The Interaction Between Public and Private Space in Traditional Environments: The Case of Kabaltı Houses in Urfa

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ABSTRACT

This study explores the interaction between public and private domain in traditional environments. The interaction between these dualities; public and private, interior and exterior, indoor and outdoor, part and whole, individuals and environment are essential design criteria in traditional environments. The modes of interaction between public and private domain and the spatial configuration between inside and outside are formed totally according to the mutual dependence of public and private, interior and exterior, open and closed, part and whole, individuals and environment.

This research firstly tries to define the public, private and in-between spaces in both physical and social aspects. The aim is to search the existing literature in order to find significant variables in the relationships among public, private and in-between space. In addition, the thesis aims to explore in-between spaces and how it provides social interaction in traditional built environments.

The second attempt is to analyze the traditional Kabaltı houses in Urfa in regards to the interaction between public and private space. The aim is to analyze both the visual interaction within the community life and the physical interaction between house and street including street façade and its component (kabaltı and cumba). Additionally, the study contains analysis of living spaces in terms of interior and exterior relationships. In this respect, the threshold between the interior and exterior, public and private space which is boundary of the house is one of basic concept of study.

Keywords: Kabaltı house, interaction, in-between space, public space, private space, threshold, boundary

ÖZ

Bu çalışma, geleneksel baglamlarda kamu ve özel alan arasındaki etkileşimi araştırmayı amaçlamaktadır. Özellikle geneleksel cevreler; kamu ve özel, kapalı ve acık, iç ve dış, parça ve bütün birey ve çevre ikilemler arasındaki etkileşim geleneksel ortamlarda önemli tasarım kriterleri olarak karşımıza cıkmaktadır. Kamu ve özel alan arasındaki etkileşim bicimleri ve iç ile dış arasındeki mekansal konfigürasyonun oluşumu, tamamen kamu ve özel, iç ve dış, açık ve kapalı, parça ve tüm, bireylerin ve çevrenin karşılıklı bağımlılıklarına göre şekillenmektedir.

Bu araştırma öncelikle hem fiziksel hem de sosyal açıdan özel, kamu ve ara mekan anlamlandırmaya çalışır. Tez mevcut litaratür tarama yolu ile kamu, özel ve ara mekan arasındaki ilişkiler hakkında önemli değişkenleri bulmayı amaçlar. Buna ek olarak, tez ara mekanın geleneksel doku icerisine sosyal etkileşimi nasıl sagladıgını ortaya koymayı amaçlamaktadır.

Tezin ikinci hedefi ise, kamusal ve özel mekan etkileşim bağlamında Urfa'daki geleneksel Kabalıtı evlerini analiz etmektir. Amaç, toplum yaşam ile özel yaşam arasındaki görsel etkileşim ve ev ile sokak arasındaki arayüzleri, sokak cephesi ve bileşenlerinin (kabaltı ve cumba) analizini gerçekleştirmektir.

Ayrıca, bu çalışma iç ve dış ilişkiler bağlamında yaşama mekanlarının analizinin yapılmasını da içermektedir. Bu bağlamda, evin sınır, iç ve dış, kamu ve özel alan arasında bir eşik olarak bu çalışmanın temel araştırma kavramlarından biridir.

Anahtar Sözcükler: Kabaltı ev, etkileşim, ara mekan, kamusal mekan, özel mekan, sınır, eşik

DEDICATION

To my father Hec Hemo and my mother Hec Ellê

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Chapter 1

INTRODUCTION

In traditional environments, all parts of a place respect and interact with each other within a spatial coherence. Traditional urban fabrics are essentially composed of large number of elements that create peculiar spatial patterns which interrelate and continue within the urban fabrics. As a consequence of the interaction between parts and whole, public and private, individual and community, open and close, inside and outside, people and environment, certain spatial qualities are created in traditional environments. "Space configuration of indoors and outdoors as well as the modes of interaction between the two are shaped totally according to the aforementioned mutual dependence" (Eyüce, 2012). Traditional environments are completely perceived as a great single structure. The built form is formed during strong intercourse among the individual house form and properties of the settlement tissue. A similar view is accentuated by Rapoport as follows "... it is sometimes difficult to separate dwelling and settlements. Particularly in the case of the communal dwellings, where dwellings and settlement are one..." (Rapoport, 1989). Furthermore, in bridging the interaction of contradict or duality between housestreet, public-private and interactions in terms of "inside-outside" phenomenology, Tuan emphasizes that; "Consider the sense of an "inside" and an "outside," of intimacy and exposure, of private life and public space. People everywhere recognize these distinctions, but the awareness may be quite vague. Constructed form has the

power to heighten the awareness and accentuate, as it were, the difference in emotional temperature between "inside" and "outside" (Tuan, 2001, p107).

In particular, the interaction between public and private domains defines certain transitional spaces in architecture. For instance, thresholds, verandah, porticos, culde-sac are the remarkable spatial entities related with the interaction of public and private domains. In this respect, Kabaltı which is an under passing urban house type very frequently seen in South Eastern Anatolian traditional environments is a unique case which illustrates interaction between house and street, inside and outside, public and private in architectural scale.

Besides various spatial qualities for interaction, Kabaltı creates shortcut and provides easy access between different parts of the traditional environments. Organic street patterns and effective circulation network are achieved with the presence of Kabaltı in the traditional urban fabrics. In different cultures, the under passing urban house is given different names such as Sabat, Abbara, Sottoportici, Archhouse. In the South Eastern Anatolia, it is commonly called Kabaltı and Abbara.

1.1 Objective and Problem Definition of the Study

Under this scope, the main purpose of study is to point out spatial and cultural significance and role of Kabaltı for achieving public and private interaction. The aim is to understand the role of Kabaltı in spatial continuity between building-street and inside-outside domains, with developing and understanding on how it is formed a "in-between space" and achieved certain interaction between private and public domains. Moreover, significance of Kabaltı in the provision of accessibility and the

achievement of compactness in traditional urban settlements are also to be researched.

Although, the Kabaltı possesses spatial and cultural qualities that help achieve social satisfaction and climatic comfort both in urban and architectural settings, it is not sufficiently studied to taking in the implementation of contemporary buildings and urban environments. Even more, the Kabaltı has disappeared from tradition architecture due to the misleading rules and regulations of municipalities.

1.2 Research Limitation

The traditional built environments have been selected as the focus of this means where the role of the Kabaltı houses in spatial continuity between building-street, inside-outside, public and private domains within the traditional built environments are considered. This study is an attempt to explore general characteristics of the Kabaltı houses selected within traditional built environments through mentioned criteria. This research is concerned with the limitations of the traditional kabaltı house, the house-street boundary and house-garden boundary, where boundaries of the house create a threshold between public-private and exterior-interior.

1.3 Research Methodology

The method of research is mainly based on literature survey and field study. In order to draw the general theoretical framework of the study, literature survey focuses on three issues: (i) to explore community life and public space of the street, (ii) to explore domestic life and private space of the house, (iii) to explore the in between space in front of the house and the street regarding the interaction between house-street, inside-outside and public-private.

The field study is carried out in the old city of Urfa in Southeastern Anatolia in Turkey. The town of Urfa has a particular traditional tissue composed of stone buildings and organic narrow streets. In this urban tissue, the Kabaltı is a special architectural feature of the place and add peculiar characteristic to the traditional tissue.

In the field study, a number of Kabaltı houses are selected for the realization of architectural analysis. The analysis is based on architectural drawings (plans, sections, elevations) and further interpretations are supported with the data obtained from interviews with the user's people as the examples of last generation who lived and experienced Kabaltı houses.

In the case study, certain buildings with Kabaltı characteristics will be selected in order to illustrate their significance and roles in the creation of the traditional urban fabric in Urfa.

Chapter 2

THEORETICAL BACKGROUND OF THE STUDY

2.1 Introduction

The traditional environments are places, which were founded under the hierarchical movements, which range from the macro to micro and from public space to private spaces. All parts of traditional environments are interrelated with each other within a spatial unity.

Traditional urban fabrics are essentially composed of large number of elements that create peculiar spatial patterns which interact within spatial coherence in urban fabrics. Streets, building entrance, arcade, portico and many other components connect public and private space in traditional environment. These transitional spaces connect indoor and door space by various activities.

Additionally, these elements play an essential role in the structure of traditional built form. Eyüce (2012) mentions that traditional built form is shaped by significant role of the interdependence between house form and the properties of the settlement pattern, in the other words, the form is the outcome of coexistence between house and settlement. In line with the view of Pulhan (2005), traditional environments are the volumetric combination of large number of elements, and they are combined together to modulate the relationship between the parts and the whole.

Referring to Rapaport (1969) the space organization of traditional house is neither coincidental nor amorphous. The traditional house form and each spatial element of it was formed and assembled under certain role of design principles, which embodied the impact of cultural factors. The system of beliefs, and attitudes towards privacy and gender roles have important effect on the formation of traditional house form (Rapaport 1969). In accordance with this fact, the concept of development from interior, which is the private and domestic core of family, to exterior, which is public urban domain, is the basic approach for controlling the formation of traditional built environments.

In fact, spatial continuity establishes certain interactions between public and private, inside and outside, part and whole, people and environment by creating certain transitional spaces in traditional environments. In addition, numerous different elements in traditional built environments play certain role to connect private and public domain as arcade, cumba, kabaltı, portico, and building entrance. In-between spaces join the public and private, indoor and outdoor, part and whole by the volumetric combination of these elements and also connect various social activates. What is more, urban fabric establishes coherence and spatial continuity through the hierarchy of spaces.

Today, public and private spaces are strictly demarcated. On the other hand, there is clear definition of the public and private space. Thus, it affects interfaces which are integrated more into urban fabrics. In-between spaces, which are neither public nor private, and neither inside nor outside, create certain interaction, which has been examined by various research fields. If there is no spatial hierarchy between public and private spaces, inside and outside, people and environment, the social interaction

might be weak. In the greater part of the traditional settlements, the striking spatial hierarchy is accomplished by utilizing transitional elements in diverse scale, for instance, the eyvan between the inside and outside of a domestic building, the cul-desac between public and private realm and the gateway in city wall between the artificial setting and natural setting.



Urfa in Turkey Aibar in Spain Figure 1: The cumba, kabaltı and arcade

Though, the similar scaling spectrum is accentuated by Pulhan (2005); "there are certain transitional spaces of domestic buildings where certain elements – indoor and outdoor spaces appear as isolated elements, which can then be identified and even named in the environments, characterized by grater homogeneity" (Pulhan, 2005). Subsequently, the characters of the transitional elements not only have impacts on the house form, they also have certain impacts on the urban form.

Draw attention to the linkage between the public domain and the private domain in the traditional settlement, the form of these linkage changes over time in settlement which includes the in-between domain. Rapaport (2007) describes these linkages as "the sequence of outdoor spaces which are cul-de-sac, streets, neighborhoods; fence, gate, path porch, door, entranceway and thresholds". He also states that the courtyard house is one of these forms. In this regard, this forms the relationship betweem public and private space, Rapoport (2007) defines them as "via a 'lock,' rather than without such a lock and with permeable boundary" (Rapoport, 2007, p.58). (Fig. 2) Referring to him, this is more important than the form of the public and private space.

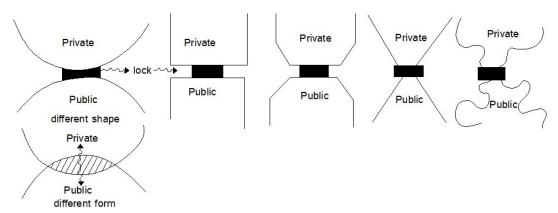


Figure 2: The linkages between domains in traditional settlements (source: Rapoport 2007)

Within this respect, the relation between public and private space appear as an important point which provides the interaction and communication between its components. From Lang's point of view, the distinction between public and private space is not always clear due to fact that there are also semi-public and semi-private behaviors and places (Lang, 2005, p.6). Subsequently, in the research one should consider that the spatial relationship could create interaction between private and public space rather than a clear distinction amongst them in traditional environment.

Despite the fact that the spatial terminology such as private, in-between and public space in space describes the transition and interaction between private and public space in traditional environment, this research will be elaborated on public space of the street, private space of the house and in-between space in front of the house on the street as an outcome of inter and intra relation within built environments by conducing social interaction and communication. Under this scope, this chapter is divided into three parts. The first part, the description and the evaluation of the term public and community life and relation between street and house will be discussed in order to embody the realms of interaction within a social and physical content. In the second part, the description and the evaluation of the term private and domestic life will be discussed. This section contains discussion on the spatial organization of the house in terms of the boundary between house and street, and house and courtyard. The last part includes a discussion on the in-between space. It focuses on relationship between public space of the street and private space of the house to create a bridge between social and physical aspect of traditional built environments.

2.2 Community Life and Public Space on the Street

2.2.1 Definition of the Public Space

Public space is defined in Urban Dictionary (2011) as "a place, in wide definition, for everybody to enjoy their coexistence and represent their collectivity and common interest without drowning or disaggregating their diversity". In the dictionary of Human Geography (2009, p.602), it is defined as "space to which all citizen has right of the access. Public space must be juxtaposed with private space ...". Public space is open and accessible to all individual to use or enjoy it as a communal social space regardless of social identity (Madanipour, 2010; Tiesdall et al., 2003).

One of the mostly accepted descriptions of the public is that; it contains all spaces which are open and accessible to all individuals from the community in a society (Neal, 2009). Referring to this description, what sort of areas should be considered as public space? In different scale, public spaces are manly considered as streets, squares, outdoor area as parks and several gathering places in neighborhood scale. Furthermore, public spaces are recognized as public buildings such as, religious, education and commercial building, though their utilization might be limited to specific times or to specific individuals (Neil 2009, p.1). As a result, use of public space is free for all individuals without any permission of any special group. It is not depended on user's age, gender, and social status; according to intention and willing of individuals, everyone could use it (Neil 2009, p.2). Referring to Madanipour, it creates the impression that the meaning of public space accentuates "open access to either the space or the diversity of activities, most notably the social interaction, taking place in it as caused by this open access...". A public space consequently can be described as space which allows all the individuals to have access to it and activities inside it (Madanipour, 1996, p 148).

Furthermore, public spaces are generally the places which create social interaction, based on its characteristics by way of being accessible to and open to everyone. As Madanipour mentions; "public spaces of the city are spaces of sociability where social encounter can and does take place" (Madanipour 2005, p. 209). Consequently, restaurants, cafes and shopping malls which are the privately owned spaces might also be considered as public space.

A space if it consider as public space, to its public use the right of access cannot be seen as obstacles, in spite of their inherent boundaries for public access. The interactions between users in public space cannot legally prohibit, merely the way of those interactions (Madanipour, 1996, p. 148)

Additionally, the idea of public domain broadens the limits of public space. Madanipour described the term of public domain as the place which is outside the private territory of building and the place between the buildings and the places in the city which is not private (1996, p.95). According to Tibbalds, public domain is the place where interaction occurs and the greatest amount of individuals contacts each other. The public has visual and physical access to public domain which composes all parts of the urban fabric. Accordingly, public domain consists of the street and square of a city or town and it extends into buildings which enclose and line those (Tibbalds, 2001, p.1).

Furthermore, Lang describes the physical public domain which consists of both indoor and outdoor space such as; the outdoor spaces which are streets, squares and parks, and indoor space which may include arcades and public building, and other indoor space which has public access for instance; the interior of shopping malls, the hall of railway stations" (Lang, 2005, p.7). In this regard, physical public domain is formed from the items that both bound it and structure it internally such as; the street, the square, the boundary of buildings, the ground floor uses, the entrance which opens to the public space (Lang, 2005, p, 9).

Under this scope, public domain descriptions offer us the occasion to comprehend conceivable zones where the interaction between public and private and in-between space could occur.

2.2.2 Street as Public Space

Street is a public open spaces of a city. Referring to Kostof, "only legitimacy of the street is a public space. Without it there is no city," (Kostof, 1992, p. 194) In general, street is used as passage among private properties by the movement people which are mobility of pedestrians and vehicles. As Kostof mentions, street allow to access neighboring private property and passage of through traffic (Kostof, 1992).

Furthermore, Moughtin describes street as; "a linear surface along which movement occurs between the adjacent private houses. It runs between two lines of private houses and shops (Moughtin, 1992, p.129). According to Tiesdall et al., street is the most virgin kind of public space (Tiesdall et al., 2003). Street is one of the most important components of a city which represents characteristic of urban tissue by determined form and structure of city (Shamsuddin, 2011, Lynch 1960). Street provides social interaction and, social and leisure activities by signifying outdoor space (Jacobs, 1993). As Oktay, and Onal assert; "street is the most rudimentary of intersection between the private and the public domains" (Oktay, and Onal, 1998).

Streets create a community life outside the building that enhances the quality of daily life. In accordance with this fact, urban design significantly concentrates on public space and on street, such as Walter et al. emphasizes, "this process often includes designing the architectural elements of the building that describe and enclose those public space, that are the façades, entrance, and massing which contribute to the general appearance seen from eye level" (Walter et al., 2004, p. 2).

Throughout the history, street has been integrated in traditional built environments from the encroachment of private property by public endeavors. Referring to Kostos,

street indicates the struggle between public and private space. Regarding the public good, the street space should be accessible to all and should be kept open. The encroachment of the public street on behalf of an individual's own particular purposes should be possible in two ways: by infringements and through blockage or privatization. After some time, infringements are incremental. (Kostof, 1992)

For instance, in traditional Islamic urban environments, public right-of way was defined by the agreements of their inhabitants who live side of the street. Conversely, in Western city, regulations defined private property line and public right-of way (Yerasimos, 1996). However, there were private streets noticed in some sixteenth century Renaissance street and eighteenth century London. (Fig. 3) The accesses to these streets were limited.



Figure 3: Sixteenth century private street, Strada Nuova (source: Kostof, 1992)

In the traditional Islamic built environment, Hakim (1989) describes two types of street; one of them is "open-ended street". It is considered as a "public right of way" and it is designed according to adequate width for two camel pass. The second one is the cul-de-sac which he describes as "the private property of people living on it" regarding to Islamic law. (Fig. 4)

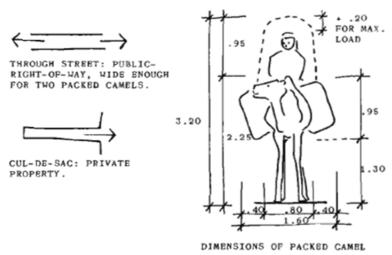


Figure 4: Street system in the traditional Islamic built environment (source: Hakim, 1989)

The close ended street is defined as in-between space between public domain and private domain and it provides threshold between these domains. In this regard, the traditional Anatolian settlement establishes a spatial sequence which is organized from the private to public space (Eyuce, 1987). In other words, there is no direct access form street as public space to house as private space without the existence of an in-between space as transitional zone. Thus, cul-de-sac can be defined as an in-between space in front of houses. The term of *cikmaz terturbe*, *darb*, *zuqaq*, *or sikkah* all refer to the cul-de-sac. (Fig. 5) Thereby, the entrance door directly opens to cul-de-sac and it is utilized as communal space amongst the neighbors. Cul-de-sac (*terturbe*) have been considered as an in-between space which is the collectively own

space by the inhabitant of traditional built environment. In other words, it is conceptualized as part of the surrounding building (Saleh, 1981).

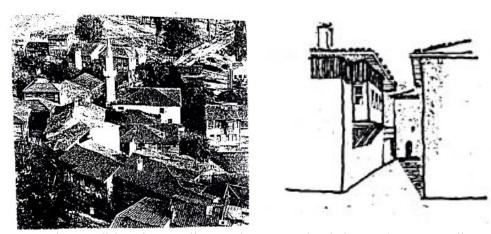


Figure 5: The Traditional Anatolian settlement and cul-de-sac (source: Pulhan, 1997, p.72)

The traditional organic pattern creates logical space hierarchy which links the most private street to the most public one with elegantly introduced thresholds. As Habib mentions; "it provides thresholds to provide possible transition from the most intensive public space to privacy" (Habib 2012).

2.2.3 Community Live on the Street

Street as a social fact has two social purposes. One of these purposes is that; street provides a certain connection between buildings and activity nodes which is important for community life to support marketing, manufacturing and administrative functions. The other purpose is that; street which act as a connector between individuals provide communication and interaction. Consequently, street generates a link to tie together the social order of community. Moreover, street utilized as a site in order to create social interaction together with recreation and entertainment. Street is additionally including the ritual of community (Gutman,

1991). As Moughtin mentions "the street is not only a means of access and an act of movement but also an arena for social expression." (Moughtin, 1992, p.129)

Furthermore, Carr (1992) defines public space in relation to community life: "Public spaces of a city provide form to the ebb and flow of human conversation. The dynamic public spaces are an important counterpart to the more settled places and routines of work and home life, providing the channels for movement as the nodes of communication and the common grounds for play relaxation" (Carr 1992, p.3). This is also Jacobs's view; "streets are places of social and commercial encounter and human conversation. They are places where people meet." (Jacobs, 1996, p.5)

According to Lynch and Hack, the street is not merely a passage in traditional environment. He mentions many functions of the street such as; "it was market, workroom, and meeting hall. We have shouldered these functions out of the public right of way, to the advantage of traffic and to society's loss." (Lynch and Hack 1984) In the conventional way of community life, the work place generally near to home or outside of the room and it was additionally the center for entertainment and recreation activities. Consequently, as far as street considered community in interest and awareness were more complete and extensive in traditional urban areas (Velibeyoglu, 1998).

On the other hand, as far as the social purpose of Streets in traditional Anatolian settlements was considered, as Kuban (1986) mentions that; streets were not adequate in width for social gathering. Streets were merely utilized to provide space to access the houses and passing through (Kuban, 1986, p.49). However, Eruzun (1984) asserts that; street extended to be adequately wide where drinking fountains

were placed, and provide places for a short gathering. (Fig. 6) In addition, Vogt-Göknil mention that; "cul-de-sac (cikmaz) is a private meeting space for its occupants. It is here we find the sociological living structure of Turkish settlements" (Vogt-Göknil, 1966, p.7).



Figure 6: Street in traditional Anatolian settlement

In addition, the traditional activities in non-Western cities, Nooraddin (1996) draws attention to certain activities which occurred in the public street intrinsic to non-Western urban cultures. One of them is vendor's activities on street which have close and direct relationship with customer by pulling out a chair on the street, to watch and be part of street life. Hawkers with their displays in the street are another important activity of daily life of non-Western cities. (Fig. 7)

Furthermore, street in traditional environments are places for activities such as wedding ceremonies and funerals. As a result, street as a public space create a realm which links people to each other by providing social interaction and communication.

Therefore, the interactions of public space with in-between space or private space become an important part of discussions on public space. Under this scope street emerge as public space where community life generates on and dealt with as a significant entity to understand relationship between public and private lives.





Figure 7: Vendors and hawkers activates in Turkish streets

2.3 Domestic Life and Private Space in the House

2.3.1 Definition of Private Space

In contrast to public or in-between space, private space is frequently used for a domain which belongs to a person. Both public space and in-between space are indicating a domain that could be utilized and accessible by all individuals or limited to encourage social communication and interaction. Despite this fact, private space implies disconnection from the outside.

According to Madanipour, the origin of the word private is emanated from the Latin word 'privus' that implies "individual, single, private" (2003, p.34). Referring to Oxford Dictionary private implies: "of or pertaining to a person in non-official capacity; not open to public restricted or intended only for the use of a particular

person or persons; that belongs to or is the property of particular persons; one's own, ..." (Madanipour, 2003, p.35). As a result, the concern of private is related to private property, privacy and the right of privacy.

Draws attention to the private domain and how a spatial entity is determined by it, private domain can be defined as a territory; where people could exercise their privacy. As Madanipour describes; it provides protection from disturbing external gaze and it is also a domain of freedom of choices for persons (2003, p.202). Furthermore, in scholar's discussions, private space is emanated from the idea of personal space and private property. Personal space is a zone surrounding individual body with invisible borders to protect from unwanted intrusion (Sommer, 1969, p26). At the same time, personal space is interdependent with a territory. For instance, Sommer expresses that; if an individual personalized a geographical area, at the same time he defines a territory against unwanted interruption (1974, p.204). Subsequently, a territory describes private space as an extension of personal space. On the other hand, the description of private property also has certain relation to a territory.

Furthermore, in the discussions of private space, the term privacy becomes paramount. Madanipour describes privacy as; "the state or condition of being withdrawn from the society or other form of public attention; freedom form disturbance or intrusion; seclusion; absence or avoidance of publicity or display; secrecy a private or personal matter a secret" (Madanipour, 2003, p.36). Consequently, he defines privacy like that; "the domain which only one person is aware and had access to" (Madanipour, 2003, p.6). Alexander mentions privacy is very critical and essential need in place; for the house and any other dwellings.

According to him, individuals need both to be alone in their private space and be part of community. Consequently, there is a balance between domestic life and community life. In spatial context, it emerges as a necessity of urban life (Alexander, 1963, p.38).

In addition, the privacy can be discussed on the visual and aural privacy (Carmona et al, 2003). The disturbing noise and sound is described as aural privacy. The border between private and public domain is described as visual privacy. This border provides together the permeability and interaction. On the other hand, the permeability can be too separated or too connected if it is used gently between private and public domain. In other words, it creates interaction with public domain as well as protecting the privacy.

Asatekin (2005) describes the concept of privacy based on the interrelation of any two units. Accordingly, a hierarchy of the privacy is defined by the interaction of two units. In other words, it is represented architecturally by the interaction of the room, house and the street, and sociologically by the interaction of person, family, and neighborhood (Asatekin, 2005). Privacy and its connection to social interaction; factors described by Lang (1987) as privacy and territorial behavior influences the quality of built environment. The important point of privacy is the capability to control audio and visual of one or group of people (Lang, 1987). Therefore, the privacy has certain relation to social interaction. As Rapaport (1977) describes the concern of privacy; the capability to control social interaction and having capability to control the rate of interaction.

Furthermore, Lang (1987) asserted that social interaction will be easier if the privacy provided a balance with the sense of people. The space which is not well defined has less control on social interaction whether it is private or public. As a consequence the privacy is essential for the social interaction. There is a wide range of personal choices in built environment with physical privacy. One of the approaches to accomplish privacy is to avoid creating social interaction though another approach to control spatial territory (Lang, 1987).

Draw attention to the traditional Islamic approach for the concern of privacy; the interaction of private as domestic life and public life in street in Non-Western culture is achieved with some restriction cultural codes. A physical distinction between private domain and the public domain is determined by these codes.

The relation of the Islamic organization and its community is highlighted by Michell et al (1984) as: "However closely the individual is associated with the life of his quarter, he also belongs to another unit: the family, the basic and irreducible unit of social life. The right and obligation of the family to live enclosed in its house has led to a clear separation between public and private life, perhaps the most significant social characteristic of Islamic culture" (Michell et al. 1984, p.195).

Moreover, in one of the Prophet's expressions to the Islamic society he states: "who looks into a house without the occupants' permission, and they puncture his eye, will have no right to demand a fine or ask for punishment" (in Hakim 1986: p.151). As a result, the necessity of the Islamic culture and religion the concern for the privacy emerged.

In traditional Islamic built environments, an important design criteria is distinction between private family life and public social life. In other words, family life and women's visual protection was essential for the street life in the living environments. One of the main requirements in traditional house is the visual privacy for woman (Pulhan, 1997). As a result, in the Middle East and Mediterranean periphery, the courtyard house types were developed around a 'hard surface' in order to protect the family life (michell et al, 1984, p.199). According to Rapoport (1969) a court is based on the need of the privacy of woman. He draws attention to typical courtyard house types in different cultures; "the need is to get away while still in the familiar territory of the family or clan group and the separation of domains achieves that, in cultures with no over-all hierarchy this type of development does not take place" (Rapoport, 1969, p.81). (Fig. 14)

Moreover, the separation of male and females to protect house against outsiders is important issue in the traditional Middle Eastern Islamic culture (Al-Kodmany, 1999). In this regard, in order to avoid visual contacts between male and female the position of opening and height of living space were designed accordingly. The concern of privacy is not only important in Islam; it is also part of the social life of Jews and Christians in the Middle East and Anatolia.

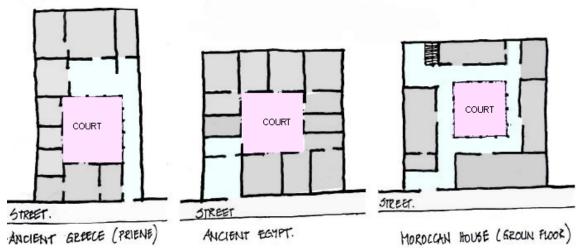


Figure 8: Courtyard houses in different regions; ancient Greece, ancient Egypt and Morocco (source: Rapoport, 1969, p.65)

Another primary concern of privacy is reflected in the height of the building in order to provide the privacy of neighborhoods in Middle East and the other Islamic cities. Generally, the restrictions on the height of the building are confined two floors. The purpose is to avoid seeing the courtyard of the adjacent neighboring house from the opening of the second floor. (Fig. 9)

These strict rules indicate the extreme respect for the privacy of the adjacent neighbors in traditional Islamic built environment. Increasing of the number of the storeys in buildings was not tolerated or it damaged the privacy. The intrusion into the private life with the increase of storeys way considered as greed (Saleh, 1981, p.105). Consequently, this type of approaches where the inhabitant is constantly under the continuous view of the others is not tolerated in traditional Islamic built environments.

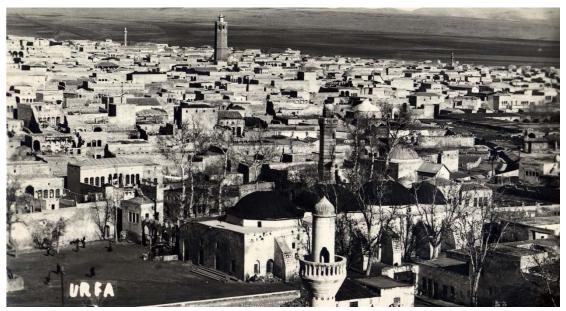


Figure 9: The view of Urfa old city showing similar building heights (Source: Cahit Kürkcüoglu Archive)

Moreover, another important point in traditional Islamic built environments is the height of the minaret. (Fig. 9-10) As, it is an essential component of the religious building it is not acceptable for the muezzin as is a religious man, who responsible to mosque to look into surrounding environment. Saleh (1991) states that; the muezzin of a mosque he should not look upon the courtyard or interior of an adjacent building. Even thought, the street and fina prevents form the view of the muezzin. Additionally, Islamic jurist Ibn al-Iman (996) states that one of the duties of the muhtasib who was related to the muezzin was that: "The muezzin must keep his gaze lowered and not gaze into the houses of the people. The muhtasib have to take an oath to this effect shall be exacted from him; and no one is to ascend the minaret but the muezzin at prayer time" (Ibn al-Iman, 996, p.100). Consequently, in traditional Islamic built environment, even the minaret is essential case concerning the issue of privacy.

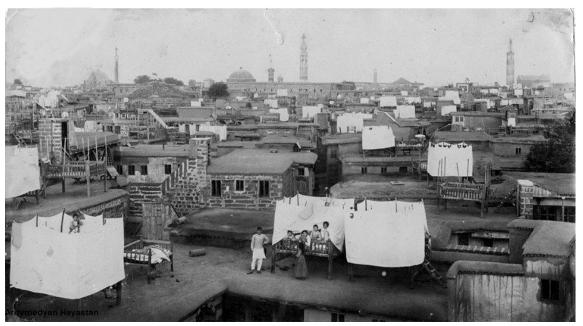


Figure 10: The utilization of the rooftop for sleeping, beds (taht) covered with sitare, in Diyarbakir city (Source: Yıldız, 2011, pg 430)

Another way of intruding with privacy is the utilization of the rooftop where the user has the view of other buildings. Due to the hot and arid climate in Middle Eastern cities the roofs are utilized for sleeping and are the points of the night life. During summer, the inhabitant usually sleeps on the roof in a special bed which is locally called *taht* and privacy is achieved by covering the side of the *taht* by textiles which are locally called *sitare*. (Fig. 10) It prevents inhabitants from the neighbors' vision and also blocks the sun and provides shade.

2.3.2 Domestic Life in the House

As part of the social order, the man and women had different roles, rights and duties. In the Islamic culture codes and the social life required segregation of both man and woman in the religious codes and in the public life, social events as well as in the house. Accordingly, this distinction plays certain role in the formation of both house and city. The subordinate female domain was in the house and dominant male was the public realm of city. As Kuban mentions; "the house was the world of the woman where the world outside was for the man. In the everyday life of household, the daily

activities of woman included cooking, baking bread, sewing, washing, and in provincial small towns, drying fruit, cutting firewood and animal husbandry" (Kuban, 1993, p.20).

Moreover, Dengiz mentions about the role of women in domestic life in the social structure of the extended patriarchal family as family members spending their days in the house while men were at work by doing embroidery, sewing cooking and cleaning (Dengiz, 2001, p.34). Furthermore, Sakaoglu draw attentions spaces where women were being productive within traditional Turkish house. For instance, courtyard (harem, avlu), hayat, garden, terrace, roof, well, fountain, gargoyle, oven, stable, eyvan, sofa, kitchen, geust house, shed (örtme) garden room were the spaces where different activities took place (Sakaoglu, 1993). (Fig. 11)

As a result of the Islamic codes one comes across with gender-specific space such as harem and selamlik in Turkish houses and in the other Muslim houses. However, the impact of religion on the Turkish house is not as strong as other Muslim houses. In the Turkish house, the gender specific space is based on interest of genders. In the border of the house, there was the working area of the man as it was a public space where males come together in formal and informal meeting. This caused the parting of the house into *harem* as private spheres and *selamlik* as public spheres (Pulhan, 1997, p.69).



A) Hayat; removeing stone from rice



B) Roof; preparing food for winter



C) Terrace; wheat production



D) Oven; bread production

Figure 11: Daily and seasonal women activates in traditional Anatolian house

Additionally, Altman and Gauvaind define privacy in term of accessible or inaccessible through "dialectical boundary regulation process". They describe this by two methods; first is 'the environmental behaviors' for instance, personal space and territory. And the second is 'the behavioral mechanism' referring to verbal and nonverbal communication (Altman and Gauvaind, 1982). The interaction and a selective control access are based on the unwanted individual or crowd in nature of these methods. This is adopted as a design concept to organize space in Middle Eastern and other Islamic built environments. For example, the courtyard separation in a house as the *harem* creates a secure space for both female and children.

The female territory is *harem* which is the place where family life generally takes place by women and her relative's grandmother and aunts and sisters comes together. It mostly used for female guests and their children. All the major spaces and serves

areas located around the *harem*. This is the most private part of domestic Muslim houses. It is introverted part of the house, and it can be defined as secret paradise. Because of this, it has less opening and view to outside world in order to control privacy. On the other hand, the male territory is the *selamlik* where the guest men are received and entertained. This is the important part of the house and has prestige thereby it differs from other spaces with its ornamentation. Additionally, it is the most public part of the house therefore; it has more opening and view to outside world. Consequently, it has certain relation with outside public domain. In order to avoid the interaction between women members of the family and men guests, more than one entrance door is used on the bounding wall. For instance, both the *harem* and *selamlik* have separated entrances. (Fig. 18)

According to Eruzun (1984) the structure of the community and patriarchal Turkish life style had certain impact on the parting of the house into *harem* and *selamlik*. Furthermore, Eldem (1969) claims that the separation of *harem* and *selamlik* in a large house generated two independent courtyards with their own entrances and service spaces. These independent courtyards were accessible through a sofa hall inbetween them. Generally such big domestic houses belonged to the rich families in traditional urban settlements (Eldem, 1969, asp.220). (Fig. 12)

The connection between two independent courtyards (*harem/selamlik*) domestic life in Turkish houses was provided via a sofa hall in-between them. On the other hand, in the Middle East cities, the connection between these independent courtyards is achieved by a door. Furthermore, there is an interesting detail between them which is a whirling cupboard. (Fig. 13) From the informal interview with an inhabitant it is understand that the food placed in this cupboard by women from harem. The men in

selamlik part should be able to reach the food without seeing *harem* part. This detail demonstrates the degree of segregation between harem and selamlik part.

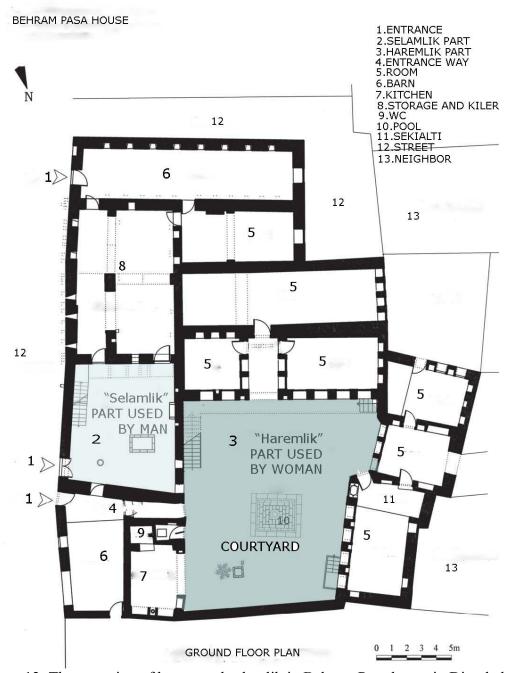


Figure 12: The segration of harem and selamlik in Behram Pasa house in Diyarbakır (Source: Yıldız, 2011, pg 422)

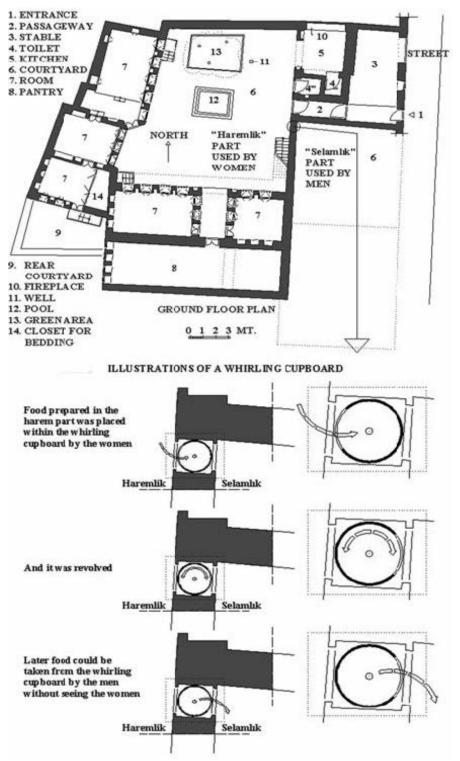


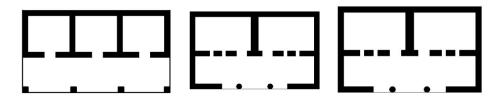
Figure 13: The illustration of a whirling cupboard between harem and selamlik (Source: Bekleyen, &Dalkiliç, 2011)

2.3.3 Boundaries and Spatial Interaction in the House

The demarcation between human being and nature, in and out, started with the formation of shelter due to a harsh climate and other outside forces. Thereby, the

space around the shelter utilized for different purposes. For example, the circle plan of the "Turkish Tent" and "Toprak Ev" (Round house) were settled by Turkish people before coming to Anatolia in the Central Asia. "The concept of the "territory" and "felling for a homeland" was not connected with land" (Pulhan, 1997). An artificial environment was created by organization of tents, interior and exterior. Referring to Küçükerman, the principal evolution of enclosure 'sofa' and common open space 'hayat' appeared at that phase by the spatial organization of the 5-10 tents and identification the space between them (Küçükerman, 1991).

The conception of sofa has similar connotation in Arabic and Iranian architecture which is named 'tarma' or 'riwaq' in Arabic and 'liwan' (eyvan) in Iranian domestic architecture. This striking similarity is seen in 'riwag' houses in Syria and 'tarma' house in Iraq. Fig.(14). Badawy (1996) explains the close relationship between Anatolian house form and Mesopotamia house form as a respect of cultural exchange (Badawy 1996). In these typologies, one comes across with transitional space as an element of domestic building in-between indoor and outdoor space. The feature of this transitional element does not only affect the domestic house form but it has also an impact on the urban form.



Riwaq houses, Syria Tarma houses, Iraq Sofa houses, Turkey
Figure 14: Comparison of evolution proses of domestic houses (source; Alper, 1992, pg.254)

The important component of Anatolian domestic architecture is the space called 'sofa' and according to its location in the spatial organization and size of the form it may have different variations. Due to physical, sociocultural and climatic factors one comes across with three typology of sofa which evolved in Anatolian traditional built environments as outer, inner and central (Alper 1992). The other sofa house is the oldest instance of these typologies. It is a primitive exemplar which is essentially the main house (room) placed near the garden. Furthermore, basically the outer sofa defines an in-between space which is between people and environment, indoor and outdoor, and open and closed. This earliest typology of Turkish house was found in Hacilar near Burdur. It is very unique and modest which has rectangular living room and in front of this room there is open room which create transition between indoor and outdoor (Badawy, 1966). Similar typology 'Megaron' houses in Troy and Hittite 'Hilani' house in Kultepe and Bogazkoy were also found (Alper 1992). (Fig. 15)

Furthermore, all these houses have a portico and in-between space in front of the house. Subsequently, megaron with its portico (ön geçit) and room (arka oda) developed to become the traditional house types of today since the time of the old Anatolian settlements.

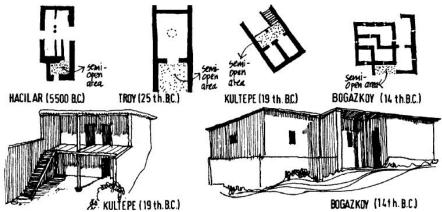


Figure 15: Typology of traditional houses in Neolithic period in Anatolian (source; Alper, 1992, p.249)

In general, the rectangular room, sofa and hayat are the basic component of the traditional Turkish houses. The spatial hierarchy flows form the hayat (courtyard) to sofa and into the room. Drawing attention to the inside-outside in these houses, the hayat can be located outside in contrast the sofa, and the sofa can be an outdoor space in contrast to the rooms (Cerasi 1998; Asateki and Balamir 1991). As, Habreken (1998) clarifies this hierarchical spatial formation in the concept of territorial depth. The continuous spatial formation begins from the minimum size of cell which is a housing unit growing continuously and enriching the street network of the neighborhood and the urban fabric.

As a result, this spatial continuity is a consequence of interaction between inside and outside, open and close and part and whole and it is achieved by certain transitional space. In this extent, in the following part, the interaction between house-street and house-garden will be discussed based on the relationship between inside-outside, open-close, and public-private.

2.3.3.1 The Interaction between Street and House

The interaction between street and house emerges from importance of the front façade articulation of the building. The importance of the front façade of the building is relating to the interaction between public and private domains. According to Walter and Brown the front façade articulation of the building defines public face of the house which encloses the public room (Walter and Brown, 2004).

The architectural components create an interaction between street and house or public and private space such as balconies, arcades, porticoes, cumbas, kabaltıs, and different type of windows. As Madanipour mentions; "the articulation of the spatial boundaries as demonstrated by colonnades and front porches, promotes interaction

between the public and private spheres where the boundary becomes means of communication" (Madanipur, 2003, p.57). (Fig. 16)

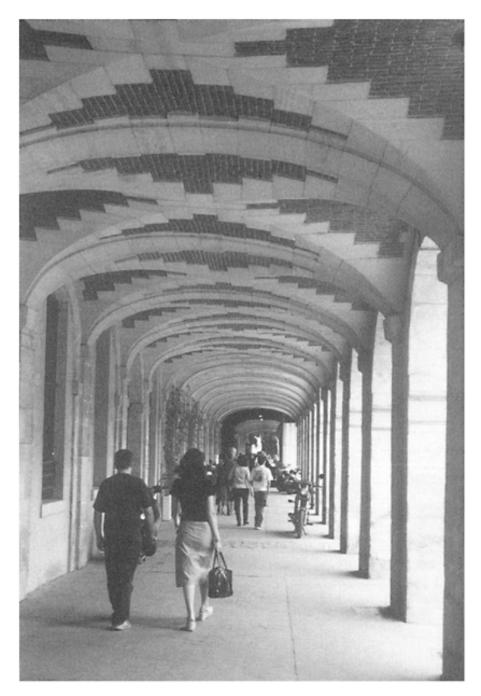


Figure 16: Arcades provide interaction between public and private realm, (Paris, France) (Source Madanaipour, 2003, pg. 57)

Furthermore, in-between spaces such as outdoor semi private spaces establish interaction realm in three dimensions between private and public realm. (Fig. 17)

Bentley et al. state that; "public and private interaction makes private life richer, instead of destroying privacy altogether, it is vital that its degree of permeability is under the control of the private users" (Bentley et al. 1985, p.15).

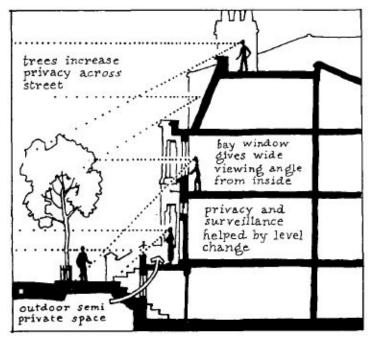


Figure 17: Street and building interface (source: Bentley et al. 1985,)

As a negotiating zone, in-between the street and house, transitional space provides a mediator to affirm the dynamic interaction with the nearest public space as street. In the meantime, it is ensuring the privacy and territorial control of house by numerous spatial arrangements. For example, an elevated yard should be adequately visible to provide social interaction but also it provides more privacy to house better than yard at street level. (Macdonald, 2005) (Fig. 18) The mediating space between the street and house in suburban environment has become smaller, a house and street are closely adjacent, in other words, a house façade is turning into a street wall (Habraken, 1998).

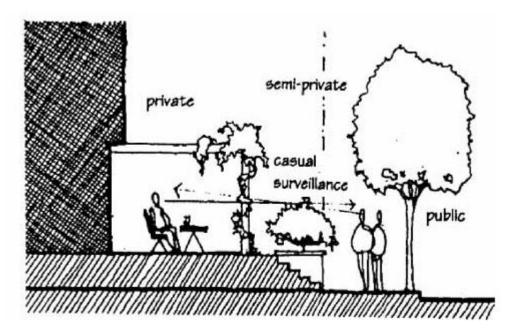


Figure 18: Public-private interaction (source: Macdonald, 2005)

In consequence, the principal concern is to generate interaction between street as public space and house as private space where the façade of the house became the public face. Tiesdall et al. assert that the house facades should "mediate between inside and out and between private and public space, providing gradations between the two"; "have windows that suggest the potential presence of people and that reveal and 'frame' internal life"; "have character and coherence that acknowledge conventions and enter into a dialogue with adjacent buildings"; "have compositions that create rhythm and repose and hold the eye" and "create a sense of place" (Tiesdall et al., 2003,) Fig.(19).

In accordance with this fact, house's elements at the upper floor provide a connection between house and street. As Cameron et al. point out; "enlivening edges with balconies, bays, porches, awnings, colonnades or other projection" are generating "a more comfortable threshold in inclement weather, prolonging activities and enabling uses to overlap into the street" (Cameron et al. 2007, p.90).





Figure 19: Façade articulation as projection in traditional settlement Anatolia (Source: Cahit Kürkcüoglu Archive)

In addition, the relationship between inhabitants and public in non-Western towns is not same as the idea of the public of western urban areas. For example, these streets are open from both side and the public has right to use them. On the other hand in non-western towns, there is same restriction to use the public space as cul-de-sac, this was merely for the use of inhabitants of that street where they had right to build physical obstruction for example a door at the beginning of the street in order to control the access of the street. As a result, in this traditional urban pattern every point is not equally utilized between these two dichotomies. In other words, the public and private spaces had diffident right over this space. For spaces in front of or near a house, the inhabitant has greater priority over the utilization of these spaces than public. Indeed, the demarcation of boundary between public and private domain was difficult in this traditional built environment. For instance, the concept of fina in traditional Islamic cities, which describes the space in front of the building and the inner courtyard, it had various application in expressing threshold staying, transition

and reflection (Nooraddin, 1998 and Hakim 2008&2007). (Fig. 20) Inhabitant has the right to utilize the *fina* which is the space in front of his house hence; inhabitant did not have the right without obstructing the public right of way. There was an institution in traditional Islamic built environments which control the public/private territorial infringement and public right of way. In Anatolia; '*Kadi*', and in Middle East and in other Islamic communities elsewhere; '*Muhtasib*' was working as an inspector of public spaces (Saleh, 1981).

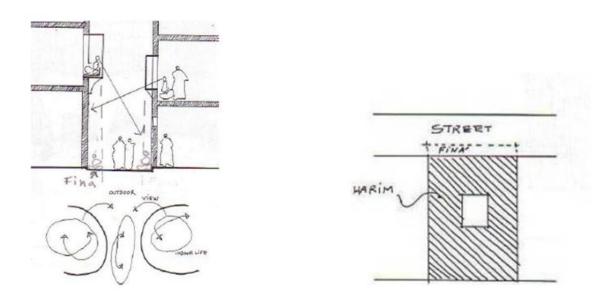


Figure 20: The conceptualization of the fina space in this traditional built environment. (Source: Nooraddin, 2013)

Moreover, in commercial and residential zones there were differences in application of the fina; vertical extension as part of the house in residential zones, and displaying or selling products in front shop in commercial zones was creating the space fina (Saleh 1981 and Nooraddin 1998). Furthermore, vertical extensions from the main body of the house to the street emerged as a territorial superimpose which was as Kabaltı houses in Anatolia.

The shaping of the traditional form consists of both the house and the settlement. It is the creation of a co-influence that provides a way to co-existence both the house and the settlement. In other words, the shaping of the traditional form is product of the mutual interaction of two. According to Eyüce the mutual interaction is the interdependence between the house form and the properties of settlement pattern. In the traditional built environment, the interdependence is in the form of co-existence house and settlement in the compact traditional built environment (Eyüce 2012, p.17). (Fig. 21)

Due to the given importance to the spatial hierarchy in traditional Anatolian settlements, movements in the house start from the most private room in the house and reaches to the courtyard through the sofa or vice versa. On the other side, the main door of the house becomes a thresholds between outside (street) and inside (sofa). Sofa as an in-between space continues to the public street space.

The function of each unit in traditional built environments is to provide necessary shelter. Thereby, they help to create the spatial need of the inhabitant where it becomes an integral element of the whole settlement and in-between space. Consequently, the relation amongst building to building, and individual building units play major role in formation of built environments. In other words, the coexistence and interaction can be criticized as the result of the building and building dependence (Eyüce 2012). (Fig. 21)



Figure 21: The interaction among building to building in diffident traditional built environments

The interaction between two domains is defined as the horizontal and vertical extension building facades and activities in-between space. The horizontal and vertical extension are elements of boundary in the house such as balconies, porticoes, arcades cumba, and kabaltı which provide interaction between street and building, public and private, inside and outside, and part and whole. (Fig 22) Pulhan (2002) describes façade of building as "the border where exterior turns into interior or vice versa" (Pulhan, 2002, p.68).

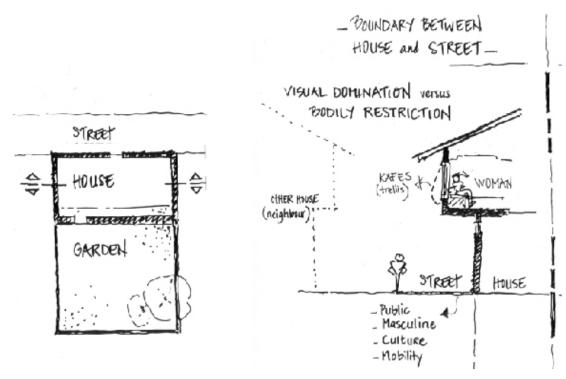


Figure 22: The boundary between house and street in traditional settlement (Dengiz, 2001)

On the other hand, indoor and outdoor, and public and private space configurations described by Eyüce (2012), as the interaction between the two which are shaped entirely referring to the mutual dependence of the building and settlement (Eyüce, 2012 p.17). The relation among the buildings defines solid-void relation of settlements which are characterized as textual properties. A parallel view holds by Asatekin, G. and Balamir A. (1991) state that the nature of continuous surface gives sense of space both the street façade and courtyard façade of a house. The continuous surface provides connection between the house and the street. This continuity acts as a transition plane and it is broken on the upper floors, the house drop a single layout, allows to define a flexible form. It was a significant element of traditional built environments to provide interaction between public and private domain (Asatekin, G. and Balamir A, 1991, p.82). (Fig. 23) In order to understand the spatial and formal features of an architectural formation and configuration, the relation of the solid and

void has great importance. The interaction between solid-void living pattern and the meaning creates the basic spatial features which are spatial demarcation between indoor and outdoor space and the degree of spatial extroversion and introversion (Eyuce, 1987, p.9).

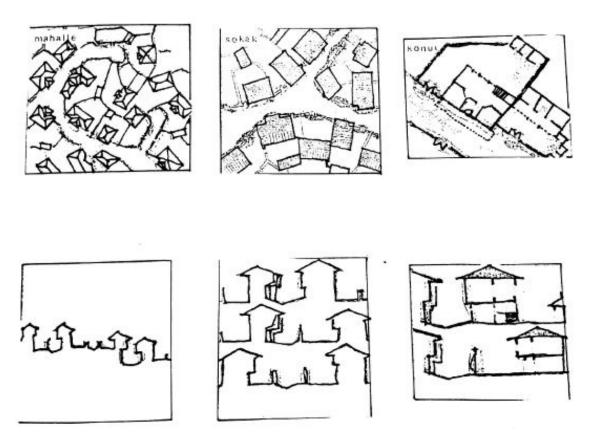


Figure 23: Solid-void balance of street and house in the traditional Turkish settlement (Source Asatekin, G. and Balamir A., 1991. P.83)

The interaction between bonding surface, spatial form of a house and traditional settlement is discussed in connection with the "traditional building practice" in Muslim traditional settlements. This issue is rooted in the teachings of Islam and it is highlighted in research of Hakim (1986, and 1989). According to him, in the traditional Islamic environments, the old neighborhood structure has certain influence on building activity and design decision of the recent one. Thus, it provides a peculiar interaction between buildings. However, this interaction has a

potential to cause conflict, and this conflict among neighbors is the concern of the Mu'amalat which is branch of the Fiqh¹ (Hakim 1986, 1989). (Fig. 24)



Figure 24: The complexity of traditional built environment of Fez in Morocco (Source: in Hakim, 1989, Islamic architecture and urbanism, p.89)

The vertical and horizontal extension on the upper floor, the *cumba* has a role in creating interaction between public and private domain. (Fig. 25) Eyüce (2012) states that *cumba* as: "the protrusion form which is the main body of the building that plays so important role in spatial syntax both house and the whole settlement" (Eyüce,

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¹ The term of Fiqh is law in Islam and also the science of religious. It is managed two domain of activity which are Ibadat; that deal with ritual observances of Islam, and Mu'amalat; that is deal the problem which occurred due to interaction and relations between people which are conflicts because of building activity and design decision and also it deal family law and laws of inheritance of property and contract. (Hakim,1986)

2012, p.20). In other words, it is not only an extension of private space towards the public space, but it creates private space with certain view of public space such as street.



Urfa (Source; Kürkçüoglu Archive)



Medina (Source; Eyüce, 2012)



Beypazari (Source: Eyüce, 2012)



Lefkoşa (Source: Pulhan, 2008)

Figure 25: Cumba in diffident Traditional built environments

Moreover, attention is drawn to the relation between house and street. Cerasi (1998) indicates that; the ground floor of traditional house is organized according to the adjusting to plot. If the plot and street were random forms, then the houses were organized in the pattern which continues the street towards indoors (Cesari 1998). A parallel view holds by Pulhan in the analysis of traditional environments, where she indicates that houses were configured parallel to the street, and house were perpendicular to the street. In both positions, the houses are directly connected in the street (Pulhan, 2002). (Fig. 26)

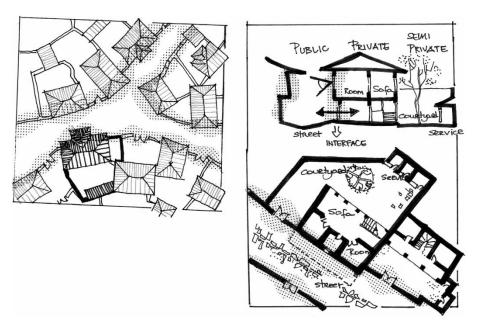


Figure 26: House and street relationship in traditional Turkish house (source; Asatekin, 2005)

In addition, Tanyeli highlights that; it is difficult to draw the boundary between the public and private domain in urban structure (Tanyeli, 2005). Instead of certain territoriahil ts zone was shaped with subtle equilibrium between public and private domain, which contains certain interval, intersection and superimpose both space and create complex structure within spatial continuation.

On the other hand, built environments were founded on the contrast of privacy and community. Street is reserved for the vertical extension, as part of house such as *cubma* or window by the horizontal extension of the house on ground floor. Thereby, the inhabitant would be comfortable due to having enough amount of space to utilize without causing any harm to his neighbor. According to Tanyeli (2005), this is the

reason of late implementation of public/private dichotomy in Anatolian built environments; because, lands were mostly under the control of the empire until the founding of the new republic. During the modernization of the new Turkish republic, the cadastral plans were legalized and started to be implemented in 1925-1930 (Tanyeli, 2005). With modernization the introduction of social structure and mahalle (neighborhood) started to be eliminated and created opportunity for the liberation of the person from traditions of mahalle (neighborhood). The polarization of public and private space resulted in these processes (Tanyeli, 2005). On the other hand, with the modernization movement drawing and defining the border between public and private has become a problem, because, it is the culture which depends on the concept of the 'fina' and 'kabaltı', and they disappeared due to the misleading rules and regulations of municipalities within the modernization movement.

In-between private and public space, intermediate space as a transition zone which acts as mediator with the closest public space simultaneously, protected the privacy and territoriality and this was controlled by various spatial requirement and processes. For example, the ground floor of the traditional Turkish house utilized for service space with small windows. On the contrary, the living space was organized at the upper floor as the main floor. It has more opening both to courtyard and street façade in order to get more view, light and air ventilation (Pulhan 1997). On the other hand, these features provide balance between privacy and community. Through the window and extension, people could interact with street and have a view of the whole street.

In the traditional Turkish house and other houses especially in the Middle East, design house layout was based on the separation between domestic life and community life. At the ground floor, a complete physical border between outside and inside was defined as hard surface.

In line with privacy, the visual privacy was so important where window became an essential in order to avoid overlooking into other houses. This has always been condemned in the society (Al-Kodmany, 1996, p. 115). The main concern of the visual privacy is about location of the windows. The earliest example relating to this issue involved the argument of the second Caliph of Islam who was al-Khattab during his reign in place al Fustat. He reported Amir for demolishing the room which was built for the purpose of overlooking neighboring houses. On the other hand, once persuaded that this issue was not the purpose of the owner, he insisted that the owner to place a *sarir* (bedstead) on the window and stand on it; if the male was able to look into the neighboring building, it was to be sealed, however, if the neighboring house could not be seen, the owner could retain the window (Saleh, 1981).

Correspondingly, in traditional Islamic built environments, the architectural criticism of accomplishing the visual privacy can be seen opening on the bounding wall and height of openings are located above the eye level, thereby, the public as passers-by cannot look inside of the building. (Fig. 28) Due to the fact that most of daily activities took place on ground floor in the open courtyard; the family members had the comfort to deal with everyday activities without being observed by passer-by.

The ground floor of a house, the height of the opening which is facing the street as public domain is defined form the street side. As Hakim describes; the approximate height of opening from the public side is determined by the eye level of an ordinary

man which was 1.75m. If the ground floor level is lower than street level the height of the window can be less than 1.75m. Also, the location of the opening should be arranged according to old opening on the other side of the street (Hakim, 2007). (Fig. 27)

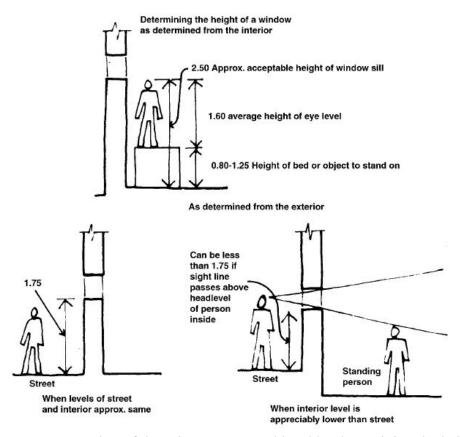


Figure 27: Preservation of the privacy at ground level by determining the height of opening (source: hakim, 1986)

In this regard, there is no restriction on the window which is on the upper level facing the street, due to their size and sill height above the street level. Due to no restrictions on the upper floor, horizontal and vertical extensional space have been created in order to have more view to outside world and to that allow ventilation and sun light. (Fig. 29)

In the traditional Turkish house, the ground floor on the bounding wall used less and small openings in order to have privacy. However, upper floor used screened opening with covered wooden frames or metal grills. (Fig. 28) The ground floor of the Turkish house due to concern of privacy is bounded with high peripheral wall and there is no opening at eye level especially from street side. Cakircioglu (1952) describes the opening on the courtyard wall which faces the public domain only open to the interior side and left closed in Kayseri houses. However, in the interior façade they are open to exterior which is the courtyard.

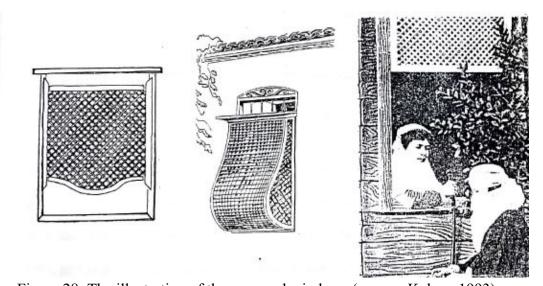


Figure 28: The illustration of the screened windows (source: Kuban, 1993)





A house in La Médina, Tunisia

A house in Urfa, Turkey

Figure 29: The ground floor window above eye level and upper floor; kabaltı house's window facing street

2.3.3.2 The Interaction between House and Courtyard

The privacy requirements of domestic life in Islamic culture play an important role in the formation of boundaries of the courtyard house. Courtyard is the outside environment for women to carry out the daily house work without being disturbed by strangers. According to Dengiz the boundary in-between the house and street is a defensible wall discouraging entrance. However, the boundary between house and courtyard opens itself to the outside (Dengiz 2001). Thus, formally both of these two boundaries have different façade characteristics. (Fig. 30-31)

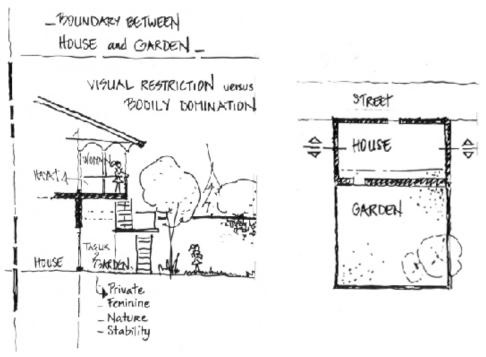


Figure 30: The boundary between house and garden in traditional settlement (Dengiz, 2001)

The indoor space is controlled by the sofa and the introverted courtyard creates void as a breath for whole setting. At the street level, the ground is isolated form the public space by surrounding wall with less opening. Sitting on the ground floor is not preferred by inhabitant in urban areas (Eldem, 1969, p.5). On the other hand, the main floor is located above the ground floor (Kucukerman, 1991). Pulhan describes the ground floor as the transitional space which is in-between the most crowded public domain and the most private domain. She mentions that; there are two different approaches seen on façade organizations. The main one is the external façade which has extension "cumba" and creates certain interaction with street. And second one is the interior façade which is open to courtyard (avlu) and it is totally open (Pulhan, 1997). (Fig. 32)





The exterior façade toward street The interior façade toward courtyard Figure 31: The exterior and interior façade organization of traditional Turkish house

The outer sofa as an in-between space connects indoor and outdoor space and is the surface where the face of the courtyard acts as perforated periphery. In contrast to solid street boundary it conveys a periphery character. (Fig. 33) Generally, on same the mass form of the house, the outer sofa has certain impact on the development of two distinctive house boundaries. Similarly, eyvan developed as a void subtractive volume in the internal bounding surface. It appears as an intermediate degree of openness and creates transition between indoor-room and outdoor- courtyard.

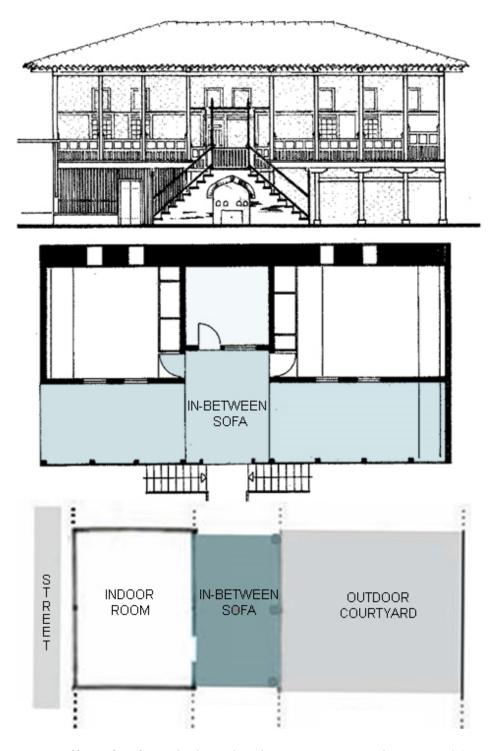


Figure 32: Effect of Sofa on the boundary between House and Courtyard (Source; Kuban, 1993, p.213)

2.4 In-Between Space in front of the House

2.4.1 Definition of In Between Space

The term in-between space is defined in dictionaries by means of the things or the human that is located between two extremes, circumstances or classifications and conflicting situations. It is briefly an intermediate space. Regarding to Plato's work, Grosz (2001) describes in-between space as a strange place that is 'choric'. Consequently, it is the mediation space that is between different identities. It is the bond of relations, thereby it has no certain geometry and its form is determined from both sides. (Fig. 33)

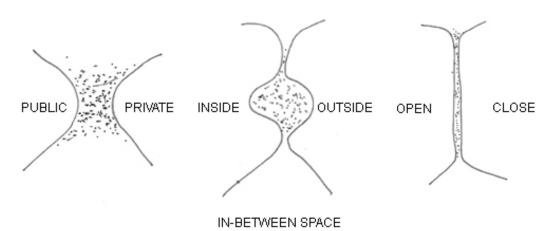
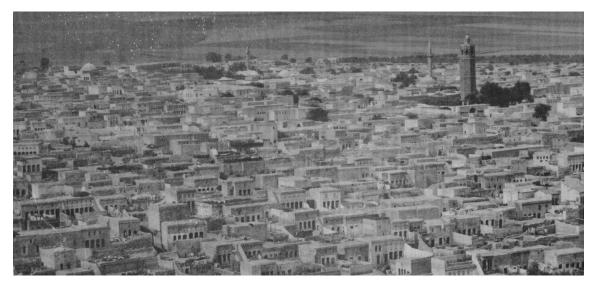


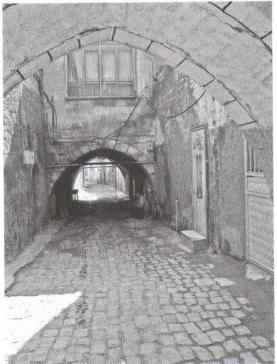
Figure 33: Determination of in-between space by two dichotomies

Grosz (2001) indicates that; in-between space is "the point for social, cultural and natural transformations: it is not simply a convenient space for movements and realignments but in fact is the only place—the place around identities, in-between identities—where becoming, openness to futurity, outstrips the conservational impetus to retain cohesion and unity" (Grosz, 2001; p. 92).

On the other hand, Rudolf (1966) argues that the inside and outside reflect a "dichotomy" due to both the inside and outside cannot seen at the same time. Conversely, one of them cannot exist without the other hence they exclude each other. This dualism creates challenges for architecture to integrate both the inside and outside. The perception of interior and exterior of a building is seen differently. Such as, from the interior of a building there is no ability to compare the indoor with outdoor space. The comparison of the interior space can be merely with the things that will be seen later or the things that seen earlier. On the other hand, from the exterior of a building, the evaluation of the building within its size can be merely with the surrounding building and spaces. Consequently, the design of a building should be considered with their near environments (Rudolf et al., 1966).

The final concern is the 'inside' and 'outside' interaction in traditional environments. In general, the traditional built environments are very dense, which help to achieve spatial continuity. Therefore, there is interdependence between part-whole and inside-outside. A similar view is held by Rapoport as follows "... it is sometimes difficult to separate dwelling and settlements. Particularly in the case of the communal dwellings, where dwellings and settlement are one..." (Rapoport, 1989). The same scholar expresses that: "The dwelling and its parts are linked to many other settings in the neighborhood, the settlement and beyond" (Rapoport, 1989). (Fig. 34) Both the house and the settlement simultaneously have certain impact on formation of traditional built form as the creation of a co-influence that gives way for the co-existent of two (Eyuce 2012).





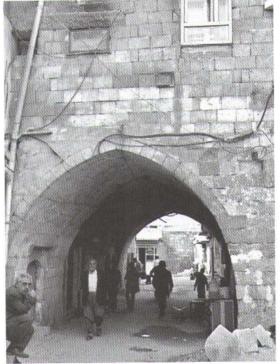


Figure 34: Traditional urban fabric of Urfa, Turkey (Source: Cahit Kürkcüoglu Archive) & Kabaltı, Urfa, Turkey

In other words, in traditional urban environments large numbers of elements are interrelated and the settlement is perceived as one within spatial continuity. Furthermore, in bridging the interaction of contradict or duality between house-street, public-private and interactions in term of "inside-outside" phenomenology, Tuan emphasizes that "consider the sense of an "inside" and an "outside," of

intimacy and exposure, of private life and public space. People everywhere recognize these distinctions, but the awareness may be quite vague. Constructed form has the power to heighten the awareness and accentuate, as it were, the difference in emotional temperature between "inside" and "outside"." (Tuan, 2001, p107)

The space between the building and street plays significant role in terms of social interaction and behavior (Nooraddin, 1988, 2002, 2013). This space organization constitutes social interaction or vice versa. The interior extension of a building such as cumba balconies, porticous, sottoportici, arcade, verandah, riwag, kabaltı and courtyard help to form the interface between the private domain and the public domain. In fact, these extensional spaces encourage certain social interaction in the built environment. (Fig. 34) In line with this view, Nooraddin (1998, 2002) describes the in-between space as "the relationship between the indoor and outdoor spaces". What is more, this intermediate space is a significant element which gives formation to traditional settings by creating spatial continuity. These elements are attached to the private indoor space and to the public outdoor space for instance; the courtyard being connected to a street so that becomes a threshold space in-between the private space and the street (Nooraddin, 2002). Many scholars adopted this term in their research with various definition as in-between space, threshold, betwixt, public/private boundary, soft edge, liminal space and interface.

The classification of space such as semi-public and semi-private may not be certain due to territory of these spaces. In-between space contains public, private or both types of spaces, accordingly, territory of in-between space depth and significant (Habraken, 1998). This is supported by Nooraddin (2002) these spaces have overlapping character and they have multifaceted nature because of the complexity

of a territory. The term 'in-between' is illustrated by him. Consequently, the term 'in-between space is chosen rather than using semi-public or semi-private.

2.4.2 In-between Space for Interaction and Transition

The first step where the private occupant interacts with the other is in-between space. Rummel (1976) expressed the social interaction as "the acts, actions, practices of two or more people mutually oriented towards each other". Regard to Rummel (1976) the type of physical relation; physical distance and behavior do not define the interaction. A mutual orientation toward each other makes the interaction. On the other hand, the physical relation has certain impact on the mutual orientation. For instance, the building extension; cumba, kabaltı, balcony, veranda, arcade and threshold create the mutual orientation between private and the public. (Fig. 35)

Turner (1988) expresses the social interaction by means of timeless and invariant property which is defined as "a situation where the behaviors of one actor is consciously reorganized by, and influence the behaviors of another actor and vice versa" (Turner, 1998; p.13). Three elements of social interaction have been classified by Turner (1998): "the motivational process, the interactional process and the structuring process". The motivation process is where people are mobilized in interaction with the others. The interaction process involves an activity, what they do when they impact to each other. The structuring process is associated with organization of the space which helps to create a base for the motivational and interaction processes (Turner, 1998, pp.14, 15). For example, each day people have the motive to move out of their house and they bump into other; and this repeated cycle of interaction will occur in a particular space, such as the threshold of a house. Similar view is shared by Giddens in "theory of structuration" (1984). The structuring process is that societies continuously reproduce recurrence and reinterpret

their social relation under the scope of the space and time context. This repeating process is fundamentally related with the interrelation of space formation and its utilization and it is also related to the social life of the society. In other words, the space and people give meaning to each other and as a consequence coherent spatial and social relations can be continued (Giddens 1984).





Balconies in Cuba

Sotto-portici in Italy

Figure 35: Balconies and Sotto-portici

Generally, spaces for interaction are connected with the concepts of privacy, proximity functionality, legitimacy and accessibility. In fact, in order to create certain interaction; an appropriate space and distance and also the opportunity need to interact one to another. Garling and Skjaeveland (1997) expressed four basic spatial requirements in order to provide certain interaction. First of all, the most essential is the extension of the building and existence of a suitable space for the interaction. Second one is the function and features of physical built environment, for instance cul-de-sac. Third one is the private space, and in-between spaces, such as

thresholds, verandas arcade, porches and kabaltı and last one is the appearance of the place by means of visibility and surveillance. The main features of the interaction is spaces that have been expressed as the in-between space and their size, structured public space, visual appearance and surveillance from the interactional spaces and private spaces, compactness of built environment, and street/entrance level by Garling and Skjaeveland (1997).

Indeed, extension of indoor space to outside created private/public interaction and also encourage the interactional space and its personalization. The projection of the extension of the upper level on the ground defines an interactional space which is usually utilized by private user such as the steps to front doors. And this space creates strong social interaction between public and private. This is supported by the illustrated examples (fig. 36). As a consequence, the interactional space defines a territory which is utilized or controlled by private users. This kind of approach has been the norm for traditional settlement in the Mediterranean region (Hakim, 2008).

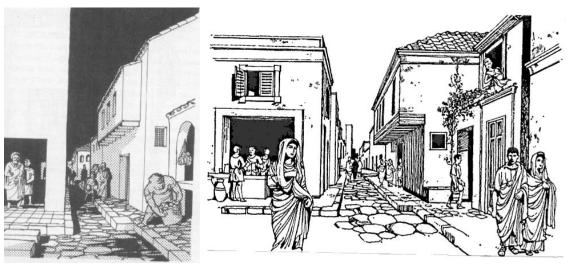


Figure 36: Typical territorial extension of the house in Roman town (Illustration by John Pittaway from Picture Reference Ancient Romans, Brockhampton Press 1970)

In addition, a built environment consists of solid-void relationships. Space organization is defines by various ways of interaction between solid-void. At the building scale, Pulhan (2002) argues that the interaction between solids-void cerate formations of interfaced surfaces in the built environment, such as street facades between the public outdoor and private indoor space, and city walls between natural and urban setting. Additionally, the interaction between space and form is achieved by various opening that are two and three dimensional voids on the solid surface for example doors and windows in the built environment (Pulhan, 2002).

According to Lewis (2005) the quality of space organization is affected by form in two ways; "the way their uses interface with the space, and how their volume and mass frames encloses the space" (Lewis, 2005, p.58) Definition of fronts and backs of the building should be clear and distinguished. The front of the building should face the public domain such as the street. For occupation the issues privacy is essential. Accordingly, defining public and private spaces of built environment encourage the mediation between public and private domains. The important tools for interaction are levels of penetration, permeability and visibility (Lewis, 2005). (Fig. 37)

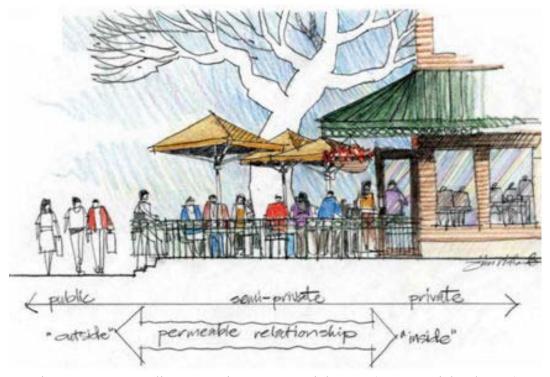


Figure 37: Intermediate space in a commercial street (source: Richard 2007)

Furthermore, intermediate space is named as; in-between, threshold, interface, betwixt, soft edge, appropriate space, liminal space, buffer between house and public space and loose space by various scholars (Isin, 2012). The intermediate space is defined as a soft edge by Gehl (1996) which is a transition zone that help create transition between private and public domain. The thresholds have an important role for the interaction of neighbors. According to Gehl; adults generally utilize "edge zones" for sitting and chatting. However, children utilize street for playing in order to see other people (Gehl, 1996). Gehl (1986) includes that; the in-between space is the initial step where the inhabitant prepares himself to interact and enter the public realm (Gehl, 1986).

In-between space is formed by the relation between indoor and outdoor space (Nooraddin, 2002). Due to fact that; the overlapping territories of the dialectical spaces which are semi-public and semi-private space therefore it is better to use the

term in-between space rather than using these spaces. Subsequently, because of the complexity of the territory; Nooraddin (1998, 2002) claims that in-between space has a "multifaceted nature" whereas Habraken (1998) names it as "territorial depth". (Fig. 38)



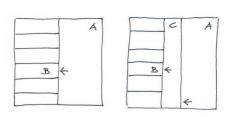


Figure 38: An illustration of territorial depth in Valparaiso, Chile. The territories 'A' refer to the most collectively used space, 'B' to the most individually used space, 'C' as the additionally collective space. (Diagrams made after photographs in situ, Valparaíso, Chile, 2002)

An illustrated example for overlapping territories is the kapaltı which is an upper level space where inhabitant feel more private whereas ground level is more public for the outsider. (Fig. 39) At this point, a new character of space is generated if two distinct space characteristics overlap. And this new space is defined as in between space and it is more than sum of both. What is more, it turns into a dynamic and living level of space and it is held movement throughout itself. Those different spaces expose variety of experiences. Accordingly, in the context housing, the transitional space becomes important as it is manly created transition between public and private space. The space becomes more meaningful and powerful in order to merging these spaces in to everyday live.

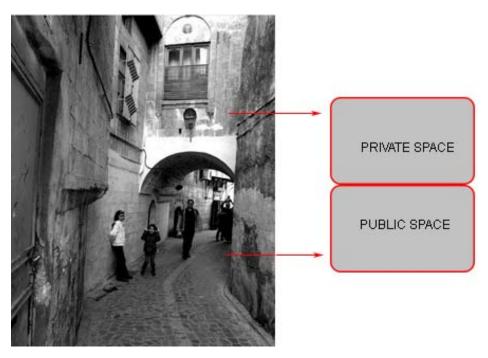


Figure 39: The overlapping territories of the Kabaltı house in Urfa, Turkey

As a consequence, within in-between space we feel both inside and outside at the same time, as there is a certain level of the connection with passer-by. And it can be read as a space through a certain hierarchical order. Through the hierarchy of layers, they perform a meaningful entity; each layer leads to the other. In-between space serves both public and private spaces; it being an enriching transitional space without appearing as a new space.

In addition, Steven (2007) describes in-between space as betwixt: "a threshold is a point where between inside-outside can be opened to outside where space loosens up, and wide range of perceptions, movements and social encounters become possible" (Steven, 2007, p.73). Moreover, in-between space is used to define a spatial component that is constituted "transitional space" which is between public-private realms, open-closed forms, and indoor-outdoor space of traditional houses (Pulhan, 2005). She argues that; "this interaction and indissoluble whole of fabrics, transitional space, which is described as the overlapping of indoor outdoor spaces,

has great importance" (Pulhan, 2005). At the same time, this interaction constitutes certain important design criteria in the traditional environment, such as arcade, verandah, cumba and courtyard.

2.4.3 Threshold and Entrance as Transition Zones

In-between spaces are playing important role in space organization in traditional environment. The sense and the identity of the space are determinate by the quality and the character of in-between space. Besides this, in-between spaces are the basic component of the street where the interaction emerges; such as, a link between indoor and outdoor. From this point of view, it connects the interior space with nature and community. In this regard, different design solutions have been emerged in traditional architecture in order to understand the dialectic between the two dichotomies. The invention of shelter is to protect the inhabitant from outdoor physical condition; such as the climate and other outdoor forces. In traditional architecture, shelter is one of the first attempts to distinguish indoor and outdoor, people and environment, open and close, part and whole. The architectural elements which are connecting people with nature are holes; for instance, windows and doors. Activity space and gathering points of shelter were the space around and the entrance of it. As a consequence, the transition spaces developed as a means culture in built environments. The differentiation between pattern and shelters is the consequence of different design solutions and different people activities (Nooraddin, 2002).

In other words, similar to shelter; traditional house creates a social interaction between the occupant and the public. For example, the indicator of social life of occupant is "the walled entrance door between house and street". It is almost an extension of indoor to outdoor and it becomes the social interaction point where diverse group of activities are accommodated within limitd of privacy (Oktay, 1997).

Consequently, the relation of a house with the outside, adjacent structure has certain impact on the spatial formation of the house.





Figure 40: Entrances of traditional house in Urfa, Tukey

Beside this, entrance as in-between space creates a certain physical link between inside and outside of the house. It is a transition zone which controls movement from in and out and vice versa. And it generates certain interaction between inhabitant and public passer-by. Hillier and Hanson (1984) describe entrance like that; "the space outside the entrance constituted a potential interface between the inhabitant and the stranger; and the entrance was a means of converting a stranger into visitor" (Hillier and Hanson, 1984, p.19). According to Pearson and Richard (1994) this space "serves to make transition between domains such as inside and outside, sacred and profane, male and female, and public and private" (Pearson and Richard, 1994, p.24). Additionally, Alexander et al (1977) describe entrance as an in-between space which involve the two spaces; cover some space outdoor and some space indoor. "The

outside part may be like an old-fashioned porch; the inside like a hall or sitting room" (Alexander et al, 1977, p.625).

It is addition, entrances and thresholds are the components in traditional house which form certain transition between public and private spaces by creating in-between space. According to Walter and Brown creation of an in between space with "porches stops raised in-between spaces which create a threshold between public realm of the street and private realm of home" (Walter and Brown, 2004, p.135) Fig,(41).



Figure 41: Portico in Western architecture, Chandos-House, Londan. By R. and J. Adam

The location of threshold in three different countries is highlighted by Rapaport (1969) in the relation to the principle of public and private domain. Fig,(43). Rapoport (1969) puts the threshold in relation to public domain in order to clarify the relation between private domain and public domain. He compares these three models. The Indian model is the closest model to the model of Moslem culture, yet the threshold is part of the public domain (street). Subsequently, it is a transitional space between private and public domain. And these three cases indicate that the interaction between public and private domain consist of different dimensions and these two dialectics are observed both in non-western and western world. It will be intriguing now to investigate the relations between house and its exterior surrounding in Anatolian and non-western built environments.

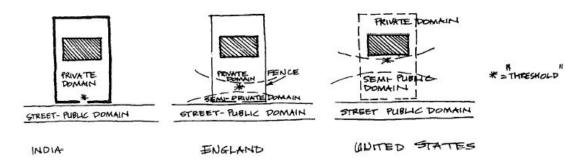


Figure 42: Approximate location of the threshold in three cultures (Source: Rapoport, 1969)

Entrance and threshold are transitional zones in non-western built environments. Referring to Moughtin (2003) the transitional zone is clearly defined with the semi-private space as shown in figure 44. He points out that "the entrance of the housing cluster may be designed to determine those who may disturb the privacy of the residents" (Moughtin, 2003 p.95).

In addition, Altman and Guanvain (1982) highlighted that entrance and threshold in some cultures have relation with mythology, cosmological and beliefs. For instance, in Anatolian Turkish cultures, people demonstrate their respect while a guest enters the house throughout the threshold on the entranceway. These spaces are decorated in various ways such as knockers, door handles, materials where religious signs refer to different meaning in different culture. Subsequently, the formation of entrance and threshold express the extension of family life to outdoor. In other words, it reveals the degree of transition between the two dialectics.

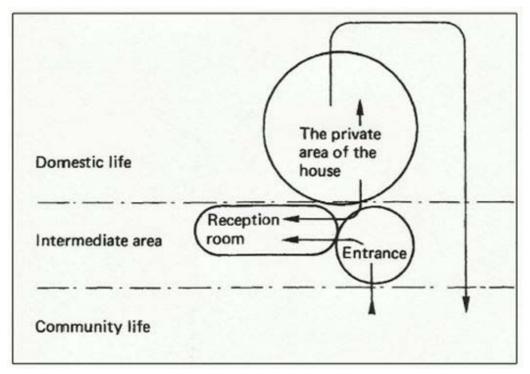


Figure 43: Non-western housing layout (Source: Moughtin, 2003)

2.4.4 The Fina as Interaction Zone

The *Fina* is an Arabic term which denotes two different kinds of space; one of them is the private internal courtyard of the traditional buildings and is called *fina* in Arabic parts of the world and its synonymous terms are *harim*, *hayat* and *avlu*, and second one is an open space around and along a building which is called the *fina* (Hakim, 2007). In other words, the fina is an identical in-between domain which is a

defensible space supported by guidelines and social customs in the traditional built environment. According to configuration of the houses and the street it is formed. It is a space in-between the two boundary private and public². Thus, it is interaction zone between these boundaries as well as being a transition in-between the two boundaries.

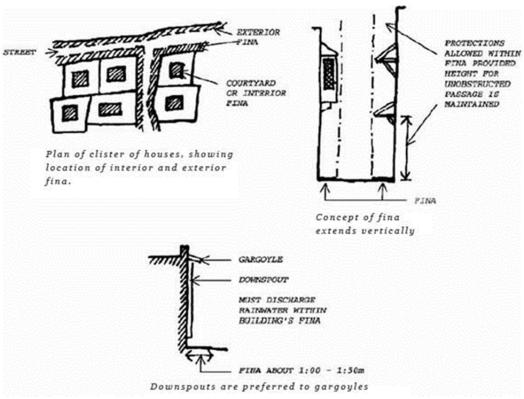


Figure 44: The conceptualization of the fina. (Source: Hakim, 2007)

Hakim (2007) describes *fina*, as "an invisible space about 1:00 to 1:50m wide alongside all exterior walls of a building that is not attached to other walls and primarily alongside streets and access paths. It is extended vertically alongside the walls of the building" (Hakim 2007). (Fig. 45)

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² The term al-fina' is an Arabic word, borrowed from the old Islamic literature, but it exists in different Islamic cultures as other terms according to the different languages. In Arabic, the word fina' means spaciousness and roominess. It was used in old Islamic cities to define two spaces, first the inner courtyard, and second the yard in front of or around buildings (Nooraddin, 1998; p. 67).

Additionally, Akbar (1998) defines it as "the space on the street abutting a property, used exclusively by residents of that abutting property" (Akbar, 1988, p. 107). "It was the space along the street adjacent to the buildings which was considered as private areas of the houses which allowed the public make use of it" (Nooraddin, 2013). Indeed, the fina is the first defensible space of the property. The demarcation of the fina as an in-between space is depended on the condition of the street (zugag) as wide, narrow or cul-de-sac. Its territory is regularly described by the inhabitant and by the additive component on the building façade. (Fig. 45)

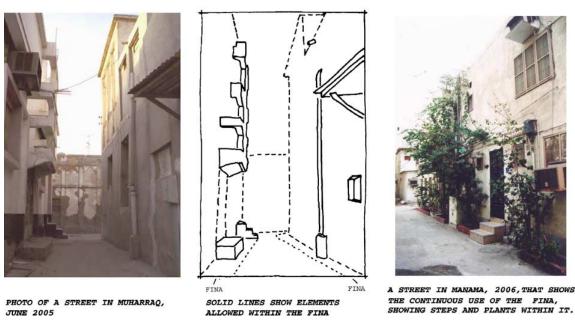


Figure 45: The territorial description of the fina by inhabitant and by façade configuration (source: Hakim 2007)

From this point of view, the *fina* is the utilization of the public domain (street) to obtain the in-between space by inhabitants. These in-between spaces are used by all surrounding buildings and utilized as interaction zones for the social and recreational purposes in the traditional environments. In other words, it provides interaction between private domain and public domain, as well as producing certain transition

between two domains. Thus, it provides dialectic relation between these two dichotomies.

In accordance with this fact, the fina as the private edge of the house is describe by vertical extension components of building; such as cumba, shutter and the wall along the street. Consequently, it creates certain interaction between the private indoor and the public outdoor. The windows of the house directly open into public domain. At the same time, the inhabitant has a direct visual and control of the public domain and this case create mutual interaction. (Fig. 46) The streets as public domain were social gathering spaces in traditional built environments. Commonly, in front of house and shops there were sitting benches built in stone or brick to create strong social interaction zone between private domain and public domain.

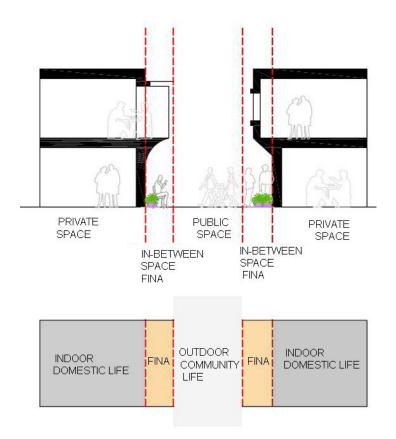


Figure 46: The conceptualization of the fina as an interaction zone

In traditional built environment the traditional parameter of the conception of the fina is emphasized by Hakim as follows; "a certain width alongside the exterior wall of a house on the street side belongs to the owner for his benefit and use, provided such use will not create harm to the public and its right-of way" (Hakim, 1986, p.16). The maintenance of the fina in the absence of the municipality government will be under the responsibility the owner as aforementioned defined who will be in control for maintaining and keeping it clean. (Fig. 47) In this regard, some suggestions are highlighted about using the public right-of-way within the minimum width. For instance, if the spaces for garbage bins are not appropriate within the exterior wall it could be removed, the space for outside planting tree could be an extension of the courtyard.



Figure 47: Utilization of the fina by the inhabitant in Algeria

Even if in the modern era, the municipal governments take the responsibility of the cleaning of the street hence, they never manage to keep street continuously clean. Consequently, if the cleaning of the fina and the exterior walls of the house is under the responsibility of inhabitants then houses are cleaned at least once a week. And putting any sort of thing inside the fina which will hinder public right of way in the street is not permitted. At the same time, if it is decided that street is adequately wide for vehicular access and emergency access, then it is permitted to entirely utilize the fina.



Figure 48: The maintenance of the fina in Vejer de la Frontera, Cadiz province, Spain, Photo by Bernard Rudofsky, early 1960s

Many regulations and arrangements have been developed in the old Islamic jurisprudents for the privacy of the *fina* space and also keeping people's interest in

the utilizetion of the fina space. The inhabitant of the building has particular rights and responsibilities which are connected the *fina*. The inhabitant has the right to utilize the fina for temporary purposes hence, such utilization will not impede the public right of the way in the street. Malik who was the chief of the Maliki School³ highlighted the responsibility of authorities like that: "...for spaces of small width, where the least thing posed would hinder the circulation, I think no one has the right to reserve their use for himself, and that the authorities must intervene; but for those where the width is such that the circulation would not be hindered at all if the neighboring owners utilize them for their own needs, I see no harm if the authorities do not intervene..." (in Saleh, 1981).

Asbagh also argues that the public circulation is not to be hinder and damaged by inhabitant who is the owner of the fina space (Asbagh, 996). (Fig. 50-51) Under this scope, regarding the use of the fina by the inhabitants who were the owners of surrounding houses, it seems that they have the right to utilize the fina spaces in the way they wish to provide that they apply with the conditions specified.

³ The Maliki School of jurisprudence which is one of the one of the four major schools of Figh or religious law within Sunni Islam, depend on the Quran and hadiths as primary sources (From Wikipedia).

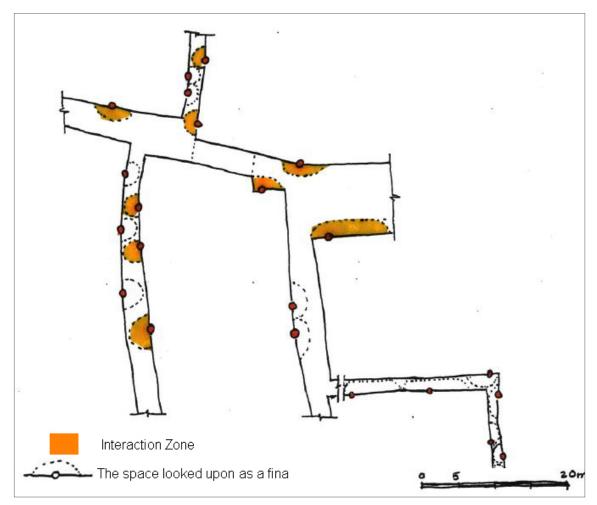


Figure 49: The fina; open space around and along the house as interaction zone, it is in-between private and public, it does not extented more than half of the street in order not to hinder the public right of way (Saleh 1981)

In addition, in the built environment of the traditional Islamic settlements this conception has been maintained. Indeed, the application of the fina reflects an interaction zone in-between private and public. It is the impact of the extension of the private indoor space of the house adjacent with the street to the border of the passage in the public domain. Fig.,(50). Consequently, the interaction zone has numerous functional such as private, public or both. It achieves social interaction between the street life and the domestic life. In addition, it functions as a threshold and transition space that accomplishes interaction between private and the public domain within residential context.





Photo by Tim Moore

Photo by Arthur Erickson,

Figure 50: The utilization of the fina; creation of social interaction in Altea and Ronda in Spain.

Additionally, in the traditional built environment, the fina is utilized for activities which related with the domestic life in addition to public activities. For instance, it is utilized for the selling or the creating of products. Thereby, if any inhabitant had the right to utilize the *fina* the other neighbors should respect and correspond to the user's activity such states aforementioned case. For instance, in one case the fina was utilized as a small coffee shop and it was shared by two abutting houses. (Fig. 51) The other building which was no relationship with the *fina*, was separated by the street, and had their own fina. This space near two resident's doors is conceptualized as their fina is became a vehicle for providing their house needs. Thereby, the *fina* is functionally achieving an interaction zone in-between private and public domain in the residential context.

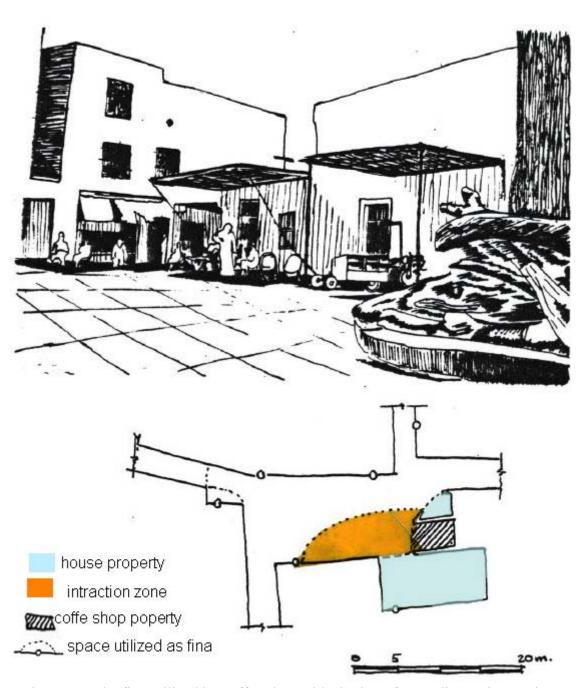


Figure 51: The fina utilized by coffee shop with sharing of two adjacent houses in Medina Saudi Arabia (Saleh 1981)

In another instance the *fina* is utilized as a selling shop in the traditional market. In fact, the front part of the building is utilized as a shop for exhibiting and selling their goods in the traditional built environments. As a result, the street became the place where the most of the urban activities take place. Therefore, the streets are

conceptualized as part of the shops. (Fig. 52) Thereby, the relation between house and street was created to maintain social interaction within cohesion pattern of historic urban fabric.

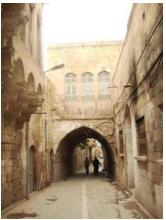


Figure 52: The frontage utilized as the fina to exhibit and sell products in the bazaar in Urfa, Turkey (Source: Cahit Kürkcüoglu Archive)

2.4.5 The Kabaltı as Interaction and Transition Space

The kabaltı is the horizontal extension of solid form as an expression of the room over street. This concept is a projection of the model of the fina, which as the extension of the room is bridging the public right of way. This form is usually shaped when the house could not extent vertically, and it grew horizontally over the street by a component of building that allowed creating additional space attached to a neighboring building. In fact, in architectural scale, kabaltı provides certain interaction between house and street, inside and outside public and private in traditional built environments.

In different cultures, this kind of conceptual formation is given different names. In traditional Western house form it is named as Sotto-portici and in the traditional Eastern house form it is named as sabat. In the South Eastern Anatolia, it is commonly called Kabaltı and Abbara. Indeed, in other settlement in the Mediterranean basin, the building tradition has developed to indicate cultural transmission in the region.



The Kabaltı in Turkey



The Abbara in Turkey



The Sabat in Tunis



The Brosriada in Greece



The Hashti in Iran



The Sotto-portici in Italy

Figure 53: The kabaltı in different names, in the different regions

According to Hakim this form emerged as an extension of the fina. He states like that; "the fina extended vertically allowing high-level projection in the form of balconies, enclose by window, and room bridging the public right of way which are called sabat" (Hakim, 2007). (Fig. 54) The fina as a vertical extension permits

abnormal state projections; such as galleries, encased cove windows, and room crossing over people in general right-of-way which is called kabaltı. The traditional building of the kabaltı is widely used in most traditional Islamic cites. It is a viable way for enriching additional space, and if they are built above street it provides shade for the public in the street. In fact, such kind of approaches which bridge the street, provide excellent shade in front of the door of the house. It provides certain extension from indoor domestic life to outdoor public space.

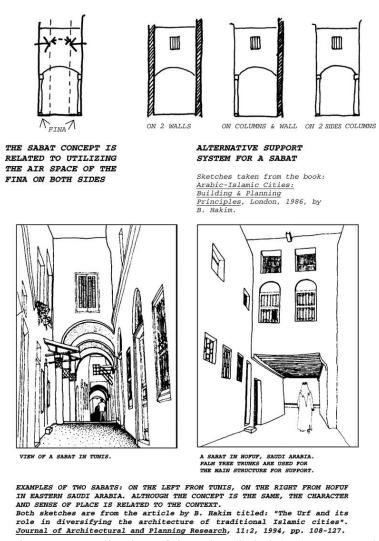


Figure 54: The conceptualization of the sabat (kabaltı). (Source: Hakim, 2007)

In addition, the kabaltı form provides overlapping domains on the street as public domain at ground and the room as private domain. Besides, it forms in-between space in front of the door of the house that is particularly providing a space with hybrid character. (Fig. 55) At the ground level, the in-between space works as a transitional device. Especially, the kabaltı creates district harmony inside and outside space by making them nearly one to create feeling and sense of belonging. Due to this fact, in-between space is utilized as a terrace in western architecture.

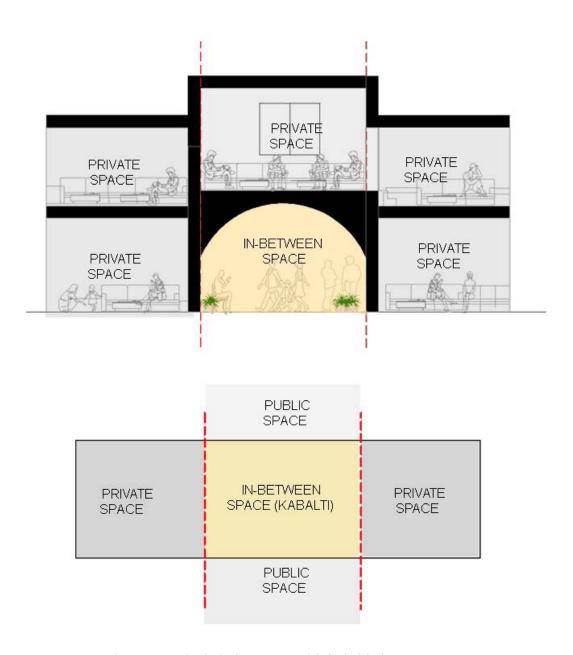


Figure 55: The kabaltı, space with hybrid character

Additionally, in-between space becomes the horizontal extension of the ground floor life as a place to entertain the guest and communicate with neighborhood and speak about community life. Consequently, it creates certain interaction between public and private spaces in traditional built environment. Thus, such serious unique forms are converted in a space as it interpenetrates and overlaps in traditional built environments. It becomes a key element in order to create interdependence between house and settlement, house to house.

The concept of horizontal extension of house on the street in the traditional built environment can be explained with a working spatial system. For instance, the space enveloping the building which is clarified as the spatial concept of the fina, usually extends 1 meter (3feet) in width and that extension usually surrounds all the exterior configuration of structure. The second physical entity which is called the kabaltı that is developed for additional space which is bridge the public right of way have certain role and responsibilities in relation to construction. (Fig. 56)

The formation of the kabaltı form is related with the concept of the fina which is the extension on the top of the street. The extension and second floor room where is built over the street are predominant components in the traditional Islamic setting. (Fig. 56) In fact, in the traditional Islamic community primary priority is the privacy of the domestic life. The formation of the kabaltı in traditional built environments is directly providing relation between interior private domain and exterior public domain.

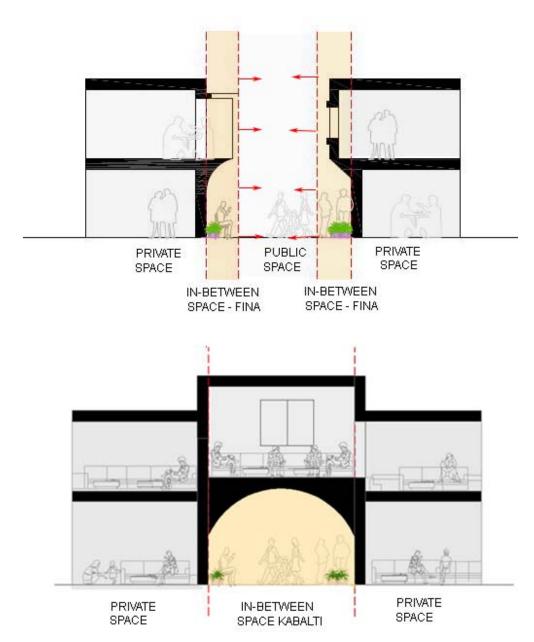


Figure 56: The conceptualization of the kabaltı form by Author

On the other hand, Saleh (1981) indicates that there was no objection to such practice since early Islam and among Muslim jurists hence, any damage that cause to hinder the circulation of the public right of the way, had objection. Muslim jurist Ibn al-

Rami suggested that "the parts that are fitted to the walls and extended to street should not be prevented" (Ibn al-Rami (1334) in Saleh (1981).

In traditional setting, the house has privilege of extension on the street which defines the conception of the fina, cumba and kabaltı. Referring to the Islamic jurist the person whose house doors opens to the street has right to utilize the street when he does not hinder and damage the public right of the way. (Fig.57)

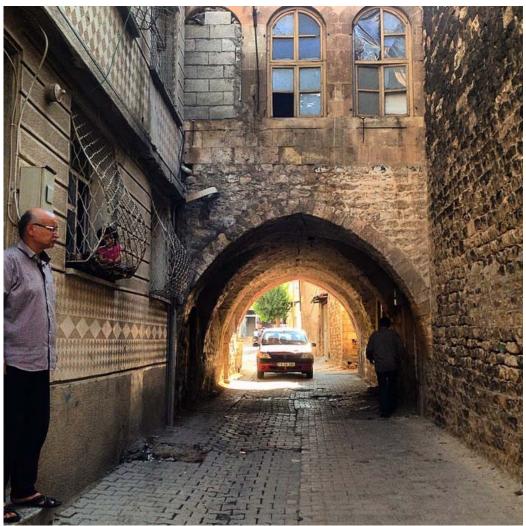


Figure 57: Utilization of kabalti space does not hinder and damage the public right of the way. (The Kabalti house in Kilis in Turkey)

On the other hand, the extension issues cause a debate which is about air right and involve two adjacent neighbors. The jurist divided the street into two in order to provide the air right over the street. Therefore, the priority of extension on a street belongs to the house which opens onto the street but it does not deny other adjoining houses from having extension from the upper level onto that street regardless of the fact that their main doors are located along that street.

In relation to the extension of rooms, Saleh (1981) indicates that if a person owns two houses from the each side of the street, he has the right to build a room on top of the street. Additionally, he states that: "he (who builds room on top of the street) cannot be prevented from doing so, unless he introduces into the street something that may narrow it or cause harm, then, he must be stopped. But for acts that cause no harm to either the street or to the public, he should not be prevented" (Saleh 1981 p.103). The same principles were implemented in real cases in traditional built environments, for instance, where a house owner had small shop at the other side of the street; he covered the street by building a room with a structure. If there was no impediment or harm in the public right of way he always had right to build room on top of the street even though his neighbor' object (Saleh 1981).

Chapter 3

THE ANALYSIS OF THE KABALTI HOUSES IN URFA

3.1 Location and History of Urfa

Urfa is on the historic crossroads of East and West where trade, migration and culture exchange take place. Throughout the history, it has been the center of civilization both in Mesopotamia and Anatolia and it was reigned by richest and strongest nations in the region like the Persians, Hellenes, Romans, and Byzantines. Then, it was under different states of Arab and Turkish states. Firstly, at the period of Caliph Omar (634-644), Urfa has been governed by the Islamic rules. "Between" A.D. 1098-1144 the city was established as an independent crusader country town. The city was governed by Akkoyunlular at 1404, by Safeviler at 151, and starting from 1517 it was governed by the Ottoman Empire (Oymak, 1998). In this regard, Urfa has been homeland of many civilizations which have led to the formation of the house form with its own distinct identity.

Urfa is one the oldest towns of Anatolia and Mesopotamia. The archaeological excavations which are "Nevalı Çori" and "Göbeklitepe" are amongst the world's oldest temple ruins status, and their stone reliefs dates back to B.C. 9500 of Neolithic era (Kürkçüoğlu, 2005). In this regard, the architectural history of Urfa dates back to 11.500 before Christ.

Within the history, the old city has been called with different names in Aramaic language "Orhay", Macedonians named it "Edessa", Greeks named it "Kaliru'e", and Arabs named it "El Reha or Ruha". The current name of the city derived from the changes of these names Ur, Orhei, Orhe, Orhay, Orha, Reha, Ruha within history. Additionally, due to the Prophet Ibrahim and the Prophet Ayyub have lived in Urfa, it is named as "City of Prophets". The city has also been governed by Osrhoene Kingdom which was the first community accepted Christianity in-between B.C.132-A.D.244. Therefore, the city was named as "Blessed City" by Christians (Kürkçüoğlu et al, 2002).

The city of Urfa is located on the historical "Silk Road". Throughout the history, Urfa has become a stop point of the cultural flow in- between the Western and the Eastern world. Thus, it has been an important center for expressing the cultural accumulation. The traditional Urfa houses indicate the cultural nature of the city. The physical and social characteristics make the traditional Urfa house form distinctive and indigenous. The natural conditions and social-cultural environment which embodied the house form have great impact on the architectural formation of the house and its interdependence with the urban fabric on which house form has generated from.

The old city of Urfa is located in the southeastern Anatolia and in the Middle Euphrates. It is surrounded by Adıyaman to northwest, Diyarbakır to northeast, Gaziantep to west, Mardin to east and provincial border with Syria on the shouth.

The region is located in Mesopotamia which is described as the land between the Tigris (Dicle) and Euphrates (Firat) rivers. Fig., (59). It is named in Greek as

"Mesopotamia", in Arabic a "Elcizire". Therefore, the history of Urfa is linked with the history of Mesopotamia which was under the power of states in Iraq, Syria and Egypt. This fertile land is the extension of the plains of south province of Urfa city.

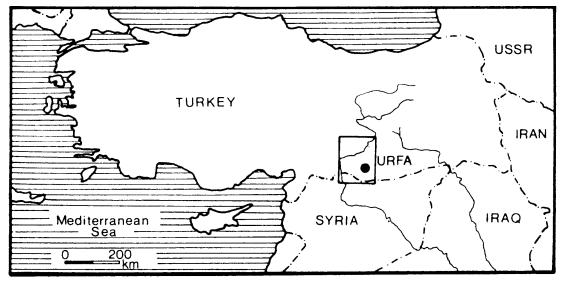


Figure 58: The location of the Urfa city

The city was founded in a significant location which is in the transition zone between Anatolia and Arab countries, and due to its presence on the historical Silk Road, it was an important crossroad for the Christians and Muslims. Additionally, the "fertile crescent" which is very important for the world culture, as well as the history of civilization and archaeological literature, is located in this region.

The old city of Urfa is located between the southern slopes of Southeastern Taurus (Toros) and the southern plateau. (Fig. 59) This plateau is surrounded by the Southeastern Taurus (Toros) and the Euphrates (Firat). The mountain and the high hills at north side of the city are descending towards the south side of the city.



Figure 59: The city with nearby environment (source; Goggle Earth)

The climate is hot and arid. There are big differences in temperature between summer and winter, night and day time. The annual rainfall and humidity is low, the city is one of the hottest cities in Turkey. The prevailing winds are the Karayel (Northwest) and Günbatımı (West).

3.2 Socio-Cultural Environment of Urfa

The social structure of Urfa city is formed under the impact of many civilizations. The effect of the Turkish and Arab civilization on the social structure is more than the other civilizations. This social structure also reveals itself in the built environment of Urfa.

In the region, since the periods of Seljuks, very large properties have been formed. This formation mostly affected the rural region rather than city itself. These large properties have been ruled by Kurdish aşirets (tribes). At the era of the Ottoman Empire, these asirets (tribes) principally had autonomy in the internal affairs and they became the sole ruler of these properties. During the new Republic, despite some precautions against this social structure, their strength is continues in the region

Throughout the history the distinctive societies have co-lived and co-existed in the city with their own culture, languages and religion. These societies were Armenians, Jews, Arabs, Turkish and Kurdish. During the First World War, Armenians and Jews societies immigrated by force of Ottoman Empire.

At the era of the Ottoman Empire, the city was connected firstly to Diyarbakır State and later to the Aleppo State. At sixteen century, the city was divided in neighborhoods based on religious and ethnic groups which were typical characteristic of the Islamic cities. Akkoyunlu (1989) described the districts in Urfa in 1518 as four Muslims and one Christians in total five districts. In 1530, it was five Muslim and three Christians and these eight existed districts. Referring to yearbook of the Aleppo province in 1873, the twenty percent of the population was Christian. (Table (1)) According to the records of the Ottoman census in 1881-1882-1883; there are many religious groups in the total population which was 126 776 (Ören, 1996). (Table (2))

Table 1: According to yearbook of the Aleppo province (1873), the different of religion population in Urfa city (Ören, 1996)

Muslim Population	Christians Population	Jewish Population
45.368	10.560	248

Table 2: The records of the Ottoman census in 1881-1882-1883; the distribution of religious in Urfa city (Ören, 1996)

Muslim	Orthodox	Gregorian	Catholic	Jewish	Protestant	Syriac	Total Population
11.358	2	9.783	468	359	688	1.118	23.776

In the old city of Urfa, as a result of religious and ethnic differences in society different neighborhoods (mahalle) were formed. Due to lack of any official record we determine location of mahalles according to the location of religious building and informal interview with old people. In total, there were sixteen mahalles: Muslim part was 12 Eylul Street extended towards the east part of the city until the Nimetullah mosque. Syriac part was the east part of the Nimetullah mosque, around the Akyüz house. Armenian part was Tilfindir hill extended towards westertn part of the city wall until the Nimetullah mosque, Jew part was the south and the southwest part of the Çakeri mosque. In total, there were sixteen mahalles. Referring to yearbook of the Aleppo province in 1883, in the old city urfa there were 3096 houses, 31 mosques, 11 churchs, 14 madrasas.

Consequently, the traditional Urfa houses are a reflection of the attempts of inhabitants with different religious, cultural and economic backgrounds to generate their own private space. Due to lack of any officially records, the houses previously owned by Jews cannot be determinated. On the other hand, the houses belonging to the Christians and Muslims indicated that there is no important difference in the design of houses. Regarding the religion, this similarity can be based on the common social value of private family life. Also, all the construction sector and stone workmanship were generally in the hands of Armenians.

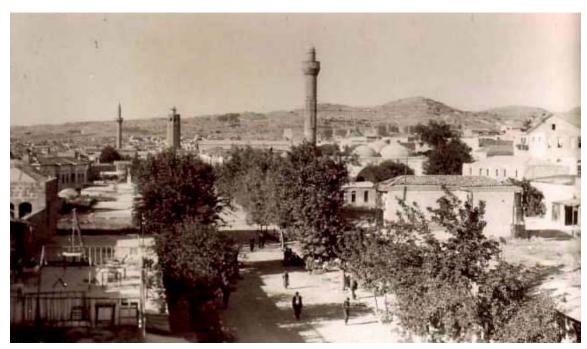


Figure 60: Minaret and belfry in the urban settlement of the old city of Urfa (source: archive of Caner Tipi, 1949)

The society is closely linked to their religious belief, customs (örf) and traditions. In social structure there are large families. Man is dominant as members of the patriarchal family structure, and the woman is life depends on the Islamic codes. Family structure had certain influence on the formation of the traditional Urfa houses. For instance, in the social structure, the position of the women and men was an expression in the distinction of harem and selamlık.

3.3 Built Environment of Urfa

The social life, trade and the religious building play important role in the formation in the development of the city. Thus, the old commercial center and Aziz Stefanos Church (Ulu mosque) became the center of the old city of Urfa.

Concerning the development of the old of city, natural and social images indicated the identity of the old city Urfa. As the main center of the city is composed the bazar place, mosque and church, like as many contemporary cities in the medieval ages. In the old urban fabric two parts were designed in order to separate the public space, the commercial places, the religious places and the private space as residential place.



Figure 61: View of the built environment of the old city of Urfa (source: archive of Cahit Kürkçüoğlu)

The traditional fabric of the old city of Urfa can be named as "sur ici" (wall city). There is no clear information about the construction history of the city walls. However, at the beginning of twentieth century large part of the wall was destroyed and new buildings were constructed replacing some parts of the wall. Only around the Bey Gateway some ruins remain. Referring to various maps, the wall was formed with four main gates. (Fig. 62) The city between the wall the doors and the castle was developed as a linear axis.

On the other hand, in the northeast part of the old city, around old commercial center new high buildings took place. They destroyed the traditional fabrics of the old city. Today, it is bordered at the southern side by Urfa castle, at the northern side by Karakoyun stream, at the western side by Suruc way and at the eastern side by Akcakale way.

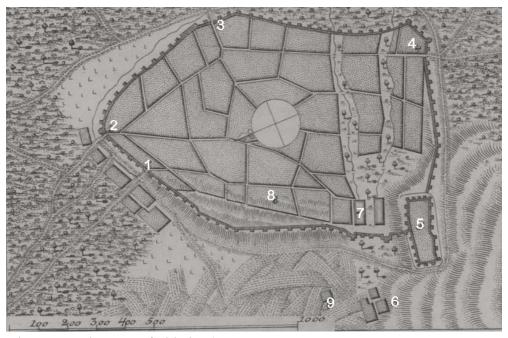


Figure 62: The map of old city (1-Samsat Gateway, 2-Saray Gateway, 3-Bey Gateway, 4-Harran Gateway, 5-Urfa Castle, 7-Rizvaniye mosque, 8-Armenian church, 9-Hidir Ilyaz churhc) (source: drawing by German travelers Carsten Neibuhr, 1976)

The built environment of Urfa which was in "sur ici" (wall city) is consisted of slope and flat areas. However, the slope is gentle; there is no sharp slope like in Mardin settlement. It is more similar to traditional settlements of Diyarbakir and Aleppo.

The traditional houses were developed from the valley slope and extended the plain area. (Fig. 63) One of the main factor affecting such development was the water resources, such as "Balıklı Göl" (It is an important lake in Islamic mythology; it is the place where the Prophet Ibrahim and the Prophet Abraham were thrown him into fire fell) and Karakoyun stream. These resources are important in order to humidify dry air.

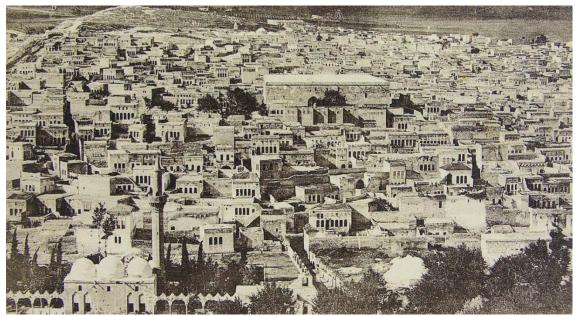


Figure 63: View of the built environment of old city Urfa (source: archive of Cahit Kürkçüoğlu)

The natural factors certainly impact on the formation of traditional built environment. For instance, houses are generally oriented towards south direction in order to get more benefit of sun in the winter. The aqueducts, baths, bridges and the religious building belong to different cultures. Commercial building, public buildings are the other structures constituting the urban fabric.

In general, the characteristic features of the old city of Urfa involves the organic narrow streets (zuqaqs), squares (meydans), kabaltı and cul-de-sac (dead-end street) which is named locally as "tetırbe".





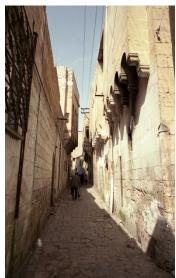


Figure 64: Architectural vistas form the scape of the old city of Urfa

Referring to Cerasi (1998) the cul-de-sac (teturbe) is an important feature of Anatolian and Islamic cities. It is the in-between space, the most private domain and the most private domain. Street patterns are usually defined by the plain faced attached to the buildings, by the extensional form which are named as cikma and kabalti. They create interaction between the private realm and public realm besides provide shelter to protect people particularly from sun, and defining architectural vistas in the urban landscape. (Fig. 64)

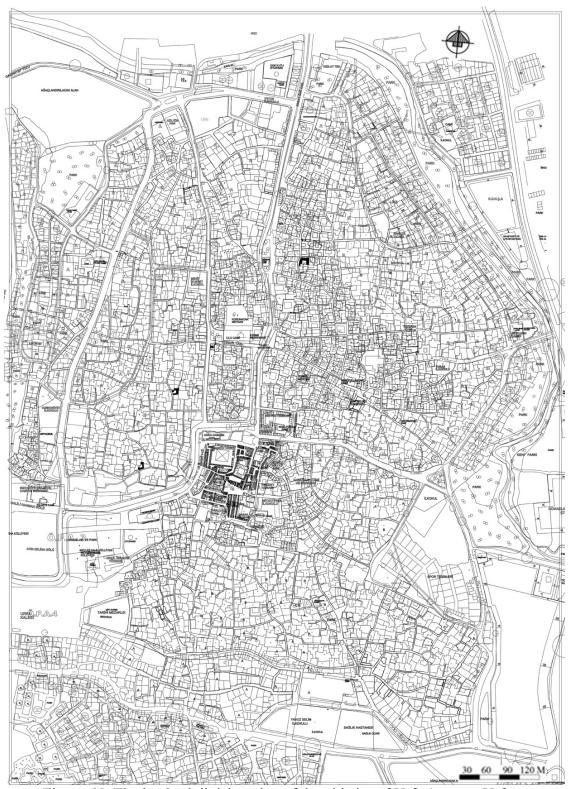


Figure 65: The land subdivision plan of the old city of Urfa (source: Urfa Municipality)

In the social structure of Urfa, male and female move in two separate domains. The commercial place and religious place formed the male's public world. The female's duties obviously centered in the house. They served as the private life of the family. (Fig. 66)

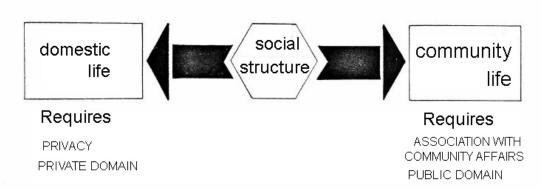


Figure 66: The homogeneity and the heterogeneity in the social structure of the Urfa

The separation of the public domain from the private domain is achieved by a hierarchical sequence of space as a progressive transition. In the old city of Urfa, the main street as the most public space led from active public space to a second echelon of social space where the local street intersected to narrower street and led to inbetween spaces and lastly to limited approaches of the houses. (Fig. 68) The mosque and the meydan can be viewed as a sequence of the spatial components which was the focus the social interaction among public and the houses which are the most private part of family realm.

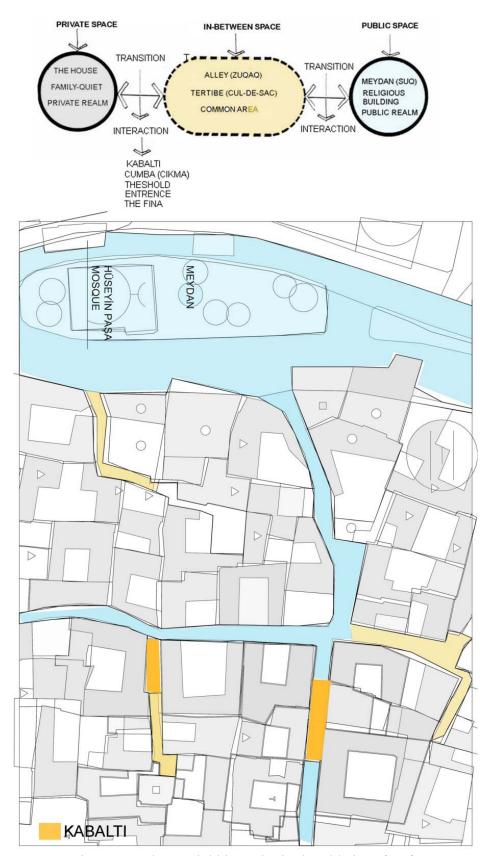


Figure 67: The spatial hierarchy in the old city of Urfa

3.4 The Traditional Urfa Houses and Indoor-Outdoor relationships

In general, the traditional Urfa houses are formed by the sequence of rectangular indoor space around a central courtyard as outdoor space. Eyvan is an important element in the plan organization. It is the main determining component in the formation of the traditional Urfa houses. The number and the orientation of eyvan plays important role in plan organization of the traditional Urfa houses.

They are usually two floors; the ground floor is utilized by life and service spaces, and the first floor is life spaces. Also, a half floor which is above or below the ground level has been planned as service spaces (Turan, 2009).

Each house has at least one courtyard. The street façade of the house is surrounded by wall or indoor space. The house which consists of harem and selamlik part has two separate courtyards. In some houses, connection of two parts provides a transitional space (kapı arası) and a whirling cupboard which is use for service to selamlik part.

The major component in the formation of the house form of Urfa is the room as indoor space which is solid additive volume, eyvan is an in-between space which is subtractive volume and courtyard is open space which is void volume. There is certain relationship between these components and these components has certain interaction with the built environment in order to create physical interaction and interdependence.

3.4.1 Indoor Space: Room

Room is the multipurpose and self-sufficient living unit of the house. As, it is the place of these purposes; living, eating, working and sleeping. Generally, a nuclear

group of extended family utilized the room as independent space reserved for the private uses.

Room is a solid additive volume of house form of Urfa. Generally, it is in the geometry of cube or the rectangular prism. It has high ceiling, Therefore, in some houses there are rows of window for view, ventilation and light. The number of rooms varies according the plot size and economic situation of the house owner.

There are no big differences between the rooms in the house in terms of dimensions and internal arrangements. On the other hand, the room which is named locally "baş oda" and "çardak odası" is utilized by male family members and the male guest. The volume of the room is bigger than the other room. Due to this purpose, these rooms led the formation extensional form as the çıkma and unique form as the kabaltı. Particularly, they are formed to have more view with the street life. (Fig. 70) The outer bounding wall at the ground floor is planned in respect of the street. However, the upper floor of these rooms is oriented towards the street. As a result, this room has more view to outside public world. It creates certain physical and visual interaction with the street life as public domain. Also, it has more ornamentation than the other in order to express the prestige of the family.

The entrance of the room is usually from the longer side. From the entrance along the short side is the lower level of the room which is named locally as "gedemeç". The space above the level gedemeç is used for sitting. The çardak rooms have different celling types. The rooms which are located on the ground floor open to courtyard and the opening at street façade above the eye level, which are located at upper level and has opening to both courtyard and street.

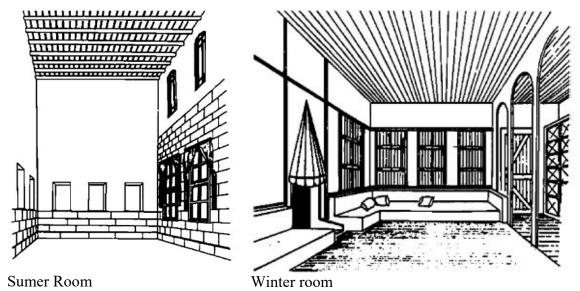
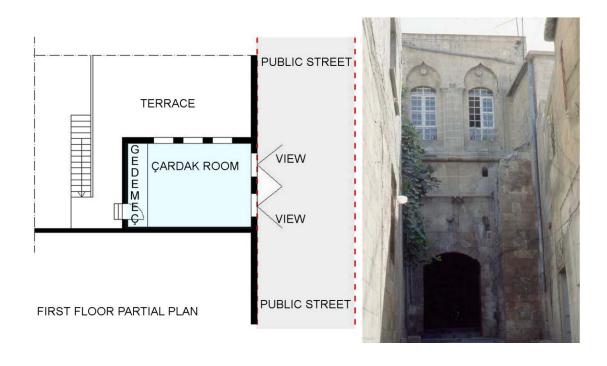


Figure 68: The summer and winter room organization (source: Süzen and Gedik, 2007)

Additionally, in the interior plan organization of the traditional Urfa houses, rooms are organized according to the weather conditions. Generally, the rooms for the summer use are oriented to the north and set on the northern part of the court in order to protect the room from solar radiation. The rooms have high ceilings and more windows. The rooms for the winter use are oriented to the south and set on the southern part of the court in order to absorb solar radiation. The rooms are organized as "room-hall-room" and they have low ceiling and few windows (Süzen and Gedik, 2007). (Fig. 69)



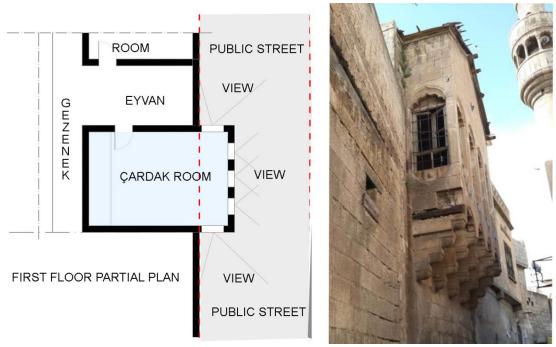
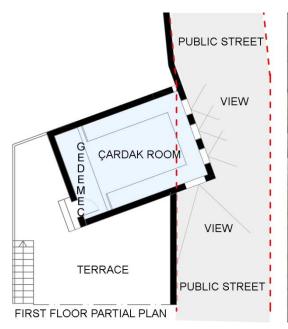


Figure 69: The scenic view of the Cardak room in the traditional house of Urfa





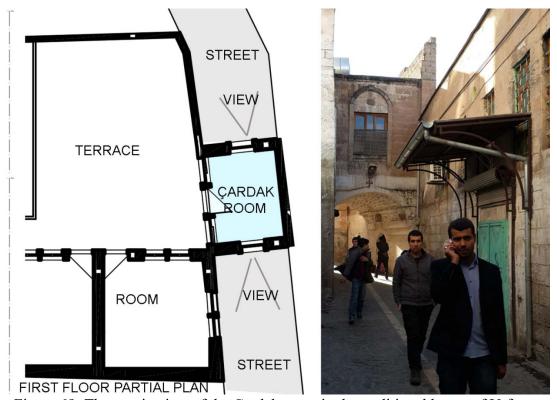


Figure 69: The scenic view of the Cardak room in the traditional house of Urfa

Draw attention of division and use of the space in setting up referring to Bordieu (1977); it has certain relation the hierarchies between persons. It is embodied within cultural principles of society. In this regard, father has his personal space in a room. This space is special for him. According to informal interview, this space was mostly the corner of room, and later it shifted on the middle. Youngest ones were located near the entrance and other adults also sat on to the sedirs. For the children there was no specific location to sit. They usually sat on the floor and in the middle of room. (Table, 3)

Table 3: The use of room in setting division refers the hierarcies between woman, man, and youngsters and its relation to interaction between public and private domain WOMEN Use of the space in setting up MAN division hierarcies VIEW between woman, man, and YOUNGESTERS youngsters in room **PUBLIC** STREET AT THE UPPER FLOOR **PUBLIC** STREET Use of the VIEW space in WOMEN setting up division hierarcies MAN between WIEW woman, man, and youngsters in YOUNGESTERS! VIEW the cumba room PUBLIC AT THE UPPER FLOOR STREET PUBLIC STREET

VIEW The kabaltı room used by MEN men. VIEW AT THE UPPER FLOOR PUBLIC STREET

3.4.2 Outdoor Space: Courtyard

The courtyard is the most important characteristic of the house in the old city of Urfa. It is void subtractive volume of the house form which is surrounded by living spaces. Referring to life styles habit, ürf (customs) and social-economic situation of the occupant, the utilization of the courtyard varies. (Fig. 70)

Courtyards are usually in the form of rectangle, square and trapezoid. The ground of the courtyard is covered by stone-cut (nahit). Therefore, it is named locally as "nahit hayat" or only "hayat". The traditional houses of Urfa do not necessarily to have only one hayat. It is usually divided in two different parts as harem and selamlik which belonged to wealthy Muslim families. Some of the houses, we come across with three courtyards. Flowers, stone water pool, well, and few trees are located in the middle of these spaces. There are wooden rectangular niches which are named as "kuş takası" called bird houses around the courtyard and rooms wall (Turan, 2009).

Generally, courtyard is utilized by inhabitant for sitting, playing games for children, wider preparation for weddings, engagements and gatherings for entertainment such as henna.

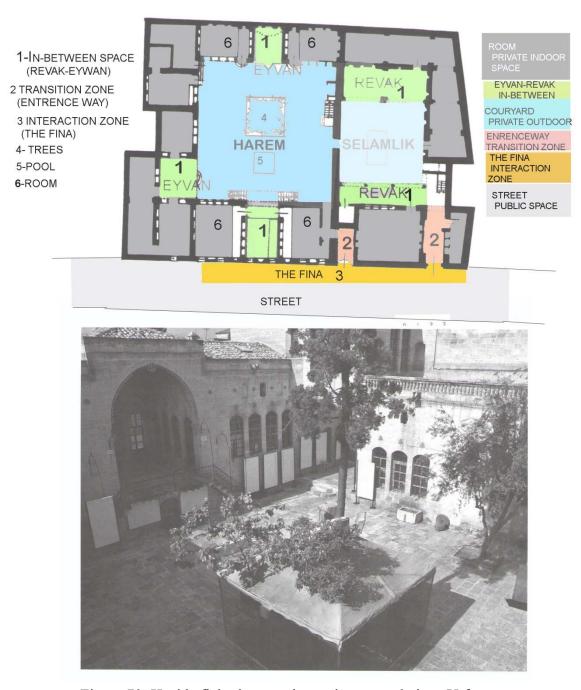


Figure 70: Haci hafizlar house: plan and courtyard view, Urfa

3.4.3 In-between Space: Eyvan, Kapı Arası

The eyvan as an in-between space is one of three major spatial elements of the traditional house of Urfa, together with courtyard and room. It is a void subtractive volume of the traditional Urfa house form. (Fig. 71) It is a transitional space located between the courtyard as outdoor space and house inhabitable room as indoor space.

Under this scope, eyvan, the spatial component has certain relation with the Hittite *hilani*, Turkish *sofa*, Arabic *beyt*, Cyprus *sundurme* and Mediterranean form (Pulhan 2005).

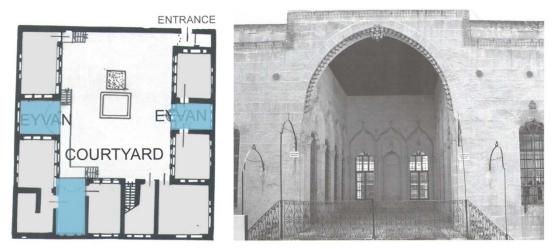


Figure 71: The eyvan: a void subtractive volume of the traditional Urfa house form

Eyvan is functionally achieving the interaction of private and public domain in context of the house as distinctive transitional element. The room retains the maximum enclosure and the courtyard relatively keeps the minimum enclosure. On the other hand eyvan appears as an intermediate degree of openness and creates interaction between indoor and outdoor spaces.

Eyvan can be categorized in four different types. In each type, it determines particular unit of the house as room-eyvan-room. (Fig. 72) One eyvan type is mostly used in the formation of the traditional Urfa houses. In the plan, it is in-between two rooms (başoda). It becomes the backbone of the spatial organization in order to connect independent living room on one or two axial system, created by the main unit. Each unit is supported by the services spaces which are located across, beside

or under it. From this point of view, each unit is an important determinant factor in the identification of the traditional architecture of Urfa.

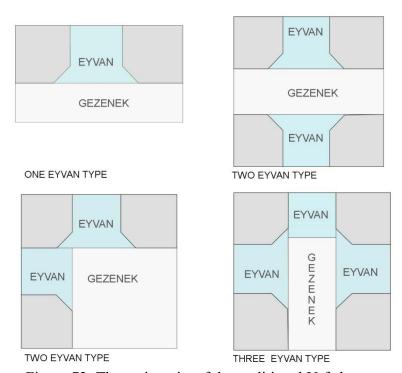


Figure 72: The main units of the traditional Urfa houses

Additionally, eyvan plays an important role in façade articulation and the mass formation of the house. It is developed perpendicular to the street axis. It has impact on both the internal façade and external street façade of the house. In some cases, like sofa and sundurme in Turkish domestic architecture, eyvan reflects street faced as çıkma an extension form at upper level. On the other hand, it reflects the internal façade as void subtractive component. (Fig.73) The characteristic of eyvan is creating symmetry onto internal façade of the traditional Urfa houses.



Figure 73: The reflection of the eyvan onto the internal façade, Akyüzler house, Urfa

In-between; street door and courtyard, there is a transitionianl zone which is named locally as "kapı arası". It is in the form of a square or rectangle and it is connected with a roof or pointed cross vaults. It is not possible to clearly see inside the courtyard when the street door is open. Characteristically, in the most of the traditional Urfa houses, private spaces, like eyvan, kitchen and toilet, cannot be seen from the street. In order to provide privacy transition space is included. (Fig 74)

The fina space along the wall surrounds the courtyard utilized for removing odours and fumes form the indoor space and communicating with neighbors. Particularly, the fina is used by old family members at day time for resting and for the social interaction. In other words, it is a place for entertaining the guests and speaks about public life.

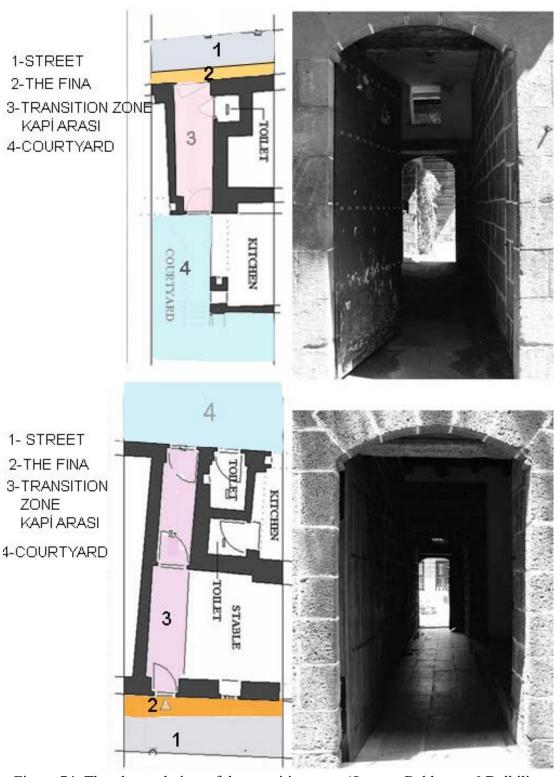


Figure 74: The plan and view of the transition zone (Source: Bekleyen, &Dalkiliç, 2011)

3.5 Spatial and Physical Formation of Tradition Urfa Houses

The principal concern is to create interaction between private domain and public domain, interior and exterior, open and close, and indoor space and outdoor space; the configuration of space bounding surface and plan organization of the traditional house plays certain roles. The relationship in-between the parts in the house are important as much as its reflection on façade formation as solid-void relationships in order to create the interior-exterior relationship; produce a whole character of the house form. Consequently, the interdependence between bounding surface and spatial formation constitutes certain relation between interior and exterior.

Façade articulation of a building is the public face of the private domain and it becomes an important concern in order to create an interaction zone as the fina and in-between space between public and private domain. As the bounding surface of the house mediates between in and out between public and private space and it provides gradations between two domains. Consequently, the openings in the traditional Urfa houses reveal private life as a frame of internal life. The coherence and character of opening determine a dialog with the adjacent building and street. (Fig.75)

The components of the facade are the common element of the mass and space form and they are reflected as space boundary between inside and outside. The dimension of façade surface such as height and length have significant in the character of spatial form of the traditional Urfa houses. Façade articulation is based on the combination of the horizontal and vertical component.





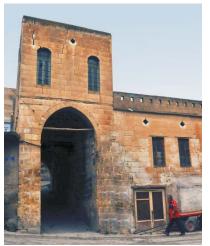


Figure 75: The bounding surface of traditional Urfa houses.

The façade components have certain reflection on the ground. They describe a territory which is aforementioned as in-between space; that allow social interaction in traditional built environments. Additionally, façade treatments on the ground level as overlook street to provide interior space with the full length of the public domain as street. Thus, these treatments on façade produce certain interaction between private indoor live and outdoor public live. On the other hand, in terms of solid-void relation in the buildings scale, solid form creates interaction with street and adjacent property.

The articulation on the façade as bounding surface of the mass and it's relation to street and adjacent property in traditional Urfa houses are classified under three main titles which are the defined by the characteristic of treatments of bounding surface as plain form, extensional form and unique form.

3.5.1 Plain Form

The plain form is described by surface feature of the bounding surface as twodimensional entities. Generally, the plain form is simplest ones of the traditional Urfa houses. It is observed with two or one floor house. It is the first stage creation of dynamic bounding surface. (Fig.76) The façade composition is based on the figure ground articulation. From the Pulhan's point of view; "they are as the untransformed condition of the 'generic form'. They have no additive and subtractive" (Pulhan, 2002). It has numerous variation of form the according to length and width on the street.

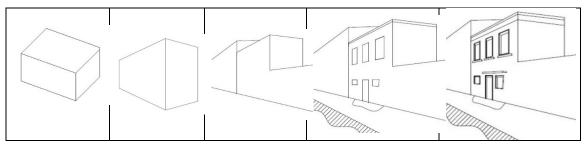


Figure 76: Plain form; from the most abstract to most concreted one

A dynamic form created from the plain from through the shift in axes. The interlocked two of the generic from created in front and at the back in the formation of house. Thus, a dynamic form is generated by the projection of surface towards street.

On the other hand, the component on the plain form such as windowsill and door canopy projection on the ground play an important role in order to define in-between space, the fina space as the interaction zone. The fina space is described 1m and 1,5m alongside of plain from on the ground and vertically as an interaction zone. (Fig. 77)

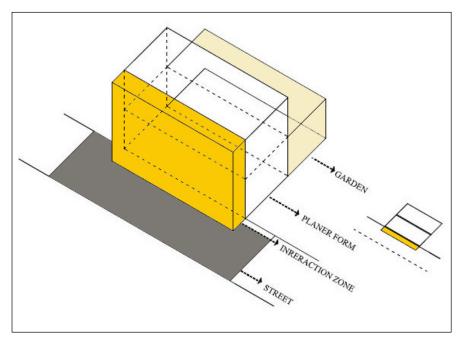


Figure 77: Interaction zone alongside of plain form

3.5.2 Extensional Form (Form with Cumba)

The extensional form gained in two floor house, by adding solid components and subtracting void volumes of house. The cumba and the çıkma are the characteristic treatments of the traditional Urfa houses. In general, they are distinctive of upper level extensions of the traditional houses in Anatolia and Middle East. Eyüce describes the çıkma as an extensional form coming out form the main body of the mass. It has certain role in spatial syntax of both the mass and the whole environment (Eyuce, 2012).

The extensional form is the reflection of the indoor dynamism towards the outside. Additionally, it provides the interior space with a full length of the view. In other words, it is providing the scenic view of the public domain. Cerasi (1998) describes the extensional form as "the life veins". Both corners of cumba become visually accessible to see street life and create relation between interior and exterior spaces. (Fig. 78)

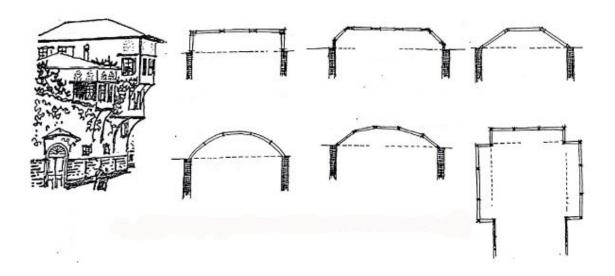


Figure 78: Numerous variations in the cumba forms (source: Eren, 1959 p.11)

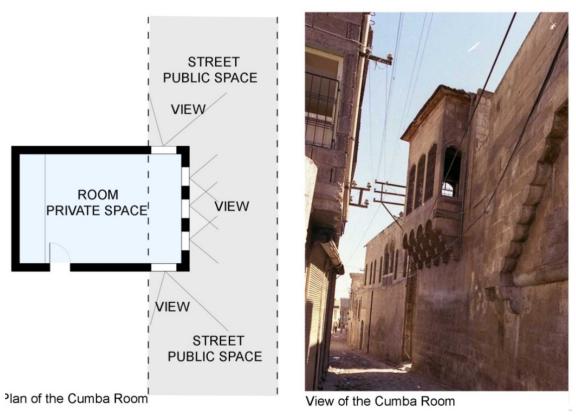


Figure 79: The scenic view of the Cumba room in Urfa house

As the dominant spatial and formal figure, cumba provides a linkage to the inhabitant to interact with the public life on the street as they watch the outside, and creates

communication between neighbors especially from the window to the window at the upper level.

Draw attention to the projection of the additive solid component on the ground, this extensional form is defined a fina space which is in-between space at the ground level. (Fig. 80) The fina which is extended vertically allows high-level projection as the form of cumba, çıkma, and balconies. It provides a territorial hierarchy as private, in-between and public. Thus, it becomes a paramount component to constitute spatial continuation. Therefore, it creates a particular transitional zone which is both the 'private' domestic life and the 'public' community life in the street.

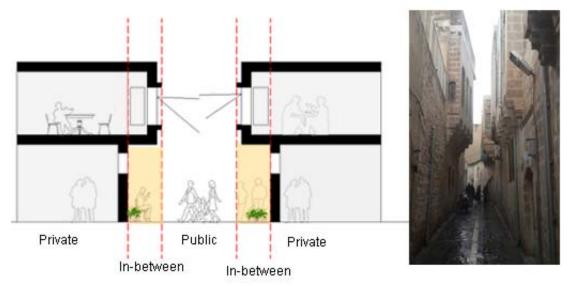


Figure 80: The projection of the extensional form on ground in traditional Urfa houses

3.5.3 Unique Form the Kablatı

The unique form is the distinctive additive solid horizontal element of the traditional Urfa house locates over the street. Indeed, formal configuration of the house is enriched with additive solid component. Obviously, in the traditional built

environments such kind of unique forms illustrate special type of the interaction between house and street, inside and outside, public and private.

House with unique form provides a space to watch public life on the street without seen. It provides to the interior space at the upper level full view of the street. (Fig. 81) Thus, it becomes a linkage between the most private one and the most public one.

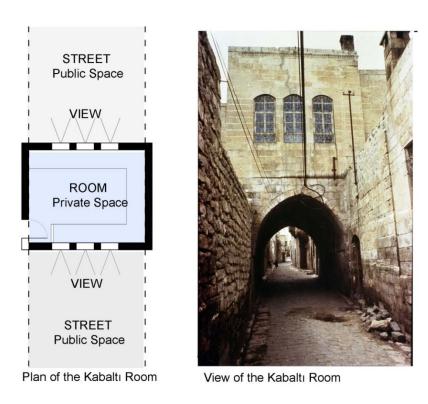


Figure 81: The scenic view of the Kabaltı room in Urfa houses

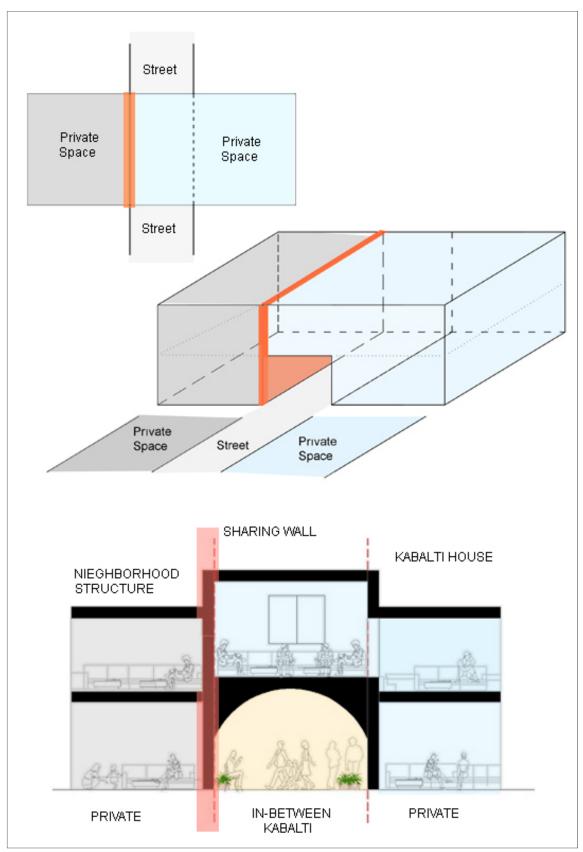


Figure 82: Derivative of unique form 1

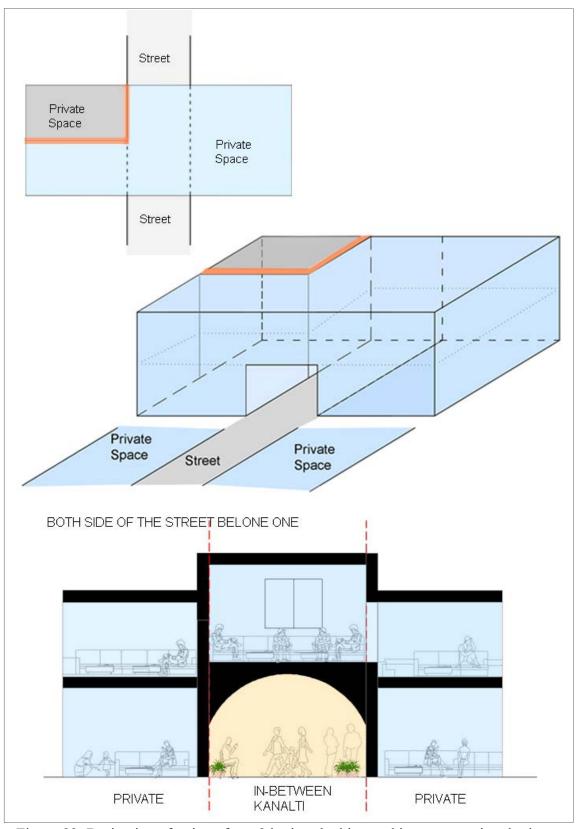


Figure 83: Derivative of unique form 2 by interlocking and interpenetration, both side of street belong one

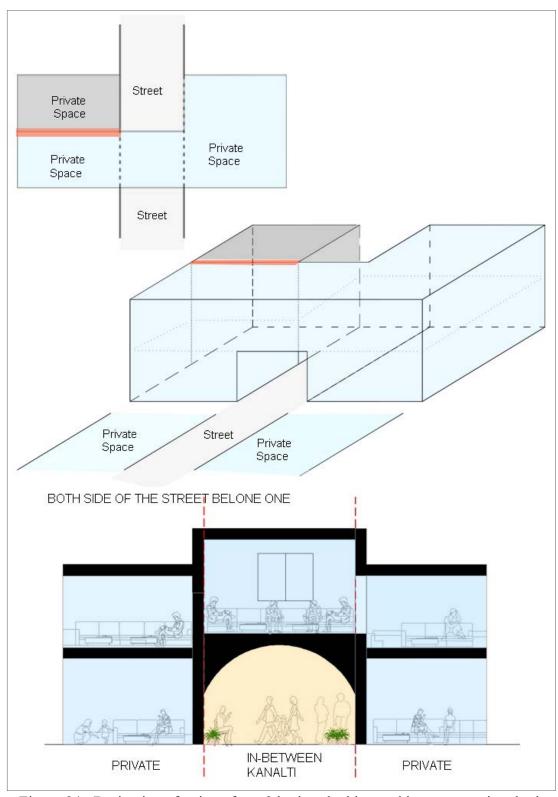


Figure 84: Derivative of unique form 2 by interlocking and interpenetration, both side of street belong one

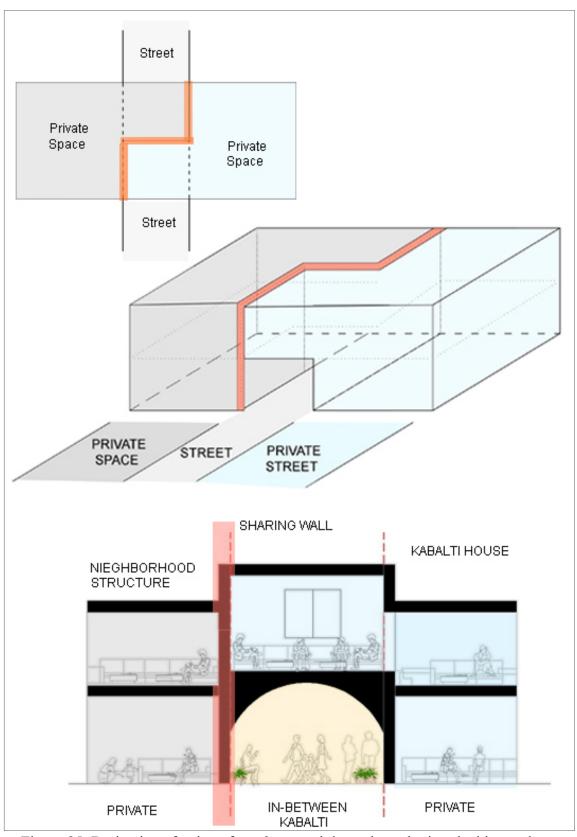


Figure 85: Derivative of unique form 3: mutual dependence by interlocking and interpenetration

The way of domestic life entails a house environment within the consideration of privacy of the family life. In the traditional built environment of Urfa, this special consideration was secure within tranquil environment that the physically controlled interactions in built environment at different levels. In this interaction network, the unique form is characterized as a principal unit in the formation of hierarchy between persons at the building and neighborhoods levels.

At the same time, it is enforced spatial continuity in the setting up divisions in the context of the house. If the unique form is viewed as spatial extension of the fina or the cumba towards the other side of the street, its contribution to the social life is clearly understood. It creates a stage to its users to watch the street as type of a certain interaction acquired between private and public domains.

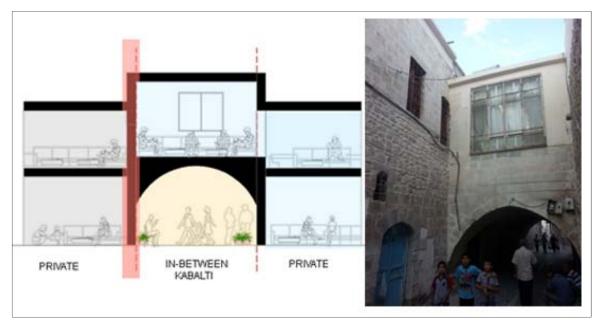


Figure 86: The projection of the unique form defines in-between space on ground

If the both sides of street are the building or the sides are belong to one person or family it permitted to build the kabaltı. (Fig. 86) If a house is within the maximum

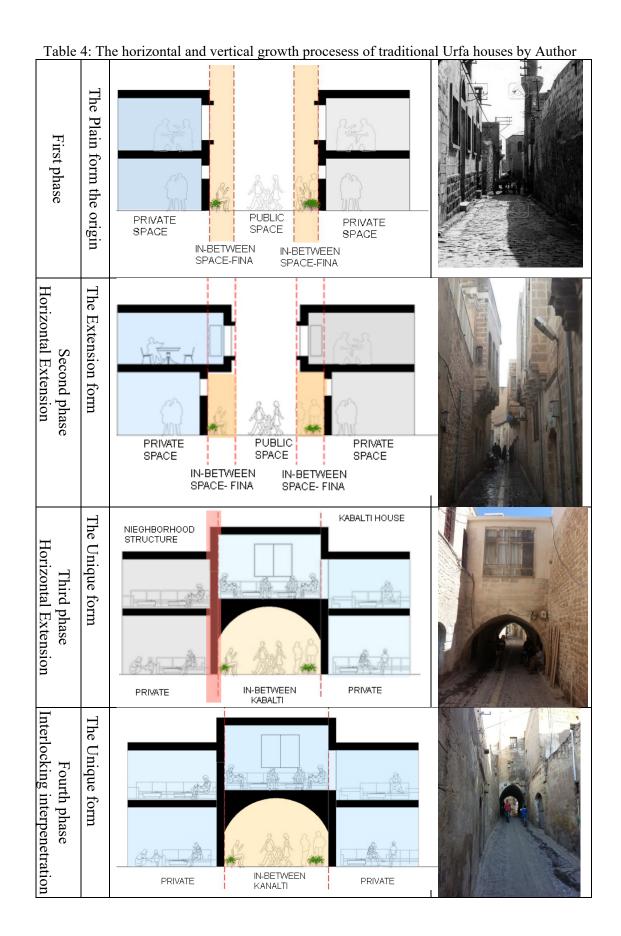
limits and the side is small to extent, the house owner can build an additive space as a kabaltı. Furthermore, in order to design an ideal kabaltı, the structural requirement must be fulfilled. The both sides of the kabaltı should be supported by the independent walls which are at the opposite sides of the street. The ownership easily changes due this reason. The supports should not take space from the public right of way therefore; they must be built such way; the supports touch the walls of the building. Secondly, the wall of the buildings at the both side of the street can be used as the support of the kabaltı if the building owner is same person. Otherwise, a columns have to build other side of the street at adjacent to the wall of neighborhood and they should be careful about the wall and its foundation no damage must be occurred.

In the spatial terminology, the unique form generally defines as room spanning the street in current building terminology Hakim (1986) describes this as an "air right structure". In order to create more space in the house due to reasonable ground, link two houses on the opposite sides of the street to provide the potential additional space to use. And it is generally supported by columns, vaults, arches or wall of the opposite house. This supporting system is depending of condition and intention of house owners that are mention above. Traditional implementation of kabaltı is generally supported by wall of the house hence, the other side supported by columns or vaults. In the case of the Urfa the kabaltı is generally supported by the vaults (13 kabaltı houses, 39%) and arches (20 kabaltı houses, 61%). (Fig. 90) On the other hand, it is disadvantages to utilizing opposite wall due to legal constrains. It might be easier to structurally to build kabaltı on the columns, if someone decides to build a kabaltı later on. On the other hand, the public right of the way is not to be impedimented by the sporting columns of the unique form.



Figure 87: The structure of the unique form

Furthermore, in the traditional built environment, after a few epoch and property owner changes the extension of the structure as cantilever, this becoming a common conception particularly in the Islamic build environment which created peculiar labyrinth formation. The main impact on the formation of the pattern is that the religious rules that emerge from the concern of privacy and also from the consideration of climatic conditions. The correlation and attachment of the components of the properties constitutes spatial continuity within the traditional pattern. According to Hakim the compact formation of the traditional pattern is due to fact that; "a neighbor has preemption right over his neighbor property" (Hakim, 1979). Consequently, the formation of the unique form is a strongest key component of urban fabric within the context of "house-façade-street". And also, the unique form is peculiar and substantial conception in order to cope with the harsh climate particularly in the deserted area.



3.6 Street-House Interaction in the Old City of Urfa.

In the old city Urfa, in a congested neighborhood, some of individuals had closed the public street by horizontal additive extension part of his house across the public street on the grounds. Consequently the public street turned into tetirbe (cul-de-sac) on one the side site of the. As a result, in order not to close the public street to the neighbors, ground floor was opened for the public and kept upper floor for private purposes. This type of approach creates interaction between house and street, and it has been a common in the traditional Islamic built environments. Consequently, it achieves spatial continuity and effective circulation network within congested traditional environments. Correspondingly, this approach provides certain physical interaction between private indoor space and public outdoor space as street.

The unique cases illustrated how this practice within the traditional Islamic settings on the physical level, refer to the cases of the public street in old city Urfa (figure; 91) which had been transformed in many cases; closed and turned into tetirbe (culde-sac) as an in-between space. Another instance is the public street and private plot subdivision plan of the old city of the Urfa (figure; 92)

In the old city of Urfa, there are numerous kabaltı cases which point to the interaction between street and house. They were the result of the practice open to the public street life and the neighbors opened the ground for the public and kept upper floor as using private part of the house, that provides certain physical interaction between street as public domain and house as private domain (figure; 93, 94, 95 and 96).

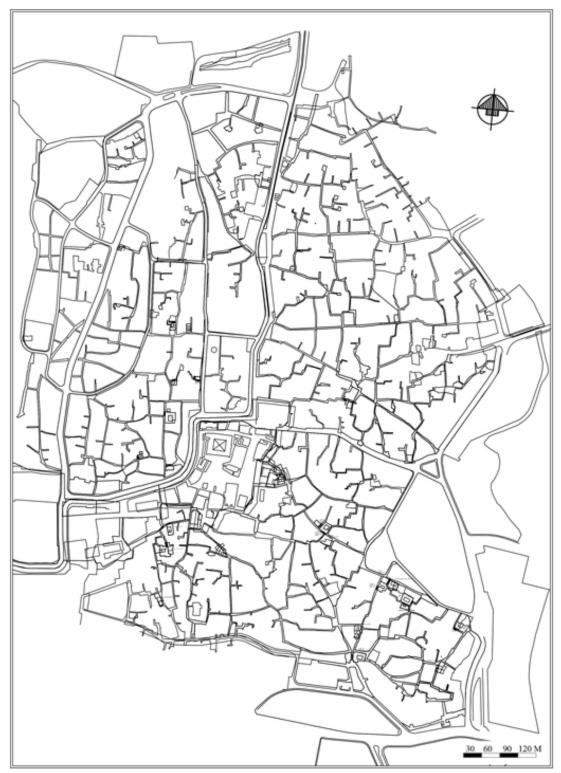


Figure 88: Street plan of the old city Urfa

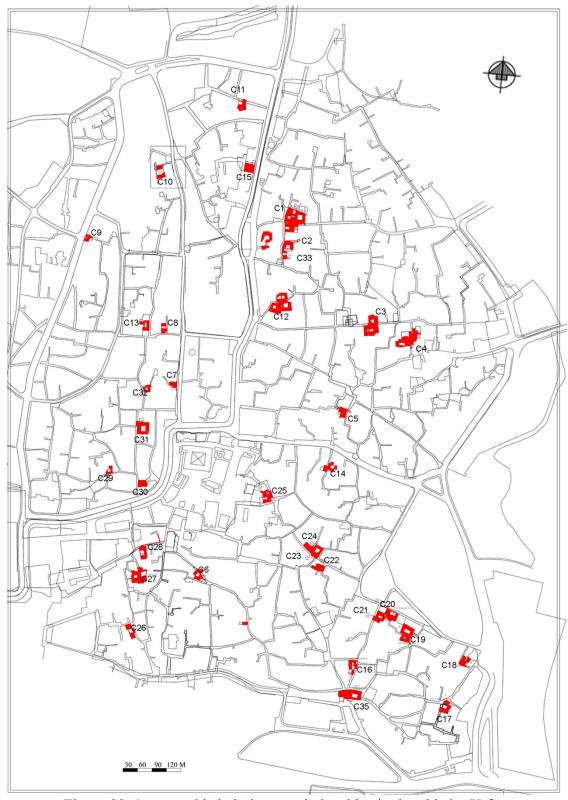


Figure 89: Street and kabaltı house relationships in the old city Urfa

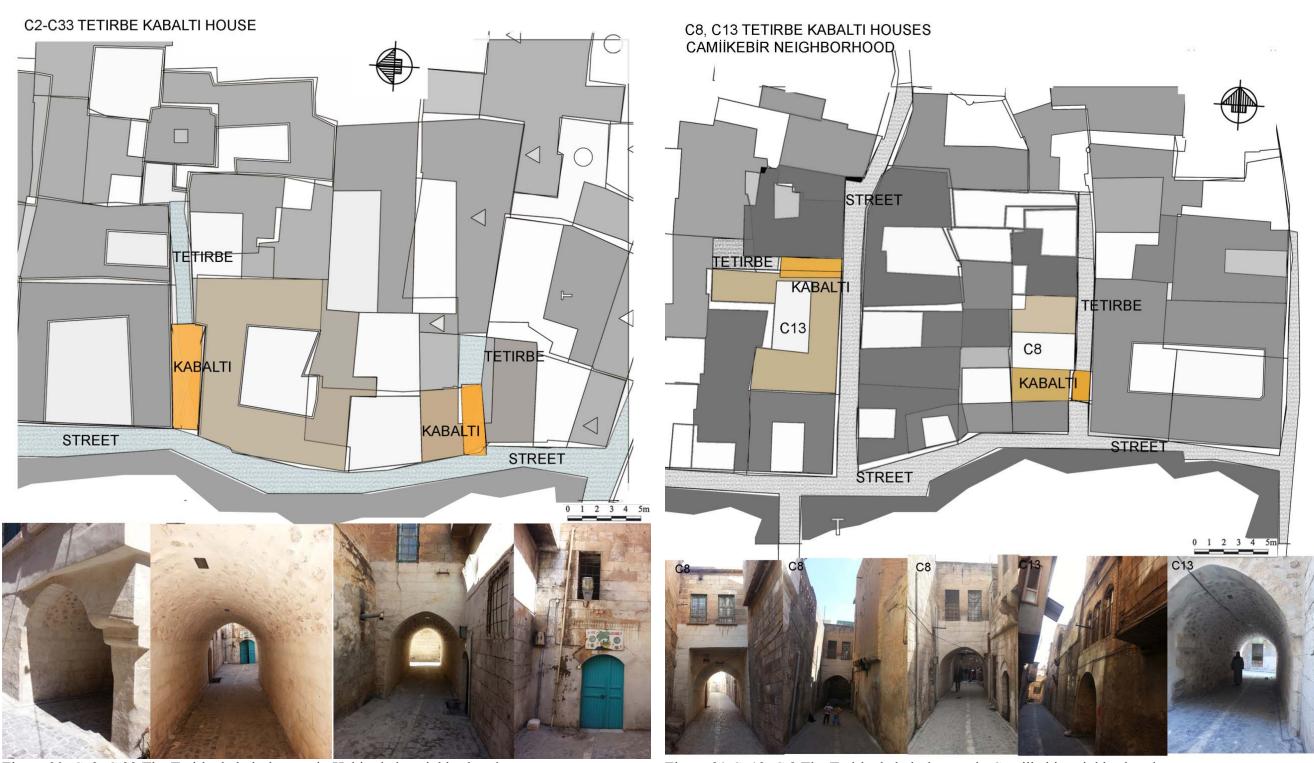


Figure 90: C. 2, C.33 The Tetirbe kabaltı houses in Hakimdede neighborhood

Figure 91:C. 13, C 8 The Tetirbe kabaltı houses in Camiikebir neighborhood

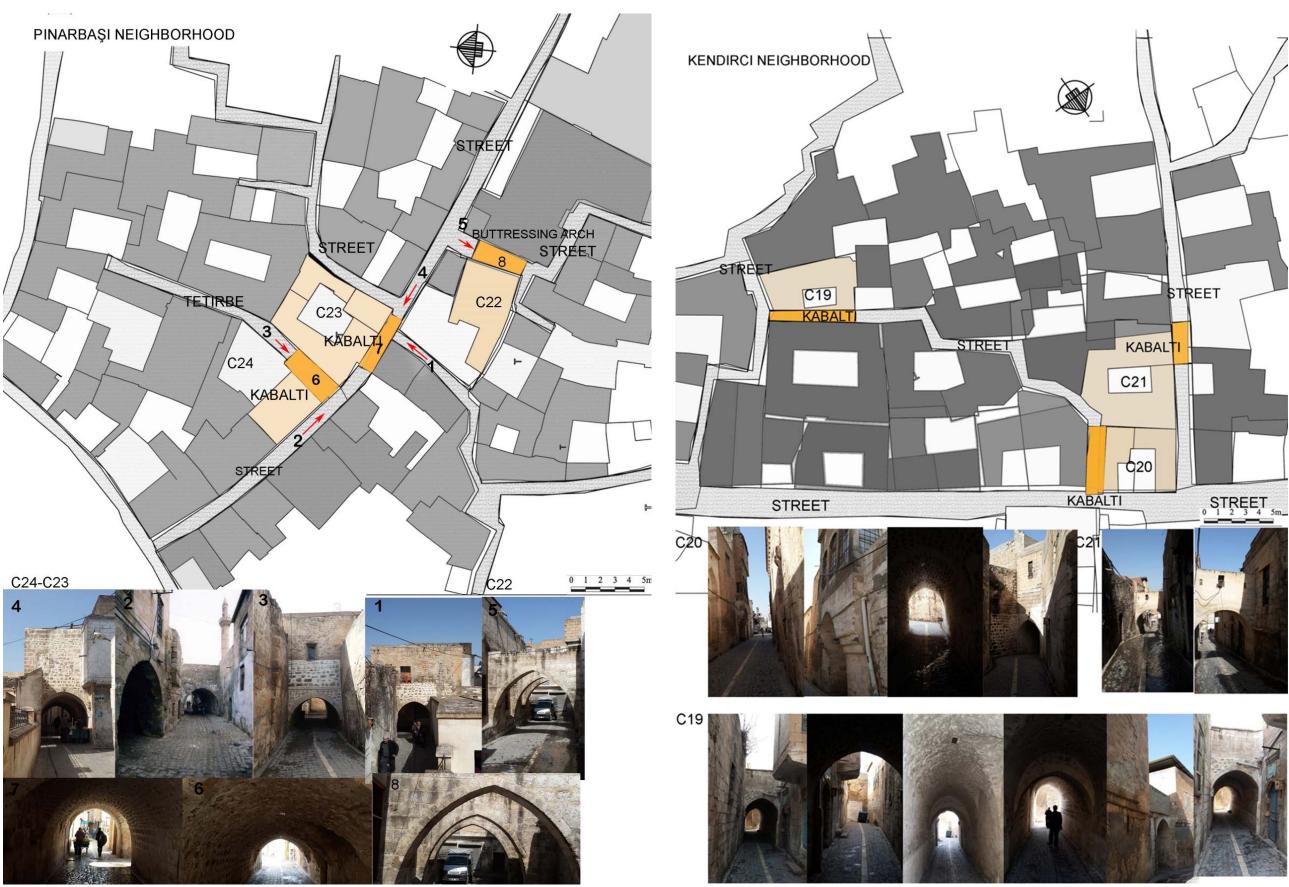


Figure 92: C. 24, C.23, C.22 The kabaltı houses in Pinarbasi neighborhood

Figure 93: C.19, C. 20, C. 21 The kabaltı houses in Kendirci neighborhood

3.7 Case Studies: Kabaltı Houses in Urfa

The kabaltı houses in the old city of Urfa are unique cases that illustrate interaction between house and street inside, and outside, public and private in architectural scale. They help achieve interdependence amongst the component of traditional built environment of Urfa.

Generally, the kabaltı space as a unique form is constructed by using overlay technique. The street width and depth was used for the formation of the upper room. It is usually around 5-10 meters long and 3-6 meters wide. Kabaltı space was constructed by utilizing pointed arch, low arches, cross vault, and barrel vaults. In the traditional Urfa houses, these structural elements were used in order to define the transitional space (entrance way) and in-between space (fina). Consequently, the transitional space is locally named as kabaltı. Due to the geometry the upper space, it is resembles to kap (pot), whereas the space on the ground floor is locally named as kabaltı (under pot).

In the old city of Urfa, there are thirty four kabaltı houses (see table 6). These kabaltı houses are located in different parts of the old city fabric. (Fig. 97) Between these kabaltı houses seven houses have been selected based on the availability of architectural drawings (plans, sections, elevations).

Under the scope of the research, each kabaltı houses have been analyzed according to following categories:

General information: includes location, side loyout and indentity ans social starus of the owner.

Space organization: contain internal space zoning; indoor spaces, outdoor space and in-between space referring to relation to each other and the privacy concern.

Interaction of public, private and in-between space: includes internal external spaces zoning; according to spatial interaction between public, private and in-between space.

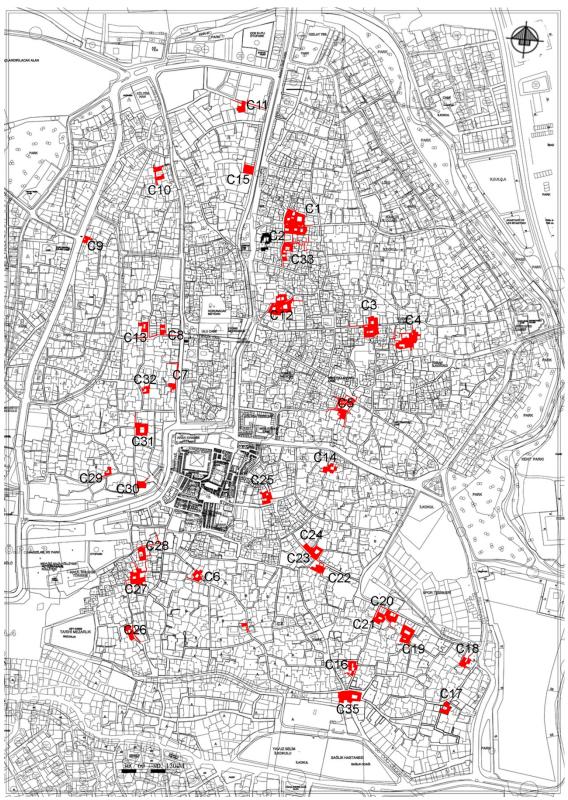


Figure 94: The location of the kabaltı houses in the old city of Urfa by Author (source of map: Urfa Municipality)

Table 5: List of the kabaltı houses

Table 5: List of the kabalti houses								
Case	Name	Location	Туре	Physical	Group/			
S			2775	Interaction	quality			
C1	Hac Ebo Kabaltı	Gul neighborhood 2940 st	Kabaltı hosue	Street	Registration			
		D' l			ļ <u> </u>			
C2	İbrahim Halil	Bicakci neighborhood	Kabaltı house	Street	Registration			
	Güngör	1251st.	77 1 1 1					
C3	Kilic Kabaltı	Gul neighborhood 2879 st	Kabaltı house	Street	1.Group St			
C4	Kabaltı	Kurtulus neighborhood, 1057st	Kabaltı house	Street	2.Group St			
C5	Etune kabalti	Tepe neighborhood 2869	Kabaltı house	Street	Registration			
	Kalaboynu							
	Kabaltı	st.						
C28	Kurtulus	Kurtulus neighborhood,	Kabaltı house	Street	1.Group St			
	Kabaltı	Gulluoglu street						
	Kefkerler	Yusufpasa neighborhood,	Kabaltı house					
C6	Kabaltı	Sarac street	Buttressing	Street	1.Group St.			
	Salih avci	Camiikebir neighborhood,						
C7	Kabaltı	1356	Kabaltı hosue	Cul-de-sac	-			
		Camiikebir neighborhood,						
C8	Kabaltı	1350	Kabaltı hosue	Cul-de-sac	Registration			
C9	Kabaltı		Kabaltı hosue	Stugat				
C9		12 eylul street	Kabani nosue	Street	-			
C10	Emine Tekok	Kadiroglu	Kabaltı hosue	Cul-de-sac	Registration			
	Kabaltı	neighborhood,1371st						
C11	Turku konagi	Yusufpasa neighborhood, 921st	Kabaltı hosue	Street	Registration			
C12	Yorganci	Camiikebir neighborhood,	Kabaltı house	Street	Registration			
	Kabaltı	994 yorganci st.						
C13	Kabaltı	Camiikebir neighborhood,	Kabaltı house	Cul-de-sac	D			
		1353			Registration			
C14	Kabaltı	masarkiye street 1198	Kabaltı	Street	Registration			
		Yusufpasa neighborhood,						
C15	Kabaltı	915st	Kabaltı house	Cul-de-sac	Registration			
		Kendirci neighborhood,						
C16	Kabaltı	2960st	Kabaltı hosue	Street	Registration			
		Kendirci neighborhood,						
C17	Kabaltı	2978st.	Kabaltı house	Street	Registration			
	II D	Kendirci neighborhood,						
C18	Hac Recep	2976st.	Kabaltı house	Cul-de-sac	Registration			
	Isgurdu k.							
C19	Kabaltı	Kendirci neighborhood,	Kabaltı	Street	Registration			
		2969st.						
C20	Kabaltı	Kendirci neighborhood,	Kabaltihouse	Street	Registration			
		2969st.		<u> </u>	8			
C21	Kabaltı	Kendirci neighborhood,	Buttressing arch	Street	_			
C21		2978st.						
C22	Kabaltı	Turkmeydani	Buttressing arch	Street	2.Group St			
		neighborhood. 1187st						
C23	Kabaltı	Pinarbasi neighborhood,	Kabaltı house	Cul-de-sac	Registration			
		1190 st .						
C24	Kabaltı	Pinarbasi neighborhood,	Kabaltı house	1_				
		1192 st .		Street	Registration			
	1	/ - ·		I	I .			

C25	Barutcu hani	Pinarbasi neighborhood,1201 st	Kabaltı house	Street	2.Group St
C26	Kabaltı	Kurtulus neighborhood, 1018st	Kabaltı Kabaltı house	Street	2.Group St
C27	Kabaltı	Gul neighborhood 2878 st.	Kabaltı house	Cul-de-sac	Registration
C28	Kefkerler	Yusufpasa neighborhood,	Kabaltı house	Street	1.Group St.
	Kabaltı	Sarac street	Buttressing		
C29	Kabaltı	Bicakci neighborhood 1253st.	Kabaltı house	Cul-de-sac	2.Group St
C30	Kabaltı	Bicakci neighborhood 1250st.	Kabaltı house	Street	-
C31	Kabaltı	Hakimdede neighborhood , 935st.	Kabaltı house	Cul-de-sac	2.Group St.
C32	Kabaltı	Camiikebir neighborhood, Nabi street	Kabaltı house	Cul-de-sac	1.Group St
C33	Kabaltı	Hakimdede neighborhood , 964st.	Kabaltı house	Cul-de-sac	2.Group St.
C34	Kabaltı	Tepe neighborhood, opposite Arabi mosque	Kabaltı house	Street	Registration

3.7.1 Case No 1: Hac Ebo Kabaltı House

General information:

The Hac Ebo Kabaltı house is one of biggest kabaltı houses in the traditional built environment of Urfa. It is located in the Gul neighborhood which is a sloping site in the old city of Urfa. The house has been restored in 2015 by the family members.



Figure 95: Figure ground map of Hac Ebo Kabaltı house

One of the main characteristic of Hac Ebo Kabaltı house is that street as public domain pass through under building. In fact, in the medieval Islamic built environments emerging of private property within congested organic urban fabric, the relation of the property and street becomes problematic. For example, in case of Hac Ebo Kabaltı house; street passes through from private property. According to Islamic jurist, the property owner has right of the full use of owner's property without creating any obstruction to public traffic. In the Hac Ebo kabaltı house case, the house is bridging the right of way without hindering the public right of way. Both side of street belong the house owner in other word street pass through plot. (Fig. 98) Thus, the house owner constructed house both side of street by using kabaltı to provide public right of way throughout his property without any obstruction.

Space organization:

It consists of two main floors and one intermedia floor. The main floor of the house is the first floor due to main courtyard located on this floor. (Fig. 99) The service spaces and rooms (başoda) are located in that floor. The visual interaction between the street life and indoor private are achieved by the opening of başoda.



Figure 96: The courtyard of Hac Ebo Kabalti house

The connection between ground floor and the first floor which is the main floor is achieved by stair case in the middle of the courtyard. (Fig. 99) Eyvan, as an inbetween provides certain connection between indoor room and outdoor courtyard. There is striking spatial hierarchy in the formation of Hac Ebo Kabaltı house which is the outcome of spatial functional and climatic requirement of the space. Thus, it creates transition in-between indoor and outdoor space. (Fig.100)

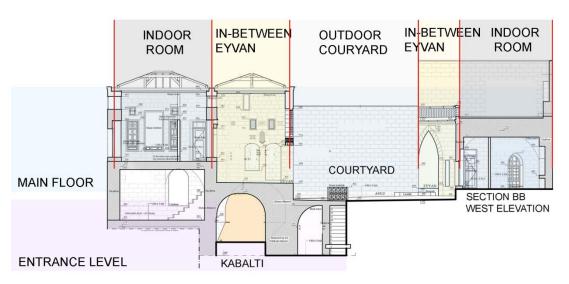


Figure 97: The striking spatial hierarchy in the organization of the Hac Ebo Kabaltı house

The first floor is extended toward other side of the street. The ground floor is divided by street in to two parts. In-between them, there is the fina space which is utilized as part of the ground floor. (Fig.102)

Interaction of public, private and in-between space:

The ground floor of the house formed as a transitional element that creates certain linkage between the outdoor community life and indoor domestic life. The ground floor extends toward outdoor space. The fina as an in-between space was as utilized as part of the ground floor. In fact, the full utilization of this in-between space as part

of the ground floor does not hinder the public right of way. Consequently it is creating certain physical interaction with the neighborhood structure.

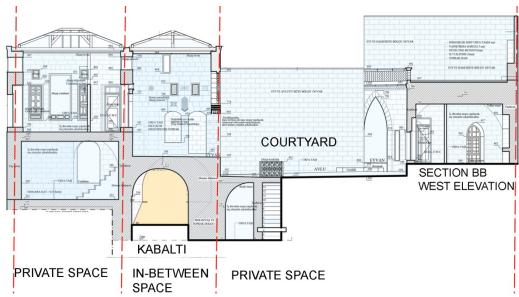


Figure 98: The house extent other side of the street by interlocking and interpenetration

According to the informal interviews with the inhabitant, it is mostly used by in the summer season by the old members of the family and children. It became a socialization space for the old family memberd to gather and communicate with neighbors. It achieves climatic comfort by creating shade and the gentle breeze allows people to enjoy the environment.

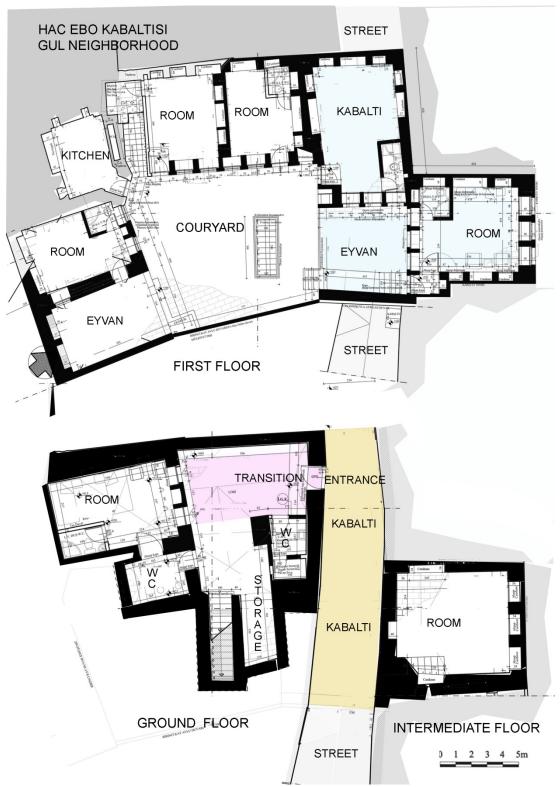
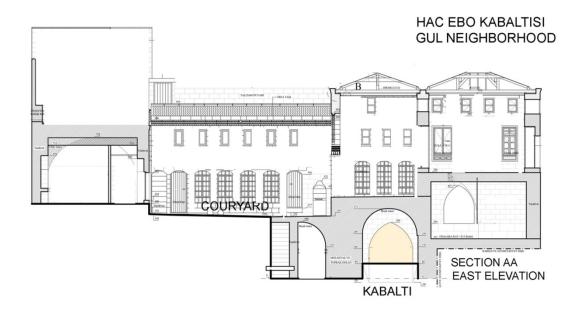


Figure 99: The plan of the Hac Ebo kabaltı house



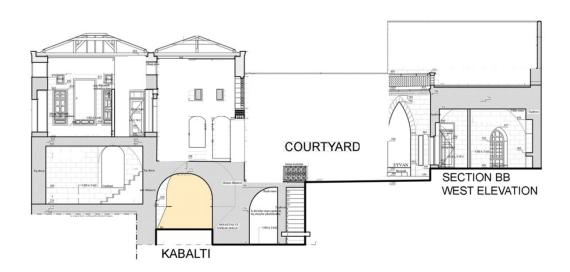




Figure 100: Section and elevation of the Hac Ebo kabaltı house

3.7.2 Case No 2: İbrahim Halil Güngür Kabaltı House

General information:

The İbrahim Halil Güngür Kabaltı house is located in Bicakci neighborhood. It is settled on the gently sloping site. The house has been projected to restore by architect Şükran Güzel.



Figure 101: Figure ground map of İbrahim Halil Güngür Kabaltı House

Space organization:

The house consists of two main floors and half under ground floor used as storage. The service space and some of the başoda are located at the ground floor. (Fig.108) According to the informal interview with the inhabitants, the ground floor is usually utilized by female domain. It is used by females and their female guests. On the other hand, the upper floor is used usually by men thereby service spaces are located on the upper floor.



Figure 102: Views of İbrahim Halil Güngür Kabaltı House

Thus, the house has two separated entrance; one of them which is usually used by female guests has transitional space between the interior private space and the exterior public space. The second one which is the main one is used by family and male guest. Referring to the informal interview with inhabitant this in-between space as the kabaltı is utilized as a welcoming space to meet the guests. Thus, in-between space utilized as part of the entrance hall as a transitional space, interior private and exterior public space. Additionally, it is utilized by inhabitants as communal space to gather neighbors communicate without hindering the public right of the way. (Fig. 106)

Interaction of public, private and in-between space:

Furthermore, at the upper floor the cikma is extended to the other side of the street as a unique form. This extension is achieved by interdependence of the structure which is at the other side of street, and used neighbor property. It achieves certain physical interaction with the street. Besides, it has interdependence with neighborhood structure. Thus, it creates certain interaction in-between private and public space.

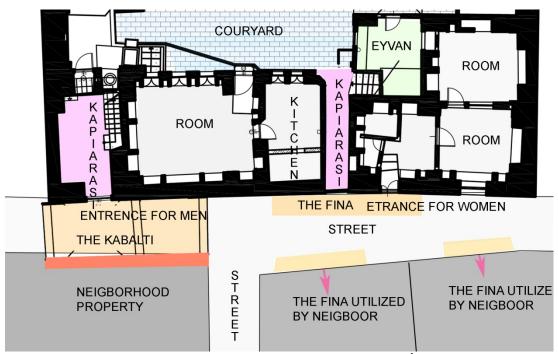


Figure 103: Zoning of the ground floor plan of İbrahim Halil Güngür Kabaltı House

The kabaltı room is used by inhabitants as a çardak room which is usually used by men. The room has scenic view of the street as public space. It creates a linkage between private interior space and public space. Thus, it produces visual interaction with the community live. Additionally, at the ground floor, the kabaltı, as inbetween space becomes the extension indoor domestic life as a place to entertain the guest and communicate with neighborhood. As a result, it creates certain connection between indoor domestic life and outdoor community life. (Fig.107-108)

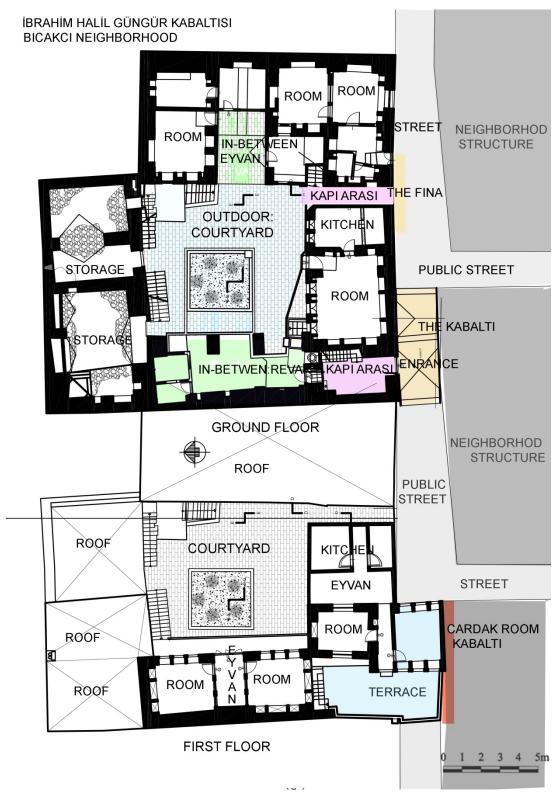
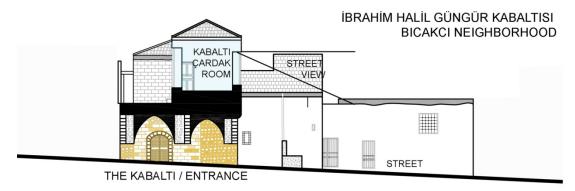
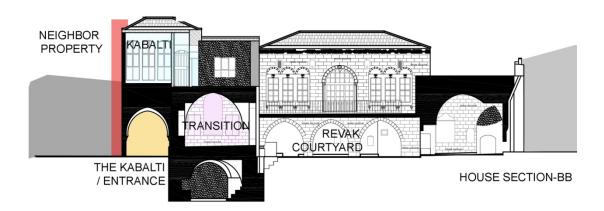
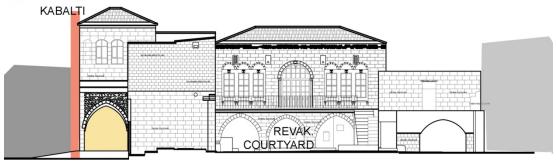


Figure 104: The plans of Ibrahim Halil Gungur Kabaltı House



STREET SECTION-AA





THE KABALTI / ENTRANCE

SOUTH ELEVATION



Figure 105: The section and elevation of Ibrahim Halil Gungur Kabaltı House

3.7.3 Case No 3: Kilic Kabaltı House

General information:

The Kilic Kabaltı House is located in Gul neighborhood. It located near the monumental Islamic religious building which is Balıklı Göl and Dergah mosque. The house is also close to the traditional commercial center. The house belongs to the Kiliclar family. It is settled on gently sloping site. The Kilic Kabaltı house is one of the well preserved traditional houses in that neighborhood. The house has been restored by the family members.



Figure 106: Figure ground map of Kilic Kabaltı House

Space organization:

The house has a characteristic introverted plan organization. The main façade of the houses is oriented toward the courtyard. Consequently, the kabaltı plays major role in order to create a linkage to connect indoor private domain and outdoor public domain.



Figure 107: Views of Kilic Kabaltı House

The house consists of two main floors. It has a rectangular courtyard with a U shape plan organization. It is oriented to south direction. The main floor of the house is the first floor where the başoda and çardak room are located. At the ground floor, service space and some of the başodas are located. At the ground floor, a large room which only opens from street façade is used as a shop. The house has only one entrance. The kapı arası is a transitional element which provides connection between the fina as in-between space and interior private domain.

Interaction of public, private and in-between space:

In addition, the entrance door of the house which is located on the other side of the street is located directly opposite to each other. According to the informal interview with inhabitants, the additive kabalti room was placed in order to describe the kabalti space of the both houses which are located opposite to each other. Thereby, the neighbor gives permission to build the kabalti room on his house wall.

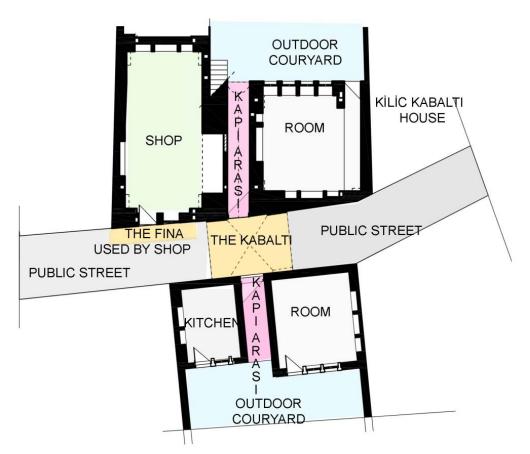


Figure 108: Zoning of the ground floor plan of Kilic Kabaltı House

Consequently, at the ground level, space is utilized by both mutual neighbors as common space to gather together and secure space for playing children. In other words, provide interaction with community life. Also, it becomes an important place before entering the private realm. They are mutually responsible to maintain the inbetween spaces without hider the public right of way. On the other hand, it archives spatial continuation within urban fabric.

However, at the upper floor the kabaltı room is used as part of Kilic Kabaltı house. They utilize the kabaltı room as çardak room. Thus, this unique form creates visual and physical interaction between private indoor life and the street life.

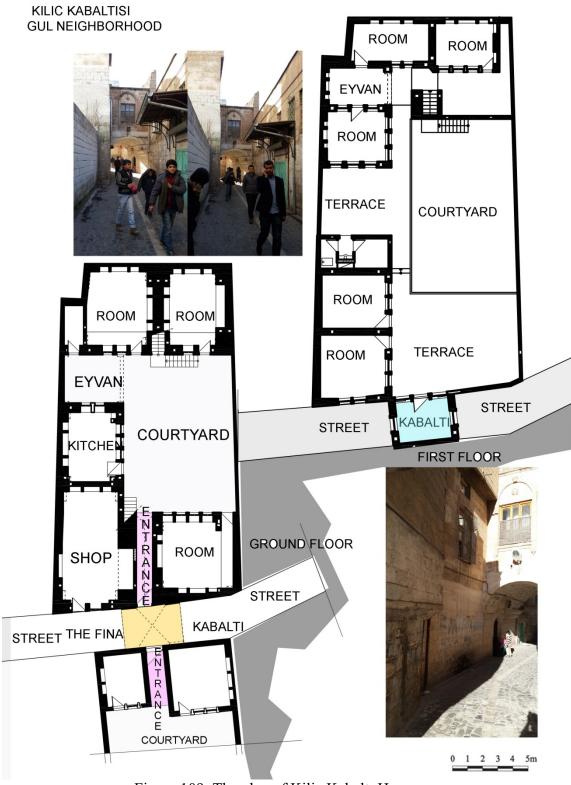
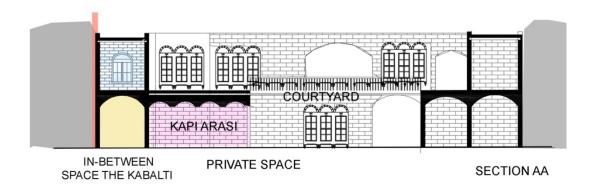
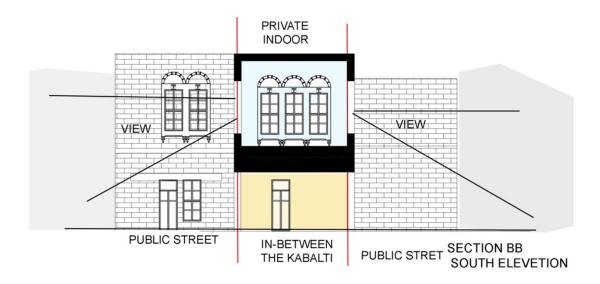


Figure 109: The plan of Kilic Kabaltı House





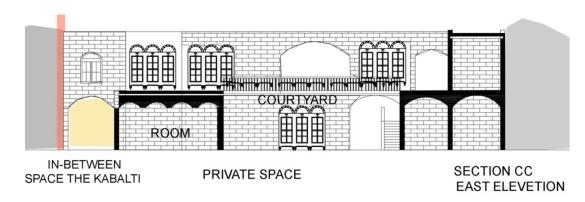


Figure 110: The section and elevation of Kilic Kabaltı House

3.7.4 Case No 4: Etune Kabaltı House

General information:

The Etune Kabaltı house is located in Tepe neighborhood. It is settled on slope area. Generally, Muslims live in Tepe neighborhood. The house belongs to Arab familiy. The social status of family is low. The name the house derives from the family as Etune.



Figure 111: Figure ground map of Etune Kabaltı House

Space organization:

The house has an introverted plan organization, and has two floors where the main floor is on the ground floor. It consists of two başoda and one service space. The house has a rectangular outdoor space called hayat. The other indoor space is located both sides of the hayat. (Fig. 116) The first floor only consists of kabaltı unit which has a room. It is located on northern side of house as an additive unit.

Interaction of public, private and in-between space:

Referring to the in formal interview with the inhabitants, the house does not have adequate space if the family grows to be a large family thereby they need extra space for requirements of domestic life. However, the house is not able to grow as building the second floor due to weak structure is not possible. Consequently the house developed horizontally by adding additional space which is the space spanning the street as kabaltı. In the current building terminology this structure is "air-right structure". The structure of the kabaltı is barrel vaults they do not use the wall of the neighbor. They use the space belong the street attaching the neighbor's wall where there is no opening of opposite side and it not utilized as fina by neighbors. The unique form does not hinder the public right of way. Thus, this extension achieved by interdependence of the structure which is other side of street by using neighbor property. It has achieved certain physical interaction with the street. Besides, it has interdependence with neighborhood structure. Thus, it creates certain interaction inbetween private and public space. (Fig.117)



Figure 112: Views of Etune Kabalti House

At the ground floor, the kabaltı space is utilized as part of the fina. The kabaltı room has a scenic view of the public street live. It is used as a family living room.

Therefore, it is covered by wooden lattices in order to protect the family life from the public gaze. (Fig.115)

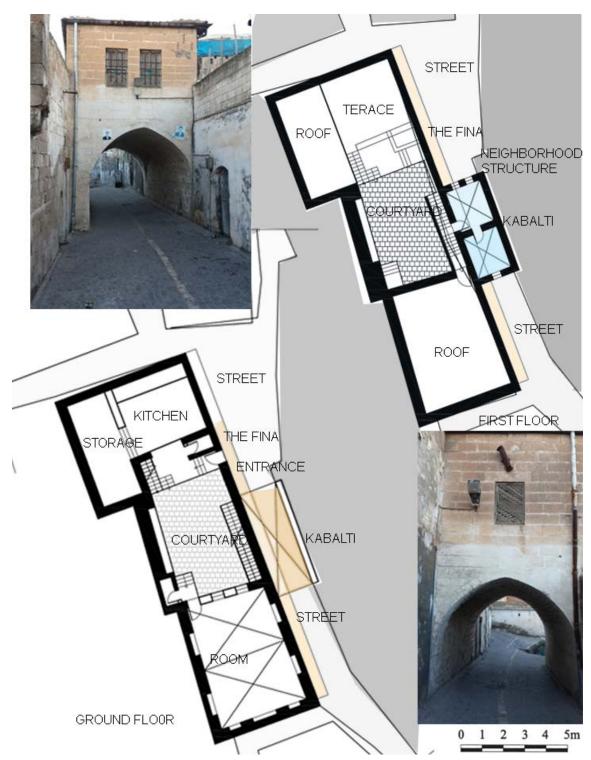
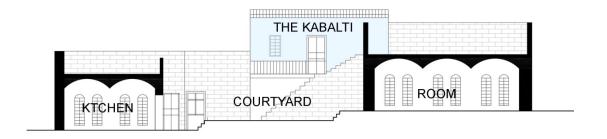
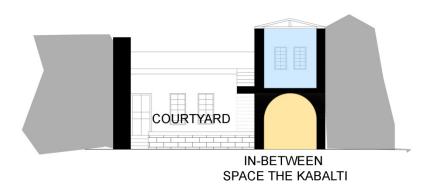


Figure 113: The plans of Etune kabaltı House





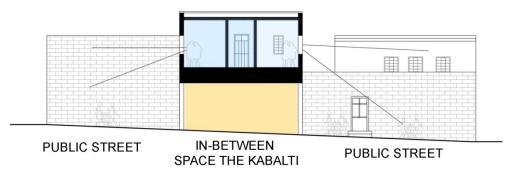


Figure 114: The sections and elevations of Etune kabaltı House

3.7.5 Case No 5: Hac Recep Isgurgu Kabaltı House

General information:

The Hac Recep Isgurdu Kabaltı house is located in Kendirci neighborhood. It is settled on flat site. Generally, Muslims, Jews and Christians live together in Kendirci neighborhood. Referring to the informal interviews with the occupants, the house was constructed by an Armenian family. After the Armenian immigration, the house has been used by a Muslim family.



Figure 115: Figure ground map of Hac Recep Isgurgu Kabaltı house

Space organization:

The house consists of only one main floor and half under ground floor. It has a rectangular hayat. The indoor space organized as U shape plan organization. The service space and başoda are located on the ground floor. There is only two başoda (room-eyvan-room). They are placed at east side of hayat. The service spaces as kitchen, barn, wc, placed south side between the kapı arası. (Fig. 120) There is only one room which is kabaltı room at upper floor.

Interaction of public, private and in-between space:

According to the informal interview with inhabitants, it was constructed as an additional space. It is used as a çardak room which usually used by male and male guest. Besides, According to the orientation of the kabaltı, it gets more benefit of western prevailing wind in summer. At the summer, it is used by the other family due to climatic comfort of the çardak room.

Additionally, the opening of the çardak room only is oriented towards exterior public domain. Consequently, it plays an important role in the formation of the introverted house to create a link between the most public and private, interior and exterior.



Figure 116: Views of Hac Recep Isgurgu Kabaltı house

On the other hand, at the ground level of the kabaltı space is not utilized by the inhabitant because it is located south part of the building. The space alongside the exterior west wall which is the main entrance door located utilized as the fina space which connected the transition zone as the kapı arası. The structure of the kabaltı is barrel vault. They do not use the wall neighbor. They use the space belong to the street attaching the neighbor wall where there is no opening to opposite side and it is not utilized as the fina by neighbors. (Fig.121)

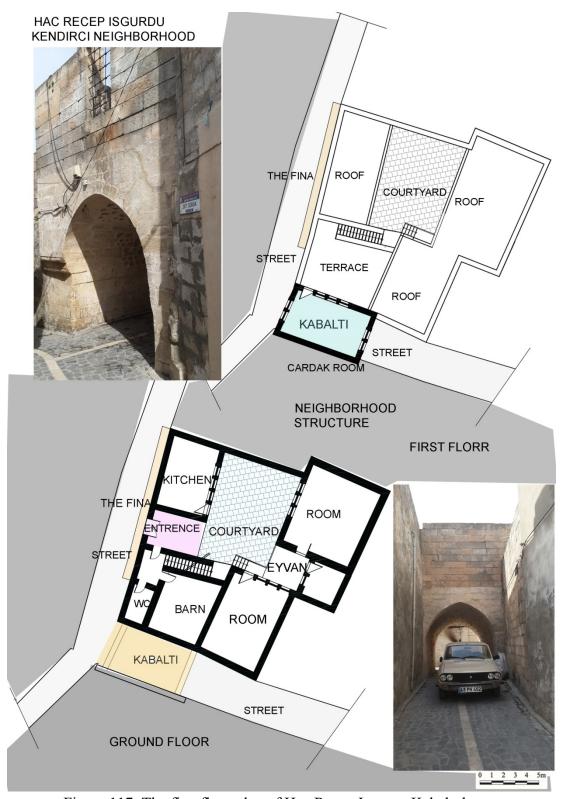
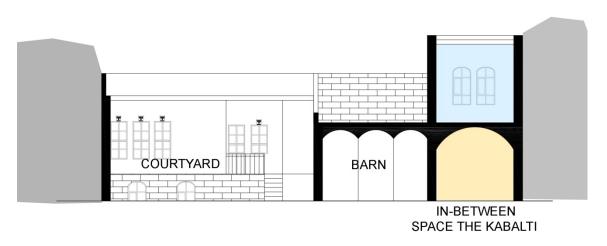
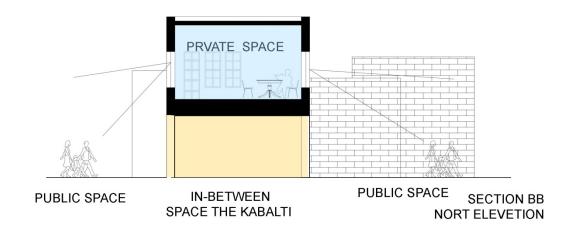


Figure 117: The first floor plan of Hac Recep Isgurgu Kabaltı house



SECTION AA



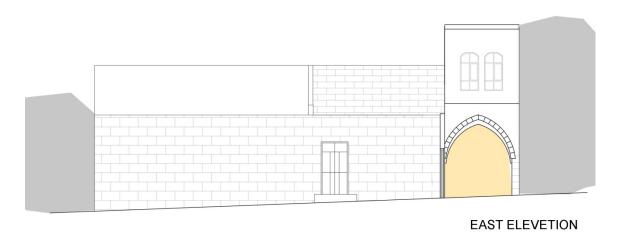


Figure 118: The section and elevation of Hac Recep Isgurgu Kabaltı house

3.7.6 Case No 6: Kurtulus Kabaltı House

General information:

The Kurtulus Kabaltı house is located in Kurtulus neighborhood. The house is located on the flat area of old city of Urfa. It interacts with the Güllüoglu Street. Generally, both Christians and Muslims live together in Kurtulus neighborhood. The house was built by Muslim family. It was restored by family members.



Figure 119: Figure ground map of Kurtulus Kabaltı House

Space organization:

The house consists of two main floors. There is a rectangular courtyard and other spaces are placed in the courtyard. The service spaces and two başodas are located at the ground floor, and upper floor has only two başodas and a kabaltı unit.

The total space of the house is not adequate for a large family. The male amily members married, they need extra space to live in the house. Therefore, the house grew vertically only two floors. Thus, it grew horizontally by spanning to the street

in order to fulfil the need of extra space. The additive extension is a unique form and an important unit of house which consists of room-eyvan-room. (Fig. 124)

Interaction of public, private and in-between space:

The additive extension unique form is link two houses on the opposite side of the street as interdependence between house to house. In the other ward, it provides spatial continuation in-between between two houses. The opening of the additional unit provides the scenic view of the street. (Fig. 124)



Figure 120: The scenic view of Kurtulus Kabaltı House

As a result, it creates certain visual interaction between private domain and the public street life. The in-between space which is described by the kabaltı unit connected indoor private space as a threshold.

Furthermore, the entrance door of the house which is located other side of the kabaltı space is opposite to each other. Referring to the informal interview with occupant the additive kabaltı room was placed in order to describe the kabaltı space of the both houses which are opposite to each other. (Fig. 124) Thus, at the ground floor both houses get benefit of the kabaltı space.

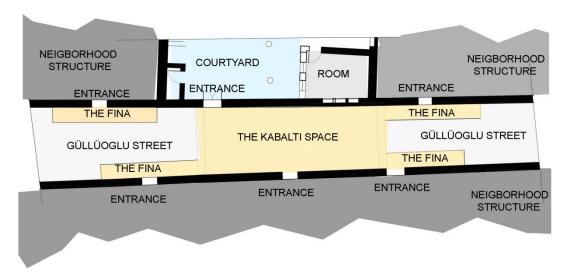
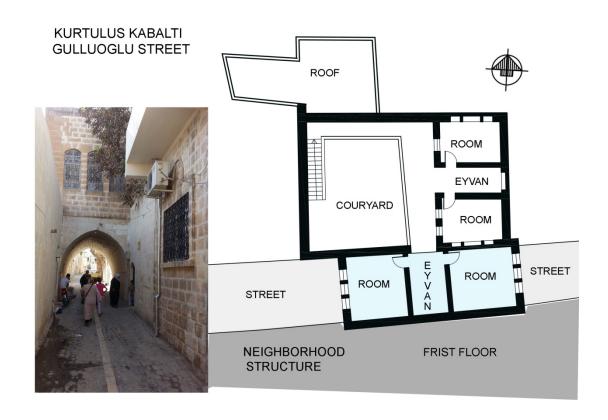


Figure 121: Zoning of the ground floor plan of Kurtulus Kabaltı House

At the ground level, space is utilized by both mutual neighbors as common space to gather to together and secure space for playing children. In other words, it provides interaction with community life. It also becomes an important place before the entering the private realm. Inhabitants are responsible to maintain of the kabaltı space and fina space without hindering the public right of way. Thus, it archives spatial continuation within urban fabric.

The structure of the kabaltı unit is barrel vaults. It is constructed on the neighbor's plot. Thus, the kabaltı unit describes the fina space which belong the neighbors. It is utilized as a common outdoor space as socialized space. It provides interaction between inhabitant and the public.



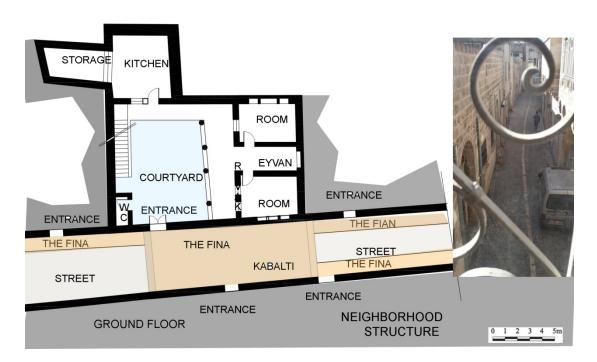
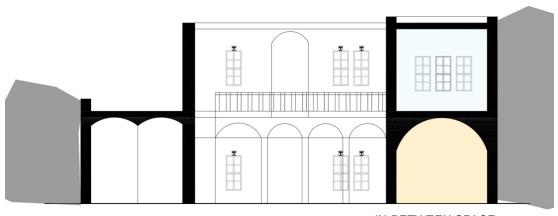
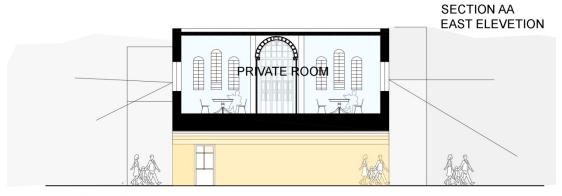


Figure 122: The plans of Kurtulus Kabaltı House



IN-BETWEEN SPACE THE KABALTI



PUBLIC STREET

IN-BETWEEN SPACE THE KABALTI PUBLIC STREET SECTION BB



Figure 123: The sections and elevations of Kurtulus Kabaltı House

3.7.7 Case No 7: Salih Avci Kabaltı House

General information:

The house is located in Camiikebir neighborhood. The house is located on the flat area. It is interacted with 12 Eylül Street and teturbe (cul-de-sac). Generally, both Christian and Muslim live together in Camiikebir neighborhood. It was restored by house owner Salih Avci.

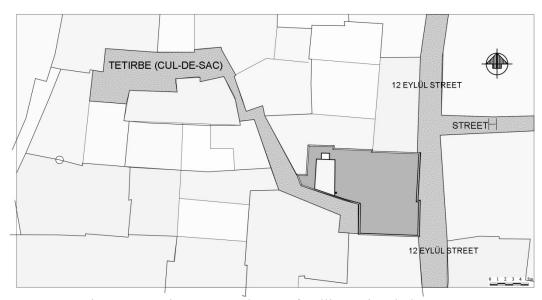


Figure 124: Figure ground map of Salih Avci Kabaltı House

Space organization:

The house consists of two floors. The ground floor is totally used as an income source. It is rented as a shop. The upper floor is used as a living space. It consists of two başodas and service spaces. Both the ground floor and first floor have separated entrance. Thus, the family does not use the ground floor, both fina space which is in front of the shop and the kabaltı space is utilized by the shop owner. (Fig 128)

Interaction of public, private and in-between space:

The teturbe pass through the properties which belongs to the kabalti house owner; Salih Avci. (Fig. 129) In order to implement the right of accessibility; so that neighbors are able to access their property he gives way through his property by forming the kabaltı structure. Adjacent neighbors have the right to access and servitude which is depended on the particular formation of the site and the buildings. Accessibility of neighborhood is achieved by creating short-cut through adjacent neighboring plot. The implementation of this right has been observed in medieval Islamic cities as Hagg al-Irtifgaq.



Figure 125: View of Salih Avci Kabaltı House

Both the fina space and kabalti space are utilized by shop owner to exhibit his products in order to sell them. However, the shop owner does not hinder the accessibility of public to enter the teturbe. (Fig.128)

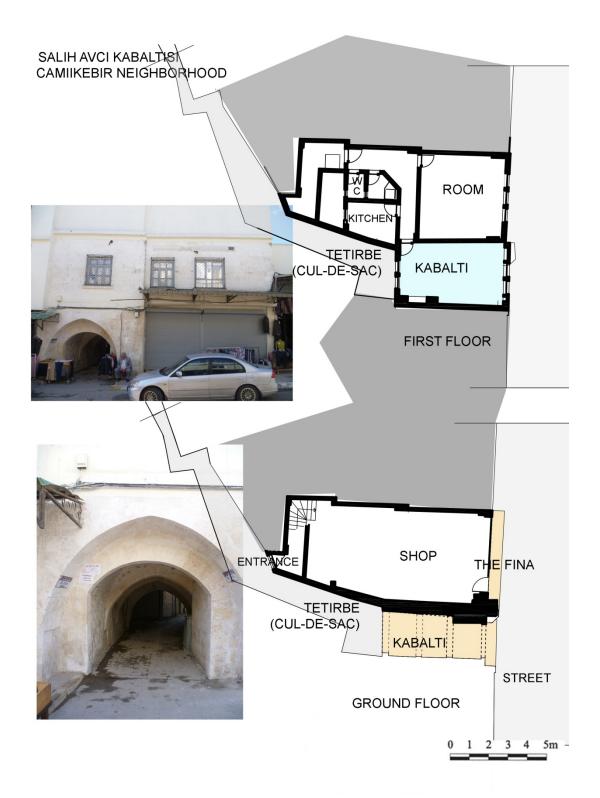


Figure 126: The plan of Salih Avci Kabatis House

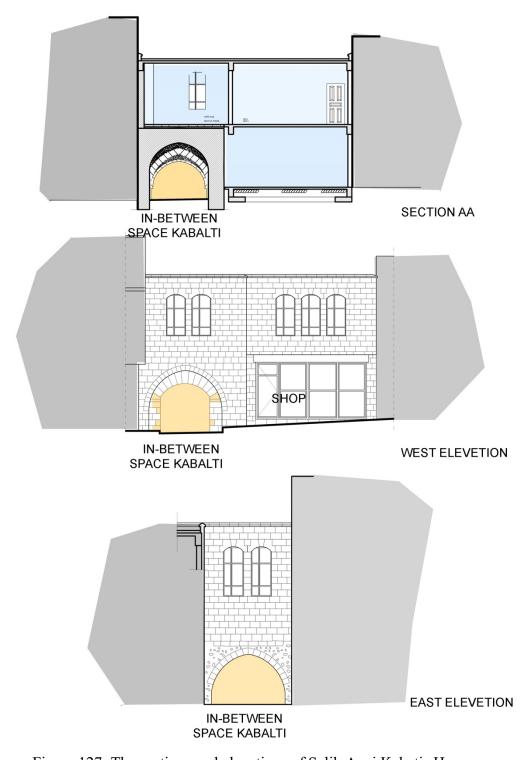


Figure 127: The sections and elevations of Salih Avci Kabatis House

3.8 Findings and Discussions

The study of public, private and in-between space of traditional built environment of Urfa provides a significant outcome on the environmental role these space which are missing from today's contemporary built environments which should be adopted form traditional built environments.

In the traditional built environment of Urfa, public and private right are clearly articulated and understood by the community. Correspondingly these rights have certain impact on design decisions that affect the formation of the traditional Urfa houses and its components which are çıkma and kabaltı.

In fact, design decisions are derived from the history and value system of the community. People who live in their neighborhoods made these design decisions which are affecting the interdependence and interaction of proximate built environments.

Referring to Hakim (1986) the norms and principles that indicate public and private rights finding from the case studies by asking questions to the inhabitants are that:

- Right for and adjacent neighbors to access and servitude which is depended
 on the particular formation of the site and the buildings. Accessibility of
 neighborhood is achieved by creating kabaltı form to provide short-cut
 through adjacent neighbors plot.
- Right of the full use of one's property which include the right horizontal extension for increase useable space as kabaltı room bridging the right of way without creating any obstructions to traffic and the public right of way.

- Right for utilizing a section or all part of one's property on behalf of creating
 or providing income such utilize does not make harm to the neighborhood
 and the public right of the way.
- Inhabitants who utilize in-between space as fina space or kabaltı space
 responsible to keep clean and maintain without creating any obstructing the
 public tight of the way by the inhabitant.

Furthermore, the method and way to build a kabaltı that indicates the interdependence and interaction between house-house findings form the case studies as:

- If a person's plot extent to other side of street or street passes through plot may build a kabaltı.
- If a person get permission from neighbor to use outer wall form opposite side
 of street in order to support the kabaltı or it can be supported to build columns
 or wall to adjacent neighbor's wall which is opposite side of street without
 hindering the public right of way.
- If two neighbors who own building opposite each other across the street both of them may build two or more than two adjacent kabaltı as two houses interlock and interpenetrate to each other.

Space organization: as it is seen in cases organic urban formation characterized the traditional Urfa houses. There is certain spatial hierarchy in organization of the traditional Urfa houses. The most private room links with eyvan as in-between space to create the most important unit in traditional Urfa houses. This unit organized

around courtyard as private outdoor space. In-between the public street and the private courtyard there is certain transition space as kapı arası (entrance way).

Generally, the kapı arası connect witht the fina space or the kabaltı space. In fact, the kabaltı space has hybrid character between the private and public space. It is generally act as mediator space the closest public space. Both the fina and kabaltı space are protect the territoriality and the privacy of the traditional Urfa houses.

The Interaction of public, private and in-between space: according to derived from the case studies the kabaltı space as a negotiation zone in-between street and house provides certain transition between public and private space, in the meantime it creates a dynamic interaction with public space. The kabaltı form is the outcome of the mutual dependence of house-to-house. Thus, the interaction between indoor and outdoor, private and public space are shaped totally according to the mutual dependence of the house and the built environments.

The kabaltı and cumba form the main body of traditional Urfa houses plays an important role to create private space with certain view of the public space. The spatial boundary between the traditional Urfa houses and street becomes means of communication that provides interaction between public and private domain. In addition, in-between space such as the fina and kabaltı space establish interaction realm in three dimensions between private and public realm.

Table 6: Typology of the Kabaltı houses

Type 1		Type 2		Type 2						Type 4				
Frivate Space Space Street	Private Space Private Space	Private		Private	Private Space Private Space Street									
Location Picture	Location	Picture	Location	Picture	Location	Picture	Location	Picture	Location	Picture	Location	Picture	Location	Picture
Yusufpasa neighborhood, Sarac street	Camiikebir neighborhood, Street:1350		Gul neighborhood, Street: 2940		Hakimdede neighborhood, street: 935		Kurtulus neighborhood, street: 1018		Kadiroglu neighborhood, street:1371		Kendirci neighborhood, street: 2978		Pinarbasi neighborhood, 1190st	
Camiikebir neighborhood, 994 yorganci st.	Camiikebir neighborhood	0	Kendirci neighborhood		Hakimdede neighborhood, street: 935		Camiikebir neighborhood, street:1356		Yusufpasa neighborhood, street: 92		Kendirci neighborhood, street: 2976	CS . SS	Tepe neighborhood 2869 st.	
			Kendirci neighborhood, 2969st.		Kurtulus neighborhood, Gulluoglu street		Camiikebir neighborhood, street:1350		Yusufpasa neighborhood, street:921		Kendirci neighborhood, street:2969		Gul neighborhood 2879 st	
			Gul neighborhood 2878 st.		Kurtulus neighborhood, street:1057		12 eylul street		Kendirci neighborhood, street: 2960		Pinarbasi neighborhood,1201 st		Bicakci neighborhood Street: 1251st	

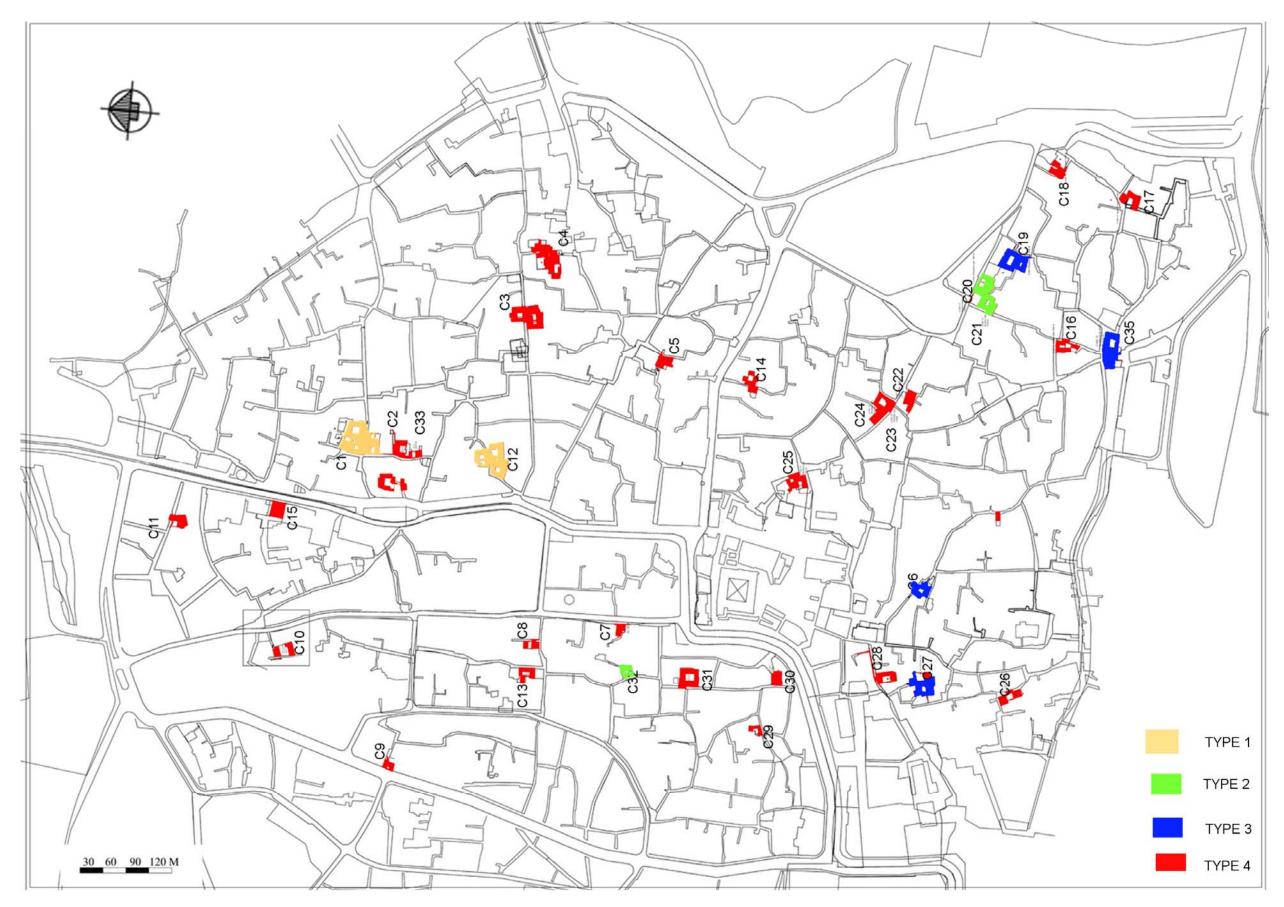


Figure 128: Typology of the Kabaltı houses in old city of Urfa

Chapter 4

CONCLUSION

The main concern of the research is the interaction between the morphological properties of individual living unit and the pattern of the settlement in traditional built environments. This interaction, which is reflected on the built from as the plain, extensional and unique from at varying degrees based on the specific requirements of different cultural richness, the religious codes, and natural constrains the extension of the unavoidable coexistence of the interaction elements of the tradition built environments.

Inhabitant of traditional building are utilized the space in-between the public and private domain by describing the basic building material and component, or by the interaction component, each built environment has its own specifies which is the result of the cultural and religious norm.

In traditional built environment, there are varying understanding and requirements of privacy in the indoor dynamics. The indoor and outdoor dynamics have certain impact on the formation of house in term of proximity and separation with their neighbors. The essential dynamics which play important role to determine the spatial organization in the traditional Urfa houses and settlement are that cultural impact regarding to family structure, gender role in the family in the society, their attitudes toward privacy social intercourse daily life of the people. Furthermore, the dynamics

reflects itself in the spatial organization of house as harem and selamlik which are based on gender role, and the family structure play role in the organization of rooms as a house. The privacy requirements are not only fulfilled in the formation of the each house as the façade design they also have certain impact on the formation of urban pattern as to make different street such.

On the other hand, one of important outcome of research is that the need for the privacy is not always mean to separation and isolation. It can be explained by appropriated house-to-house and house-to-street interaction and this physical interaction certain visual interaction between the private domain and public domain.

The horizontal solid extension as expression of the room over the street provides interaction between house-to-house and house-to-street as extensional form (the çıkma) and unique form (the kabaltı). In the light of the case work the factors influenced the creation of the traditional kabaltı house form of Urfa are those; need of the extra space for the private users; in the social structure of the Urfa, the family structure is very large due to social economical social-economical reason married member of family could not be able to settle in new a house, they built extra space as the kabaltı, the house cannot able to growth vertically due to structure it is developed horizontally and the shout-cut, the owner of the structure allow his neighbor to access his property through his property.

The assessment of the traditional built environment has to be considered as a process of interaction and development in unity. Under this scope, the interaction between private domain and public domain, interior and exterior, open and close, and indoor space and outdoor space; the formation of space bounding surface and spatial

formation traditional house plays important roles. The relationships between the components of traditional house are important as much as its reflection on façade formation as solid-void relationships on order to create the interior-exterior relationship; to produce a whole character of the traditional built environment.

In traditional built environments the buffer zone which is in-between interior and exterior, indoor and outdoor, and private and public play an important role in formation of both physical and social space. The divisions between the two dualities are not to be entirely separated from each other in the traditional built environment. It is usually completely overlapping each other as seen in the kabaltı case. There is transition zone which is adequately permeable in order to connect the inside private world with the outside public world. Besides, this zone is an outcome of concern of the privacy while connecting the two dualities. In-between space as transition space functions is connected the indoor and outdoor space in the residential context. The most important aspect of in-between space is to provide social interaction between the private and public.

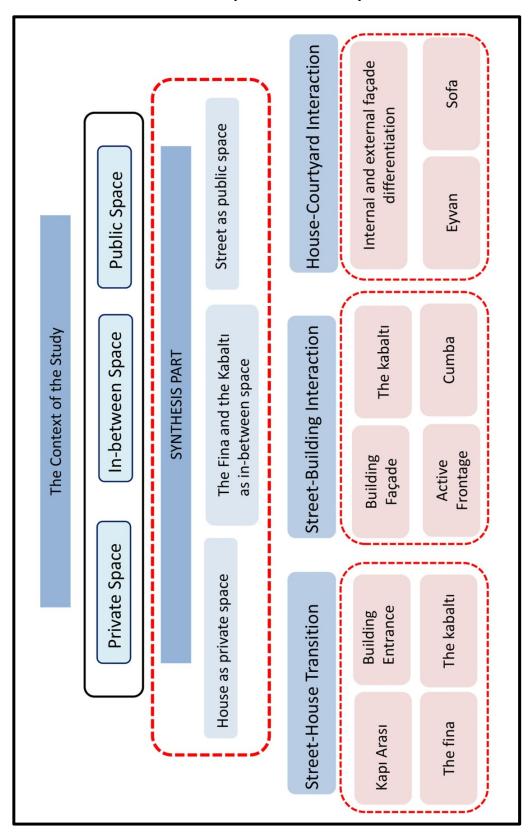
This study has approached to the topic by underlining the formation of territories as an outcome of the relation between man and the environment. As a result of this relation, private, in-between and public space and territories are established depending human behaviors that attempt to form the built environment regarding their needs. Thus, territories, personal spaces and the generation of boundaries among territories are the outcomes of the relations between human behaviors and built environment.

Table 6: Characteristic of the private, in-between and public space

	Usage and accessibility	Control and property	Description
Private Space	Individuals	Possession and ownership of individuals Private property	Provides segregation and disconnection from the outside
In-between Space	Limited users	Possession of limited group which have right to use Public or private property	Creates social interaction, communication and provides transition between public and private space
Public Space	All users	Ownership of the public authorities Public property	Creates social interaction, communication

Private, in-between and public spaces are continuously in relation with each other along the boundaries. Consequently, the boundary became the paramount element that provides interaction between different territories. Then, the creation of interaction is a result of the permeability of boundaries that allows transition. When the boundaries would be permeable alike in public and in-between spaces, the interaction and communication could create between two domains. Conversely, private space emerges as the private territory of individuals that signifies the isolation from outside world and strict control of usage and accessibility. Therefore, the boundaries of private domain could be described as less permeable with the help of the barriers that control the access. Therefore, the spatial hierarchy between these domains provides the well definition of domains and relatively, the behaviors of people on space.

Table 7: Synthesis of the study



One of the main results of the research is that the creation of interaction is directly related to boundaries between house-street and the transition between these boundaries. (Table: 7) Consequently, in- between space generate a transitional boundary among public and private space and it is also increased communication among these domains. Thus, transition as the important idea defines the design criteria of the interaction and it arrange the amount of interaction between two domains regarding the in-between space.

Another major outcome of this study was that the realms of the interaction between house, street and in-between space create a spatial continuity in traditional built environments and this relationship is continuously reformed and reformulated due to the relation between people and built environment, part and whole, public and private, and inside and outside. (Table: 8)

Lastly, the social structure and the necessity of the people have been altered through the modernization. Therefore, by introducing modern techniques and building materials, building activities have been altered quickly. The study provides an important lesson from the traditional built environment of Urfa to adopt today's contemporary built environments.

Table 8: An analytical approach of the space hierarchy and interaction-transition Space in the traditional built environment of Urfa

The role of	•	ction		built environment of Oria				
the component in space organizatio n	Interaction	Transition	Space	Figure				
It is located around courtyard	•		Indoor Private Space	PUBLIC STREET TERRACE VIEW CARDAK ROOM VIEW PUBLIC STREET FIRST FLOOR PARTIAL PLAN	Room			
In-between space between inner courtyard and room	*	(■)	In-between space	YARD	Eyvan:			
Space organizer, focal spatial element		**	Private Outdoor space	HAREA CANADA CAN	Courtyard			
In-between space between entrance and courtyard			In-between space	KITCHEN STABLE 1	Kapıarası			

In-between space between house and street		In-between space		Entrance
In-between space between public space (street) and Kapıarsı		In-between space	COURSESSES SOUTH TO THE PROPERTY OF THE PROPER	The Fina
In-between space between public space street and Kapı arası		In-between space	CUITODOR COURTARD SHOP ROOM ROOM PUBLIC STREET ACM OUTDOOR COURTARD COURTARD COURTARD	The kabaltı
In-between space between public space (street) and private space (house)		In-between space		Teturbe (cul-de-sac)
Public space with the hierarchy to access of private properties	**	Public Space		Street

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APPENDIX

Appendix A: Analysis the Kabaltı Houses in term of Public/Private Relationship

