high ceilings. In such applications, the part leading to the ceiling taht starts where the wardrobe ends, was generally decorated with pictures to complete the overall identity of the area (Küçükerman, 1985). The motifs that were used on the wardrobe covers and "şerbetlik" were carefully designed and being different from the examples of the other periods, color, reliefs, and glass was used in specific parts. In conclusion, during the first stages wardrobes were developed to serve a real function and to answer a specific need and they had very important roles to play within the room area. However, in time they served as show-cases, and more importantly they became status symbols among families. As far as the design is concerned, there is a correct connection in regards to the

human scales and ties with the area in the establishment of the wardrobes. The unchanging characteristics of the wardrobes used in the traditional Turkish House can generally be explained as stated above, regardless of their kind, function, shape, dimension.

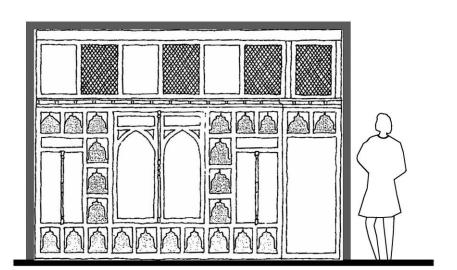


Figure 3.3. The third stage example for room cabinets

3.3. Design Principles and Room Cabinet Units

The basic function of the wardrobe and the side-cover had always been to keep the essential daily objects in the rooms where life is spent. Thus, the wardrobes have been named according to the functions such as large closet, closet for long tobacco pipes, wooden turban-shelf, pitcher shelf, napkin shelf, lamp shelf, coffee-pot shelf, coffee-cup shelf, flower-stand, fez-stand, stick-stand, idle's hole ("tembel deliği"). The simplicity in naming is also seen in shaping. In fact, all the dimensions have been actualized to facilitate the most suitable usage (Küçükerman, 1985).

There is a clearly precisely defined function of the wardrobe in the old examples. Because of this, there are no unnecessary formal efforts and care in the establishment of the wardrobes. The main purpose is to keep the specific objects inside. In the later examples, the open areas have been used to display the

valuable objects. In time, on the surface of the wardrobes and especially on the covers, oil-painting flower pictures called "Edirnekari" can be seen (Günay, 1998). Later, when movable environmental elements such as tables, chairs, bed-steads, entered the traditional Turkish Houses, the wardrobes became areas of affectation and ornament displays and this affected directly the designs of the wardrobe units.

There is another very interesting direction in the design and establishment of the wardrobes in the traditional Turkish Houses. The upper boundary of the wardrobe is never higher than the height that a human hand can reach. This shows that there is an unchanging and important concern about the dimension despite all the formal changes. This is truly the unchanging common characteristic regardless of type, shape, and dimension. In reality, this element is directly connected to the basic idea that the Turkish House is relying on.

According to this idea, practically "the utility areas should not overreach the human dimensions". Thus, a kind of "upper limit" above the functional parts of the areas is formed. This "upper limit" is one of the most attractive characteristics of the Turkish House area. The lower part of this limit is for "utilitarian usage". However, the upper limit is accepted as an isolated upper-environment. The door, windows, wardrobes, closed areas and all other functional interior elements are below this limit. Only in special cases shelves can be placed above this limit. When the old examples of wardrobe units in Turkish Houses are examined, it is seen that this has been applied more effectively. The vertical element which also designates the height of the room and which has been used regularly no matter what its dimensions are; has been arranged at a height of 220m. Only the skylights and the rarely used upper sections of some wardrobes go beyond this abstract line (Küçükerman, 1978).

In addition to this development in the rooms, some coating applications on the side-wall cover can be seen in small amounts. The most used material has been wood for this purpose. Since it is an expensive job, it has been used in special applications and coatings. Generally, the coatings were set up by means of placing various planes in between wooden frames or using wood pieces in small dimensions. In addition to these, interesting embellishments were placed on these wood pieces by means of various methods. These examples are generally seen around the entrance to the room. But even so, the element that is occupying the least possible space is the wall coating. In a way, this can be considered as a characteristic of the Turkish House (Günay, 1998).

As a result of the rooms being used for multiple purposes, the amount of belongings that are visible is kept to a minimum. When things are needed they are brought out, used and put back in their places. For this reason, there are specific spaces to place different things.

Yüklük (Matress closet): This is a large closet used for storing bedding. The side covering is 75 – 90 cm. and width is between 130 to 150 centimeters. Inside these closets, bedding is stored three-fold and bed sheets, pillows and duvets are placed on top. In order that these mattresses weighing on average 10 to 12 kg to can easily be lifted and carried, they must be placed 60 to 80 cm. off the ground. The base of bedding closet is at this height. It has two doors and underneath it is usually a zinc-lined bathing cubicle. Bedding closets are usually near the entry and on the same wall as the fireplace.

Gusülhane: Bathing is necessary for both cleanliness and the Muslim religion. The bathing cubicle setup for the ritual ablution of the whole body is an ideal and simple solution for the Turkish social lifestyle. Privacy is ensured when taking ablution in the bathing cubicle of the living unit by means of a sparing a room for each family. There is one cubicle in each room and even in the kitchen (because the kitchen is a room and a living space too). The bottom of the bedding closet is configured as the bathing cubicle. When the doors of the bedding closet are opened, beds taken down to the floor, and the base of the bedding closet lifted, the bathing cubicle is uncovered. One can step over the part facing the room to get inside. Water needed for bathing is heated in a copper pitcher in the fireplace or on the stove in a copper water container and it is mixed with another pitcher of cold water in a bucket placed on the shelf next to the door and then poured with a

cup. One bathes sitting on a low, backless wooden chair called a "kürsü". Because this is a very small space, one is warmed by the steam of the hot water. As bathing takes a short time, it is much like the showers in our day. After the bathing cubicle is cleaned, the lid is closed. The bedding, sheets, duvet and pillows are folded and placed on top and the closet doors closed. The floor joists of the bathing cubicle are made of slanting wood. Under foot is a wooden grating. The dirty water is transferred to the garden by means of these grates.

Ceiling shelf ("Sergen"): This is a shelf that surrounds the walls of a room at the level of the top of the windows and door. Its width is approximately 12 to 15 cm. Because of this, it is decorative rather than functional. Nevertheless, it determines the highest point at which things can be stored. It is always within reach. This height determines the dimensions and height for the door, windows, closets, seating and working areas. Above this shelf are areas either not used or used very little like walls, top windows, or ceiling closets. Ceiling shelves can be deeper in the kitchen. Pots not used very often and pans with lids are stored there as decoration. In other rooms, soap or quince is placed on the shelf for drying and various decorative pieces for decoration.

Closet with doors: The depth and width of these storage units containing belongings other than bedding are less. They may have one or two doors. They are 60 to 80 cm above ground and extend up to the ceiling shelf. Below is another separate cupboard with doors. Sometimes firewood is placed in these lower cupboards. In these cupboards there are shelves. Things like bundles, sewing and embroidery materials, prayer rugs, pitchers and glasses are placed on these shelves. Grape bunches are hung in some cupboards that are in cooler parts of the house and then eaten in winter. These are called grape cupboards. In the 19th century, pipe smoking became popular and thus special compartments were made for storing pipes. These cupboards were in turn called pipe cupboards.

Kavukluk: The turban shelf ("kavukluk") is a kind of the wall shelf composed of two or three pieces and is hanged or mounted on the wall. On the

wall, it is hung at the height of an average person. Sometimes they are hung in the corner. They were often used to carry the lighting equipment.

Kavukluks, on which decorative objects or mirrors are placed have adopted a decorative identity in the splendor of the Ottoman Palaces. Like the bookrests (rahle) and coffee tables (sehpas), turban shelves reflect the artistic sensibility of their own periods. While some samples are adorned with gold gilding, openwork, carvings in Edirne work and painted usually in the colors green and yellow and used by middle class families, the ones which are richly ornamented in Istanbul work decorate the most valuable spaces.

Çiçeklik: These are niches in the wall. The structure is concave. At the base, there is a wooden shelf protruding outwards. Usually there are three decorative wood carvings on each side. The çiçeklik (flower stand) is a decorative element. They have appeared as a result of the trends during the Baroque period. In some rare instances they are decorated with frescoes. Mirrors, pitchers, lamps, clock and similar objects can be placed on the flower stand.

Serbetlik: Serbetlik is the inset paneled wardrobe seen up to the 18th century in the Anatolian Turkish house. But in the course of time, it was substituted by the independent buffets fitted with mirrors. Usually it has a vaulted or quadrupled frontal and ornamented shelves and small niches on sides and is placed in the middle of the walls of the room. Surrounding small niches which are called "Gilve" are for the decorative objects like oil lamp, water bottle, pot, vase, censers etc. Some of the lower parts of serbetlik have small compartments with covers in which plates, glasses, cups, coffee pots and that kind of service objects are kept. The facades, frontal and sides of the serbetlik are usually made up of carved wood and ornamented with rosettes, various plants, flowers and landscape paintings.

3.4. The Significance of Room Cabinets in Organization of the Room

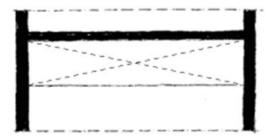
All design elements in traditional Turkish homes were constructed with consideration for its ergonomics and function for the user in mind, and all structures inside the building were designed interdependently. Architectural layouts which show differences by people's living conditions, financial situations, needs and desires have, for the same reason, lead to differences in cabinets. Almost all layouts differ from one another; storage units in the same house and even on the same floor were designed with different and independent plans. This has caused the creation of different architectural solutions on both the horizontal and vertical planes and enabled the creation of designs tailor made for the individual and for the particular function.

It is necessary to consider a series of samples demonstrating the relationship of walls to closets in order to easily understand the function of the storage units in relation to the whole of the Turkish house in Anatolia. In order to do this, we must analyze in terms of layout and cross section keeping in mind the fact that closets are configured in a particular way and the walls in a different way.

3.4.1 Layout Analysis

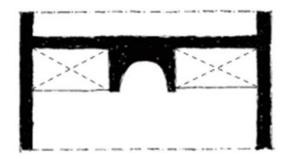
The space between the two walls have been configured as a single closet. In this configuration, the closet occupies the space between the walls completely. Since there is no door or entrance nearby, it was possible to set up a monolithic unit without any interruptions. (*Figure 3.4*)

Figure 3.4. Types of cabinets plan



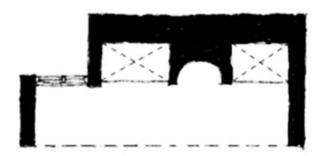
The closet configuration has been reduced in size for various reasons. It doesn't extend all the way between the two walls. In this sample, the wall length has been evenly divided and a fireplace set right in the middle. Closets usually flank the fireplace but in such cases the fireplace seems like a more significant internal structural element. (*Figure 3.5*)

Figure 3.5. Types of cabinets with fireplace



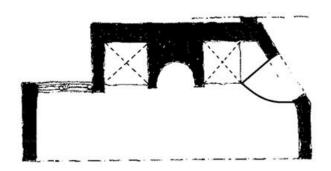
Within this structure, closets, a fireplace, and a window have been placed. The fireplace-closet-window create a plane. In this way, three internal elements have been integrated into a whole. In this sample, the effect of the fireplace is reduced. (*Figure 3.6*)

Figure 3.6. Types of cabinets with fireplace and window



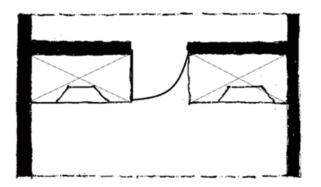
The space between the two walls have been divided with various structural elements and the fireplace. In addition to the fireplace, closets and window, the configuration of the entry and its proximity to the structure as a whole has complicated this facet of the room. (*Figure 3.7*)

Figure 3.7. Types of cabinets with fireplace, window and door



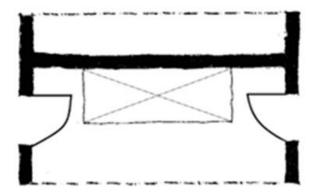
The entrance to the room divides the closet into two even sections. This type of entrance is not very common because it may be argued that it is not in line with the principles of the Turkish house in Anatolia. This configuration is actually not very different from those basic principles. Indeed, corners of rooms have been configured in different ways due to structural reasons. The midsection of the closet plane has been used as a passage. (*Figure 3.8*)

Figure 3.8. Types of cabinets with one door



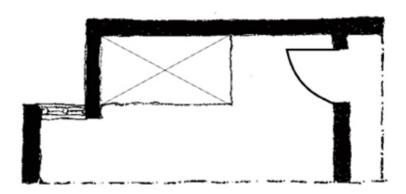
The closet has been completely separated from the walls on either side. In actual fact, this type of separation is only visible on the plan. But in general, inside the closet is masterfully tied in to the structure. The closet has been placed in the middle because of the presence of entrances on both sides. It is very rare to have entrances or passages on both sides of a closet. Such layouts may be created under special circumstances. But a solution has been reached without compromising the integrity of the internal configuration. (*Figure 3.9*)

Figure 3.9. Types of cabinets with multiple doors



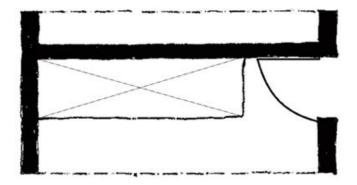
The closet has been enclosed on the one side with a window and on the other with a door. In such situations, the presence of the window indicates an interesting view in that direction. Moreover, entrance has been configured with the closet. (Figure 3.10)

Figure 3.10. Types of cabinets with door and window



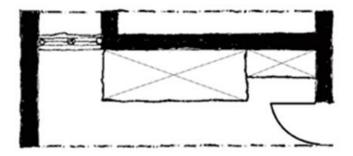
The size of the closet has been reduced for various reasons. The closet is no longer occupying a whole wall but is configured together with various other internal elements on that wall. The closet has been pulled to one side of the room because of the entrance. This is the simplest and most common configuration. It has come to be a basic principle of the Turkish house. As the entrance is configured with the closet, a very plain looking plane has been achieved. (*Figure 3.11*)

Figure 3.11 Types of cabinets with door



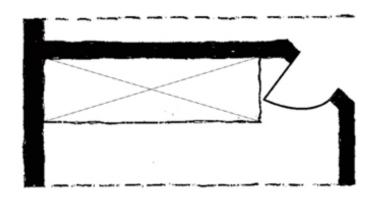
A section of the closet has been narrowed on one side to facilitate entry into the room and the other side has been cut off by a window as in this sample. Entrance is provided from in front of the closet unit. The closet occupies a small space on the wall plane. (*Figure 3.12*)

Figure 3.12 Types of cabinets with door and window



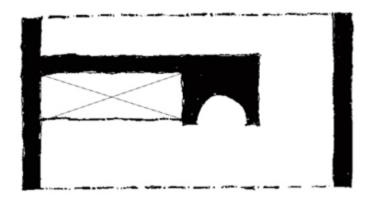
Positioning the entry way at a 45° angle required the reduction in closet dimensions. However, an important change as taken place in the interpretation of the entry way. In other words, this has added interest to the entry into the hall/anteroom. This configuration has more of an effect on the ambiance of the hall/anteroom. (*Figure 3.13*)

Figure 3.13 Types of cabinets with 45 degrees door



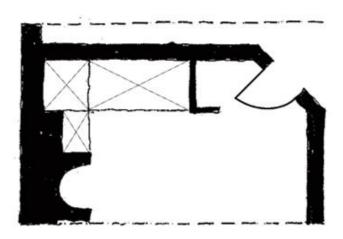
The room entrance and the fireplace has caused the closet size to shrink as in the example. The closet has been positioned to one side. This type of entrance and closet configuration appears to be a feature particular to adjoining rooms. (Figure 3.14)

Figure 3.14 Types of cabinets with fireplace



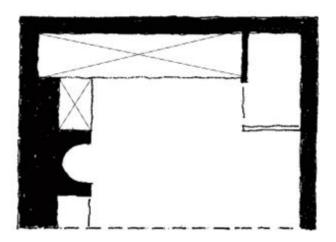
The plane facing the entrance has been divided at midpoint by a fireplace. Occasionally, the closet units in the room are configured in a very unusual way. The complexity of this room is evident at first glance. Yet, in terms of layout the basic principles have not been violated in this room. On one wall, a double sided closet, on the other wall, two closets flanking the fireplace have been installed. This type of configuration, although not as plain, has achieved substantial effect. (Figure 3.15)

Figure 3.15 Types of cabinets with fireplace



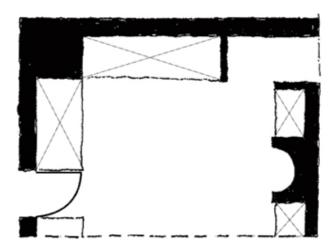
The closets have been configured at two walls and cover several wall planes at once, as seen in the drawing. Thus, the closet has come to create a more complex influence on the internal configuration of the room and has gained importance in the layout. (*Figure 3.16*)

Figure 3.16 Types of cabinets with fireplace and niches



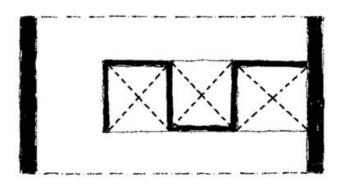
The closets have been configured on three walls of the room. Closet surface in this room, which possesses winter room characteristics, has reached maximum level. Here, the room is complex rather than plain. (*Figure 3.17*)

Figure 3.17 Types of cabinets with fireplace, niches and door



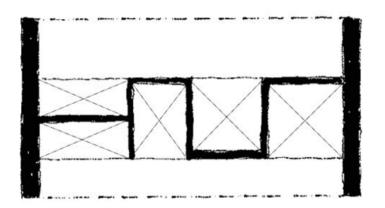
Integrated configuration of adjacent closets in adjoining rooms is often a result of a structural configuration involving two similar purpose rooms. The closets are integrated and back to back. At the same time, the "clean" space accessible from both rooms has been configured in an interesting way. (Figure 3.18)

Figure 3.18 Types of cabinets with other cabinets



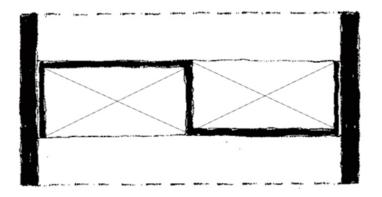
A closet unit facing both directions has been built between two walls. Such configurations demonstrate the fact that adjoining rooms had truly equivalent properties and functions. (Figure 3.19)

Figure 3.19 Types of cabinets with other wardrobes



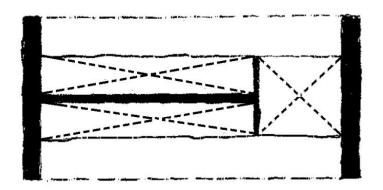
Example of a series of closets placed between two walls and accessible from both sides. The section has been formulated accordance with the needs of both rooms to achieve a complete look. (*Figure 3.20*)

Figure 3.20 Types of cabinets with other cabinet



The fact that between the two walls, the set of closets facing two different ways and the passage connecting the rooms are connected, have affected the configuration of the closets as well. In this layout type one must consider the possibility that there may be secret doors or rooms inside the closets. (*Figure 3.21*)

Figure 3.21 Types of cabinet with other cabinets



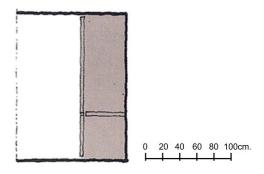
3.4.2 Vertical Design of Cabinets

The presence of storage units within rooms has influenced design not only in terms of layout but also cross-sectionally. Various design solutions have been created for those areas that are too high for people to reach, that is, higher than two meters.

In order to clearly understand this "conceptual line" which divides a room based on two almost different notions in such a meaningful way, and which leads to the creation of different functional elements such as the ceiling shelf "sergen", the side covering must be analyzed cross-sectionally so that its development and methods of configuration can be appreciated.

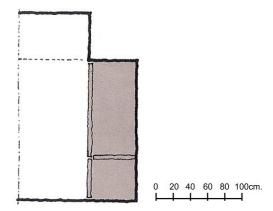
Cabinets in Rooms with Low Ceilings; this is a type of cabinet used in rooms with very low ceilings or on mezzanine level. The closet occupies the space between the ground floor and the joists of the mezzanine floor with no interruptions. It is the plainest form of closet. In most cases it is not decorated. In cases where the ceiling is slightly higher, the closet is transformed in several different ways. (Figure 3.22)

Figure 3.22. Cabinets in rooms with low ceilings (vertical section)



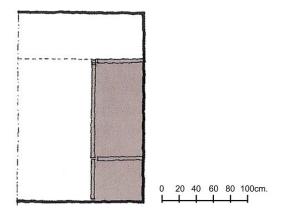
Cabinets in rooms with high ceilings (covered); the wall that starts at the top of the closet rises straight to the ceiling. The front of the cabinet and the wall create a vertical plane. This configuration has led to something new. The wall rises on a vertical plane up to the ceiling. The closet, on the other hand, is left below. This creates an alcove on top. (Figure 3.23)

Figure 3.23. Cabinets in rooms with high ceilings (covered) - (vertical section)



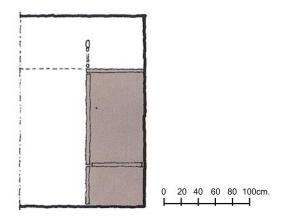
Cabinets in Rooms with High Ceilings (not covered); the wall extends up to the ceiling as a flat vertical surface. The closet is constructed with the present design. An alcove forms at the top. This area functions, though not very often, as open storage. In this way, both the height of the ceiling is preserved and structure does not change. (Figure 3.24)

Figure 3.24 Cabinets in rooms with high ceilings (not covered) - (vertical section)



Cabinets in Rooms with High Ceilings (top semi-covered); part of the empty space on top of the closet is covered with a crown which is sometimes decorated with motifs or engravings. This both enriches the appearance of the room and makes possible the use of this space, even if rarely. (Figure 3.25)

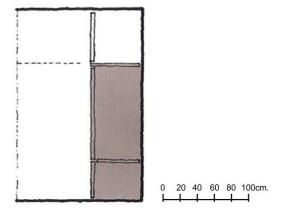
Figure 3.25 Cabinets in rooms with high ceilings (top semi-covered) - (vertical section)



Cabinets in Rooms with High Ceilings (top covered); though the top may be an open space independent of the cabinet, the front is covered with various motifs or poles. In some regions, these spaces may also be used to store fruits. The top sections may be covered completely or hidden behind a lattice. In this way, a storage area completely covered and reaching as high as the ceiling is achieved.

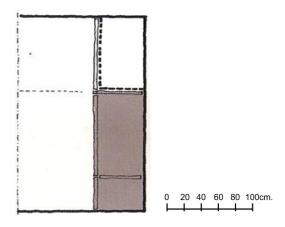
This is a form frequently seen in towns. Such spaces are mostly covered, and ornamentation is foregrounded. (Figure 3.26)

Figure 3.26 Cabinets in rooms with high ceilings (top covered) - (vertical section)



Cabinets in Rooms with Very High Ceilings; in rooms with very high ceilings, the part that extends between the top of the closet and the ceiling is decorated in accordance with the particular features of the room. These unused areas are configured together with the wall covering. In addition to its main function, the storage unit becomes a display piece. It has fewer covered sections. There are more open sections where valuable objects can be displayed. The unused top sections are decorated. Meticulous care and attention is paid to the cabinet doors and other parts. (Figure 3.27)

Figure 3.27. Cabinets in rooms with very high ceilings (vertical section)



CHAPTER 4 – ANALYSIS OF ROOM CABINETS IN TRADITIONAL TURKISH HOUSES: KULA EXAMPLES

4.1 The Geography and History of Kula

Kula is situated in a plain at 630 meters above sea level, in Manisa in the Aegean region. Surrounded by Selendi, Uşak, Alaşehir, Salihli and Demirci settlements, Kula is one of the more densely populated of Turkish settlements as it was on both the "Royal Road" and the İzmir–Ankara trade route during the Ottoman period. Kula, which is 150 meters from the volcanic Kara Divlit mountain, sits on top of the extrusive rock spewed from that mountain and is on a 2nd degree seismic risk zone. Its population today has reached 15,000 at the centre and 45,000 together with its neighboring villages.

Kula has appeared on historical records as "Klanudda" starting 56 B.C. It is believed that the settlement has been called "Kula" meaning "tower" because at the time, it was used as an observation post. Kula was controlled first by Lydians, and then the Persians. Between 1280 and 1300 it was a protectorate of the Seljuks. After going under Byzantine control in 1344, Kula endured a complicated period under different principalities and then was placed under the Aydın principality in 1410. During the Ottoman period, Kula was a county seat of Kütahya. In 1922, it was liberated from Greek occupation which had begun in 1920, and became part of the Turkish Republic (Tosun, 1969).

Due to the development of transportation technologies, Kula began losing the commercial prominence which it had gained through its strategic location. Today, Kula, where animal husbandry, fruit, vegetable, cotton, tobacco, root dye textile production is common, is trying very hard to protect the cultural fabric it possesses.

4.2. Kula's Traditional Residential Texture

The oldest part of Kula, which is also the most populated, has developed between the skirts of the Kara Divlit Mountain and the main road in the south. The newly settled area lies to the south and west of the main road. Within the residential texture of the town are the most important roads of the town owing to their place and high traffic, Yeni Hamam Avenue divides the town center which is the hub for transportation in general and which accommodates the city center as well as the shopping district; and Kışla Avenue is said to be on the antique trade route and connects the town with the main road.

Although it is not known exactly where Kula was first established, it is assumed that today's settlement started off and developed from the area surrounding the main shopping district. Despite the fact that Kula is located on a large plain, it has grown organically. Flatness of the region's topography prevents one from perceiving the texture of the town completely at one glance. Instead, when one enters this texture spreading on a horizontal plane, one sees a rich tapestry with constantly changing perspectives and surprising mini town-squares produced by its organic structure. This is evidence that the residential texture is loyal to human context rather than a fixed configuration, as well as evidence of its diversity and richness.

Most of the houses that were built within Kula had external anterooms. However, the ratio of houses with internal anterooms to the whole is quite large. The only connection between the courtyard with its high and soundproof walls and the street is the garden gate. The courtyard is surrounded by walls that are at least three meters high. In houses from the 18th and the first half of the 19th century, entrance to the house from the courtyard is usually provided through a double-wing wooden door. Less often, as in the Hacı Recepler House, through the door one enters the quarters under the anteroom which then leads into the courtyard. This is seen mostly in later houses of that period. After the second half of 19th century, in houses with an internal or a central anteroom, as in the Beyazoğlu House, the door opens directly to the anteroom; in addition, there is

also a separate door to the courtyard. The courtyards of Kula houses are paved with slate. Under the anteroom there are wooden poles that support the structure of the hall. Kula houses are usually two storey houses. On the ground floor is the barn, the cellar, kitchen etc. The toilet and sometimes the baking oven is in one corner of the courtyard. In houses with internal halls, the toilet is inside the house. Though bathing is usually done in the rooms, in the Küçük Göldeliler and the Bekirbeyler houses there is a separate hammam. In some examples, there is a basement below entry level which houses large earthenware vessels and which serve to store food and as coolers. In some houses with open anterooms such as the Bozerler and the Beyoğlu houses, there is another storey midway between the ground floor and the first floor. This undecorated low-ceiling mezzanine floor is used as a living room during winter. On the upper floor which determines the floor plan of the house, there are living areas where people can sit and spend most of the day. Usually in houses with open hall, one façade faces the street while the other faces the courtyard. The side of the hall facing the street is enclosed and there are windows with either wooden lattices or bars. While, in earlier examples, the facade facing the street used to be open, later examples have enclosed this with windows.

As in the Bozerler House, the kiosk is a common feature located at a corner of the hall. These are usually open structures with a view and used especially in the summer. One or two of the rooms upstairs is the main room. These are rather elaborately decorated and usually face the street. In Turkish houses there aren't different rooms for different purposes; each room can serve the purposes of eating, sleeping, living and the like at once. The rooms in Kula houses also have been used for numerous purposes. Nevertheless, the main room is generally reserved for guests.

The rooms display all the characteristics of a Turkish house. Examples from the 18th century and the first half of the 19th century have two levels: the upper platform and the lower platform. This separation is apparent both in the difference in elevation and also the use of wooden guardrails and arches. One can enter, through the single-wing door, the area for the shoes on the lower platform at the

beveled corner. On the lower platform are the bedding closet, windows, niches, other closets and bathing cubicle. On the upper platform there are the divans, shelf, fireplace and closets.

The fireplace is on the wall perpendicular to the bedding closet and has a plaster or wooden hood above it. The lower platform is organized in a standard way in Kula houses. On what we can call the bedding closet wall are the bathing cubicle, niches, the bedding closet, niches and shoe-rack, in that order. On the side of the bedding closet that faces the shoe-rack and on the wall perpendicular to the bathing cubicle, there is always at least one closet. Over the closets are niches called "göz". The bedding closets have no doors. With the exception of the Hacı Recepler House, in all the examples, the space between the bedding closet and the ceiling has been left empty. In the Hacı Recepler House, it has been made into a gallery with arches. This is the only such example among Kula houses. These features apply even to those rooms without a platform division. In Kula houses, rooms receive lots of sunlight thanks to windows that face the hall and the street.

There are usually three windows that open out towards the hall. The upper floor windows are paired. On the lower row, there are rectangular vertical windows with wooden bars or lattices and panes while on the upper row, there are top windows with plaster latticework that border the inner and outer façade of the wall. Doors to the rooms have single wings. The opening for the doors are 200-240 cm high and 80-90 cm wide. The opening is framed on top with a decorative cusped arch.

In houses built after the second half of the 19th century, the two level platform method has been abandoned. The shoe rack, niches and the top windows have disappeared. The bedding closets have doors and rise up to the ceiling. Now there are niches on the walls used as flower stands. The doors are no longer at the beveled corners and now have double wings. Arches that frame the space above the door are not part of these period houses. In early examples, rooms are fitted with plain wooden ceilings while later there are examples fitted with a

plasterboard style dome as in the Zabunlar House, or with a cross vault as in the Gülmezler House.

The economic make-up of the region has generally shown its effect in the fabric of the society and many houses have become uninhabitable, many have been torn down. In order for this situation to change and the houses to be renovated, it is necessary that the traditional assets of the region be protected and the region begin activities geared towards cultural tourism. However, regardless of the social and economic conditions, the physical factors that shape the region's architecture and cultural fabric must be analyzed.

4.2.1. Topography

The most important geological feature of the region is the now inactive Divlit Volcano which has formed the volcanic layer on which the settlement is located. Located southwest, Yağci mountain, is the most prominent among the few 1000-1200 m. high hills. Kula was established first on this flat area, on the old Royal Road, and has developed outward from this central point. Today, at this center are located public buildings like the Municipality and the post office.

The fact that the settlement was in a flat region determines many elements relating to the fabric of the town. One would expect the plan of a settlement on a plain to have an organized, regimented pattern. Although Kula's topographic features are not at all like those of Tire, Birgi or Safranbolu, it has developed an entirely organic pattern and includes many dead-end roads. In general, the streets are comfortably wide as there is enough space in the region. Streets are on average 4-6 m. In contrast the average width of the Royal Road, which is a historic road, ranges between 12-17m. Streets are paved with granite. Uninterrupted and massive garden walls made of tuff and black stone provide only a garden-wall façade to the town. The small roof over the door common in this area is an important element. Other than the doors, the houses do not contribute much to the fabric of the street at ground level. The upper floors of buildings rise on regular and perpendicular angles to the organic plane of the

ground. This is an important and basic element of the life of the cultural fabric of the town.

The reason that the organic feature of the ground plane has developed in this manner and the reason that it still maintains its integrity despite settlement and topography is the social structure. We may say that it is due to the town being settled by central management on land that is selected and parceled based on needs but without a without a general settlement plan.

4.2.2. Climate

Kula demonstrates the continental climate feature of the region. Winters are long and cold and summers are hot. In winter the temperature drops to -10 degrees Celsius while during summer months the average temperature is 37 degrees. Because the region is on a high plain, it is open to winds from all directions. However, in winter, the northwesterly and in the summer the southwesterly meltem and southeasterly hot winds are effective in the region. In Kula, it rains profusely during spring months, occasionally during fall and rarely during summer. (Tosun, 1968)

Buildings and other elements that form the fabric of the town can be shaped in the way desired to withstand climatic effects in accordance with the opportunities are created by the fact that the settlement was constructed on top of a flat surface. One of the most important factors is the sun. Control of daylight and the temperature within the building was possible only with the structural elements of the building owing to the technological conditions of the time. As a result of this, north facing walls, enclosed protrusions, anteroom placement have been managed accordingly. Each of these methods affects the housing fabric in a different manner. Because most of the plots in Kula have been positioned in relation to the center, it is not possible to position in buildings collectively to manage climatic factors.

Buildings have mostly been constructed with thicker walls facing the north. In some cases buildings built next to each other might have forced one or the other to face north. Examples where this is valid are common throughout the town. This is preferred by some building owners so as not to raise a blank wall facing the adjacent plot and so that the two adjacent garden greenery can create a wider visual space. It is inevitable for those building owners who do not want to face northward to face the thick, wide soundproof walls of other buildings. People who live in north facing houses make use of wooden lattices, wide canopies and various natural shade providers. This brings variety in house combinations and diversity in the general make-up of the settlement.

The upper plane that contributes to the general texture of the settlement and is in complete contrast to the organic ground plane is both directly related to the factors that shape the texture and is one of its fundamental determinants. The positioning of the anteroom and the rooms, the place of the covered protrusion, is completely dependent on the region's climate conditions. Layout plans with external anterooms are commonplace. Due to the climate there is a need for cool spaces in winter and easily heated spaces in winter. In Kula, winter and summer living has been configured on three different floors in many houses. The ground floor is for the barn, kitchen, etc., the low-ceiling mezzanine if for winter and the third floor is for the summer.

In the house, the hall has utmost importance against climate conditions. In general in Kula, people have tried to position anterooms to face southwest. The reason for this is the cool winds (meltem) this region receives from this direction during the summer months. In addition, people have tried not to position halls to face south and southeast as in the summer months, hot winds blow from this direction. On the other hand, because the width of the streets have been determined independently of climatic considerations, rough winds rush through bottlenecks and damage parts of the façade or roof.

Another feature of the Kula houses is the wide canopy of roofs and the importance of the high top windows for climate control. Within Kula, almost all houses have a protruding structure. Depending on the climate and the position of the sun, covered protrusions provide more sunlight for the room. The high top window serves the same purpose, but these windows do not have panes. It is for this reason that canopies are used in controlling the top windows. Canopy dimensions are constructed in accordance with the directionality of the building, so as not to limit daylight during winter and so as not to let sunshine in during the summer.

4.2.3. Positioning of Buildings

Because Kula was established on a plain, there are only streets and internal courtyards to provide visual interest. This has caused all buildings to become enclosed units. In such a case, no matter what the climate conditions may be, the building connects to the courtyard through the hall, and to the street that provides access to it through the protrusion or the platform area next to the anteroom. Houses in Kula tend to be typical Turkish houses. Life outside the building only takes place in the courtyard and the little squares that allow for provision of various needs.

Close to the outer limit of Kula, one or two houses located on little hills tend to face Divlit and Yağcı mountains which can be distinguished from a certain distance. But the concrete buildings constructed as a result of new development have blocked the view that determined the positioning of these older buildings.

4.3. Architectonic Features of Kula Buildings

4.3.1. Stone walls

In Kula houses, stone walls have been used as foundation, for ground floor main bearing walls and sometimes on the first floor walls that need to be soundproof. It appears that in the foundation walls are to a large degree constructed of granite blocks and lime mortar. We can see that for the main walls, black stone with lime mortar is preferred and the wide joints in between the stones are filled with lime mortar creating black and white contrast. On the main walls, sometimes wood and at others slabs of "köfeke" stone is used for horizontal beams. Slate is also used for the main walls.

4.3.2. Wooden Structures

In Kula houses, wooden pillars and girders are used for support. Pillars are connected to each other in various spots with floor joists, and at the tops and bottoms of windows. To prevent deformation some lower rafters have been used. Floor joint dimensions are 12-20 cm and they are placed 50-80 cm apart. In the carcass system, the dividing wall structures are made of wood, and the fill is brick and "köfeke" stone. The fill for the dividing wall is plastered on both sides. As in the outer walls, inner walls are also covered without filling. It was seen in Kula that dividing walls could also be placed over large gaps. We believe the reason for the use of the carcass system in Kula houses to be the fact that this system resistance to earthquakes allows freedom in design without total dependence on lower main wall and the construction of openings in the façade as desired.

4.3.3. Floor Joints

Floor joints in old houses generally have a round cross-section while in new houses the more common rectangular cut has been used. Round joints are usually made of poplar. They are placed 50-80 cm apart. The cross-sectional diameter is 15-18cm. The rectangular joint size ranges from 12/20 to 20/18. The floor planks

are 2-3 cm thick, 18-30 cm wide and fastened to the joints using nails with an iron head. Joints are covered with 1-1.5 cm thick wooden ceiling panels inside rooms but left open underneath the halls.

4.3.4. Roofs

Roofs of Kula houses can be analyzed in two categories: 1. Double sloping (gable roofs) 2. Four slope (hipped roofs). Double slope houses are less common in Kula houses. The roofs of houses are usually pavilion roofs. The wooden planks under the roofing tiles are between 6 and 15 mm. thick. These are fastened to the rafters with nails. Rafters are usually 6-10 cm in diameter and made of unprocessed poplar. They are placed 40-50 cm. apart. Tie beams and sloped ridge beams also have a round cross-section with 13-16 cm in diameter and are made of popular. These sit on top of pillars with round cross-sections that sit on the lower walls. Struts placed to decrease spacing between tie beams and braces to resist winds have been used for support. When the braces do not coincide with anything, ridge beams with large cross-sections have been placed there. All wood structure is not fitted but fastened with nails.

4.3.5. Ceilings

Ceilings are an important feature of the structure especially in old Turkish houses. There are two types of ceilings in Kula, categorized in terms of construction: single and double ceilings. Single layer ceilings are made to cover the joints of the 6-15 mm. sheathing wood nailed to the ceiling joints and create the desired decoration. On double layer ceilings, on the other hand, laths with semi-circular cross-sections form small geometric shapes on the sheathing. Between these lathes small wooden panels of appropriate size are fastened with nails. In this way, a double layer ceiling is achieved.

4.3.6. Doors

Doors are an important structural element that directly affects the design of the side covering under scrutiny. Doors, which can affect both the appearance of both rooms and closets, fall under two categories based on their function: internal doors (*room doors*) and external doors (*main door and garden door*).

Internal doors in Kula houses are single-wing while external doors are double-wing. The function of the door wings is not only to maintain the separation of the door space but also to attract the attention of those who are looking for an entrance. Internal doors are generally 200-240 cm high and no wider than 90 centimeters. All doors have thresholds. These are as wide as the door frame and 6-8 cm high. They have fitted frames. These doors are comprised of smaller parts. Possible deformations that might take place in time are prevented in this way. Whereas the sides of the internal doors that face the hall have been heavily decorated, the other sides are left unfinished. Doors having this structure are sometimes painted.

In Kula, in order to enter the house one must go through the courtyard or the garden. These doors are usually double-wing doors. Each wing is 80 cm wide, 280 cm high. They are fastened at three points to 20 to 30 cm wide, 3 cm thick belts with nails. Doors are usually made of yellow pine. Door profiles are plain and their mountings are visible.

4.3.7. Windows

Wooden frames with 25/200 mm cross-sections serve as the casing for the window, bars and shutters. The cross-section of the window frames is 25/50 mm. The window frame is usually very thin. There are three muntins on all windows. However, because these are not at eye level, they are not overwhelming. When the windows are closed, only the hooks placed on top and the bottom hold them in place and keep them from opening. The corners of the window frame are fitted but strengthened with wooden nails. The window casings are 6mm thick in all houses.

They are 75/90 mm. wide. Inside the rooms, the wooden panels between the window and the shelf are 6 mm. thick. There are different elegant spiral decorations on these panels in each house. Research has shown that the panes in old window frames used to be 1.5 cm thick and yellow in color. Effect of external factors and water was not completely resolved; there is no drip board. In the event of heavy rain, rainwater seeps into large houses with no canopies. In such weather shutters are closed to prevent water from coming in.

In Kula houses, there are different varieties of windows such as standard double-wing windows, windows whose frames are divided into two with a fixed divider above and below which are double wing windows that open separately, vertical windows and horizontal windows.

In addition, there are fixed top windows designed only to provide light. Only their casing and frames are made of wood. Muntins and window parts are made of plaster molding. In these colored or stained glass has been used. On some there is Ottoman writing.

4.3.8. Room Cabinets and Storage Units

In traditional houses in Kula, there are fixed room cabinets and niches to provide for the function of the room. Almost all of these room cabinets are built-in. They take names such as "yüklük" (bedding closet), "peşkirlik" (towel cabinet), and "lambalık" (lamp shelf) according to their function. Of these, bedding closets are usually in the lower platform. Room cabinets in Kula usually occupy one, sometimes two walls. These closets are never higher than the reach of a person. The upper parts of these storage units whose heights are 220 cm maximum, are usually empty. However, in the main room and kiosk room where decoration gains importance these are covered with a fixed wall or wooden paneling. Such room cabinets do not extend to the ceiling and the 100-150 cm space above them are given the appearance of a mezzanine. In more elaborate examples this space is decorated with colorful reliefs or designs.

Continuous shelves that are at the height of the room cabinet surround the other walls of the room. While separating the upper and lower windows, they also divide height of the room. One or some of the closets below this shelf is used as a bathing cubicle, especially in large houses. The floors of these cubicles constructed to enable the family staying in that room to perform ablution is covered with zinc. With an incline towards the outer wall, the water is transferred to the garden. Research shows that bathing cubicles are usually 80-85 cm wide and 210 cm high.

Design and decoration of these side coverings used in the traditional houses in Kula houses differ according to the significance of the room and the house. The doors, panels and niches of these room cabinets all which are made of yellow pine or juniper have been decorated according to the size and function of the room and the desire of the owner. As a result of research it was seen that in Kula, these decorations are stylistically very similar or even repetitive. Engravings usually incorporate interlocking geometric forms, flower, leaf and sun motifs. These continue on the ceiling, door panels, and decorations above windows and the shelf with different motifs but with the same stylistic language. Where engravings have been done, no coloring has been done.

Figure 4.1. Wood ornaments on the cabinets (The Hocacılar House)

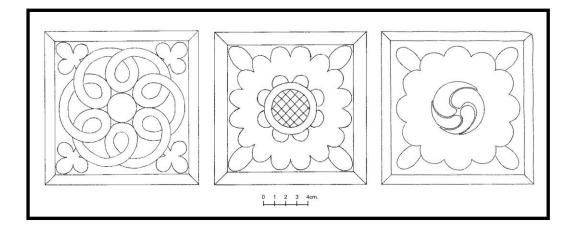


Figure 4.2. Wood ornaments on the cabinets (The Bekirbey House)

(See also Fig. 4.12 - 4.15)

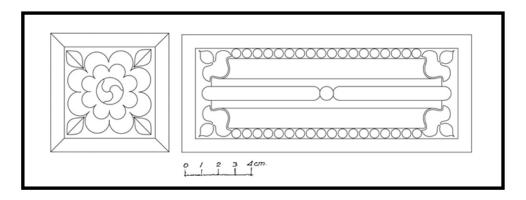
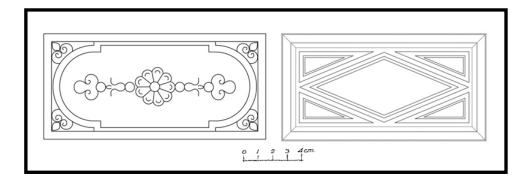


Figure 4.3. Wood ornaments on the cabinets (The Bekirbey and Beyler Houses)

(See also Fig. 4.12 - 4.15)



In the room cabinet, the corners or seams have been configured with very simple and practical methods. Almost all points joined are fastened with nails and occasionally strengthened with wooden nails. The inadequacy of technological capabilities has led to different practical solutions. For example, the shelf systems in use today have been configured in the room cabinets of Kula with a femalemale system carved out of wood. Drawers slide on a horizontal piece of wood nailed to the closet. Simpler versions of hinges which are another mobile element have been used on period closet doors. A circular wrought-iron metal piece attached to the door and a hook shaped piece which is put through the circular

hinge on the closet casing enables the door to move. (Figure 4.4) Hinges used in examples from the later period however are more similar to those used in our day. For instance, they are configured as in the picture of the room cabinets on the ground floor of Bekirbey's house. (Figure 4.5)

Figure 4.4. Hinge Detail (The Bekirbey House) Figure 4.5. Hinge Detail (The Bekirbey House)





Samples of storage units in traditional houses of Kula from all periods have been scrutinized. As a result of these surveys, information about storage units in traditional Turkish houses, especially meticulous study of storage units have been collected and computerized. Following the collection of basic information, detailed analysis of drawings have started with the Bekirbey house. This is an 18th century house. Today it has been separated into three different quarters but it is not used. This house has an external anteroom, and a courtyard. The kiosk room is separated from the others. The vaulted anteroom is situated between the kiosk and the main room and has an opening to the outdoors through a window. Two stairs lead to the main house. These have been added to the building after the house was partitioned into three. The engravings on the ceilings, doors and closets are of special significance.

A SEKI B NOSK COA BALKON DUST KAT TLÂNI

Figure 4.6. The Bekirbey's House first floor plan (Tosun, 1954)

In this building being examined, studies were carried out especially on two rooms and the cabinet units in these rooms were examined. These living spaces, both of which are available in the second floor of the building, completely reflect the second period and third period developments in cabinet units.

In this first room of the Bekirbey House in which the study was carried out, functionality is prioritized. It is approached with a simple and straightforward design away from decorations. The shelf, circulating the entire room is also cutting the upper part of the cabinet and the space between the cabinet and ceiling is left empty. The right side of the cabinet unit was used as a bathing cubicle as the section on the left part is used as a large closet for bedding. That the closet light plastered with gypsum was attached latterly to the cabinet was revealed as the result of the study. (*Figure 4.7*)

The entrance door is started 80 cm behind the cabinets and it is in sloppy condition in terms of design. The most interesting detail in the room is included in the closet for bedding. When the covered closet is opened, an embedded shelf system appears.

Figure 4.7. The Bekirbey's House first room (A) cabinet views and niche detail Figure 4.8. The Bekirbey's House first room (A) plan (by Yarkın Üstünes)

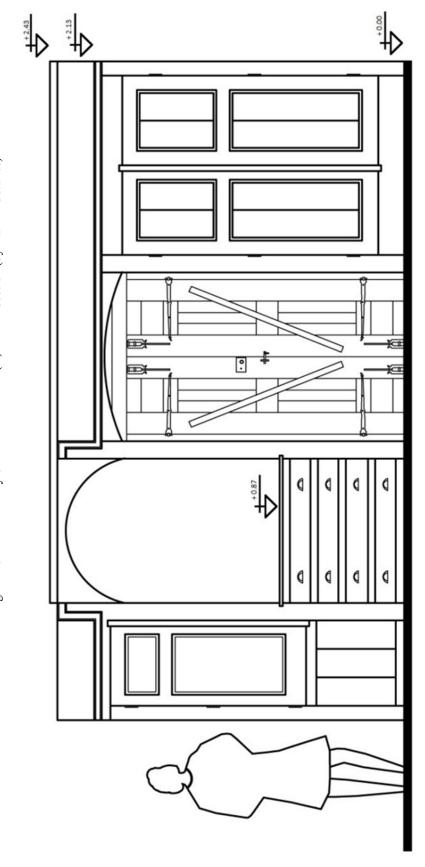
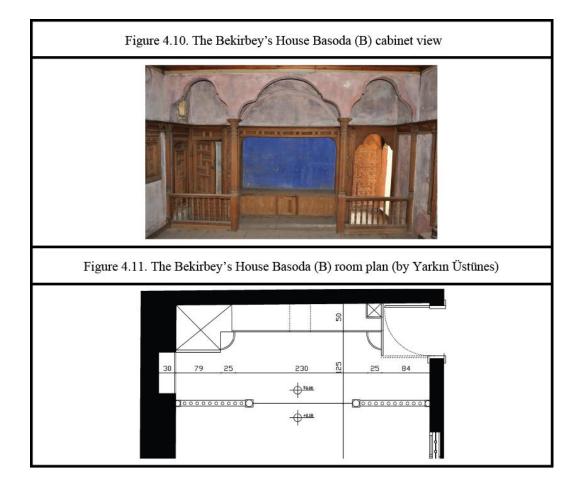


Figure 4.9. The Bekirbey's House first room (A) cabinet section (by Yarkın Üstünes)

A basoda room is available on the second floor of the same house. The door, window, ceiling, stained glass and wooden works made on the cabinet are quite remarkable. The cabinet and ceiling embroideries and motifs above the stove are in particular among the best works in the case of Kula. Cabinet doors and embroideries above the "şerbetlik" are very detailed allowing us to obtain information about Turkish motifs.

The closet unit located in the pavilion room of the Bekirbey House was set to meet all needs of the period. This room in which we can easily understand the social status of the family by the motifs and embroideries it is carrying, helps us to understand the current position of closet units in traditional Turkish Houses. The closet unit for bedding, having a height of 220 cm and a length of 440 cm, was designed to contain inside a bathing cubicle at a width of 96 cm, 6 units of "şerbetlik" at a width of 47 x 40 cm and with an open bedding section of 260 x 48 cm. It is designed in a state by including also the door of the room.



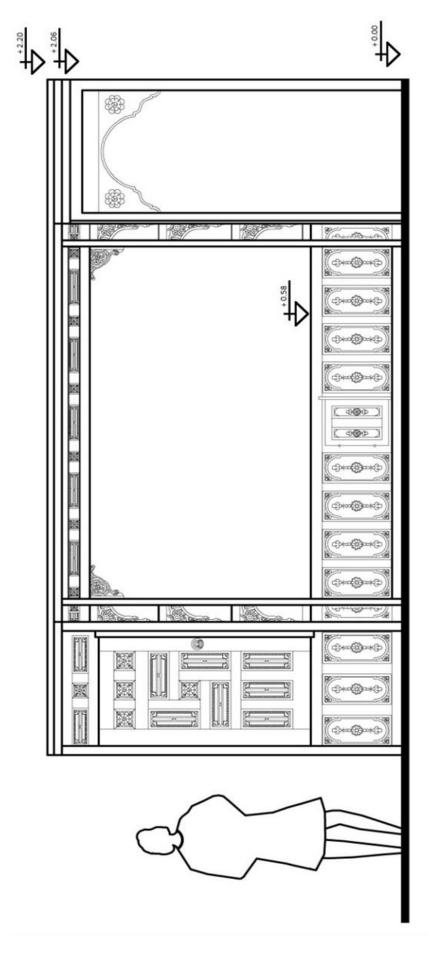
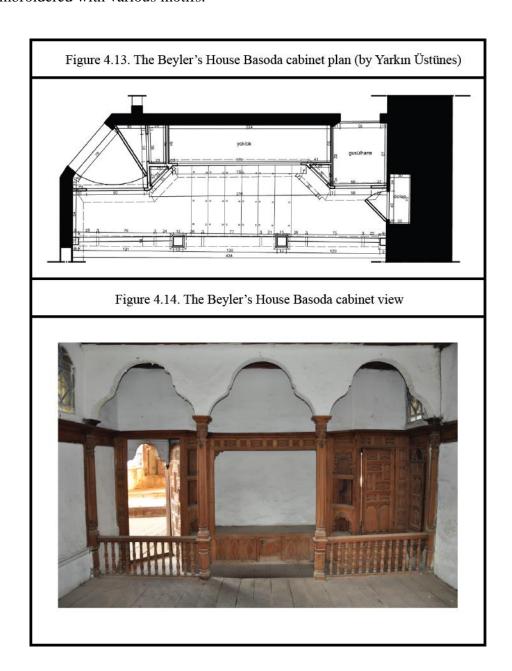


Figure 4.12. The Bekirbey's House Basoda (B) cabinet section (by Yarkın Üstünes)

Another building in which the closet for bedding and cabinet units are examined is the Beyler House. It is known for being constructed in the 18th century by the Beyler family. It is made by a plan of exterior hall style. One part of the house is completely deaf. The main windows of the rooms overlook the hall. The hall has two pavilions that are completely separated. However, these pavilions are in ruin state today. The floor plan of these houses is rescued from humidity by being increased 150 cm. from the ground. Between these intermediate floors, service rooms are located. The main floor is available over this floor. Especially the ceiling, doors and closets for bedding in upper rooms is embroidered with various motifs.



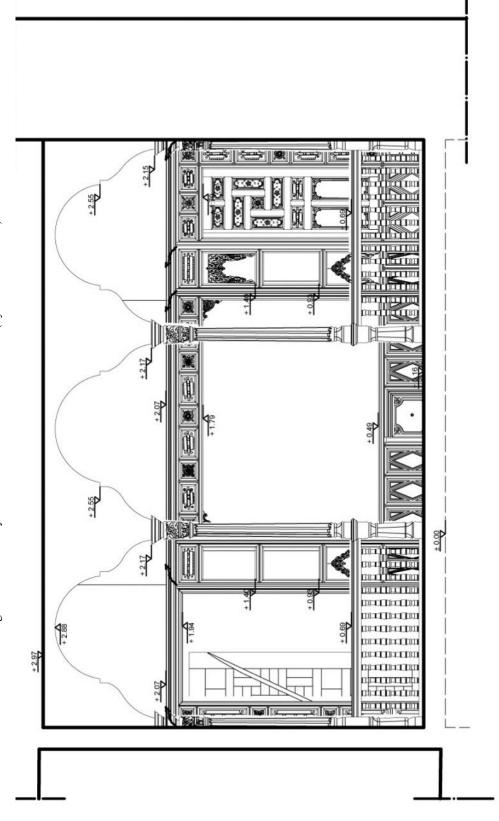
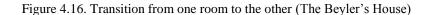


Figure 4.15. The Beyler's House Basoda cabinet section (by Yarkın Üstünes)

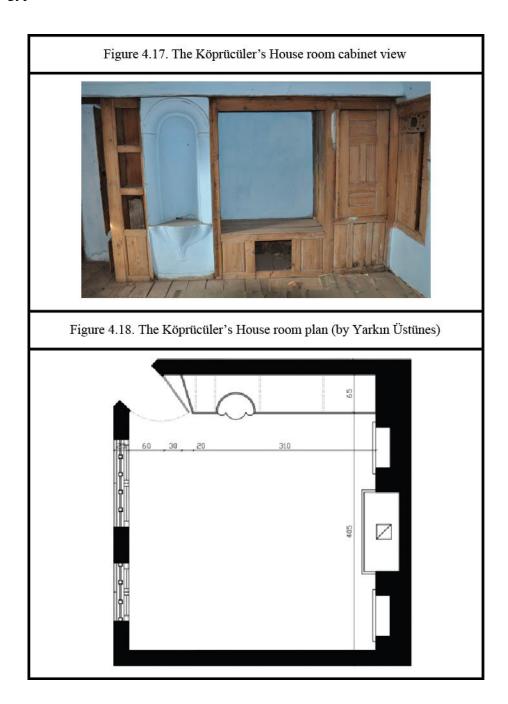
The woodworks in Kula distinguish among their examples in Kula. Except the motifs in the unit of the closet for bedding, attention is also drawn by a solution made at the bathing cubicle. As it can be understood from the figure 4.16. the bathing cubicle can be used from both rooms. This section also allows transition from one room to the other according to needs.

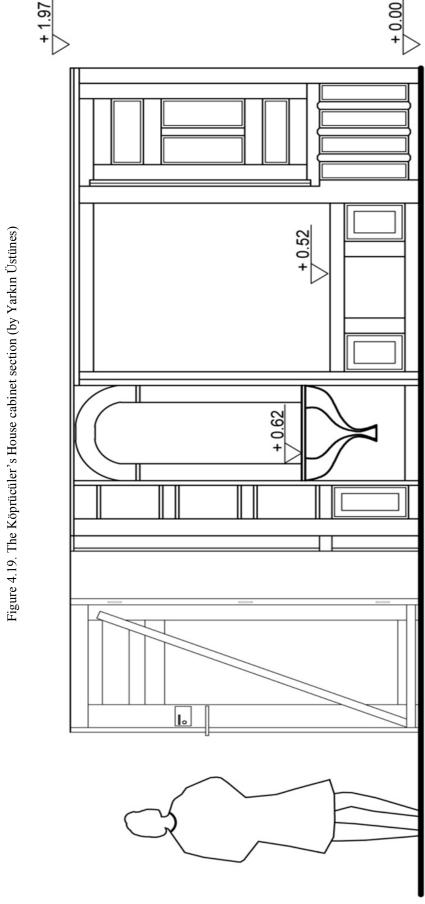




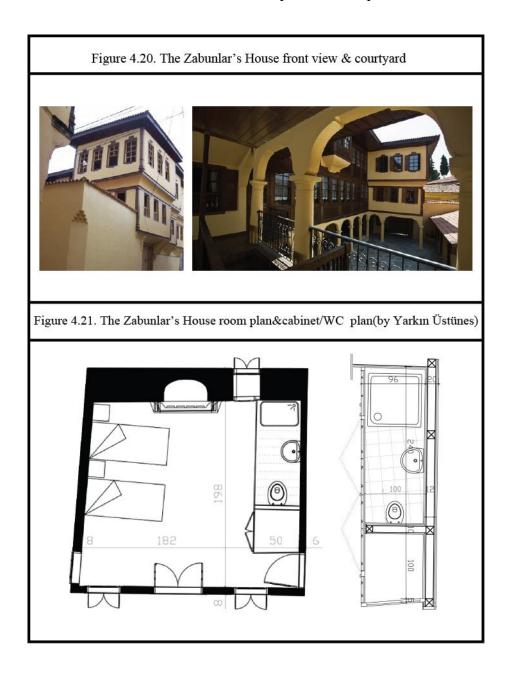
Another house for which the study was conducted is the Köprücüler Mansion that has an outdoor hall planned style. This building, known to built in the 18th Century, is in a very ruined state today. The ground floor of this building, which is consisting of three floors, is built with a stone masonry system and the other two floors are built by a wooden frame system. This building which of the roof was repaired in 2011 by the municipality in order to prevent the collapse of the building is at the forefront with its wood artisanship.

The Köprücüler Mansion being a house of a soldier family and which was used until the 1940s was produced with a simple and straightforward approach far from decorations. When the development stages of cabinet units are considered, they form a good example to the second phase in terms of the period. Connection parts are resolved in an extremely simple manner and cabinet tables are fastened to each other with nails. The only visual area at the cabinet unit at which the bathing cubicle of 65 x 85 cm is available, is the section of the closet light made of gypsum available inside the cabinet unit.





Another building examined under the research is the Zabunlar Mansion. This building, which is approximately 130 years old, is an example for the outdoor hall plan type with its U shape. This building, which could not be used for long years, was transformed into a hotel today under the name "Anemon Kula" after being restored. The most significant feature that comes to the fore with the wood artisanship on the building, wood works on windows and stairs in this building is observed in cabinet units. This closet for bedding, which is plainer when compared to other examples in terms of decoration and embroideries, does not include a bathing cubicle in its structure. Today, the same bathrooms are dissolved within cabinet units. Also in this aspect, it is unique in Kula.



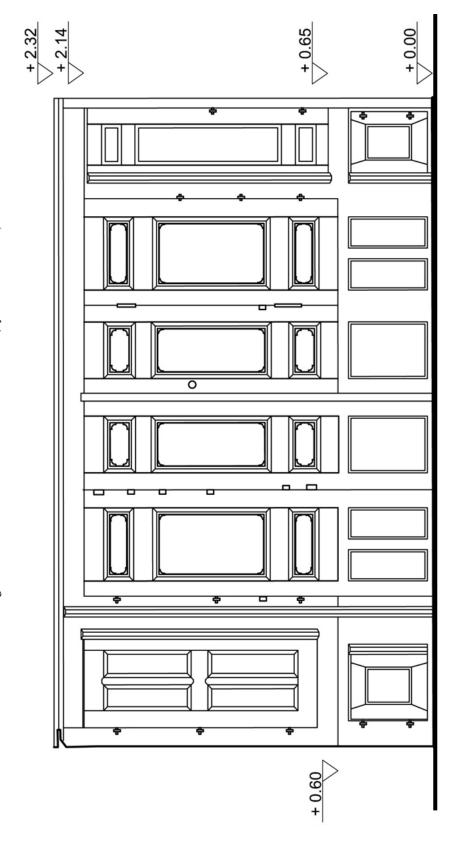
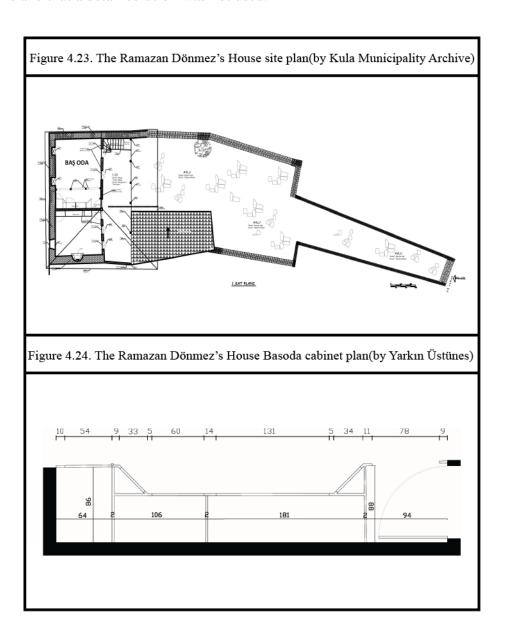


Figure 4.22. The Zabunlar's House cabinet section (by Yarkın Üstünes)

Another study is the Ramazan Dönmez House located in the old residential area of Kula. This house located on the 96th street has a "I" plan diagram. The ground floor of this house with outdoor floor is made with a stone masonry whilst the first floor is made with a frame system. Although being smaller than other examined houses, it is at the forefront with the cabinet workmanship in the main room, the flower at the crown section and with its geometrical formed decorations. After researches, it was understood that the unit of the closet for bedding available under the terrace is fixed together by means of large-headed nails and that a detail solution was not used.



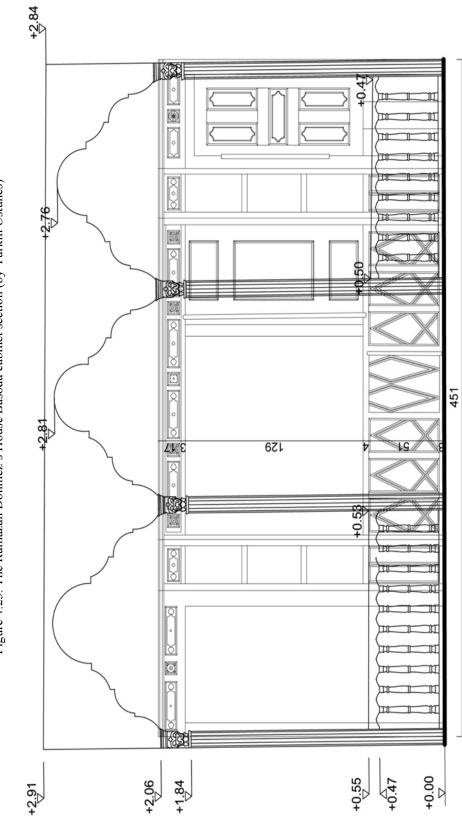
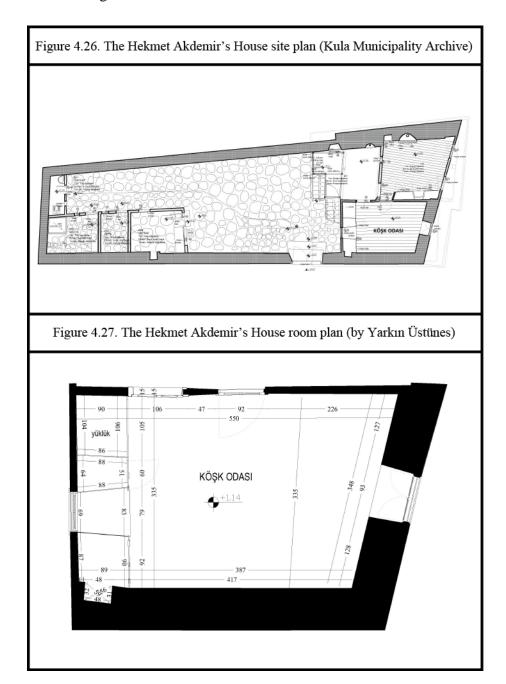
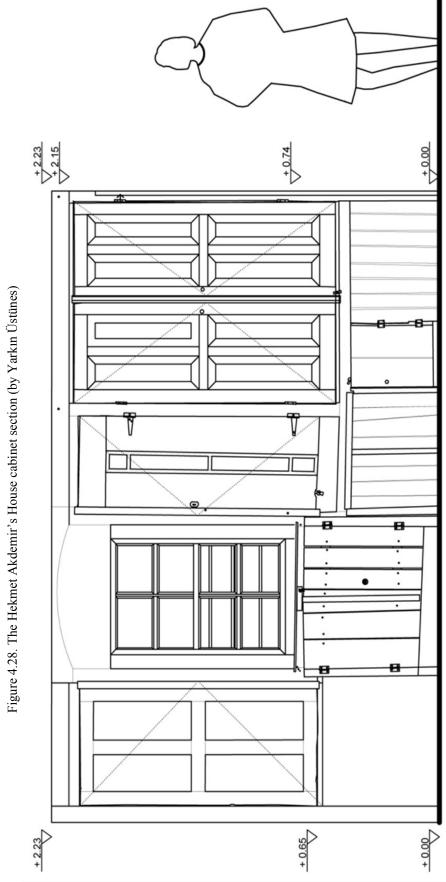


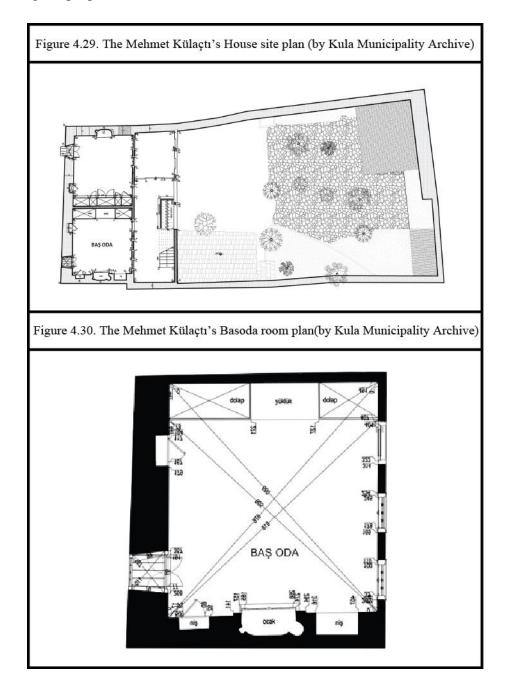
Figure 4.25. The Ramazan Dönmez's House Basoda cabinet section (by Yarkın Üstünes)

As a result of researches carried out in Kula, another building being studies is the Hekmet Akdemir House. This building located on the Zafer Street is situated on the same street of the Anemon Kula house for which another research was also carried out. This building being constructed on a slope ground has an outdoor hall and a wide courtyard. A kitchen, bathroom and storage was later included to the building. This house, which is located on the north-south axis, consists of two floors and it was built by the wooden frame system. The most important reason to examine this structure is that the window-cabinet axis in the room is solved together.





Another example for the present survey was carried out in the Mehmet Külahçı house in Kula. This three-floor building in the Akgün Neighborhood has a large courtyard. On the other two floors of this building which of the ground floor consists of three storerooms, six rooms are available. This house, for which restoration studies were initiated in 2009, is used today by its new owners. The survey was concentrated on the cabinet unit available in the main room of this house. It shows a similar character to other examples in terms of application solutions. A closet for bedding that is plain and far from decorations and is serving for purpose is available in this room.



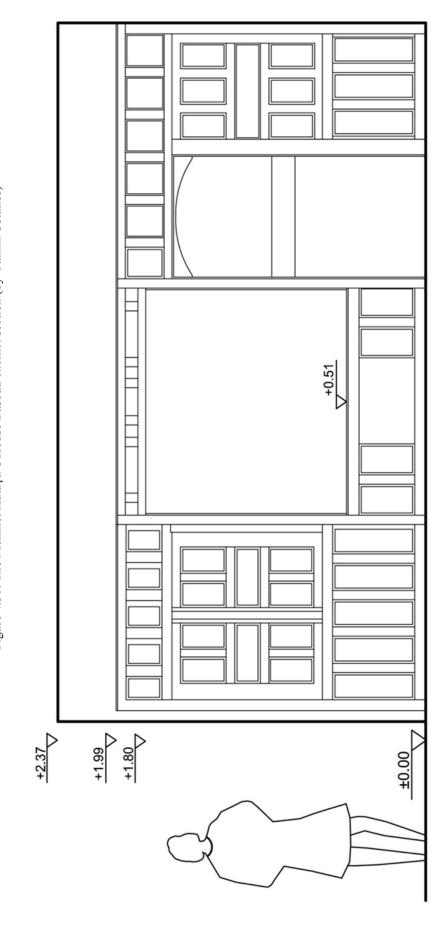


Figure 4.31. The Mehmet Külaçtı's House Basoda cabinet section (by Yarkın Üstünes)

CHAPTER 5 - CONCLUSIONS

Like any other, The Turkish society exhibits a unique character. Formerly a mobile society moving about, the Asian steppes, by adding Islamic rules of belief, this society has synthesized the two to form a different way is life.

The ''oba''s (wool covered circular tents) of Asia has reflected itself on the rooms of the traditional Turkish house. Although, one cannot say exactly how long a period has evolved in the transformation of a tent into a room. We see that the oldest of the traditional Turkish houses in about 250 years old. Therefore, one can not exactly say how long its taken for this society to earn a ''settled'' character an opposed to the ''migrating'' society.

The common feature of the ''oba'' and the room is that they both equipped to answer nearly all kinds of human demand. The rooms provided space and services for cooking eating, sitting, sleeping and sometimes bathing. The traditional house built on stone load bearing ground floors and wooden structure of the first floors was often lost in fires and other natural hazards. The living spaces were always on the first or second floors (or both) and wood was widely used in construction as well as decoration. The traditional house, as compared to stone constructions, has not been strongly built and wide use of wood has resulted in frequent fires and loss. of dwellings. Rooms of houses with their fireplaces, ''sedir'' (an all around sitting) facility and closets have shown different degrees of luxury. This being dependent on the income of the owner.

The Turkish society has not completely deserted. Its nomadic features and has also clearly exhibited the rules imposed by Islam in its settlements and houses, such features can be easily seen in plan types, usage of floors, '' sofa'' s, 'haremlik'' (rooms devoted to women) doors, closets, etc. All such features are good reflections of local cultures and social way of life which have taken shape through time. The new way of life has not taken form instantly right after the migrant society has settle and transformations have taken place through centuries. This reflects itself perfectly in the concept if a room in the Turkish house.

The activities which have taken place in the tent ("oba") of the migrant population has, almost identically been located in rooms. A room means, for its users, a bedroom, a living and norms, a bathroom. The fact that many activities were carried out in the floor has meant that mattresses be folded and stored in deep closets, when the floor was used other activities. It has also meant that these be deep in order to accommodate folded woolen or cotton mattresses. The storage system also indicates that people had to live with minimal clothing and food.

Islam prohibited painting and sculpture in order to avoid the "artificial gods" in the past. This has reflected on art and plainness has meant a lot in designs. Only flower motives and wood carrying were used with or without paint. Luxury was considered a sun and even in the dwelling of the rich on sees a well balanced approach when nothing was over used. The same belief has also led to the use of geometric forms in the construction on of shelves "sergen" drink cupboards "serbetlik" and other alcoles which accommodated commonly used equipment (e.g gear used in preparing food and coffee).

The closets and similar storage facilities used in houses indicate the socio economic statues of it users their belief and habits. The shower taking facilities ("gusülhane") embedded in the closet was, for example, serving a need indicate by the Koran (that couples, after being together, had to take a shower).

The various spaces of the traditional house also provide clues about the understanding of art. This is not only seen with in rooms but also at the exterior of buildings (facades, roof projections, entrances, etc). The stucco of the exteriors was produced from clay and marble dust and then given shape. Being protected from the rain and the sun, interiors were heavily decorated by works of art in wood. Wood work is especially significant on ceilings doors, closets, windows, shutters and other details. Wooden frames, railings, shutters often carry nautically detailed work which often has a meaning. The walls oven the closet in one dwelling has scenes from Istanbul so that the mistress of the house can quench her home sickness. Pomegranate represents wealth and abundance, clover leaf brings

good luck and tulips represent elegance ant richness. Examples, of these were clearly seen in Kula own case study area.

Many traditional Turkish houses have not reached our day due to above mentioned reasons. Through time technical infrastructure (eating, cooking ventilation, lighting) system have changed and many every day functions are how dealt with in separated space. Consequently certain interior elements are no longer valid in our present day homes. Consequently closets now serve in keeping clothes orderly fashion and mattresses are not any longer folded and piled. New industries and product have obviously given way to a new spatial understanding.

We now have modular, ''fix it yourself'' wardrobes which can be fitted to any space many are cheaper than before. Turkish people are now moving towards American solutions. However, we still learn from the past. The shelves within the closet of Bekirbey house in Kula has given clues about new designs while those of the Beyler house has shown as how closet between two rooms can provide insulation and privacy while allowing passage from one room to the other.

The wealthier and cultured won prefer "walk in closets" rather than wardrobes in walls, and more ant more people demand "chancing rooms" which are joined their bedrooms.

This study has been an attempt to document and study the closets if the traditional Turkish houses and keys were studied from Kula. It is evident that many other similar studies will be needed until we can grasp better the culture, understanding, religion of our ancestors and the arts. They have reflected via their dwellings.

BIBLIOGRAPHY

Ahunbay, Z., 2007, Tarihi Çevre Koruma ve Restorasyon, Yapı Endüstri Merkezi Yayınları, İstanbul, 188s.

Akdemir Z. ve Keskin, M., 1994, "A'dan Z'ye Anadolu Evleri", *Arkitekt Sayı 5,* İstanbul, 46pp.

Aksoy, Z., 1995, İzmir Tarihi, Karsını Basımevi, İzmir, 68s.

Aktüre, S., 1987, 19. Yüzyıl Sonunda Anadolu Kenti - Mekansal Yapı Çözümlemesi, Ortadoğu Teknik Üniversitesi Mimarlık Fakültesi Baskı Atölyesi, Ankara, 334s.

Akyüz, E.L., 1993, Traditional Housing Architecture in İzmir, Yüksek Lisans Tezi, Dokuz Eylül Üniversitesi, Fen Bilimleri Enstitüsü, İzmir (yayımlanmamış)

Akyüz, E.L., 1999, Batı Anandolu Kıyıları Konut Mimarisinin Ege adalarındaki Örneklerle Karşılaştırılmalı Değerlendirmesi, YEM Yayınları, İstanbul, 285s.

Altıner, A.T., 1997, Geleneksel Türk Konutunun Geç Dönemi Üzerine Bir İnceleme, Ege Yayınları, İstanbul, 68s.

Arel, A., 1982, Osmanlı Konut Geleneğinde Tarihsel Sorunlar, Ege Üniversitesi Güzel Sanatlar Fakültesi Yayınları, İzmir, 168s.

Arseven, C., Türk Sanat Tarihi, Milli Eğitim Basımevi, İstanbul, 640s.

Arslanoğlu, A., 1983, Sivil Mimarimizin Günümüze Vakfettiği Modern Mimari Manasında Bazı Değerler Üzerine, *Rölöve ve Restorasyon Dergisi*, Vakıflar Genel Müdürlüğü Yayınları, Ankara.

Aru, K.A., 1996, Osmanlı – Türk Kentlerinin Genel Karakteristikleri Üzerine Görüşler, Tarih Vakfı Yayınları, İstanbul, 334s.

Asatekin, G., 1994, Anadolu'daki Geleneksel Konut Mimarisinin Biçimlenmesinde Aile-Konut Karşılıklı İlişkilerinin Rolü, *Kent Planlama, Politik, Sanat Tarık Okyay Anısına Yazılar*, Ortadoğu Teknik Üniversitesi Mimarlık Fakültesi Yayını, Ankara, s 65-87.

Bektaş, C., 1991, Çağdaş Türk Evini Oluşturacak Yaşama Kültürü, Türk *Halk Mimarisi Sempozyumu Bildirileri*, Kültür Bakanlığı Araştırma Dairesi yayınları, Ankara.

Bektas, C., 2007, Türk Evi, Bilişim Yayınları, İstanbul, 190s.

Berker, M., 1982, Ahşap Mimari Anıtlarda Koruma Uygulamaları ile İlgili Bir Yöntem Önerisi, Doktora Tezi, Mimar Sinan Üniversitesi Mimarlık Fakültesi, İstanbul (yayımlanmamış)

Bozer, R., 1990, Kula'da Türk Mimarisi, Kültür Bakanlığı Yayınları, İstanbul, 88s.

Büyükmıhçı, G., 1999, Osmanlı Dönemi Azınlık Evlerinin Mekansal Özellikleri, YEM Yayınları, İstanbul, 302s.

Çadırcı, M., 1996, Anadolu Kentlerinde Mahalle (Osmanlı Dönemi), Tarih Vakfı Yayınları, İstanbul, 263s.

Çakır, S., 2011, Geleneksel Türk Kültüründe Göç ve Toplumsal Değişme, *SDÜ* Fen Edebiyat Fakültesi Sosyal Bilimler Dergisi, 24, 129-142pp.

Çamlığıl, Z., 1990, Geleneksel Türk Evinde İklim ve Etkilerinin Araştırılması, Yüksek Lisans Tezi, Mimar Sinan Üniversitesi, İstanbul (yayımlanmamış)

Çelebi, E., 1935, Seyehatname, Anadolu, Suriye, Hicaz (1671-1672), Yapı Kredi Yayınları, 9, İstanbul, 968s.

Çobancaoğlu, T., 1998, Türkiye'de Ahsap Evin Bölgelere Göre Yapisal Olarak İncelenmesi ve Restorasyonlarında Yöntem Önerileri, Doktora Tezi, Mimar Sinan Üniversitesi, İstanbul (yayımlanmamış)

Demir, M., 1999, Osmanlı Devleti'nin Kuruluş Döneminde Yerleşim Yapısı ve Şehirleşme, Yeni Türkiye Yayınları, Ankara, 102s.

Demirel, E., 1983, Kula Tarihsel Merkezindeki Dinsel-Kültürel Yapılar Üzerine Bir Araştırma, Yıldız Teknik Üniversitesi, İstanbul

Deniz, B., 1992, Manisa Yöresi Köy Mimarisi, *Arkeoloji-Sanat Tarihi Dergisi*, İzmir, s.17-46.

Divleli, A., 2008, Geleneksel Türk Evinin Cephe Analizi: İstanbul – Zeyrek Semti Haydar Mahallesi Örneği, Yüksek Lisans Tezi, Selçuk Üniversitesi, Konya (yayımlanmamış)

Durukal, A.K., 1997, Research of the Traditional Village Architecture in the Religion of Tire and the Problems of Conservation, Yüksek Lisans Tezi, Dokuz Eylül Üniversitesi, İzmir (yayımlanmamış)

Ekinci, Z., 2005, Anadolu Türk Evi Geleneğinde Birgi Örneği ve Sandıkoğlu Konağı, Yapı Yayınları, İstanbul, 91s.

Eldem, S.H., 1954, Türk Evi Plan Tipleri, İstanbul Teknik Üniversitesi Mimarlık Fakültesi, İstanbul, 236s.

Eldem, S.H., 1984, Türk Evi – Osmanlı Dönemi, Türkiye Anıt Çevre Turizm Değerlerini Koruma Vakfı Yayınları, 1, İstanbul, 871s.

Emecan, F., 2012, İlk Osmanlılar ve Batı Anadolu Beylikler Dünyası, Timaş Basımevi, İstanbul, 368s.

Eriç, M., 1979, Geleneksel Türk Mimarisinde Malzeme Seçim ve Kullanımı, Yapı, İstanbul, 1979/3, s. 12-27.

Ertürk, K. İ., 1996, The Traditional Turkish House Types in Anatolia, *Çağlar Boyunca Anadolu'da Yerleşim ve Konut Uluslararası Sempozyumu Bildiriler*, Ege Yayınları, İstanbul, s.159-169.

Faroqhi, S., 2000, Osmanlı'da Kentler ve Kentliler, Tarih Vakfı Yurt Yayınları, İstanbul, 135s.

Faroqhi, S., 2011, Osmanlı Kültürü ve Gündelik Yaşam, Tarih Vakfı Yurt Yayınları, İstanbul, 406s.

Gökçe, P., 1983, 'Türk-Osmanlı Ahşap Mimarisinin Planimetrik Özelliklerine Uluslararası Çevrede Bir Bakış', Doktora Tezi, Mimar Sinan Üniversitesi Mimarlık Fakültesi, İstanbul. (yayımlanmamış)

Göker, M., 2009, Türklerde Oturma Elemanlarının Tarihsel Gelişim Süreci, <u>from diewelt-dertuerken.de</u>, 1-8pp.

Günay, R., 1999, Osmanlı Konut Mimarisinde Ahşap Kullanımının Sürekliliği, *Proceedings of the 11th İnternational Cangress of Turkish Art*, No 57, 1-22 pp.

Günay, R., 1998, Türk Ev Geleneği ve Safranbolu Evleri, YEM Yayınları, İstanbul, 366s.

Gür, Ş.Ö. ve Batur, A., 2005, Doğu Karadeniz'de Kırsal Mimari, Milli Reasürans T.A.Ş., İstanbul, 253s.

Gür, Ş.Ö., 2000 Konut Kültürü – Doğu Karadeniz Örneğinde, Yapı Endüstri Merkezi Yayıncılık, İstanbul, 247s.

Hacıbaloğlu, M., 1989, Geleneksel Türk Evi ve Çağımıza Ulaşamamasının Nedenleri, Gazi Üniversitesi Teknik Eğitim Fakültesi Matbaası, Ankara, 143s.

Hasol, D., 1998, Mimarlık Sözlüğü, YEM Yayıncılık, İstanbul, 520s.

Hidayetoğlu, L. 2009, Türk Yaşam Kültürünün Geleneksel Türk Evlerindeki Yansımaları, *Selçuk Üniversitesi Bilimsel Araştırma Projeleri*, Konya

Kahya, E., 1998, Geleneksel Türk Evleri Bibliyografyası Deneme, Kültür Bakanlığı Yayınları, İstanbul, 158s.

Kamarlı, E., 2008, Kastamonu Tarihi Dokusunda Yer Alan Geleneksel Konut Yapılarının Cephe Mimarisi Üzerine Tipolojik Bir Araştırma, Yüksek Lisans Tezi, Dokuz Eylül Üniversitesi, Fen Bilimleri Enstitüsü, İzmir (yayımlanmamış)

Karaarslan, H., 2010, Kula Peri Bacaları ve Kula Evleri, İndigo Dergisi, s. 4-6.

Karametli, C., 1962, Osmanlı Devri Ağaç işleri, Tahta Oyma, Sedef, Bağa ve Fildişi Kakmalar, *Türk Etnografya Dergisi*, 4:5-13

Karpol, T., 2000, Bursa'da 1930- 1950 Yıllarında İnşa Edilmiş Konutların Cephe Özelliklerinin Değerlendirilmesinde Tipolojik Bir Yöntem Denemesi, Doktora Tezi, Yıldız Teknik Üniversitesi, Fen Bilimleri Enstitüsü, İstanbul (yayımlanmamış)

Keskin, H. ve Asarcıklı, M., 2002, Ahşap Süsleme Teknikleri, Gazi Kitapevi, Ankara, 188s.

Köse, A., 2005, Türkiye'de Geleneksel Kırsal Konut Planlarında Göçebe Türk Kültürü İzleri, *AKU Sosyal Bilimler Dergisi*,7-2, 158-191pp.

Kuban, D., 1995, Türk Hayat'lı Evi, Eren Yayıncılık, İstanbul, 280s.

Kuban, D., 1988, 100 Soruda Türkiye Sanatı Tarihi, Gerçek Yayınevi, İstanbul, 304s.

Kuban, D., 1966, Türkiye'de Malzeme Koşullarına Bağlı Geleneksel Konut Mimarisi Üzerinde Bazı Gözlemler, *Mimarlık Dergisi*, 38, s.15-20.

Küçükerman, Ö., 1985, Kendi Mekanının Arayışı İçinde Türk Evi, Türkiye Turing ve Otomobil Kurumu, İstanbul, 214s.

Küçükerman, Ö. ve Güner, Ş., 1995, Anadolu Mirasında Türk Evleri, Kültür Bakanlığı Yayınları, İstanbul, 250s.

Küçükerman, Ö., 1981, Geleneksel Türk Evinde Çevre Tasarımı ve Oda Kavramı, İDGSA Yayıncılık, İstanbul

Küçükerman, Ö., 1981, Geleneksel Türk Evinde Çevre Tasarımı ve Oda Kavramı, *Akademi 10 Mimarlık ve Sanat Dergisi*, 82.

Orhon, D. ve Akyüz, E.L., 2000, Kula'da İki Ev, *Ege Mimarlık Dergisi*, İzmir, 33-38pp.

Özkaraman. M., 2004, Türkiye'de 1800 – 2004 Yılları Arasındaki Değişim Süreci İçinde Tasarımı Etkileyen Faktörler: ve Bir Örnek Olarak Mobilya Üretimi Modeli, Doktora Tezi, Mimar Sinan Üniversitesi, Fen Bilimleri Enstitüsü, İstanbul.

Özkaya, Y., 1985, 18. Yüzyılda Osmanlı Kurumları ve Toplum Yaşantısı, Yapı Kredi Yayınları, İstanbul, 516s.

Söğütlü, C.,, 2004, Bazı Yerli Ağaç Türlerinin Kündekâri Yapımında Kullanım İmkanları, Doktora Tezi, Gazi Üniversitesi, Fen Bilimleri Enstitüsü, Ankara (yayımlanmamış)

Sözen, M. ve Eruzun, C., 1996, Anadolu'da Ev ve İnsan, Creative Yayıncılık, İstanbul, 311s.

Şahin, H., 2006, Tarihin Güzel Mirası Kula, Ezgi Yayınları, İzmir, 364s.

Tansuğ, S., 1992, Türk Ev Mimarisinin Değişme ve Gelişme Çizgisi, Sosyo-Kültürel Değişme Sürecinde Türk Ailesi, Başbakanlık Aile Araştırmaları Kurumu Yayınları, Ankara,71, s.756-769.

Tanyeli, U., 1996, Osmanlı Barınma Kültüründe Batılılaşma-Tarihten Günümüze Anadolu'da Konut ve Yerleşme, Tarih Vakfı Yayınları, İstanbul, 132s.

Tekeli, İ., 1996, Osmanlı İmparatorluğu'nda Kent Planlama Pratiğinin Gelişimi ve Kültürel Mirasın Korunmasındaki Etkileri, İlke Yayınları, İstanbul, 173s.

Tosun, İ., 1969, Tarihi, Sosyal, Kültürel ve Turizm Yönleri ile Kula, Kula Tarihi ve Folklor Notları, Aboloji Matbaacılık, İzmir, 64s.

Uğurlu, K., 1991, Orta Asya'dan Bugüne Türk Mesken Sanatında Çadır, Türk Halk Mimarisi Sempozyumu Bildirileri, Kültür Bakanlığı Araştırma Dairesi Bakanlığı, Ankara

Uluengin, F., 2010, Klasik Yapı Detayları – Osmanlı Anıt Mimarisinde, Yapı Endüstri Merkezi Yayıncılık, İstanbul, 270s.

Yıldırım, K., 2006, Geleneksel Afyonkarahisar Evlerine Ait Kapılar Üzerine Bir Araştırma, *Gazi Üniversitesi Müh. Mim. Fak. Dergisi*, 21 (1), 75-85pp.

Yücel, T., 1975, Türk Ansiklopedisi "Kula", Milli Eğitim Basımevi, 22, İstanbul, 336s.

Yürekli, H. ve Yürekli, F., 2005, Türk Evi Gözlemler-Yorumlar, YEM Yayınları, İstanbul, 99s.

Zeren, M. Ve Karaman, Ö.Y., 2011, Analysis of Construction System and Damage Assessment of Traditional Turkish House – Case study of Timber Framed Kula Houses, *SHATIS'11 International Conference on Structural Health Assessment of Timber Structures*, Lisbon

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07/2010 – 05/2011 "Selçuk Belediyesi Kent Belleği Merkezi Müzesi" restorasyon ve uygulama projesi.

06/2009 – 10/2010..... Üstünes Mimarlık & İnşaat

06/2008 - 09/2008 : M.E.Ş İnşaat 06/2007 - 09/2007 : M.E.Ş İnşaat

07/2006 – 09/2006 : Üstünes Mimarlık & İnşaat 07/2005 – 09/2005 : Üstünes Mimarlık & İnşaat

AKTIVITELER:

Haziran 2009 : 'Kent ve Yaşam' konulu Fotoğraf Sergisi (İzmir, Konak metro istasyonunda sergilenmiştir.)

Mayıs 2009 : 'Kent ve Yaşam' konulu Fotoğraf Sergisi (İzmir, Yaşar Üniversitesi Sergi Salonunda sergilenmiştir.)

Mayıs 2008 : 'Mosder' Ev Mobilyaları Tasarım Yarışması'na çok amaçlı oturma grubu' konsepti ile okul adına katılmıştır.

KULLANILAN BİLGİSAYAR PROGRAMLARI:

AutoCAD & AutoCAD Architecture : İleri Seviyede
 Arcon 3D Home Design : İleri Seviyede
 Adobe Photoshop CS3 :İleri Seviyede
 Microsoft Office Programları : İleri Seviyede

Autodesk 3Ds Max
 İleri Seviyede (M.E.B Sertifikalı)

ArchiCAD : İyi Seviyede
 SketchUp Pro 3D Modeling :İyi Seviyesinde

HOBİLER & İLGİ ALANLARI:

- Özellikle mimari ve doğa fotoğrafları çekmek.
- Restorasyon, sürdürülebilir mimari ile, çeşitli iç mekan üniteleri hakkında araştırmalar ve çalışmalarda bulunmak.
- Spor yapmak (Basketbol ve yüzme)
- Su sporları (Serbest dalış, yelken)
- Kitap okumak (özellikle mesleki ve kişisel gelişim kitapları)
- Müzik dinlemek

APPENDIX

Map of Kula Indicating Houses Studied in This Research