

**Interrogation of the Islamic Influences on Physical  
Environment of Neighborhoods in Traditional Urban  
Texture of Antakya**

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Submitted to the  
Institute of Graduate Studies and Research  
in Partial fulfillment of the requirements for the degree of

Master of Science  
in  
Urban Design

Eastern Mediterranean University  
January 2019  
Gazimağusa, North Cyprus

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## **ABSTRACT**

Since its emergence in the 7th century, Islamic religion has influenced the urban texture and architectural language of many cities around the world through socio-cultural and political influences it exerted on societies.

This study aims to look at how Islamic city is identified by various researches in the literature and how it affected the development of Antakya city which had long lived under Islamic rule. Within this framework, a research will be carried out in various neighborhoods of Antakya composed of different religious and ethnic groups.

In the second part of the study, the Islamic city and its history, the Islamic city model, the criticisms made in this model, and then the features of the Islamic city and physical characteristics of the cities are examined. Thus, certain physical characteristics of the city have been determined by developing various parameters.

In the third chapter, information about the history, demographic structure and neighborhoods of Antakya, which are important for the content of the study, are included. In the light of this information, the effects of the characteristics of the Islamic city on the architectural and physical structure of these regions are examined. These features include street configurations, cul-de-sacs, courtyard houses, space organizations and their use/ functional analysis, and home and house privacy arrangements.

In the fourth section, as a result of the investigations, the findings are brought

together and discussed. In the last chapter, the results of the findings and discussion are put forward.

**Keywords:** Antakya, Islamic City, urban texture, neighborhoods, courtyard houses



## ÖZ

7. yüzyılda ortaya çıkışından bu yana, İslam dini, dünyadaki birçok şehrin kentsel dokusunu ve mimari dilini, toplumlara uyguladığı sosyo-kültürel ve politik etkiler yoluyla etkilemiştir.

Bu çalışmada öncelikle, farklı araştırmacılar tarafından geliştirilen, İslam kent modeli ve çeşitli fiziksel özellikleri incelenip, İslam yönetimi altında uzun dönemler geçirmiş olan Antakya kenti örneğinde etkileri araştırılacaktır. Bu araştırma, kent merkezini oluşturan, farklı dini ve etnik grupların oluşturduğu mahalleler üzerinde yapılacaktır.

Çalışmanın ikinci bölümünde, İslam kenti ve tarihi sonrası, İslam kenti ile ilgili araştırmalar üzerinden geliştirilen İslam kent modeli ve bu modele yapılmış eleştirilere yer verilmiştir. Sonrasında İslam kentine ait özellikler olarak belirtilen ve kentlerin fiziksel özellikleri üzerine yapılan çeşitli belirleyici özellikler incelenmiştir. Bu incelemelerden faydalanılarak, çeşitli parametreler geliştirilmiş ve kente dair belirli fiziksel özellikler belirlenmiştir.

Üçüncü bölümde ise, Antakya'nın çalışmanın içeriği açısından önem arz eden, tarihi, demografik yapısı ve mahalleleriyle ilgili bilgilere yer verilmiştir. Son olarak ortaya konan bu bilgiler ışığında belirlenen çeşitli mahalleler üzerinde, İslam kentine ait özelliklerin bu bölgelerin mimari ve fiziksel yapısına ne ölçüde etki ettiği ve olası farklılıkları incelenmiştir. Bu özellikler; sokak dokusu, çıkmaz sokaklar, avlulu evler,

mekansal organizasyonlar, mekan kullanımları / fonksiyonel analizler, ev ve evlerin mahremiyet ile ilgili yaptıkları düzenlemeleri içermektedir.

Dördüncü bölümde, Antakya'da seçilen mahallelerde, sokaklarda ve evlerde yapılan incelemeler sonucunda bulgular bir araya getirilmiş ve tartışılmıştır. Son bölümde ise, bulgular ve tartışma sonuçları yorumlanmıştır.

**Anahtar Kelimeler:** Antakya, İslam Şehri, kentsel doku, mahalleler, avlulu evler

*To my family*

## **ACKNOWLEDGMENT**

I would like to express my deep gratitude to my supervisor Prof. Dr. Özgür Dinçyürek for his patient guidance, enthusiastic encouragement and useful critiques of this research work. I am grateful to work with him. I would also like to thank to my co-supervisor Prof. Dr. Mukaddes Polay for her valuable comments and guidance on this study.

I would like to thank also all my friends. Finally, I wish to thank my parents for their support and encouragement throughout my study.

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# Chapter 1

## INTRODUCTION

The history of the settlement in Antakya dates back to the Paleolithic period. Many cities were established and destroyed in Antakya region. The establishment of Antakya occurred during the Seleucos Period and Antakya lived its most magnificent period during the Roman period. In this period, Antakya was called “Queen of the East” due to its active role and geographical location. After the Roman Period, Byzantine, Arab, Crusaders ruled the city in different periods and lastly in 1516, city entered the Ottoman sovereignty. At the end of the First World War, Antakya went under the French occupation, State of Hatay established its independency in 1938 and has undergone the process of joining the Republic of Turkey in 1939 (Demir, 1996).

Antakya has been constantly settled throughout history and hosts the physical and cultural layers of these civilizations. Antakya has hosted different civilizations with different religious, ethnic and cultural background due to its geostrategic position. Consequently, each civilization has left its traces on the urban culture. The traces of these civilizations in urban culture are still continuing. Antakya, which is one of the three major metropolises of the world in its history, is an example to the world with its cultural structure, lifestyle and tolerance.

To be aware of the history of the environment, plays an important role in

understanding the formation of urban identity.

Antakya has hosted many civilizations for centuries. There are places where different structure of periods and traces can be read. One of the layers that can be read in Antakya and still influencing it is the urban fabric which was formed under the Islamic rule. The influence of Islam in urban fabric is intensely observed. And therefore this study will be based on these influences and the physical traces it creates. This study explores Islamic effects on the city of Antakya and its physical outcomes in the city.

### **1.1 Problem Statement**

There is a wide range of researchers who look into the influence of Islam, Islamic City and the development of the cities. Nowadays, there are discussions about city models and their validity. In this sense, Islamic City model is going to be investigated. However, Islam had affected the cities and countries over the centuries and its traces are still readable.

Islam has affected many countries and cities in a wide geography. Antakya is one of those cities. It had some periods in its history which were under the rule of Islam. As mentioned above, it is discussable to state that Antakya is an Islamic city. Nevertheless many scholar are accepting and considering Antakya is an Islamic city as it bears some similar physical components like other cities which developed under the rule of Islam. Even, one of the well-known scholars,, Rapoport (1997), in his book “Human Aspects of Urban Form”, defines Antakya as a traditional Muslim city. He is mentioning the separation of the city which had quarters within the people bound together. He also looks further into these quarters and specifies some of their

differences.

Orientalism generalizes all the cities which has similar Islamic background. The city model is then proposed accordingly. In recent researches, this mentioned approach of orientalist researches are not accepted as it was before. Nowadays, researchers are taking cities individually and working on them particularly. Unfortunately, there are limited researches about Islamic effects on Antakya and its urban texture.

## **1.2 Aims and Objectives**

The main aim of this study, is to review the studies and criticisms about Islamic City and the influence of Islamic religion on the city. Then, the implications will be examined on the case of Antakya which has lived under the Islamic rule and bearing its traces in the urban texture of the city, through the learning from general characteristics of Islamic architecture and its reflections on the cities. This analysis is carried out under these headlines as such; street configurations and cul-de-sacs, courtyard houses, privacy settings and household, spatial organization, use of spaces/functional analysis and physical settings of the houses.

First focus will be on the subject of Islamic influence on the city, and the determination of features of Islam and its effects on cities in general; second, is the identification of these features in traditional urban texture of Antakya; third examines their existence in different neighborhoods which have different ethnic and cultural backgrounds. Finally, the comparison of these components and features in these neighborhoods of traditional urban texture of Antakya. In particular, the research answers the following three research questions; first one is the main question, then other two sub questions.

- What are the traces of Islam and its features on the traditional urban texture of Antakya's neighborhoods?
- What are the general features of cities which were lived under the Islamic rule?
- What are the differences among the neighborhoods which had different cultural and ethnic background?

### **1.3 Research Methodology**

This is a kind of qualitative research. Literature survey, site analysis, observation at site, taking photos, sketching and analyzing the cadastral maps are the data collection methods. Books, E-libraries, magazines, journals and articles are used for literature survey. For the site survey inventory forms are prepared. These inventory forms help to collect systematic informations about the site and the surrounding.

In the first phase of the study, the traces of Islamic effects in traditional urban texture of Antakya's neighborhoods are determined. Then 3 neighborhoods were chosen for the reason that their developments are in the same period (19th century) in the history and moreover, they were built around three different sacred places which were built in the same period. In these neighborhoods, selected twelve houses have been visited and analyzed with the inventory forms. These twelve houses were analyzed due to the fact that other houses in the neighborhood could not be reachable and the opportunity for evaluation could not be found.

Site analysis includes two parts, first part has the specific information about the street, cul-de-sac and locational information about the houses in street which is helps to define street layout. The second part has the written information part about the



house, which helps to identify the location, privacy settings, the physical structures of the houses such as circulation, spatial organization and space uses.

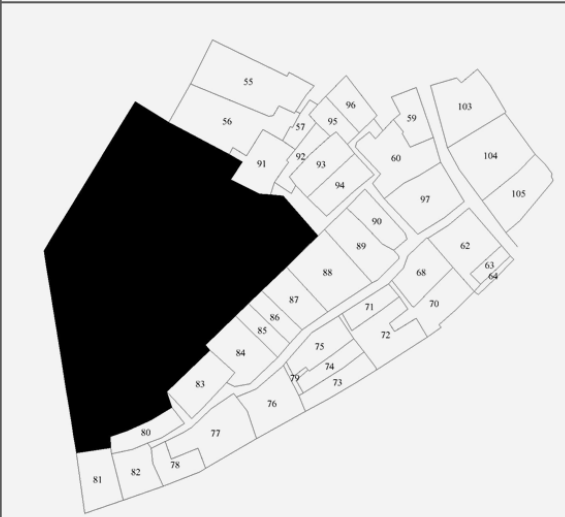
Interrogation of the Islamic Influence on Physical Environment of Neighbourhoods in Traditional Urban Texture of Antakya EMU / Department of Architecture <span style="float: right;">by Kerem Cemil Özer</span> Date: .....	
<b>General Information about the Street</b>	
<b>Cul-de-sac:</b> Cul-de-sac width: ..... Extension heights: ..... Extension widths: ..... Additional informations: .....	<b>Site Plan</b> 
<b>Street:</b> Street width: ..... Additional informations: .....	

Figure 1: Inventory form-1 for Streets (Christian neighborhood)

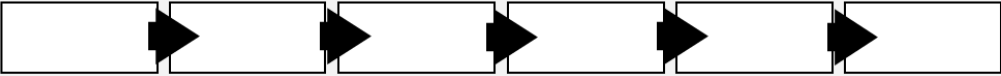
Interrogation of the Islamic Influence on Physical Environment of Neighbourhoods in Traditional Urban Texture of Antakya EMU / Department of Architecture <span style="float: right;">by Kerem Cemil Özer</span> <div style="text-align: right;">Date: .....</div>	
<b>General Informations about the House:</b>	
<b>External</b>	<b>Internal</b>
Door oppositions:.....	Courtyard position:.....
Window oppositions:.....	Gendered space:.....
Window height from ground:.....	Wall thickness with neighbours:.....
Building height:.....	Privacy Penetration Gradient:.....
Wall height:.....	
Wall thickness with street:.....	
Additional informations:.....	
	
<b>Plan:</b>	<b>Section:</b>

Figure 2: Inventory form- 2 for Houses

### 1.4 Limitations of the Study

In cities, there are some developed urban physical systems, which are shaping the urban texture. “Housing” and “Street Network” are two of these systems. In this study, among the other systems (economic, government, health, open space etc.), only these two urban physical system are selected to be analysed for understanding

physical form of the city of Antakya.

The first key limitation of this study is the neighborhoods in Antakya, which are representing the different cultural and ethnic background. These neighborhoods are selected to analyze and to compare for understanding the Islamic influences in different parts of the city. In this sense, the main focus is on the development of the cul-de-sacs in these neighborhoods.

They are chosen and analyzed since they are the specific urban fabric element which is shaping the city. Regarding the analysis of cul-de-sacs, the main reference was the sacred places in these neighborhoods. For the reason of that the first settlements in the cities were built around the sacred places after they established. The chosen cul-de-sacs are the nearest ones around the sacred places. The selected twelve houses are the ones which located in the cul-de-sacs.

## **1.5 Background of the Study**

Literature review establishes an extensive part of this study. As it is mentioned in the research method section, fundamental studies about Islamic City Model, History of Islamic City, Criticism on Islamic City Model and General Characteristic of Islamic City Architecture were studied in the literature survey.

Since many characteristic features of Islamic City and its architecture are still readable in the city, their architectural identities are studied in general. In this regard, the limited interrelated studies in Antakya are stated below.

As it is mentioned by, Besim Selim Hakim's (1986) "Arabic- Islamic Cities, Building and Planning Principles" is considered as one of the essential basis in this

ground. It delivers information about the Islamic law, neighborhood besides urban and architectural elements as a design language in Islamic world. Furthermore, it provides information about how to interpret and read the buildings and urban form in the cities.

The book, which is named as ‘After Amnesia, Learning from the Islamic Mediterranean Urban Fabric’ by Attilio Petruccioli (2007) was another significant source for this study. It includes information about the urban fabric in the Islamic Mediterranean world. It is a source for the principles of design and analysis methods for interpreting all the urban fabrics in Islamic world. Reading the city in the light of the indication of applying typological progression is the main input of the book.

A doctoral study is written that is titled as ‘An Enquiry into the Definition of Property Rights in Urban Conservation Antakya (Antioch) From 1929 Title Deeds and Cadastral Plans’ by Mert Nezih Rifaioğlu (2012). In this study, the main focus is on the subject of property rights within historical urban contexts and it is investigating their continuousness in an urban context as an significant topic in urban conservation studies. This study also an important source developing a methodology on Islamic urban forms and Islamic studies.

In the light of deliberations above, it is assumed that, there is limited comprehensive studies about the Islamic effects on the architecture and urban texture of the city of Antakya. In this regard, this study is established to fulfill the deprivation in this field.

## **Chapter 2**

### **AN OVERVIEW OF THE ISLAMIC CITY**

There are numerous widespread researches about the model of “Islamic City”. The intense interests in this subject still continues today. Modern research approaches foresee the cities as the subject of study alone instead of modelling, this model is still up to date. Because every criticism brought to the model opens a new field of research. Inherently the Islamic city model remains to be a research source and maintains its popularity with this process.

The article of Eldem (2003) shows that this topic still remains popular; “Of course there are urban types – some of them emphasize the religion more than earth, some are more autonomous than others, some of them carry more urban spirit than others, some focus on trade rather than management, some of them construct religious buildings, some of them establish societies around the market and city squares and some of them include more religious and ethnic diversity than others. However, there is no such thing as a typical Ottoman, Arab or Islamic city imposing ghettoic and unique features to all urban centers and residents.”

To understand the cities which had period under the Islamic rule, in following sections, The Model of Islamic City, History of Islamic City and Physical Characteristics of Islamic Residential Architecture and Its Influences on Street Configuration will be examined.

## 2.1 The Model of Islamic City

The Islamist city model helps us understand urban formations of Islamic cities, the model of Islamic City is mostly formed within the religiously determination parameters. In this model definition, the religion was designated as the main factor, the social structure, the physical structure and management mechanism of the city is tried to be understood and the model boundaries are drawn in the light of common points.

For example, in the approach that considers Middle Eastern cities as a traditional Islamic city, it is suggested that the religious function of the city determines the spatial structure and that the mosque is the most important element determining the structure due to its cultural, educational and religious functions (Aktüre, 1978). Grunbaum defines the city as a place where religious duties and social status are fully met for a Muslim in Islam, the sharia, which regulates both the public life and the relations between individuals in Islam, defines only some religious duties that fit the settled life.



Figure 3: A narrow alleyway, Tunis (Mortada, 2003, p. 40)

As one of the founders of the Islamic City Model, Grunebaum (1955) defines the model of Islamic City by taking the “Friday Mosque” as the center of the city and he refers to regional relations only in terms of trade and religious relations of nomadic communities within the city. Based on the Islamic City Model of which socio-economic and spatial relations are described by Grunebaum (1995), since each individual in Muslim societies is connected to one of the four sects that have emerged from the different interpretation of the Sharia, Lapidus who says that this form of organization constitutes one of the most important and broadest social organization levels of community life on a regional scale, indicates that along with the stratum in the social structure, the urban population shows a structure of distinct social stratum in itself. However, he states that the spatial proximity is not a necessary condition for class solidarity in the neighborhoods of urban areas. Despite the homogenous structure at all levels in social stratification, the neighborhoods are heterogeneous and the rich and poor people live together. (Aktüre, 1978).

In the definition of the Islamic city model, Grunebaum and Lapidus, unlike other studies, have also included the social structure as a factor in urban studies. There are four social organization levels with the definition of Lapidus in Islamic societies, which he states that they only appeared in Anatolia during the Ottoman period as follows;

1. Empire or state organization
2. Organization of the society among the sects.
3. Tradesmen-ahi organizations (guilds)
4. Neighborhoods (neighborhood units showing homogeneity in terms of socio-economic and religious aspects.

The search for the cause-effect relationship and the definitions needed in future studies impose itself in researches about the city. In other words, creating a model has long been the distinctive feature of urban studies. Such approaches provide typing and concrete agendas for research. However, this kind of approaches bring some negativity as well. The major one of these negatives is to transform the city, which has been turned into a single type, into a general concept. However, urban historians, who had devoted most of their careers to a city and are aware of the separation of that city, have sought alternative ways.



Figure 4: The physical features of a narrow alleyway in a neighborhood in the old city of Tunis lay out an atmosphere of social interrelation (Mortada, 2003, p. 29)

For example, in the 1930s, some American urban historians preferred the urban biography approach adopted by Lewis Mumford in particular. This approach explains the story of a single city extensively and tries to portray it almost as a “mortal”. A similar technique called "New Urban History" in the 1960s examined



cities as processes and manifestations of specific types. Such approaches envisage the city as an almost living social phenomenon in which people live and build something no matter how complicated it looks (Eldem et al., 2003).

The model of the Islamic city can also be defined as a model that was created to put cities into a certain classification with a certain technique. Although this model is not included in the Weber (2003) criteria for cities, it is an attempt that is formed by reaction.



Figure 5: A usual narrow street in the old city of Jeddah (Mortada, 2003, p. 22)

Despite numerous researches and studies on Islamic cities, there is still not enough information and knowledge about cities on an individual basis. One of the reasons for this is the lack of a detailed knowledge of pre-Islamic and Islamic periods, especially for certain cities. In addition, the number of researched cities is relatively low compared to the ones discussed and recorded.

## **2.2 An Overview on the History of Islamic City**

The concept of the Islamic city has emerged with the Islamic historiography to give a reaction and response to Max Weber (2003), who did not include the Islamic City in the classification of urban types that have emerged throughout world history.

Max Weber is one of the figures that is frequently emphasized because of his place among the leaders of sociology (Mardin, 2003). Unlike the other urban books written before that time, Weber published his findings in 1921 by examining all city types and determining the criteria for being a city. The book called “City” which is written with the claim that the city will no longer exist if it does not fit in these cities, is a very serious beginning for the debates about the cities. While Weber’s city definition has set a very clear bound about Western and European cities, the other ones that does not fit this definition are clearly excluded. Although it is considered as “the other” in the early times and discussed in separate definitions, it brought up many criticisms on the following periods. In this process the “Islamic City” model has aroused serious interest.

### **Studies on Islamic City Model**

The researchers working on orientalism have embarked an arduous effort to explore the true “Islamic city” of which first outputs are field works emphasizing the topographical and architectural developments of some Islamic, especially Arabic cities (Eldem et al., 2003). These studies made are generally related to physical elements and structures.

In general, Middle Eastern cities were examined under the title of Islamic cities. Considering the literature on this subject; can seen some prominent researches made

by W. Marcais (1928); Sauvaget (1934), (1941); G. Marcais (1945); Pauty (1951); Von Grunebaum (1955); Planhol (1959); Roberts (1979); Blake and Lawless (1980).

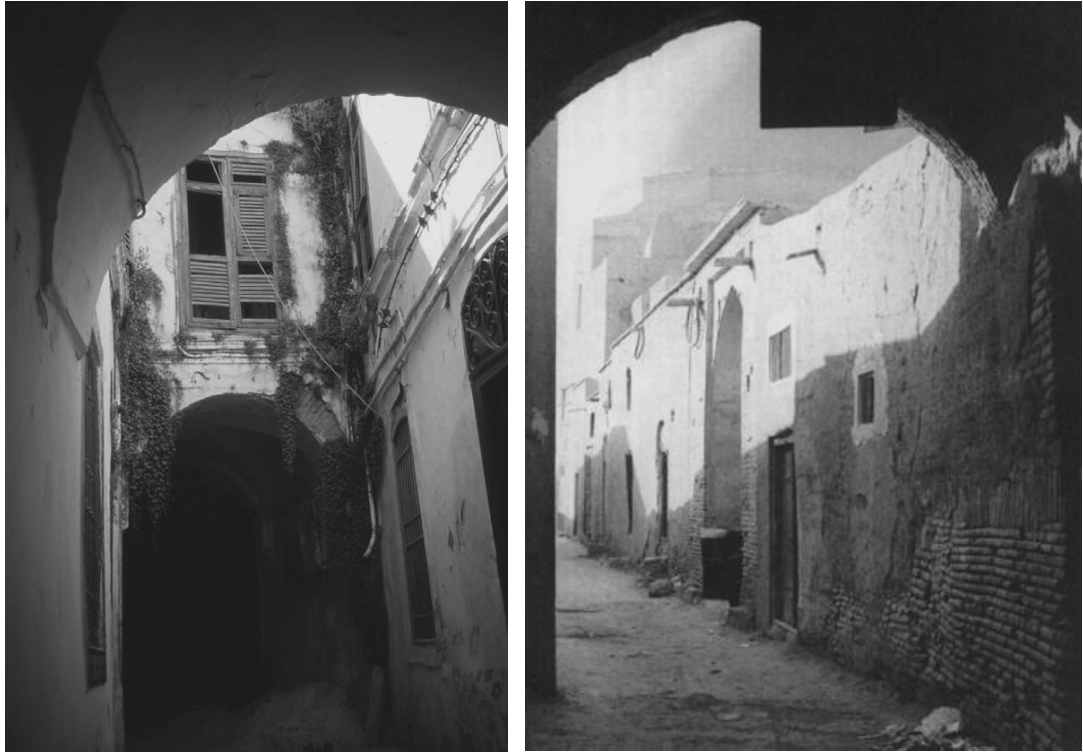


Figure 6: Unknown (Mortada, 2003, p. 46) & A simple ordinary façade of a typical house in Isfahan, a image of the norm of humility and prevention of self-advocating (Mortada, 2003, p. 41)

The Islamic city model was developed primarily based on the works done in Syria and North Africa. Grunebaum's (1955) "Islam: Essays in the Nature and Growth of a Cultural Tradition" study is an important resource about this issue. The elements that prove a traditional Islamic city and the relationship between them emerge by focusing on this model: The Grand Mosque is in the city center; madrasahs, baths, the market are settled around this Mosque (Kheirabadi, 1993). Hierarchical difference between tradesmen on the market is associated with the location around the great mosque and the output of this form for difference between residential areas shows itself in the line with the needs demanded and determined by Islam

(Grunebaum, 1955).

In the book called “Islamic City” published with the editorship of Elisseef Serjeant, he tries to determine the physical characteristics of the Islamic City. However, while he says that it is very difficult to determine the physical boundaries of Islamic City, he made generalizations and such a limitation about this issue.

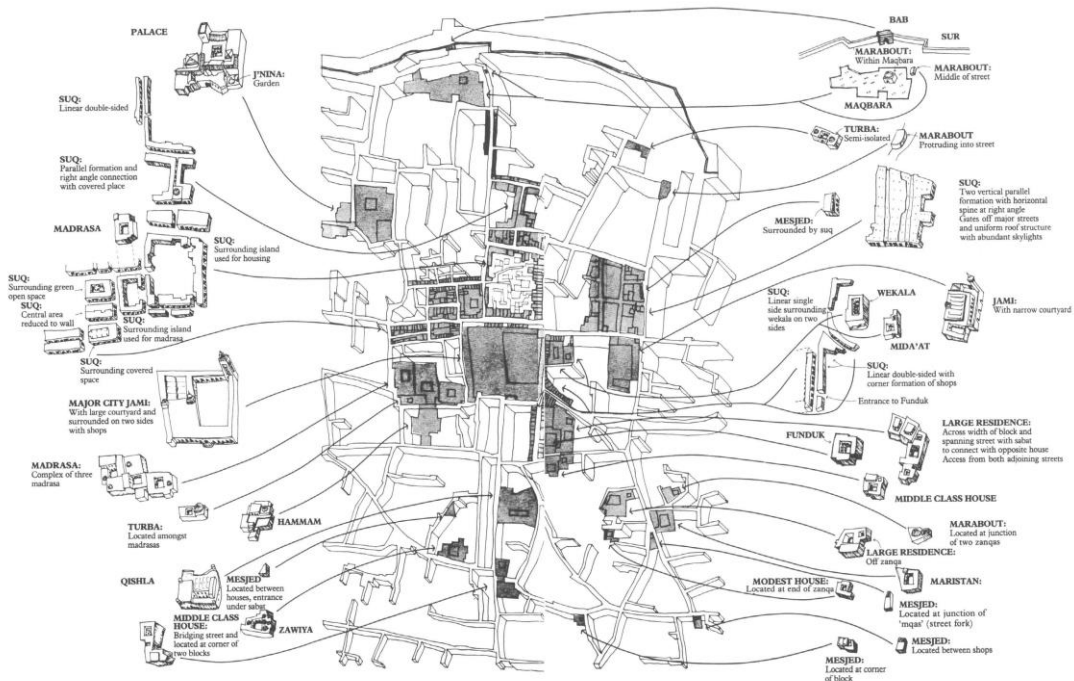


Figure 7: Morphological analysis, core of Medina (Hakim, 1986, p. 69)

Elisseef accepts this complexity and somehow emphasizes regional differences, periods, different ways of life and its difficulty. Without broaching into this topic, these difficulties lead to the generalization by taking the Islamic city as the center of the Arab World. According to him, the purpose of urban planning is to give a material expression to abstract and spiritual reality (Elisseef, 1997). Such an expression corresponds as physical change affected by the Islam which is main factor in these settlements where the Islam is dominant. Thus, a concrete general definition

is made by addressing a few cities that show common physical changes.

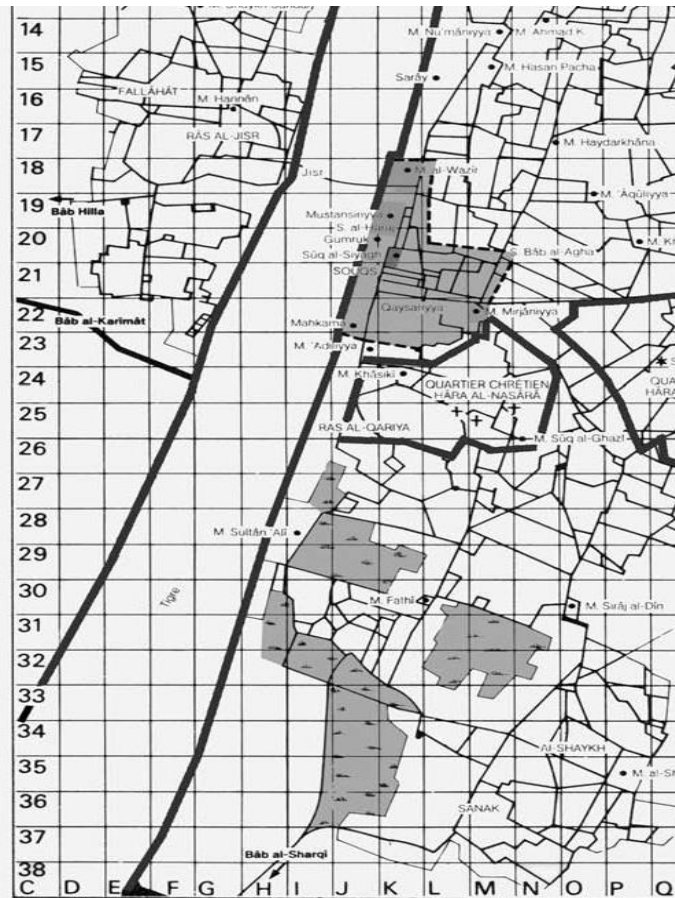


Figure 8: Christian and Jewish quarters in Baghdad (Raymond, 2008, p. 1392)

Müdesir (1997) indicated that the concept of Islamic city has been the subject of many studies in which the mechanism of management is different or incomplete, but this discourse is wrong and he also worked on the judicial system of Islamic City. Undoubtedly, traditional Islamic cities which are accepted as social beings, are characterized by well-developed, strong sense of unity and social solidarity among residents. With Stern's expression; “Judicial speaking, not expressing this sense of unity in the form of municipal autonomy and local administrations just as in the ancient and medieval European cities, caused serious controversy and chaos in certain regions.

Governors of judicial and administrative institutions in Islamic cities are representative of Caliphs or Sultans and they are directly or indirectly appointed by them. Thus they manage the city in the name of the Caliph and under his supervision. The ruler himself and all other members of the Muslim community are equally bound by the same law of Sharia (Müddesir, 1997). Therefore, in order to understand this city, understanding the concept of “Sharia” is also very important because it has been naturally shaped according to the laws of Islam.

Basic institutions dealing with the interpretation and implementation of laws in traditional Muslim cities are as follows (Müddesir, 1997):

- (a) el-Vali or el-Amil (i.e. the governor of province), deputy eş-Şurta (police)
- (b) el-Kadı (magistrate), a group or notaries of which deputy consist of approved witnesses (şuhud or Udul)
- (c) el-Muhtesib or Sahibü’s Suk (ie. supervisor of market places and public decency), heads of various professions of which deputy is approved.
- (d) In addition to these, there are the leader of protected Congregations, namely, Jews and Christians having an autonomous status in Islamic cities in accordance with the provisions of the Sharia, therefore creating a special category from an administrative point of view (Zımmiyyun).

Cansever's orientation towards this concept is different from the orientations in the West. Cansever (1997) states that Islamic culture is decisive in every geographical area under the influence of Islam and shall naturally affect the city. As Cansever considers Islam as a way of life, he thinks that the impact of Islam on life manifests itself in every field from city to home.

Rather than dealing with the physical structure of the city, Cansever (1997) is trying to show the influence of the spiritual power of Islam on the city. Because everyone who carries the spirit of Islam are in the mechanism with a natural process. These common views that occur wherever Islam is dominant are not within a specific plan. As a matter of fact, he has never mentioned a city plan of which borders have been drawn clearly. Changes and similarities manifest themselves with the spiritual belief in the heart. He also emphasizes that these natural formations turns into a situation that the cities cannot tolerate as a result of subsequent interventions, therefore the failures occur in urban planning. The failures in urban planning are caused by the imposition of laws and the situations that cannot be interiorized by the people instead of moral teachings, Cansever, who believes that all these are the reasons for the development of distorted urbanization, considers the concept of Islamic city completely in an abstract plane.

Çelik (2017) defines Islam as a city religion. Experience of substituting certain values, norms and rules in the flow of daily life and social world as a religion, has produced a civilization concept and practice in the historical process. Islam takes the axis of a city-specific social system in the establishment and maintenance of daily life and interpersonal relations. Already religious doctrine rejects tribal and traditionalist attitudes of nomadic culture and blesses the free will and choice, the forms of civil solidarity specific to the city. While the religious practices of Islam foreseen the settled lifestyle, it is understood that the Islamic law i.e. religiousness of daily life is shaped by a settled society (Çelik, 2017).

Against the assumptions that the Islam is a desert religion or warrior religion, in the Islamic thought tradition, there is a reactive approach that Islam is a city culture

religion. In this sense, it is a sociological reductionism to define Islam as a desert religion or warrior religion, defining Islam as an urban culture religion is as sociological reductionism as defining Islam as a desert or warrior religion. Islam may seem like a holy war and warrior religion from a persistent perspective, but with a simultaneous approach, there will be an urban cultural aspect of Islam (Yavuz, 2009).

Çelik (2017) states that Islam as a civilization has a harmony between the concept of the city and the understanding of existence and universe. For this reason, he also points out the fact that symbolic elements such as serenity, regularity, stability, moderation and harmony are reflected in spatial construction. In other words, the Islamic City is not the place of the clash of social class or stratum, it is in fact, the conception of the dominance of a harmony based on the existence and order of nature. Therefore, the arrangement of architecture and human environment in traditional Islamic cities has evolved from the classical interpretation of Islam (Armağan, 2010.) The perception that the world was created for service to the human as an honorable and glorious creature is determinative in the concept of space of Islamic religion, not that the world can be changed according to material development and interests. In this respect, there is no distinction between social classes and strata that would create a justice problem in the city concept of Islam. However, according to some Western philosophers, there is a relationship between the absence of urban social classes in the Islamic societies and non-development of urban and urban-belonging mentality. Ira Lapidus, for example, points out that the Islamic cities are formed as settlements formed by sects and religions living in separate neighborhoods or regions rather than social strata. According to him, the neighborhood case, which was not seen in the Western cities and which provided a



strong social control, refers to the living areas where Muslims and non-Muslims were separated by high walls on the basis of religion. In this aspect, the neighborhood is a private area where the rich and the poor live together and the community culture grows and develops (Lapidus, 1969). However, the tradition of living in religious layers, which distinguishes them in this way, has strengthened to see themselves as members of a congregation rather than a city's people (Faroqhi, 1997). Hence Turner agrees with Weber in this regard and states that Islamic cities are fragmented structure with tribal organizations and settlements, tribe and clan organizations continue in cities and this means the transmission of Bedouin tribal traditions to city life (Turner, 1997).

When historical Islamic cities taken into account, there is a reflection of the settlement, tribal and religious solidarity that emerged around the mosque in neighborhoods and neighborhoods. It is noteworthy that neighborhoods are formed as autonomous parts under the leadership of the imam or the chamberlain. (Çelik, 2017).

Imam somehow assumed some functions as the official and religious authority in the neighborhood, and informed security officials about illegal events. The neighborhood, which provided a public self-regulation, was able to isolate someone from the society by excluding people who did not comply with public morality. In the Ottoman Empire, it is understood that the neighborhood is not based on an economic-based stratification that is class-based differentiation. This arrangement of the neighborhood not only ensured the relations to be more organized and permanent, but also to the solid foundations of solidarity. The phenomenon of neighborhood where the imam is responsible for the management until the reforms of Mahmut the

Second, is expressed by a kind of congregation. The reforms carried out by the Tanzimat (reorganization) and the Republic led to significant changes in the structural character of the neighborhood and its sociocultural environment. There are differences between the neighborhoods where Muslims live and the neighborhoods where other religious groups live. While the imams were responsible for Muslim-Turkish neighborhood, the “Kocabasi” were responsible for the management of minority neighborhoods. For instance, the imams, who were liable against the “Kadi” (Islamic Judge), also kept records of events such as birth, death, marriage and divorce, as well as the elimination of disagreements among neighborhoods, removal of those who disturb and break the public order. The Imams also collected and recorded the taxes in the neighborhood. The settlement of someone coming from abroad was subject to permission of the imam. (Çelik, 2017)

The Islamic city expresses religious social life as to structure on the axis of privacy spatially (Çelik, 2017). In the construction of streets, houses and buildings, the rules of Islamic law that consider the differences between communities and general are taken as basis. This situation emphasizes the Islamic city's character based on the Islamic imagination and ideals. Kadi is a representative who tries to regulate and control the religious social life of the city in the context of Sharia's orders (İnalçık, 1995). In the geography where the Islam has spread rapidly, they have legacies of Greek, Roman and Sasanian cities as well. Cities are an important dimension among the legacy they inherited from ancient civilizations, but in this process, Islam has added its own interpretation of civilization to these cities. The historical texture of the cities in the conquered regions has not been changed, but over time, the transformation of place towards Islamic values has been ensured. In this sense, the

lines determined by the values based on religion in the spatial texture of Islamic cities becomes prominent.

Alver (2017) states that the mosques / masjids are one of the major places in terms of Turkish-Islamic cities and neighborhoods. In a sense, the masjid is seen as inevitable as house for this construction. Being the most important place determining the characteristic structure of the Turkish-Islamic city, the mosque is one of the main elements of the neighborhood life. The neighborhood attends to masjid such as houses. It can even be said that building a neighborhood is equivalent to establishing a masjid. Because the masjid is the vein of the neighborhood. In Turkish-Islamic cities, it is quite significant that the names of the neighborhood comes from the names of the masjids or the person who made them. The detail is enough to show that the masjid is in the core of the neighborhood life. The description of neighborhood as ‘those who worship and pray in the same masjid’ (Ergenç, 1984:69; Bayartan, 2005:95) also shows the importance of the masjids. The Masjid is at the center of neighborhood life as a religious and social place.

One of the remarkable features of Islamic cities is that they have a complex topography. Therefore, Western travelers, observers and researchers think that Islamic cities do not have any plans. However, when examined well, it is seen that there is a collection of neighborhoods around mosques. It has a regularity at the core of its complex image.

The inhabitants of the neighborhood meets five times a day for prayer and this provides complete solidarity and auto control among people. Being the smallest settlement module of the city, the neighborhood consists of a community of people

who know each other and who has a sense of mutual responsibility (Özbilgen, 1987). The element that pushing people into a common worldview and cultural potential and providing learn by experiencing is the neighborhood where they live in. In Islamic city life, the neighborhood forms a structure that can control and manage itself with its organic structure which is based on common beliefs, established traditions, sincerity and respect. The values provided by Islam about the neighborhood rights, make everyone in the neighborhood responsible and respectful towards each other. Perhaps one of the most characteristic features of Muslim cities is the strong sense of unity and social solidarity developed within the framework of neighborhood law. As the western writers claim, the people in Muslim cities did not consist of crowds independent of the tribal structures in the first army towns (Basra, Kufa, Fustat, etc). Everyone had the esteem and responsibility of his neighborhood (Stern, 1970).

### **2.3 Criticism on Islamic City Model**

In this section, a critical approach towards the Islamic city concept will be taken into account especially through a large number of studies starting in the 1960s and spreading over a large area.

Lapidus (1969) addressed the unions formed by certain distinctions mainly forming the basic unit while examining the social structure of Aleppo and Damascus. Groups differing according to ethnic, sectarian and family differences determined the social structure. In addition, the management style of these groups and their leaders are also the points that make the structure understandable. Lapidus has stated that the Ulema Class (clerical) had a significant impact on Aleppo and Damascus during the Mamelukes.



Figure 9: Quarter gate in Damascus (Raymond, 2008, p. 1394)

Despite of the appeal of general thought and the pressure of historical and cultural ideology, Lapidus (1969) states that the Islamic cities should not be considered as a non-differentiated as a whole, He describes this issue as follows: “As it is learned from the results of the social organization studies, none of the characteristics that form the social structure of the Muslim community such as house, fraternity (ahilik), religious society or state are the elements that organize the city form. Neither these defined subgroups can be explained by their physical structure. The cities are the knots of population woven with the layout of the large community system and they are not unified integrals determined by the characteristics of the Muslim although they are physical formations”.



Figure 10: Damascus: street level in a residential quarter (Raymond, 2008, p. 1395)

According to Lapidus (1969), Islamic settlements are neither shaped by their social content nor by geographic and ecological formations. For a defined model, villages, dwelling areas, suburbs and towns have provided the physical environment within very wide geographical units. In addition, the role of the mosque in Muslim life, which is an important physical element for Islam, is thought to be fully compatible with social reality and geographical order. From this point of view, Lapidus's claim is that there should be no term Islamic cities. However, it is not possible to ignore the fact that the huge Islamic community is living in these settlements in the Middle East.

Another researcher, Albert Hourani (1996), develops a similar approach, with slightly subtle differences. Hourani (1970) states that a different distinction occurs according to the conditions of each region: He underlines the desert, river and / or sea and ports as important factors in the formation of the city. Another point that

should not be ignored is that cities are formed by distinctions based on time and place differences (Hourani, 1970). Hourani (1970) defines the cities as a formation with a very long process and with different stages and changes and claims that it is difficult to talk about the concept of an Islamic city coming from the seventh century to the present. It is also possible to feel the stages of this process and change on the city plans.



Figure 11: Qahira region of Cairo from the Description de l’Egypte (Mortada, 2003, p. 21)

Recently, many researches have examined the history of various Arab-Ottoman cities by using court records. In these studies, there are some criticisms towards Weber, Lapidus and Hourani. Eldem (2003) gives Philip Khoury as example for this issue:” Despite the fact that Hourani's approach is essentially robust, it gives priority to leading classes and largely ignores all other classes of society (women, non-Muslims, peasants, artisans and traders)”.

Most of the researches on Islamic cities were based on one or more events in the

same region (Lughod, 1969). All these studies show that they do not generally examine the range of cities within the Islamic cultural area.

Lughod has worked on the physical structure of the city and he has described the characteristics of the Islamic cities as follows:

1. "The first distinctive feature is the separation of Islamic religious communities in these areas, gender-based prohibitions and property-based legal system. Thus all Islamic cities display scientific extent. The streets and houses of the city are warning signs and instructions indicating the appropriate behavior for the stranger.

2. The second distinctive feature, the gendered prohibitions. Undoubtedly, this is only specific to Islam. Islam imposes strict discriminatory rules that minimize the possibility that women will breach their privacy not only through physical or verbal communication, but even through vision. The structure of houses, the places and shapes of doors and windows, the distance between houses, all of these are originated from some discriminatory laws and norms.

3. The third distinctive feature is that Islamic property laws determine priorities and rights in urban planning. In the Islamic legal system, the right of priority to design the urban area belongs to the owner. Their neighbors also have some rights, in particular their own privacy, while the authorities have almost no rights. "

Lughod concluded that the debate in question should focus on the specific Islamic framework where such cities are established and managed contributing to their unique character. The Islamic cities have shown great differences in terms of the



relationship between the various functions, but the shared description and cultural heritage have created a similarity that unites all Islamic urban settlements.



Figure 12: Elite's residence quarter in Tunis (Raymond, 2008, p. 1185)

Yerasimos (1999) states that it is required to determine that clear similarities concerning urban fabric rather than architectural elements do not coincide as long as it is not caused by climatic conditions. He also states that even if a cultural one-sample is a matter of debate, there is at least one unifying point as definition. As the Islamic law and its section towards the city are defined as compliance with a law governing the Islamic belonging, the behavior of the individual and his relations with the community inextricably, here the concept of Islamic city is a challenging element of unity that should be considered, albeit limited, (Yerasimos, 1999).

According to Yerasimos, there is no public sphere in the city of Islam and there are

areas under the common ownership of the neighbors or the whole community along with private properties belonging to individuals, sovereigns and foundations. This principle is best seen in the legal classification of road network under two categories: Open-ended Street which is considered as a common property of community, and the cul-de-sac street which is considered as property of residents. Thus the residents of the cul-de-sac street can close the Street from the use of other people by making a door in the entrance of the Street with a common agreement.

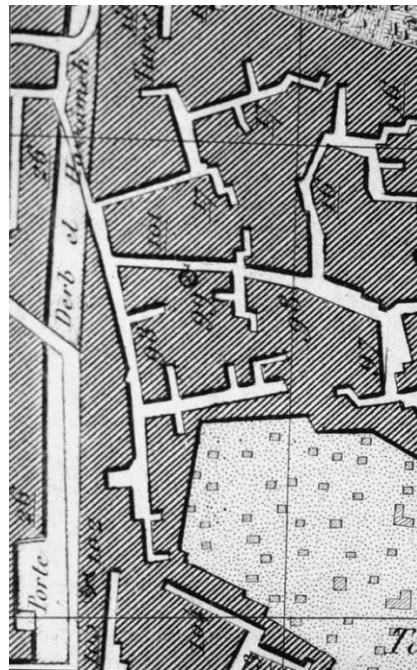


Figure 13: Kawm al-Shaykh Salama quarter in Cairo from the Description (Raymond, 2008, p. 1182)

As Egli said, “the city has not posed an important role in the lives of Arabs” (Egli, 1962). In addition, the “medina”, ie. the city, was the place of civilization. Ibn Khaldun stated that the city life was the only civilized life.

According to Kuban (1982), it is correct to make distinction between pre-Islamic cities such as Mecca, Damascus, Aleppo, Jerusalem, and newly established ones,

such as Kufah, Basra, Baghdad, Fustat, Kairouan or Medina-tul-Zehra in the Islamic World. This second group of cities was established by caliphs many times with specific plans, but they disappeared after the death of the monarchs, as they emerged as a result of the coincidence of a ruler or they lost the order in their first formation, such as Basra and Kûfa, who were originally military headquarters. The extent to which the initial structural features of these cities are effective in the subsequent development cannot be easily determined. For example, it cannot be said that being as the first headquarter of Roman city or a military camp directs she subsequent shaping of the cities. In general, although there are some architectural privileges, it is seen that the Arabic World creates a similar urban order in the Countries from Mesopotamia to Morocco and Spain.

As Kuban points out, the analogy of the main elements of Muslim cities to those found in older cities can lead to misperceptions: The market of the Muslim city does not correspond to the Roman forum. Especially in the first Muslim cities, the mosque is functionally is not similar to the Roman Basilica or the Christian church. Maybe it's a sum of the two. Considering as the prerogative of being the similar city, the baths (Grunebaum, 1961) were not monumental buildings constructed for Public enjoyment as in the Romans. The social characteristics of the Arab cities were also unique. It is not correct to say that the Islamic cities have no influence on the purpose and structure of the old cities on which they are laying above (Grunebaum, 1961).

As Egli has stated (Egli, 1961) the main feature of Islamic City from physical and social aspects, was dividing into quarters. Ethnic and religious differences in the society made this division perhaps compulsory. Thus, from the first headquarters where each tribe had a separate section, to the Baghdad of Khalifa Mansur and much

more recently, the quarter remained as a unit. Like in the old Damascus (Barthold, 1962), the quarters sometimes separated by walls.

In terms of physical formation, the geographical position of the Islamic world had a significant impact on the structure and the urban form. Inward home, narrow, shady Street, covered bazaar place, fountains and waterway sympathy and handling them carefully are important features of the Islamic City, depending on the climate (Egli, 1962). Undoubtedly, this particularly describes the Arabic and Iranian World.

The geometric distant structure of the Islamic cities is also found in medieval European cities. Without the router principles of the police, the slow and organic development of a city could not breed a geometry by itself. However, the edict of the ruler has led to the implementation of a full-circle planned city such as Baghdad or the axial compositions such as Samarra.

There are Friday mosques, which settled in the center of the city in the facts that have been revealed as the universal features of these cities. Sometimes it is accepted as the symbol of the city with its market place. This is certainly not unique feature of the Islamic City. At each level of great civilization, the city has given these two main functions a central place as the important elements of the structure. As an icon of the mosque, it is parallel to the medieval cathedral (Kuban, 1982). The fact that the bazaar is in the center of a settlement and assembled in a physical order with the temple can be a derivative of the Roman period, especially in Syria and Egypt. Grunbaum argues that the covered fabric markets (Kaysariyya) come from the Byzantine 'Basilica' and that the bazaars in Antakya are the most prominent examples of them (Grunbaum, 1961). But in most Islamic cities, the connection between the

city center, the mosque and the bazaar is not in a planned order. Moreover, the places and organizations of the trade zones are not the same in all Islamic countries. In Iran and Turkestan, trade with nomads appears to affect the physical form of cities.

The self-government of the city in social aspect is not a Islamic concept. As Grunebaum stated, “the Islamic City was an administrative and functionally unified 'entity' which consisted of few or highly settled groups. Being urbanite is not a special feature” (Grunebaum, 1961). Kuban also drew attention to this point that, rather than the city, the quarter creates a sense of being attached to a place in the city. These characteristics, until recently, are contrary to those in the European tradition of urban civilization, it is more similar to the urban order of the contemporary world, especially the New World. According to Kuban, it can be observed that in today's great American city, being an urbanized does not have a special feature and it is replaced by ethnic, religious or racial discrimination. According to this situation, it can be argued that these characteristics are not only specific to Islam.

As Kuban stated, culturally, the main feature of all Islamic cities is the lack of political unconsciousness and self-government. Therefore it could be correct to search the physical disorder in Muslim cities in the independent behavior of the urbanized in the absence of any responsible organization representing the common will of urban life. Together with Grunebaum, it is possible to express that the Islamic Cities are not expression of a uniform civilized life like the Greek and Roman cities (Grunebaum, 1961). Because Islamic civilization was not as uniform as many orientalist and Islamists thought.

Kuban (2015) states that the main unit in the residential area is the neighborhood and points out that it is difficult to say much about the qualities of the neighborhood in the Seljuk period. But the neighborhood of the Ottoman city has lived until recently, even if it is not the same, it is enlightening for older ages. The neighborhood has been more than just a physically identifiable unit of the city. The social solidarity in the city should have a quality that can be extended to the person within the boundaries of the neighborhood. Until the second half of the nineteenth century, the Imam was the religious and social manager of the neighborhood. The inhabitants of the neighborhood were his congregation within certain physical limits. The center of the neighborhood was generally a masjid, which was very close to the imam's house. Generally the name of the masjid and the neighborhood came from the name of the builder. The school was also within or near the mosque (Kuban, 2015). The mosque was the core of the new district of the city to be established or the city to be reconstructed or settled and other functions came together around it (Barkan, 2015).

## **2.4 Physical Characteristics of Islamic Residential Architecture and Its Influences on Street Configuration**

In this section, physical characteristics of Islamic residential architecture and its influences on street configuration will be examined.

### **2.4.1 Street Network**

#### **1. Street and Cul-de-sac**

Being one of the major issues in the development of the cities influenced by Islamic Culture in the Mediterranean area, the cul-de-sac is a kind of track of which with varies from minimum one meter to maximum of three with no exit, connecting a public street to a residential neighborhood of the third model of courtyard tissue. It has been called with different name in different Islamic cultures. Some of common

ones are zuqaq, zanqa, derb ghayr nafidh, and sikka gahyr nafidha (Lavedan, 1926). It consists of two parallel walls that are generally blind or with narrow openings, a kind of open-air corridor lying towards some private entrances that enables not to encounter with each other in order to prevent visual connection. The walls are perpendicular with unspecified surface, and the accesses that are the only connection point with outward are decorated lavishly. The gate generally isolated the cul-de-sac from the rest of the city in the former times (Petruccioli, 2007).

The cul-de-sac's morphology may be complicated too much. The flat sections may take right-angled abruptly or even a U-turn. Being alternating open-air ones, enclosed parts bounded by houses of which heights differ and evoking various emotions of physical squeezing.

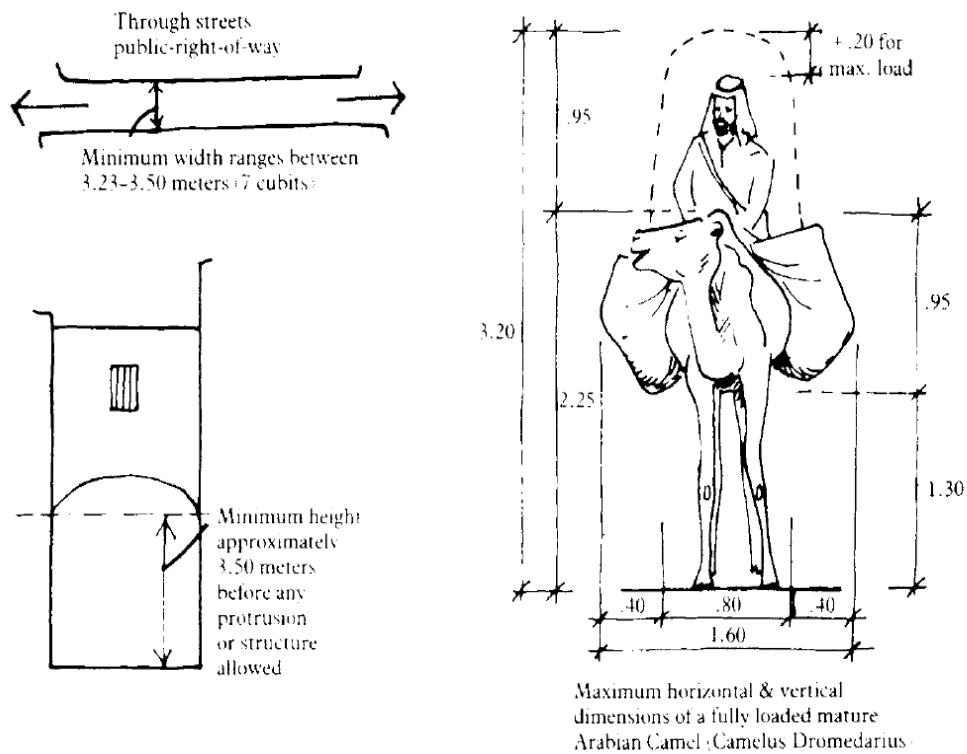


Figure 14: Minimum width and height in cul-de-sac (Hakim, 1986, p. 21)

Enrico Guidoni, which sees the tissue in the cul-de-sac, shows regard to constitutional formative element for the urban morphology of Islam, he also consider it as an premeditated pattern that have a solid symbolic significance and deduces a precise inventory of Arabic components for it from Sicilan town of Arabic originated origin (Conzen, 1960). The decisive model such like this seems improbable the cul-de-sac is always unified with the forming of deep courtyard tissue (Petruccioli, 2007).

It is more acceptable and sensible to examine the roots of the cul-de-sac as an instrument and a structure for exclusion integrated with the aspiration to include inter-ethnic disputes and debates maintain an amount of tribal autonomy within the city core. This essential manner may have been enviously maintained by social unity of the group that are settling in the cul-de-sac until the twentieth century.



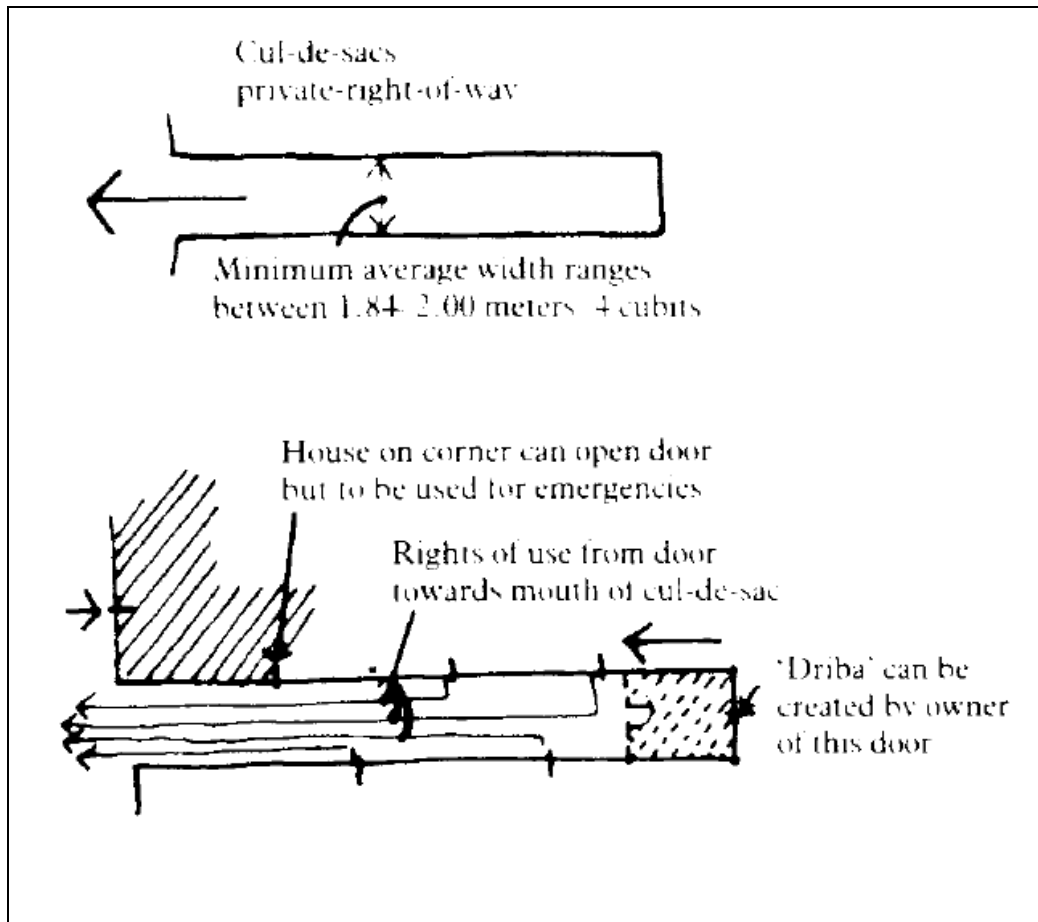


Figure 15: The rights of usage according to the Shaff'i school of law (Hakim, 1986, p. 21)

## 2. Street Elements

Hakim is stating there are some chosen codes which are universal in shaping the built form of traditional cities across the Mediterranean which affected Islamic cities as well. Two of these codes are 'Fina' and 'Sabat' which are shaping the urban texture as street elements.

### Fina

This refers to an imperceptible area of approximately 1-1.5 meters wide along every exterior wall of buildings what are not adjoining to other walls, and mainly along access paths and streets. It is vertically extended along building walls. The building landlord or tenant has defined responsibilities and rights concerning his fina. Even

though it is not explicitly mentioned by Julian, the application of such space is visible in Greek cities and villages which remain from the post-Byzantine era, mainly from post-1500s era. Substantial evidence exists that supports such concept from the pre-Islamic era in Arabia. This concept was completely accepted by Muslim scholars and jurists which is evident in North Africa, Near East and pre-1500 Spanish literature (Hakim, 2008).

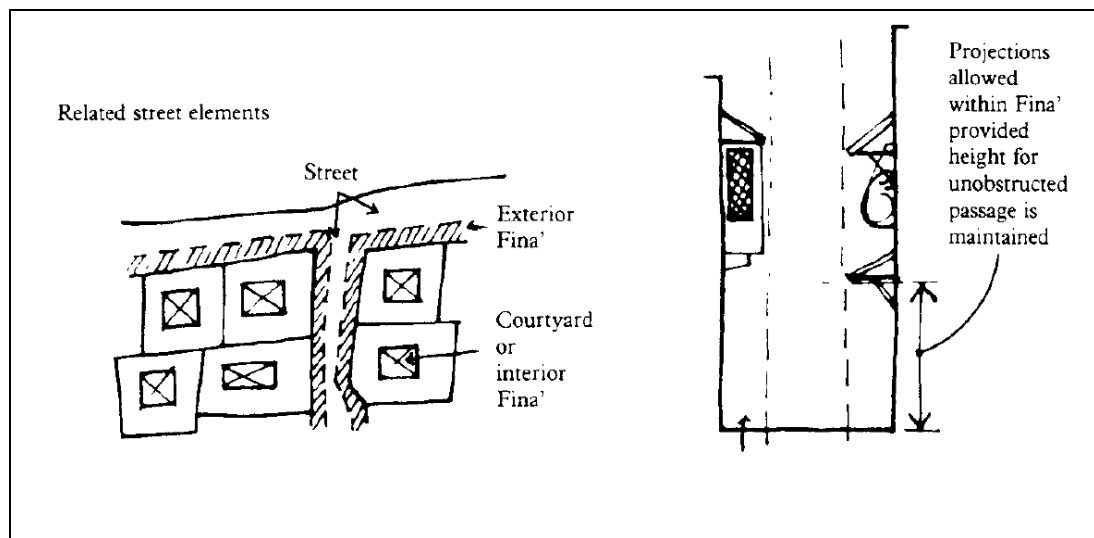


Figure 16: Concept of Fina (Hakim, 1986, p. 28)

Such concept is profound and influential in that it provides the expression of the thresholds and facades along the public domain. Incorporated benches close to entrances, confined bay windows, troughs especially for vegetation, high level projections in the shape of balconies and rooms bridging the public right of way were possibilities due to concessions of such concept. The preservation of private passageways and streets was achieved by maintaining cleanliness and safety from obstructions, which are also related to the concept of fina (Hakim, 2008).

### **Sabat**

Modifying and implementing the bridging of public right-of-way originates from the fina concept. This device provides the means of constructing extra space adjoining the building. Muslim Jurists' codes clarify the legal rights accredited to creating sabats. The fina is where it is indicated that it is adjoining from both street sides for creating a sabat. In the case where buildings of both street sides had the same landlord, then the walls were used directly for support purposes to construct the sabat.

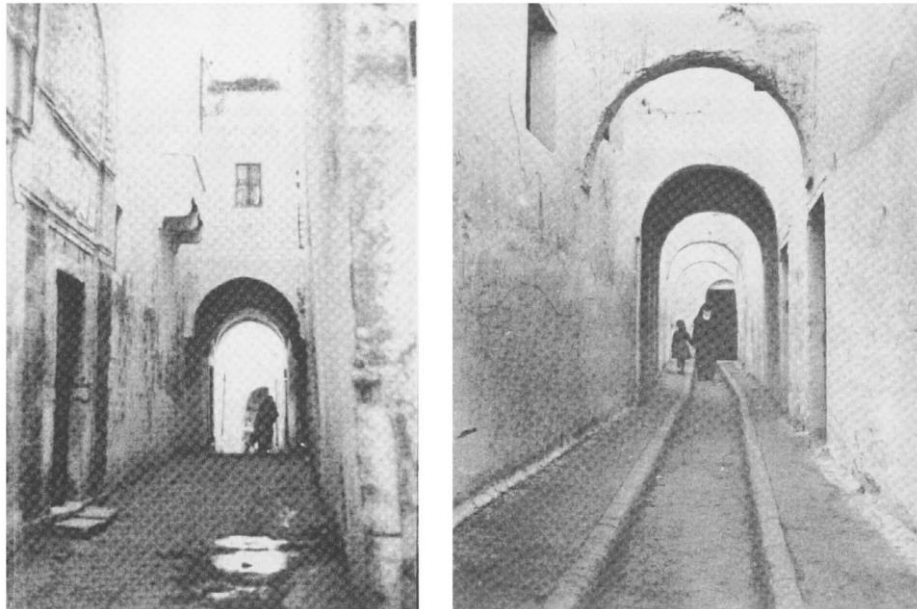


Figure 17: Sabat (room bridging street) and a cul-de-sac representing buttressing arches, high windows, and a canal which is for rainwater (Hakim, 1986, p. 26)

If there was a different landlord owning the opposing building, then the party wanting to construct a sabat may decide to apply columns to support the adjoining exterior wall. As an alternative, columns may be used to support both sides which will enable a sabat to be marketable for the neighbor living on the opposite side for an unknown time in the future. In some cases, adjacent neighbors alongside the street axis may want to create sabats. In such case, there will be continuous sabats that are adjoined and create a tunnel over the street (Hakim, 2008).

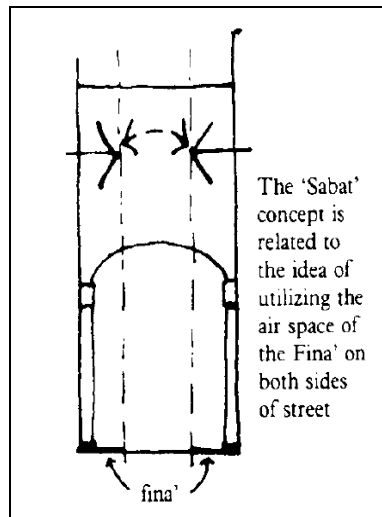


Figure 18: Concept of Sabat (room bridging street) (Hakim, 1986, p. 28)

Muslim jurist also address the issue of height clearance concerning the right-of-way by specifying that clearance should be of a height sufficient enough to prevent the hindrance of a passer riding an animal. In some regions, this was measured by using a fully loaded camel as reference. As an example, during the post-Islamic Toledo era, early 15th century Spanish codes used a knight that was fully equipped with weaponry as a measuring reference. An Armenopoulos Hexabibolos stipulation (in mid-14th century) states that any projections, namely balconies should provide a vertical space of 15 feet measured from street level (Hakim, 2008).

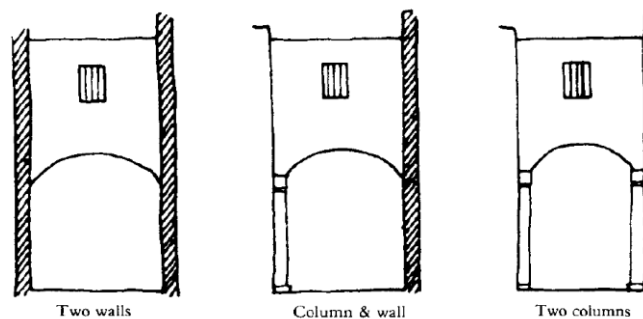


Figure 19: Alternative support system for a Sabat (Hakim, 1986, p. 28)

## 2.4.2 Housing

## **Courtyard House**

Various researchers have seen that while the courtyard house is the main kind in numerous areas, for example, Padania (the Po Valley), the Maghreb, and whatever remains of the Middle East, it isn't consistently scattered all through the Mediterranean. While it is sensible to expect that the domains of the Roman Empire were affected by the domus up to at least the fifth century, no hint of it tends to be found in parts of central Italy without expecting the Rome, southern Italy (expect for Naples field), and Provence. Climate unquestionably isn't the fundamental explanation behind occasion, Milan and Aleppo share the sort however not an climate (Petruccioli, 2007).

In the Islamic world, the courtyard type likewise reacted successfully to the basic Muslim necessities of segregating and securing women. This clarifies the simple progress from prior Yemenite models to the courtyard type by the Umayyads when they achieved the shores of the Mediterranean (Serres, 1969). Another obstacle to a clearer picture is that regardless of later comprehensive investigations of the Arab house, it is difficult to set up clear and actual typological connections between the diverse Islamic regions in the Mediterranean. Ambiguities are still available (Petruccioli, 2007).

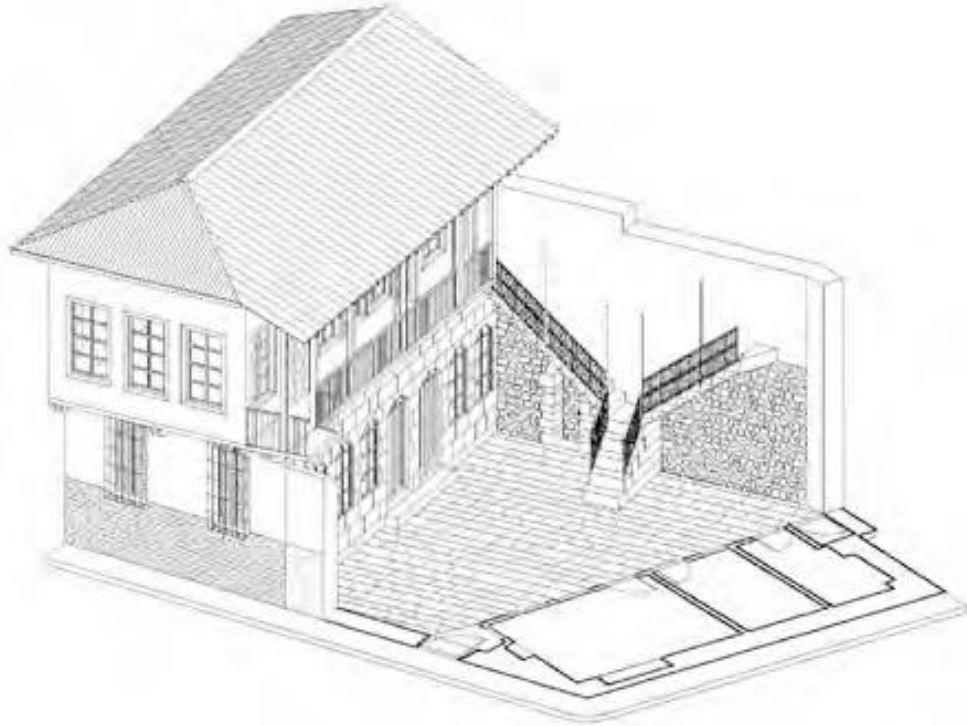


Figure 20: Courtyard corner house in Antakya (Petruccioli, 2007, p. 101)

Investigations about the courtyard house lay on a persistent prevarication, one that tends to sustain the picture of an all-inclusive and universal sort, indifferent to set up and constant after some time. The effort of Orientalists and Arabists, celebrating the yard as the core of the agnatic family, the dar as the place of combination of the microcosm and macrocosm, as the place that naturally dignifies the physical and mental comfort, has befuddled the issue further. Focusing on conventional emblematic and practical ideals, they have neglected to evaluate the anatomical and typological segments of the courtyard house, to pursue its periods of progress and to assess its topographical contrasts. (Petruccioli, 2007)

The building unit is arranged to take the best favorable position of direct sun, which in the Mediterranean catchment relates to a south south-western exposure. Since the decision of direction relates more to manufacturing needs than to the building itself,

this standard is definite in rustic territories yet not all that entirely adhered to in towns, despite the fact that it is as yet common in most of the townhouses also. Given the extensity of a southern orientation, the assembled part inside the enclosure in area is either parallel or horizontal to the street.

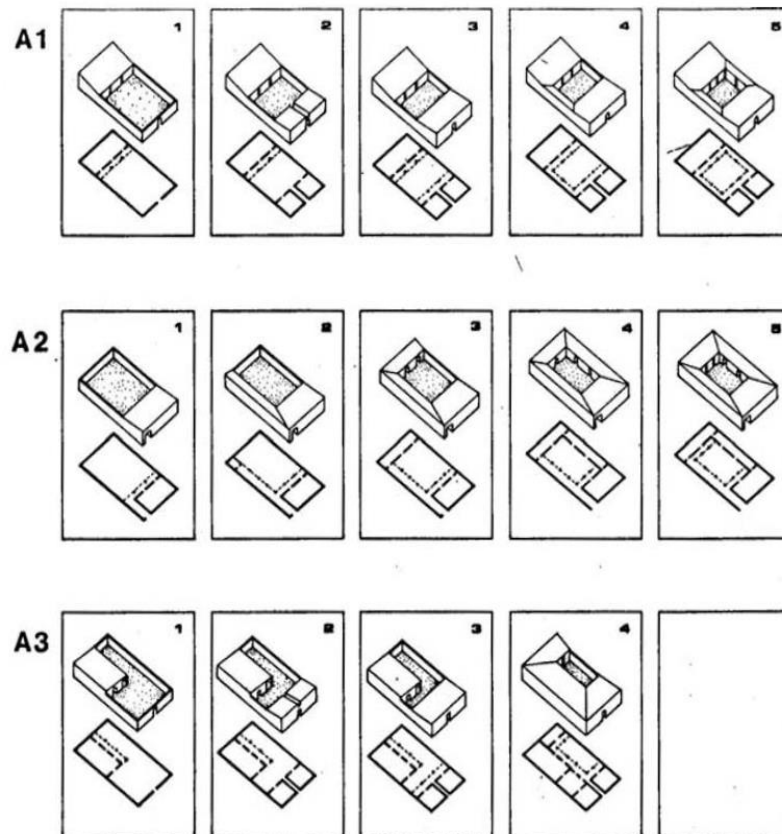


Figure 21: Typological process of the courtyard house (Petruccioli, 2007, p. 78)

There are then just three conceivable access variations for the courtyard house. In the first situation, when the building is parallel and nearby the course, entrance is through the building component, where in order not to restrict the distributive probabilities of the building, it is pushed to a far end. In the other two situations, the building is either horizontal or opposite to the street, and the passage lies in the center of the free side.

## **Household and Physical Settings in House of Islamic World**

Traditional Islamic education and traditions include instructions which are directly applicable to the household. Principles such as hospitality, privacy and modesty are integral parts of such guidance. Every principle has substantial impact on Muslim home design in addition to organizing space and household behavior. Regardless of the typical guidance on noticing hospitality, privacy and modesty in every home, Muslims that reside in various countries are affected by cultural parameters which exist in the country which they live in. Such parameters form the architectural styles whilst space is used in Muslim homes in various ways. (Othman et al, 2014)

The structure of traditional Muslim homes originates from guidance presented in the principles delineated in Islamic Sharia Law. These laws are extracted from the Quran (revelations of Allah to Prophet Muhammad) in addition to hadiths and sunnahs (utterances and actions of Prophet Muhammad). From such guidelines, three prominent principles are derived (Othman et al, 2014; Omer, 2010; Mortada, 2011):

- a) Privacy, a safe and private place for individual and family's haven;
- b) Modesty, a household with an environment for religious traditions and rituals represented by humility through a viable and cost-effective structure;
- c) Hospitality, a habitat of favorable conditions to provide hospitality for neighbors and to strengthen relations with society

Bahammam (1987) and Mortada (2011) proposed that privacy within traditional Islamic homes includes four prominent levels of privacy: (a) privacy among neighboring residencies, (b) privacy among females and males, (c) privacy among members of the family within a household, and (d) individual privacy. These privacy needs are typically adhere to via cautious design by guaranteeing family safety and



segregating private life from public relations (Memarian et al, 2011). Design concerns consist of controlling visibility via visual privacy, transmitting noise via acoustic privacy (Mortada, 2011; Hallak, 2000; Bahmammam, 1987).

### **Visual privacy**

Optimal visual privacy is an antecedent planning objective which guarantees female family members' privacy and safety in Muslim homes (Al-Kodmany, 1999). Such privacy is obtained through different exterior design intercessions, namely the design and location of entrance doors, the location and size of windows and openings, supervision on building heights and balconies, the implementation of internal courtyards and gendered spaces (Mortada, 2011; Bahammam, 1987; Hakim, 1986). The main entrance door is an evident separation that separates the public and private areas. Entrance doors in traditional Muslim households are located at a significant distance from main streets and do not face opposite neighbors directly (Bekleyen and Dalkilic, 2011; Mortada, 2011; Bahammam, 1987).

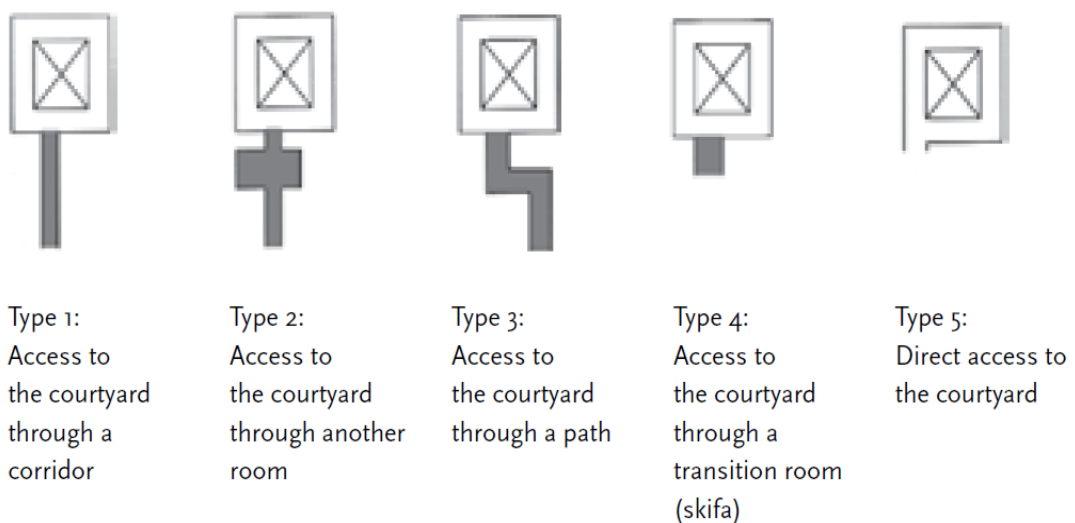


Figure 22: Access typologies of the courtyards (Petruccioli, 2007, p. 103)

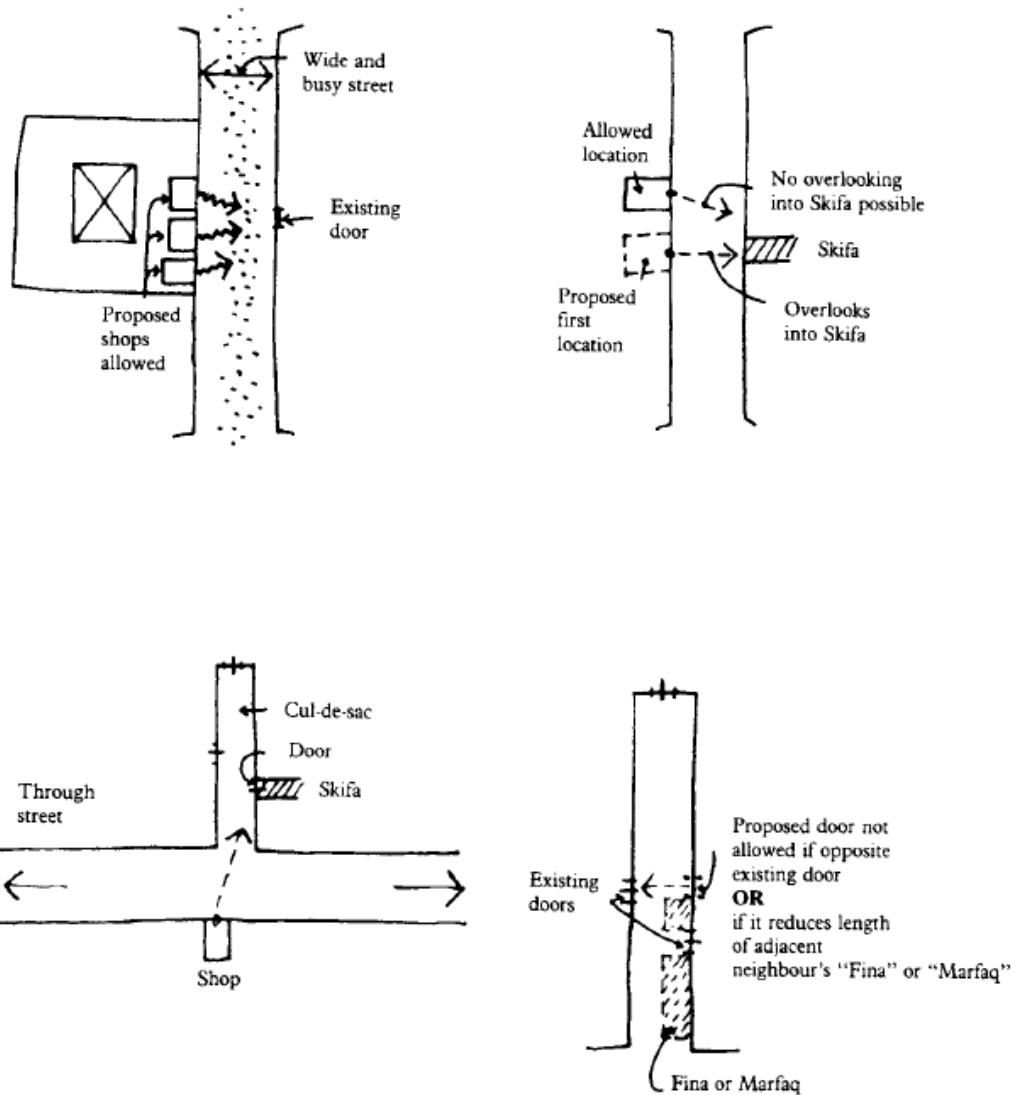


Figure 23: Overlooking further examples of visual corridors (Hakim, 1986, p. 35)

Islamic teachings are a reminder for Muslims to prevent them from breaching visual privacy by looking outside into the windows of other homes (Daneshpour, 2011; Hakim, 1986). In some cases, windows are designed and set up in traditional Muslim homes in such a way as to avert such incidents. As an example, the majority of traditional mud houses built in Saudi Arabia are installed with small windows, whilst other houses install higher level windows which are about 1.75m high as ground floor windows (Mortada, 2011; Shraim, 2000; Al-Hussayen, 1999; Hakim, 1986). Mashrabiya or wooden lattice screens are used to minimize visibility (Daneshpour,

2011; Mortada, 2011). Other design considerations to guarantee visual privacy in traditional Muslim homes include controlling building heights across the neighborhood (Daneshpour, 2011; Mortada, 2011). The application of identical building heights with meticulous window location options are also evident which make sure the windows are not within the same line of vision of opposite homes. This also controls visibility, hence, household residents, particularly females are visually shielded from strangers outside (Daneshpour, 2011).

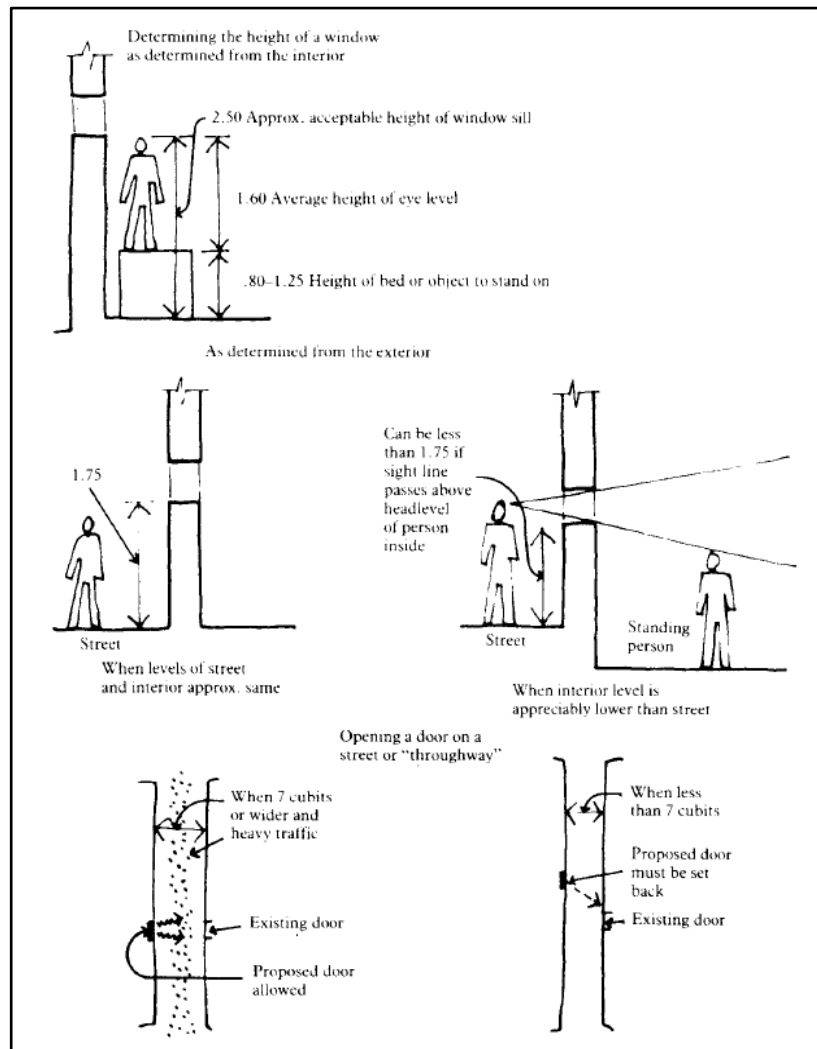


Figure 24: Overlooking visual corridors (Hakim, 1986, p. 34)

The addition of courtyards in traditional Muslim homes across the Middle East

provides sufficient distance to avoid direct visibility to neighboring home internal spaces. Such courtyards also alleviate climatic factors that exist in some countries (Bekleyen and Dalkilic 2011, Al-Kodmany, 1999, Bahammam, 1987). In addition to satisfying privacy needs, such design methods are also environmentally-friendly, thus providing a cool and convenient indoor home space in spite of harsh climates (Bahammam, 1987).



Figure 25: Windows are generally positioned above eye level on the street side, generally the threshold is nearly 1.75 m above street level (Hakim, 1986, p. 27)

The central courtyard is considered an essential space providing cooler ventilation during the summer, light for its enclosing spaces, and a private outdoor space for household residents (Bekleyen and Dalkilic, 2011). The main north-facing decorated open space makes use of the cooler summer gust whilst providing a comfortable microclimate (Bekleyen and Dalkilic, 2011). Such space is mainly utilized by tenants amidst the summer for private gatherings and musical amusement (Bekleyen and

Dalkilic, 2011). Courtyard homes satisfy the design needs for climate and privacy whilst creating the means for landscape interventions, namely the implementation of fountains, Islamic calligraphy, design themes and shade trees (Bekleyen and Dalkilic, 2011; Al-Kodmany, 1999; Bahammam, 1987).

### **Acoustical privacy**

The preservation of acoustic privacy is also considered a crucial factor in the design of traditional Muslim homes (Mortada, 2011). In order to achieve such objective, it is necessary to control the transmission and vibration of sound from external spaces into the internal realm or vice versa (Mortada, 2011; Hakim, 1986). Such privacy level is attained using thicker walls to guarantee acoustical privacy and to adhere to privacy needs (Hakim, 1986). These thick walls are formed using rocks, stones and mud bricks which are typically utilized in numerous traditional homes across the Middle East to guarantee the effective insulation of sound (Mortada, 2011; Hakim, 1986). Such design consideration is also used on roofs and floors to make sure vertical and horizontal sound transmission control is consistent (Mortada, 2011; Hakim, 1986).



Figure 26: The usage of walls between neighbors (Hakim, 1986, p. 28)

Internal spaces were typically segregated into three areas to maintain acoustical privacy, namely, male, female and service areas that are connected through courtyards (Mortada, 2011 Al-Kodmany, 1999). The application of gendered spaces enables further control over sound transmission due to exclusive male and female rooms (Mortada, 2011). Such gendered spaces are divided through corridors and circulation spaces to enhance acoustical privacy (Mermarian et al, 2011; Mortada; 2011; Sobh and Belk, 2011). Public (male and public spaces) and semi-public (female and family rooms) spaces are created as close as possible to the main entrance which prevents noise transmission to front spaces and preserves acoustical privacy for private spaces (Al-Hussayen, 1999).



Figure 27: Parapets are used for stop overlooking the private field of neighbors (Hakim, 1986, p. 28)

As it is all mentioned above, in housing and street networks, there are some specific features. These components are shaping the environment of the neighbourhoods in the cities. They are in the different scales when looked over to all. However, they are all related to each other and affecting whole.

## **2.5 Summary of the Chapter**

In this chapter above, The Model of Islamic City, History of Islamic City are investigated. In the last section, Physical Characteristics of Islamic Residential Architecture and Its Influences on Street Configurations are examined and shown above. To understand the cities which had period under the Islamic rule, in following sections all these characteristics and configurations will be used for the analysis of the Antakya city in the next chapter. All the datas which examined above will be used for understanding the case of Antakya.

## Chapter 3

### CASE STUDY: ISLAMIC INFLUENCES ON PHYSICAL ENVIRONMENT OF NEIGHBOURHOODS IN ANTAKYA

In this chapter, after providing the necessary informations about Antakya, it is going to examine the impacts of Islamic effects on physical environment of neighborhoods in Antakya.

#### 3.1 Location of Antakya

Being the administrative center of the Hatay province located in the Southern Anatolia, which is one of the border provinces of the Republic of Turkey, Antakya is a southernmost center of population of Turkey with the  $36^{\circ}10'N$  and  $36^{\circ}06'E$  coordinates.

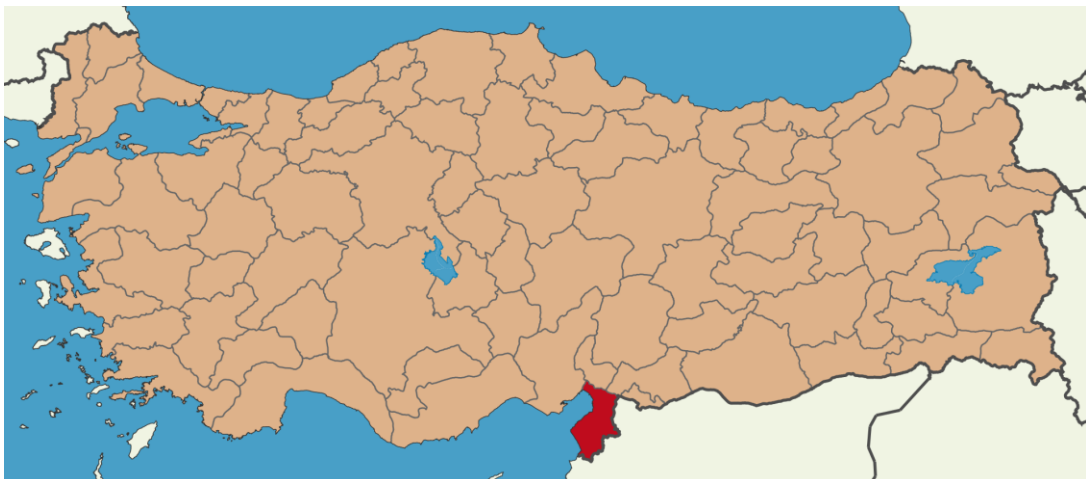


Figure 28: Location of Hatay (Retrieved from: URL-1, 2018)

Being at the eastern end of the Mediterranean climate zone, the city is settled about



22 km away from the coast with the 80 m attitude It is at the beginning of the Lower Asi Valley between Amanos Mountains (Kur Mountains) in the North and Kel Mountain (Cebeli Akra) in the South, on the foothills of the 400 m-high Habib Necaar Mountain in the Northeast of Kel mountain. Amik Plain, which develops towards the northeast of the city and is in the middle of the Hatay lowlands area, is covered with a thick alluvial soil layer which has a very high agricultural potential and this plain is the largest plains of the province as well (Demir, 1996).



Figure 29: Antakya and the borders Hatay Province (Retrieved from: URL-2, 2018)

The Lebanese Mountains are the source the river, which is called “Orontes” in the ancient times and “Asi” in the modern times, passing through the center of the Antakya and the part of the river bed passing through the city has been rehabilitated. The total length of the Asi, which forms a bed between Amanos and Kel Mountains, is 380 km. (Demir, 1996).

Connecting the New Antakya that is growing on the other side of the river with new quarters on the northwestern plains and with its own architectural character with former Antakya settled between the De River and Habib Neccar Mountain since the 19th century, three of the total four bridges are completely new bridges in terms of their location and materials. The fourth bridge, which is the oldest of them, is a new bridge built by using modern material in the same place where the old one is located, which has served the pedestrian and vehicle traffic for centuries, (Demir, 1996).

Within the framework of the project of drying Amik Lake through the Asi River, this stone bridge, which has been standing since the Coma Age of the city (it is presumed to have been made at the time of Diocletianus), was demolished in 1970 and replaced by a new reinforced concrete bridge, during the expanding the Asi ground (Demir, 1996).

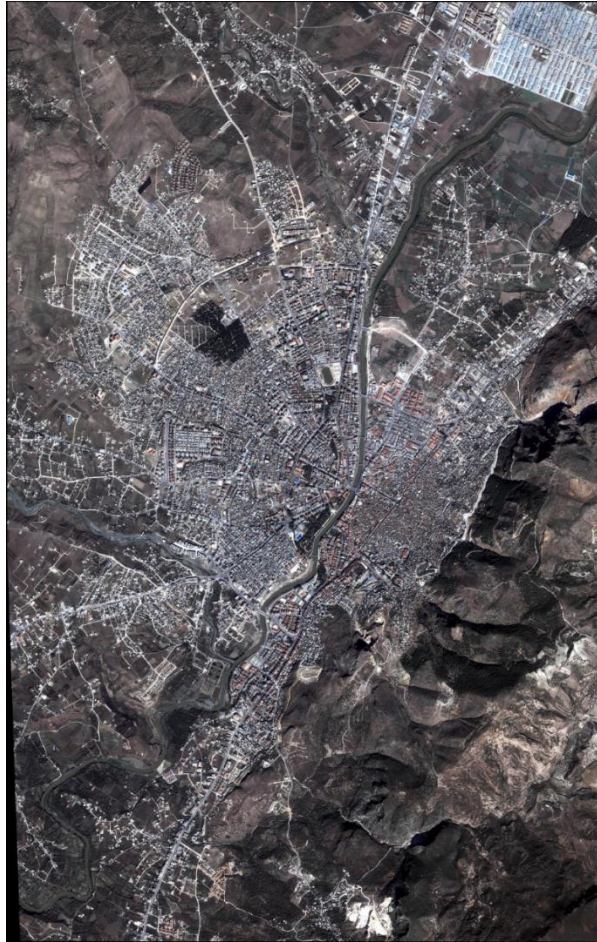


Figure 30: Satellite view of Antakya, 2009 (Source: Antakya Municipality)

Being the symbol of Antakya, the Habib Neccar Mountain with the castle and the wall ruins surrounding the city, is a natural barrier formed by a series of hills that limit the city in the southwest to northeast direction (Demir, 1996).

The vegetation cover of the region is formed by Amanos. Plane forrests in Keldağ covered by gale, laurel, thyme, lavender, juniper, oak, beech, cranberries, poplar. The forest areas in Keldag, south of Antakya, consist of Aleppo pine, deciduous oak and beech trees (Hatay Province Yearbook, 1973).

Mediterranean climate is dominant in Antakya and its vicinity. Therefore, the summers are hot and dry, winters are warm and rainy in this region. However, due to

the regional differences in climatic conditions between the coastal areas and the back parts of the mountains, the climatic conditions in Antakya differ slightly from the coastline. Therefore, while temperature reaches high values on the coasts, it remains at lower values in inner parts where the Antakya is located. One of the reasons that the summers are cooler than the coastline is that the months where the hottest average is recorded are also the months when the wind blows fastest with the highest intervals in Antakya (Demir, 1996).

Rainfall in Antakya reaches the highest values in winter season. Autumn and spring are the seasons with less rainfall. The average annual precipitation in Antakya is 1173.4 mm with no precipitation in July and August. Especially the torrents and storms in the spring season are famous and they make the streets being as rivers within the short period of time (Demir, 1996).

The average speed of the winds in Antakya is 4.7 m/s as a light breeze towards the southwest direction. However in May, June, July and August (which are the months with the highest average temperature) the average speed reaches 8.15 m/s as a strong breeze towards the same direction, southwest. The direction of the fastest wind is towards southwest and its the speed reaches 29.9 m/s in January. The fact that these meteorological data reveal is that the dominant wind direction in Antakya is southwest (Colakan, 1970).

### **3.2 General History of Antakya**

The researchers conducted in Altınözü, Şenköy, Antakya, and Çevlik districts have revealed that the settlement in the region has extended over the Middle Paleolithic Period. The settlements have been stretching during the Upper Paleolithic, Neolithic

and Chalcolithic eras. The researchers conducted in this area show that the first settlement in this area dates back to Middle Paleolithic Era, which is dated back 100000-40000 BC (Yurt Encyclopaedia, 1982).

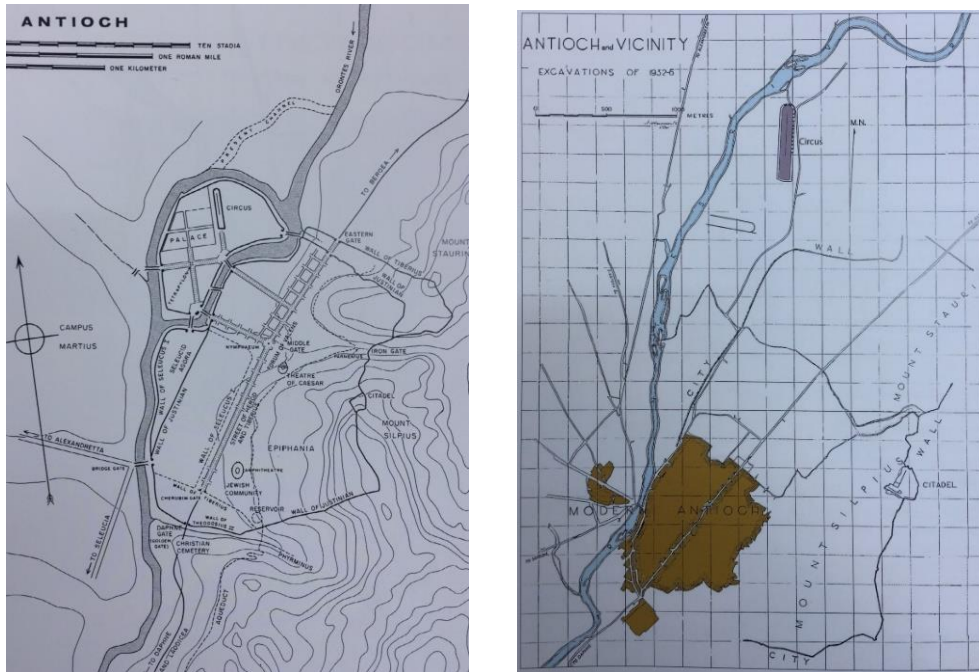


Figure 31: Antakya plan in ancient ages (Downey, 1961) & Place of the circus (Campbell, 1934)

The region, which has been ruled by Accadians since Bronze Age, was occupied to the Kingdom of Yamhad of which capital was Aleppo Between 1800 and 1600 B.C. (Britannica 1992). The region was ruled by Hittites, Late 17th century BC, and by Egypt in 1490 BC. In 1200 BC, the Kingdom of Hattena was founded with its capital Kanula (Çatalhöyük). It is thought that the origin of “Hatay” word comes from the name of this kingdom (Britannica 1992). Then the city of this kingdom respectively ruled by Assyrians, the Hittite Principality, the Urartians, and again the Assyrians. Even in the middle of the 7th century BC, the Oghuz Turks came to this region were staying for 18 years (Hatay, 1998). Antakya and its surroundings were within the borders of the Persian Empire in the middle of 6th century BC, but the King of

Persia, Dara, was defeated by the Great Alexander in the war in Isos (Iskenderun) and retreated to the Euphrates and after the second defeat in the Euphrates stream, the city came under the domination of Alexander (Hatay Yearbook, 1973). After defeating Antigonos, one of the other rival commanders, Seleukos, who is one of the commanders sharing the empire after the death of Alexander the great, he has destroyed the city founded by Antigonos in Samandag and other city settled on the South of Amik Lake and has founded Seleucia Pieria (Samandag-Çevlik) city and Antiochia (Antakya) city on behalf of his father Antiochos (Sahillioglu, 1991).

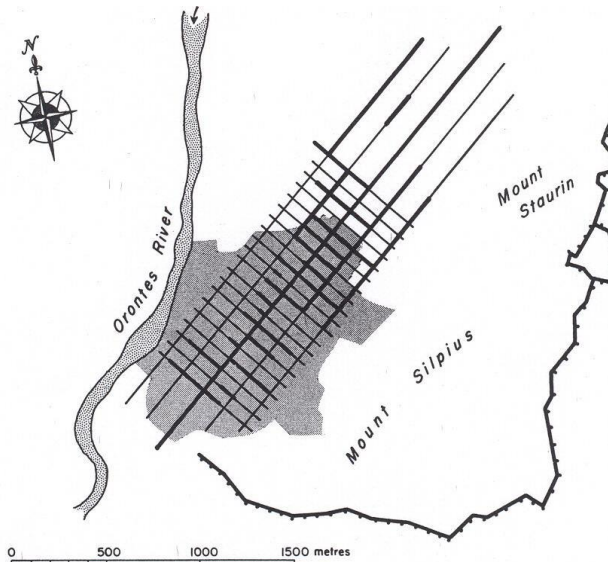


Figure 32: The Hippodamian plan applied by the Seleucid Empire (Downey, 1963)

The first community of the city was Macedonian, Athenian, Cypriot, Rhodesian and Cretan people. The city became one of the most important centers of the Hellenistic period (Yurt Encyclopaedia, 1982, 5: 3466). The city, which consists of two neighborhoods, was occupied by Macedonians and Greeks on Aleppo side and by the Jewish people and local residents on the southwest side (Sahillioglu, 1991).

The suburb of Antioch, which was as famous as Antioch and described as Antioch



near Daphne, It is known that cisterns were built on the slopes of Silpius with an aqueduct bringing water from the Daphne and the sewage water are discharged to Orontes (Asi) River. (Hatay 2000, 2000).

The city plan of Antakya has drawn by Xenarius in ways that the streets can be exposed to the sun and the wind from Asi River. Since the city plan of Latakia was the same, these two cities were called as Twin Cities for a long time (Tekin, 1993). In the period of Seleucid State, the intermittent Olympic Games were arranged from 195 BCB to 6th Century BC (Hatay, 1998).

The second founder of the city, IV Antiochus Epiphanes (175 – 164 BC), has established a new settlement called Epiphania, thus Antakya has been a town consisting four neighborhoods (Sahillioglu, 1991). The only one historical artifacts from IV Antiochus time to the present is the giant bust of Charonion (Haron) carved into a rock. This bust had been started to be carved for praying the gods to stop to the plague spread to the city but has been aborted without being completed because of the end of the plague.



Figure 33: 3D modeled Ancient Antakya City (Kaplan, 2014)

The city has completed its establishment somehow and Antakya has joined the Roman Empire by the end of the State of Selevki that was conquered by Pompeii in 64 BC. In order to warm people to the new government, Pompeii has repaired the city that was ruined by the earthquake in 69. Thus the city has been the capital of the Syrian province of the Empire. The city has survived several earthquakes but it was reconstructed immediately. The Romans also widened the walls (Sahillioglu, 1991). In the 1st century AD, the Christianity spread in Antakya after Jerusalem and those who believe in Jesus are called “Christians” for the first time.



Figure 34: 3D modeled Ancient Antakya City (Kaplan, 2014)

The Persian threat to the eastern provinces of the Empire has become more serious after the war in 260, in which Emperor Valerian (253–260) was taken captured, and finally, in 256 the city was occupied by Sapor I for the first time. The Persians who captured the city for the second time at the end of June 260, destroyed and devastated the city (Rubenstein, 2004).

Zenobia, the Queen of Palmura, declared independence as a result of few achievements against the Persians and occupied Antioch in 268. But after a few years of battle with the Emperor Aurelianus, which resulted in the enslavement of Zenobia,



Antakya have been returned to the old days and in order to eliminate the destruction of these battles, the city has been under special interest in the period of Emperor Probus (276-282). In the era of Emperor Diocletian (284-305), who had visited Antakya several times, a magnificent palace was constructed adjacent to the Hippodrome on the island (Hatay 2000, 2000).

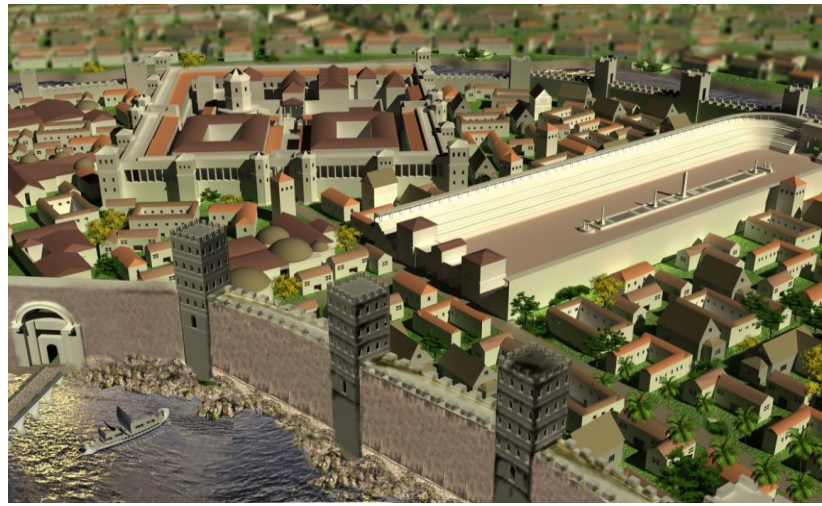


Figure 35: 3D modeled Ancient Antakya City and Hippodrome (Kaplan, 2014)

In October 525, a big fire in the city caused many buildings to be burned to ash and many people died. A year later, on the 29th day of May 526, the earthquake that occurred towards the evening caused the death of approximately 250,000 300,000 people, and almost all of the city has been destroyed, the surviving buildings have been burned to ash in the fire after the earthquake. In the turmoil caused by this catastrophe, the people looted the city, killed each other and fearfully left the city. Daphne and Seleucia Pieria have also suffered largely from this earthquake. The emperor sent large sums for the restoration of the city, aqueducts, baths, and bridges (Hatay, 1998, 54). The future emperor Justinian I and Theodora have expressed their interests to the city by building churches, baths, cisterns, and alms-houses. Columns of the Archangel Church, built by Theodora, were sent from Constantinople (Yurt

Encyclopaedia, 1982). Enusirven occupied and looted the city in 540 and the plague epidemic in 542 and the earthquakes in 551, 557 and 577 negatively affected the city (Yurt Encyclopedia, 1982).

The attacks of Persians towards Syria and Asia Minor between the years of 606 and 607 continued with the great defeat of imperial army near Antakya in 613 coinciding with the period of Emperor Heraclius (610-641) and the city was occupied by Persians again. This occupation continued until the return of the eastern territories of the empire, where Syria is located, to Byzantium in 628 (Hatay 2000, 2000).

The invasion of Syria and Palestine began with the entrance of the Arabs to the Byzantine territory under the command of Caliph Umar in 634, and this invasion extended over Jerusalem as a result of Victory against Byzantine forces on 20 August 636 in the Battle of Yermuk during the Heraclius period. Antakya has been surrendered after a short resistance against the Ebü Ubeyde bin Cerrah forces in the 17th year of hegira (March 638) (Tekin, 2000).



Figure 36: City fortification walls in II. Byzantine Period (Downey, 1963)

Between 661-550, Antakya was in the hands of the Umayyads. In the Abbasids era, Antakya experienced a quiet period. In this period, Antakya was the center of Cilicia. During the Abbasids era, Caliph Harun Reşit came up to Antakya. During this caliph era, the city was governed as “avasım” (Sahillioglu, 1991).

After the Abbasids, Antakya was captured by Ahmet bin Tolun. The city occupied by Tulunids in 877 and then occupied by Ikhshidid dynasty. In 944 it is connected to the Aleppo arm of Hamdanogullari (Hatay, 1998).

Byzantine Emperor II Nikephoros took back the city in 968 during an expedition to Syria, and until 1084, the city remained under Byzantine rule for over a century (Sahillioglu, 1991).

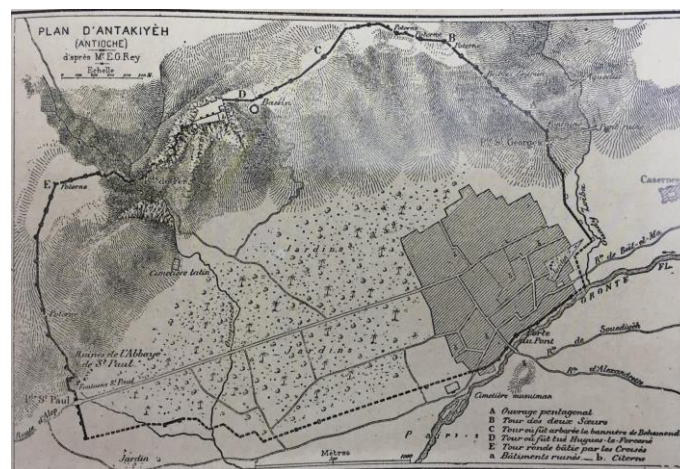


Figure 37: Antakya, the city surrounding the city walls and the rebellious boundary spreading in ancient times and the shaded area shows the modern city (Rey, 1883)

The Anatolian Seljuk ruler Suleiman Shah captured Antakya in 1084. Since the majority of the people of Antakya were Christians, they feared and frightened the Muslim Turks and refuged into the inner castle. But Suleyman Shah had no intention to do evil to anyone. He made this intention clear with an ordinance issued to his

soldiers. It is said in the ordinance that “the Christian people shall be treated well, their homes shall not be invaded, and no one shall marry with their daughters” (Tekin, 1993, 43). Suleyman Shah turned Mar Cassianus Church into a mosque; and correspondingly he allocated a land to the Christians to build two new churches (Virgin Mary and Saint George Churches) (Sahillioglu, 1991).

After the death of Suleyman Shah, Melikshah appointed Yagısıyan to this city. In 1907, The Crusaders armies benefited from the Syrian Seljuks' disturbances and seized Iskenderun first, and then Antakya in 1097 with the betrayal of Firuz. This time Antakya was staying under the domination of the Crusaders for 170 years. Antakya, which became a center of Christianity again, was ruled as a gullet connected to the Kingdom of Jerusalem (Antakya Principality or Antakya Province).



Figure 38: General view of the city in the early 19th century (Taylor, Reybaud, 1839) & House of Girgius Adeeb in Antakya: the courtyard of a house in Antakya (Bartlett, Purser, 1836)

Antakya, which had been under the control of the Crusader for a long time, was captured in 1268 by Baibars, the Mamluk Sultan of Egypt, however, Antakya was not in a position to compete with the Damascus that had been developed as a center by Muslims (Meydan Larousse, 1992, 1: 556). Baibars slaughtered the folk, captured



some of them and allowed the looting of the city and thus the city was destroyed and set on fire. After that, Antakya couldn't reach its former glory again (Demir, 1996).

In 1516, the Ottomans won the war between the Ottoman army and the Mameluke army in Meracidabik. Yavuz Sultan Selim entered Aleppo after the victory and then captured Antakya and its environs. After this Sultan, Suleiman the Magnificent passed through here on his return from the Tabriz Campaign. By order of Kanuni, this region has been turned into a village by constructing mosques, khans, baths and almshouses in Belen (Tekin, 2001).

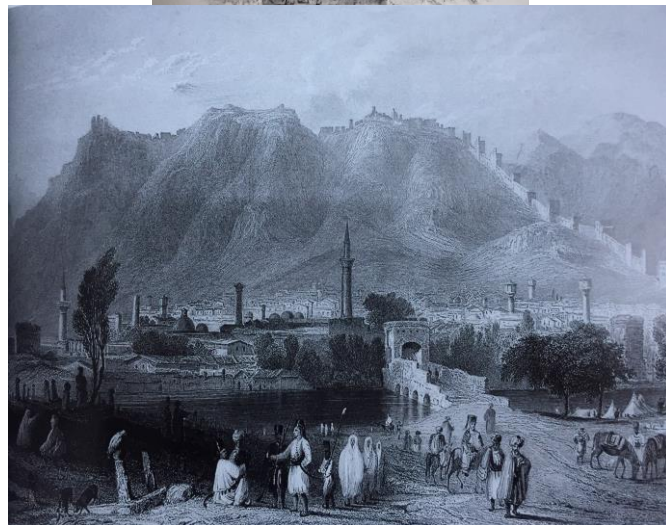
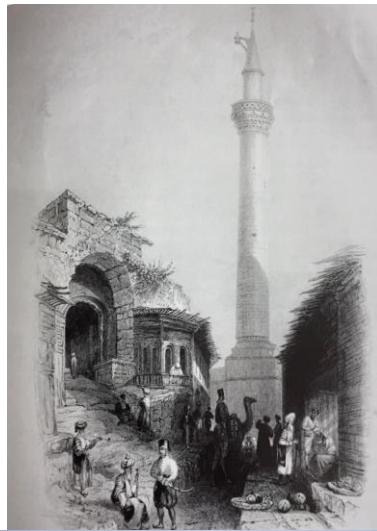


Figure 39: : Antakya Ulu Mosque (Bartlett, Allom, 1836) & View of Antakya from Süveydiye (Bartlett, Purser, 1836)

Examining the demographic structure of Antakya in the 16th century, it was observed that the population was determined several times and this finding did not change from 1527 to 1589. In addition, there was no non-Muslim population during this period. As for the number of neighborhoods in the city; it differs from 22 to 24 (Tekin, 2000, 13). Debbüs (Dörtayak), Haraccı Bekir and Hallabünnemle (Basaliye) neighborhoods were founded after the Ottoman conquest. All these neighborhoods were located inside the walls there have not been many neighborhoods outside the city walls until the 19th century (Demir, 1996).

In Antakya, which had no non-Muslim population in the 16th century, Cevdet Pasha in 1867 wrote that there were 8775 Muslim and 1129 non-Muslim population (for population information and city structures in Antioch, see Sahillioglu, 1991, 3: 231). While Muslims were engaging in different professions, especially in agriculture, Christians were mostly engaged in craft and trade. Christian neighborhoods were also formed around churches (Yurt Encyclopedia, 1982).

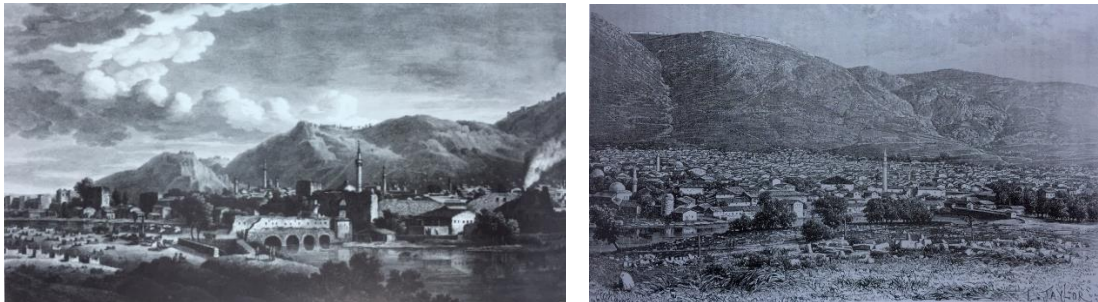


Figure 40: Panorama of Antakya in the late eighteenth century (Cassas, 1799) & Antakya panorama of 1889 (Taylor, 1889)

During 17 - 18th centuries, the nomadic Turkman tribes were settled to Antakya, Laskiye, Hama, and Humus and as a consequence, both production balance was established and some settlements were developed. In the 18th century, Mehmet Ali

Pascha, the son of the Egypt governor Mehmet Ali Pascha arrived in Syria by defeating the Ottoman army. In the battle in 1832, Ibrahim Pasha conquered this region by defeating the Ottoman army. The order established by Ibrahim Pasha continued until the Rescript of Gülhane in 1839 (Tekin, 2001).

The Rescript of Gülhane has also affected the order of the Antakya administration. However, the effect of this rescript did not last for a long time. At the beginning of the 19th century, rebellion movements began around the Iskenderun, Belen and Antakya. A legion was created for the reclamation of this area. The army, which is called Fırka-i Islahiye suppressed the rebellion movement and rebellious tribes have also obeyed (Tekin, 2001).



Figure 41: General view of the city from the opposite coast where the road to Iskenderun is located (Theil, Langdes, 1799)



Figure 42: Antakya from the West showing the ruins of the city walls and the city in 1836 (Bartlett, 1836)

The influence of the Armenian activities on Antakya and its environs has also paved a way for the opening of foreign schools in these regions. In these schools, all the Christian people, especially the Armenians, and partly the indigenous people were served. The first of these schools is the English school (1846) opened by the Presbyterian missionaries in Samandag. And then they continued their missionary movements by opening branches in Antakya (1876) and Iskenderun (1902) (Tekin, 2000; Yurt Encyclopedia, 1982). Saint Josef sirs, who settled in Iskenderun in 1877, opened a school, an orphanage and a dispenser in Antakya in 1905. The priests of Kapuchin opened a school in 1882. In these schools, the children of Christian minorities were educated (Yurt Encyclopedia, 1982).



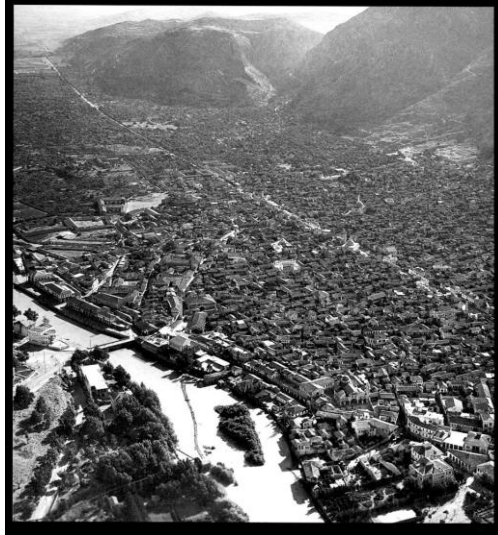


Figure 43: Antakya in the French Mandate Period (Kondoleon, 2001)

### **Establishment of the State of Hatay and Joining to Turkey**

In the end of World War I, M. Kemal Pasha ensured that the present borders of Antakya were preserved in almost the same form. Before the signing of the Armistice of Mudros, on 27 October 1918, Faisal supporters in Antakya declared the establishment of an Arab government. Then the Armistice of Mundros was signed. On 12 November 1918, based on this armistice, the French landed the troops to Antakya. The adventure of the Arab government ended with the invasion of Antakya by a French union coming from Iskenderun on 7 December (Tekin, 2001).

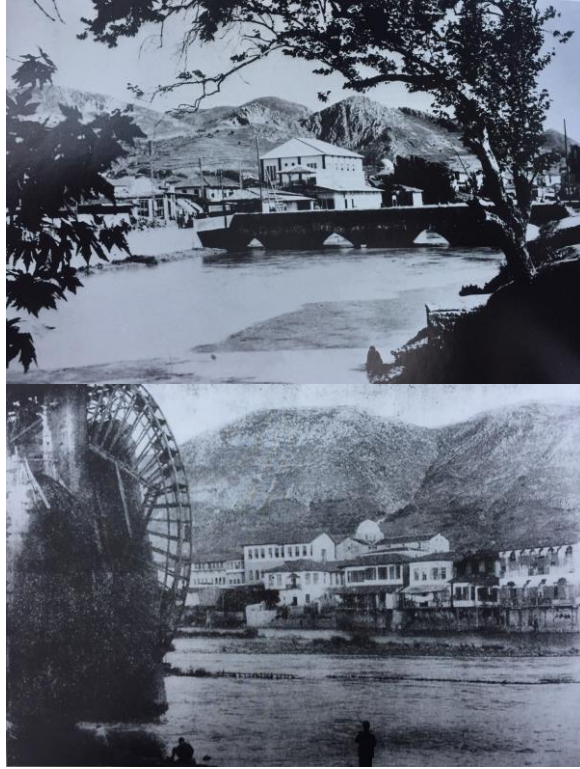


Figure 44: Old bridge: Roman Bridge (Sedat Adalı archive) & Antakya in the early 20th century, an old postcard (Demir, 1996, p. 20)

Since the establishment of the Mandate administration, the number of Armenian schools has increased from 8 to 40. This mandate administration also concentrated on imposing the Arabism. Arab high schools were opened and the Syrian Arab militants were appointed as teachers. The Turkish was not included the lessons and lessons were taught in French and Arabic. Before World War I, the Orthodox had two schools in Antakya and one in Samandag and these schools were operating with the help of Russian Tsarism. (Hatay, 1998)

On October 21, 1921, with Ankara Treaty, France has agreed to give administrative autonomy to the region called Iskenderun sanjak. After the meetings held in Paris and Ankara in January 1937, the establishment of a state with the name of Hatay was agreed in the guarantee of the two states. The Constitution was prepared in the League of Nations and approved on 29 May 1937 (Sahillioglu, 1991).

Mustafa Kemal Atatürk has also given a great importance and interest to Hatay. He strongly condemned the French administration on this Turkish city and said this historical words “Centuries old Turkish homeland cannot be held in the hands of the enemy”. However, the French pressure has increased in Hatay as a result of signing the Ankara Agreement in 1921. Turkish army entered into Hatay from two sides on July 5, 1938, and intervened this situation. Meanwhile, France was willing to soften its relations with Turkey due to the importance of the Bosphorus and the power of Turkey in the Middle East (Hatipoglu, 1986). Finally, this rapprochement has ensured the election of the National Assembly under the guarantee of Turkish and French armies in Hatay. After the elections on 2 September 1938, the Republic of Hatay was declared, Tayfur Sökmen was elected as President and Doctor Abdurrahman Melek was appointed as the head of the state and the government was established. The flag of the state is almost the same as the Turkish flag and the national anthem was the Turkish national anthem. (Hatay, 1998)



Figure 45: View towards the government building of the great mosque minaret (Demir, 1996) & The Nauras located on the banks of Asi River (Source Library Congress)

There have been very close relations between the Republic of Turkey and the Republic of Hatay. Hatay assembly has accepted the Turkish Civil Code. In addition, Hatay has asked for help from financial advisers in Turkey and with the help of financial advisers from Turkey, Hatay has been trying to establish economic order. In addition, the Turkish Penal Code was adopted by the Hatay Assembly as well. All these attempts have been caused by Hatay's desire to join the homeland. Turkey has supported this desire and accelerated its activities in this direction. (Armaoglu, 2002)



Figure 46: Bazaar of Antakya, an old postcard (Demir, 1996, p. 25)

The relations between Turkey and Hatay State has developed rapidly. However, there were doubts about Hatay between Turkey and France. On June 23, 1939, the Hatay National Assembly decided to join the homeland of Turkey. An agreement was concluded between France and Turkey on the same day and the decision to participate was accepted. However, in return, France has included a clause guaranteeing Syria's independence. (Eyicil, 1990)

On 29 June 1939, the Hatay National Assembly convened for the last time and repealed itself by taking the decision to join to Turkey unanimously. As a result, Hatay Province was established by a law dated law on 7 July 1939 enacted Turkey Grand National Assembly. Şükrü Sökmenoğlu was appointed to the governorship of Hatay. According to the agreement, the handover ceremony was held in Antakya Barracks On July 23, 1939, and the Turkish flag was raised in the barrack. Thus Hatay joined Turkey's territory again. (Hatay, 1998)

### **3.3 Demographic Structure of Antakya**

The Antakya has been adopted as a homeland by the Jews and Christians in Roman, Byzantine, Crusaders eras, and by the Muslims in Seljuk, Mamluk, Ottoman and Turkish eras. Today, Antakya is still is a city where the Jewish, Christian and Muslim people with different sects such as Sunni, Alevi, Orthodox, Catholic, etc. live together. Though the Muslim people constitute the majority in Antakya today, people with different beliefs live together in peace and tranquility.

When the demographic structure of Antakya is examined, the population differences, living-places of people from different beliefs and ethnic origins in the historical process can be easily observed. It can be also easily observed whether they live together in the same quarters. Although it is observed that people of certain religions and ethnicities in certain quarters have intensified together throughout the history of the city, it is seen that they share the same social environment in many quarters till today.

### **3.4 Quarters, Neighborhoods and Ethnic Population in Antakya**

According to the survey of J.Weulersse on the urban structure of Antakya and the social structure of the people in 1935, for the quarters where the Turks live in

Antakya, the term “Islamic Quarter”; for the quarters where the Greeks live, the term “Christian Quarter”; and for the quarters where the Alevis live, the term “Arabic Quarters” (since they speak Arabic) have been used. The Turkish quarters were located in the center of the city and they consisted the majority of the quarters in the region. According to the findings of J. Weulersse, the houses in Orhaniye quarter where the Alevis live were located in the city block surrounded by blind walls and their doors and Windows did not designed to be opened directly to the Street. In this city block, which was accessed by passing through the narrow streets and six gates, there was a system that ensures the total isolation from the rest of the city by closing those gates. No matter how small and poor they are, the inhabitants of this city block lived in the houses shaded by a few trees with the garden surrounded by walls, and they lived like a small introvert village connected with each other with strong community ties, almost isolated from the other parts of the urban fabric that nobody except the men get out from this village. (Weulersse, 1934)

In the Ottoman period in 1537, the number of quarters ranged from twenty-two to twenty-four in Antakya. Debbüs (Dörtayak) and Haraccı Bekir Hallabünnemle (Basaliye) quarters were established after the conquest of Antakya by the Ottoman Empire. Among the quarters many of which are forgotten today, Dörtayak, Habibünneccar, Kastal, Şirince Pınar, Meydan, Mahsen, Camii-Kebir are still-known quarters while the others were forgotten (Sahillioğlu, 2009). According to the Encyclopaedia of Islam, the Sofular quarter is one of the quarters which remains with the same name. All of these quarters are located in the city walls. Until the middle of the 19th century, there are not many quarters outside the city walls. There was only Selamet quarter (known as Cumhuriyet quarter today) outside the Wall in 1838



(Sahillioglu, 2009). The population of the city in the 16th century was around 5000-6000 (Antakya Municipality, 2012).

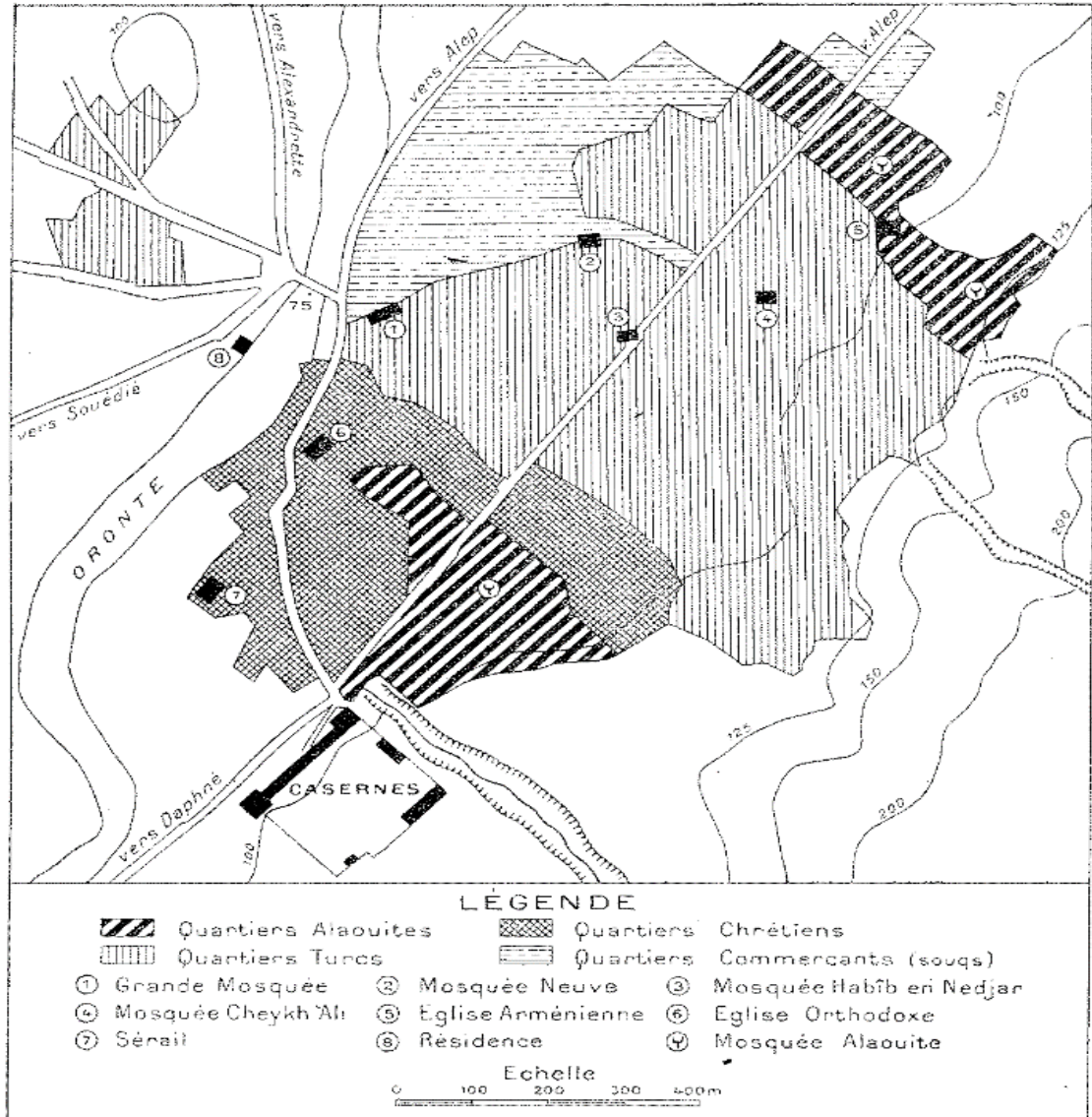


Figure 47: Ethnic and religious quarters of Antakya (Weulersse, 1934)

The city bazaar in Antakya is located in the northwest of the city, along the Asi River, and spread over Meydan quarter, Haraparası quarter, Yenicami quarter, Akbaba quarter and a part of Ulucami quarter and it occupies about 1/4 of the city. It is known that the agora in the Antique Antakya is located in the bazaars area today. Ottoman khans which constitute the core structures of the bazaar and are used as

soapery, have lost their value greatly due to unconscious interventions, improper changes and misuses. The streets inside the bazaar are covered with concrete as in the streets of the housing (Demir, 1996).

Today, there are 35 quarters in Antakya. Constituting new Antakya by growing rapidly on the other side of Asi River especially after the fifties and after being joined to the homeland, these settlements are: Kanatlı quarter, Cebrail quarter, Akevler quarter, Emek quarter, Cumhuriyet quarter, Elektrik quarter and Armutlu quarter. The old quarters located between Habib Neccar and Asi River are called: Kışla-Saray Quarter, Kantara Quarter, Güllübahçe Quarter, Dutedibi Quarter, Zenginler Quarter, Biniciler Quarter, Ulucami Quarter, Kocaabdi Quarter, Akbaba Quarter, Şeyhali Quarter, Yenicami Quarter, İplikpazarı Quarter, Meydan Quarter, Barbaros Quarter, Haraparası Quarter, Orhanlı Quarter, Bağrıyanık Quarter, Sofular Quarter, Fevzipaşa Quarter, Aydınlikevler Quarter, Gazipaşa Quarter, Kardeşler Quarter, Kuyulu Quarter, Karaali Bölüğü Quarter, Havuzlar Quarter, Şirince Quarter, Şehitler Quarter, Bedevi-Sümerler Quarter. The ones close to Asi River are old quarters and Bağrıyanık, Havuzlar, Şirince, Karaali Bölüğü, Kardeşler, Aydınlikevler and Bedevi-Sümerler quarters on the mountain side are the districts that have many shanty houses (Demir, 1996).

It is known that the population of Antakya in 1736 is approximately 14.000 (Ömeroğlu, 2006). The number of quarters in Antakya have reached 37. In 1897, the number of quarters in Antakya was 41, and in 1908, it was 42 (Yurt Encyclopaedia, 1982). The population of Antakya was around 15.000-20.000 in 1829 (Özşahin; Özder, 2011). Those living in Antakya reached 26,939 people in 1940, 94,942 people in 1980 and 216,960 in 2012 (Wikipedia, 2018). In 2009, there were 45 quarters in



Antakya. The bank of the Asi River and the southern axis of the Kurtuluş Avenue and the mountain slopes are the first settlements. The quarters in the middle of the city developed in the 18th century. The western part of the Asi River developed in the 19th century.

3 separate celestial religions and 5 ethnic elements consisting of Muslim Turks, Christian Arabs, Christian Greeks Armenians and Jews live together in Antakya (Kara, 1995). Jewish, Christian and Muslim population lived together in the quarters.

In the 19th century, there was no Muslim population in the Cenine Quarter. The Jewish population is mainly concentrated in the Kantara Quarter. The Greek population is concentrated in Kastal, Cenine, Sarı Mahmud and Muhsin quarters. While Greeks, Muslims and Jewish are living together, there is no quarter where the Greeks and Armenians live together (Kara, 1995).

In Antakya in the 19th century, Muslim, Christian, Jewish population lived together in Kantara, Sarı Mahmud, Kastal, Sofular, Dörtayak and Mahsen quarters. The Mosques, churches and synagogues are located side by side in these quarters.

In the 19th century, in the Central Sanjak of Aleppo, Muslims of different ethnic backgrounds, such as Syrian Arabs, Nusayris, Turks and Circassians; communities connected to Christian Catholic sects such as Catholic Armenians, Melchites of Greek origin, Catholic Syrians, Maronites, Chaldeans and Latinos; non-catholic christians such as Gregorian Armenians, Jacobite Syrians, Non-Catholic Chaldeans and Protestants and Jews lived together. The population structure in the Antakya district was the same. The 1891 Aleppo Province Yearbook indicates the total

population of the Antakya District as 60.394. 54.423 people of this population are Muslim, 3.514 are Greek Orthodox, 2.232 are Armenian Protestant, 221 are Jewish and 4 are Armenian Catholics. According to 1897 Aleppo Province Yearbook, the Muslim population of Antakya is 60.038, which constitutes a large majority among the total population of 66.786 (Yurt Encyclopaedia, 1982).

### 3.5 The Influence of Islam on the Physical Environment of Neighborhoods in Antakya

In this part of the study, selected neighborhoods and their components; cul-de-sacs and houses have been investigated in terms of spatial organization, uses of spaces/functional analysis, privacy penetration gradient and house-street relation and the outcomes are presented in the following parts. The defined criterias will help to discover the general physical settings of the Islamic architecture and its effects on these neighborhoods.



Figure 48: Selected Neighborhoods in City

The selected 3 neighborhoods were belonging to the people who have different ethnic and religious backgrounds in history, they are chosen for this reason. In

selection of the neighborhoods, their development periods a taken into consideration.

Nowadays, some of the houses in these neighborhoods are abandoned, some others are belong to the people who is not settling, and nevertheless some of them are actively used. In this study, from these 3 neighborhoods, 12 houses in total could be reached and examined with the analysis of the streets that they are belong.

In examination part of the study, the neighborhoods are named as Arab Christian Neighborhood, Turkish Muslim Neighborhood and Arab Muslim Neighborhood. The name of the streets of these districts are Kilise Street (Christian neighborhood), Özdemir Street (Turkish Muslim neighborhood) and Gümüşlü Street (Arab Muslim neighborhood). For the houses, cased are named with their cadastral numbers. In Kilise Street, cases are named as House 62, House 68, House 75, House 88 and House 97. In Özdemir Street, they named as House 536, House 893 and House 895. In Gümüşlü Street, selected houses are named as House 649, House 650-651 and House 652.

### **3.5.1 Arab Christian neighborhood**

In Antakya, there are various neighborhoods which Christians are living. In history, they were settling mostly together in near locations and the distinction was more readably amongst the other ethnic and religious groups. However, when considering the establishing time of the neighborhoods, one of the distinguishable Arab Christian neighborhood was the one which established around the Orthodox Church. In this chapter, this neighborhood is going to be analyzed.

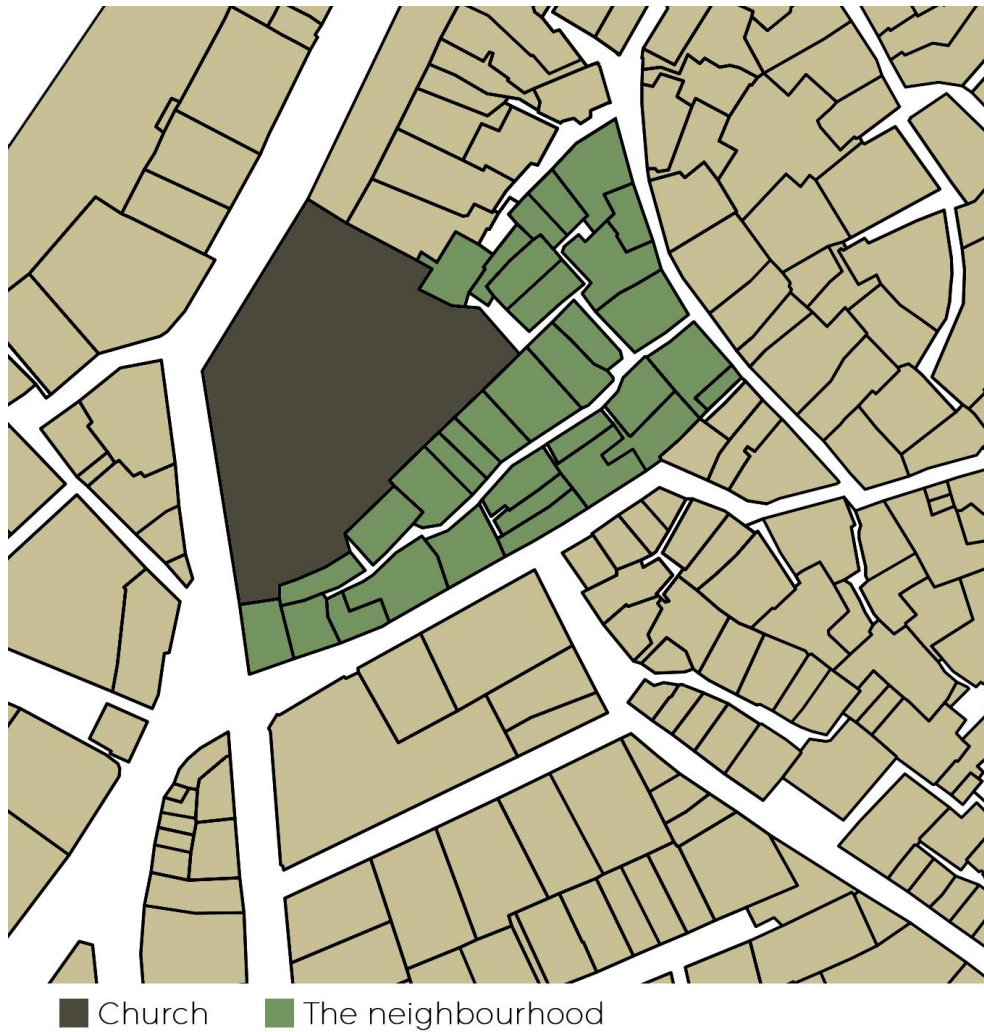


Figure 49: Arab Christian Neighborhood and its around

### 3.5.1.1 Street

Kilise Street is reached by entering a gate-like passage in Kahraman Street. Kilise Street is a cul-de-sac that has been formed in the historical process by the Christians who settled around the Orthodox Church and created their own neighborhood.

The Church Street, which is divided into cul-de-sacs, has 23 houses in the street. From the street there is a passage to the 2. Kilise Street (cul-de-sac), from which there is a way can to the door of the Orthodox Church. The neighborhood is a place where Christians live in the historical process. The entrance of the neighborhood is defined with a Sabat (bridge-room which allows passage between the houses) and is

a gateway to this neighborhood. Although this gate had a gate in the past, the security of the neighborhood was ensured by this gate. When the physical structure of the street is examined, it is seen that the width of the street is around 195cm and the two sides of the street form a corridor surrounded by the walls of the houses and the exits they form.

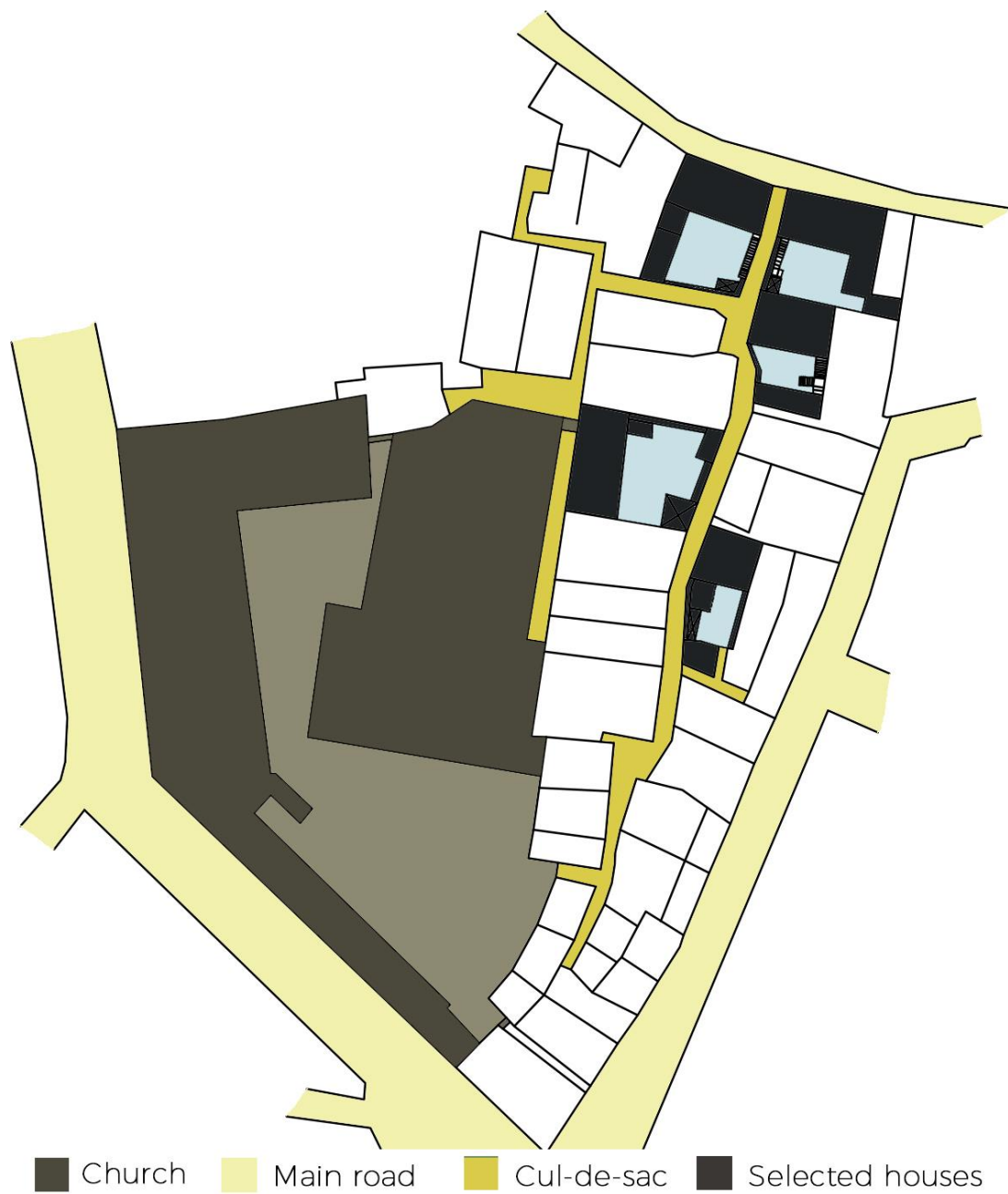


Figure 50: Kilise Street





Figure 51: Width of the Kilise Street & The entrance of the neighborhood

### 3.5.1.2 Houses

The Church Street has 23 houses in the street. Nowadays, some of the houses in the street could not be reachable and the opportunity for evaluation could not be found. 5 of the houses are evaluated and analyzed amongst all. Analysis are trying to identify location, giving technical informations, physical details and trying to understand privacy settings. Moreover, the physical structures of the houses such as circulation, spatial organization and usages are examined.

#### House 62

The 62<sup>nd</sup> house is located on the 1<sup>st</sup> Church Street, of which north-west facade rests on the Church Street and the north-east facade on the Kahraman Street. The entrance of the house is on the north-west side, on the Church Street and there is no entrance from other sides.

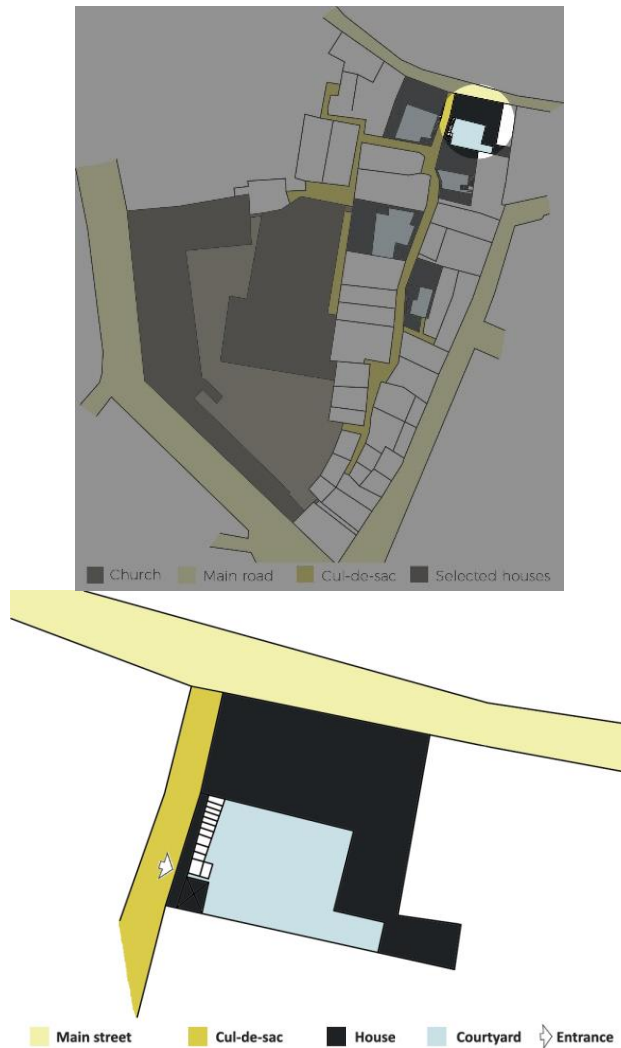


Figure 52: House 62

The entrance to the house begins with the section called “Gap” that can be reached after ascending one step from the street level. After ascending 3 steps from the “gap”, it is reaching the courtyard. When entering the courtyard, the toilet is first seen in the right opposite corner, then the kitchen is located on the left. When this part of the house is observed, the original figure of the house cannot be fully read. One of the changes made is added additional floor and it is jointed with second floor of the original structure. After entering the courtyard of the house, two rooms which are located on left side and facing the Kahraman Street, are used as living room and saloon.



Figure 53: Sample entrance schematic of the House 62

The windows of these rooms are located 1.7 meters above the street level. The height of the wall where the entrance is located is 3.8 meters. After entrance to the courtyard, reaching to upstairs is provided by a single-lever ladder located on the left side of the entrance door and facing the street. After ascending the stair, it is directing to the semi-open corridor that allow to reach upstairs rooms. Two rooms are located on the left side of this corridor end these rooms are facing Kahraman Street and they are used as bedroom in their original form.



Figure 54: Entrance of House 62



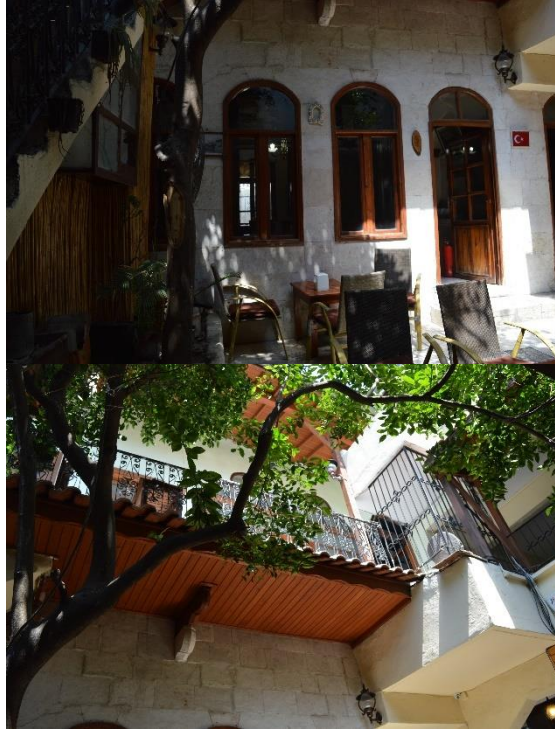


Figure 55: House 62

When looking the wall thicknesses, the wall of the courtyard facing the street is 30cm thick and the wall thickness between the neighboring houses is 50cm. It is observed that the entrance of the house does not face the entrance of the opposite building. It is observed that the windows of the downstairs living room and saloon are facing with the windows of the opposite house.

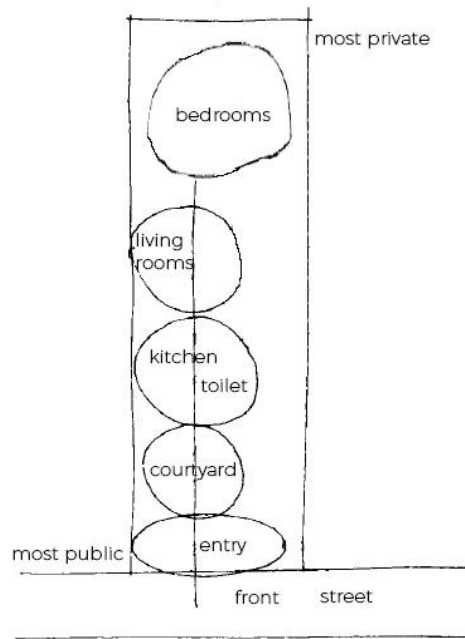


Figure 56: Privacy Penetration Gradient of House 62

### House 68

68<sup>th</sup> House is located on the 1st Church Street towards North-west facade. The entrance of the house is on the Church Street and it faces other houses through its other facades.



Figure 57: House 68

The entrance begins with the section called “Gap” and the after climbing one step from the “Gap”, it is accessing to the Courtyard of the house. In courtyard, the toilet on the right of the Gap and after this place which has been exist from old times, there is a bathroom and kitchen as it can be read from the cadastral map. But it is estimated that this part had different functions before and it was changed as a bathroom afterwards. After entering the courtyard, there are 2 rooms on the left side which are reached after 1 step and these rooms are serving as living room. Only one of these rooms has windows that open onto the courtyard, but the other room has a window opening to the Street.

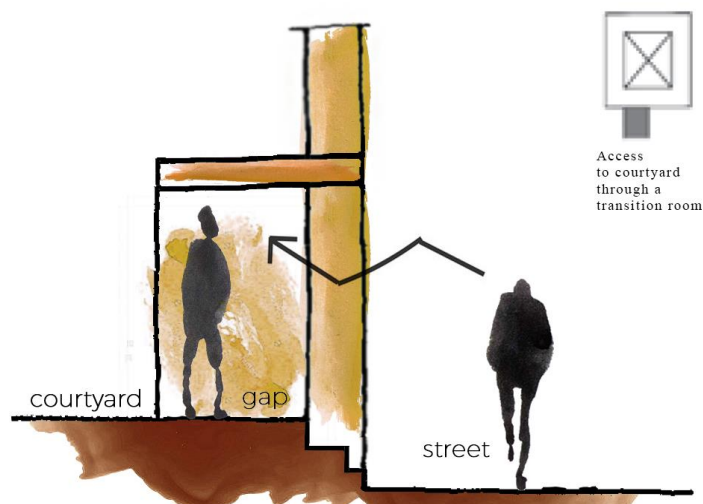


Figure 58: Sample entrance schematic of the House 68

After entering the courtyard, there is a staircase on the south-east side of the house and has access the upper floor through this stairs. When walked towards to the door on the right side of the stairway landing, there is a room, on the top of the kitchen, facing to Church Street. On the left side of the landing, it has access 2 bedrooms on the upper floor.



Figure 59: Entrance of House 68



Figure 60: House 68

When examined the relation of the house with the outside, it is observed that the window of the room on the ground floor is 1.5 meters above the street level. The wall of the entrance on the Church Street has a height of 2.9 meters and a thickness of 50cm. There is a side street between the next-door house on the south west side, which is closed today but has allow house to reach the street ahead of time. It was observed that the entrance of the house is facing the window of the opposite building.

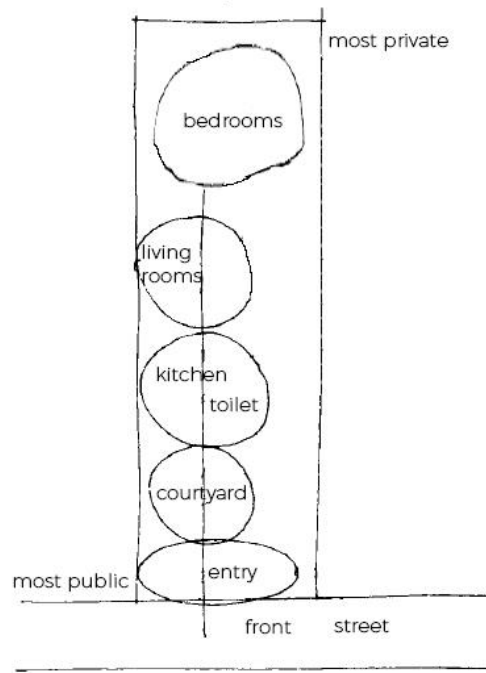


Figure 61: Privacy Penetration Gradient of House 68

### House 75

Being located in the north-west side, the 75<sup>th</sup> House is placed on the 1<sup>st</sup> Church Street as well. The street is reachable through main entrance of the house. Another entrance of this house is on the south-west side and it reaches to an cul-de-sac in which other entrances of the houses are located. It is reaching to the next street through this cul-de-sac.



Figure 62: House 75

The entrance to the house begins with the section called “Gap” that can be reached after climbing one step from the street level. Courtyard is accessible after climbing one step more from the Gap.



Figure 63: Sample entrance schematic of the House 75

When entering the courtyard, the kitchen on the right side. After the kitchen next to the door on the backside of the house which opens to the cul-de-sac, the toilet is



located which is now merged to the kitchen of which structure is still in its original form. It was observed when the house was examined that the structure have been changed a lot over the time but its original form is still readable. One of the changes made on the structure is the added storey above the kitchen and the toilet. It was observed that the access to this part is provided with a stairs that have been added later.



Figure 64: House 75



Figure 65: Entrance of House 75

Although the original stairs cannot be determined. The only room on the ground

floor and reached through courtyard is used as living room. There is no yard in the wall of the house facing the street on the ground floor. On the upper floor, it was observed that there is a balcony towards street and this balcony is around 50cm. It is determined that the height of the walls facing the alley is 2.7 meters and the thickness of walls facing both streets is 40cm.

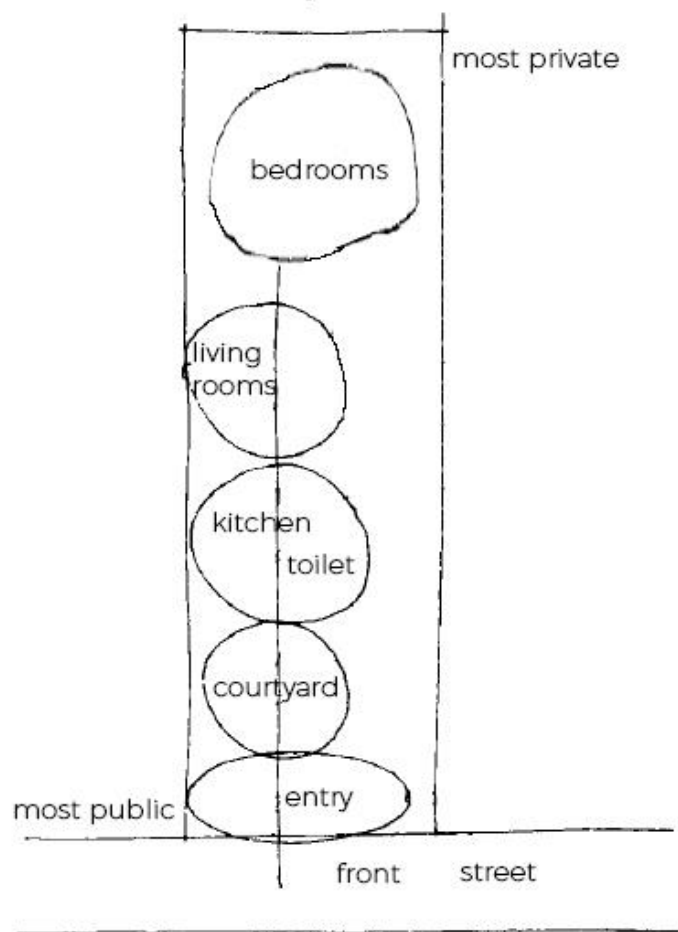


Figure 66: Privacy Penetration Gradient of House 75

### House 88

Located in the 1<sup>st</sup> Church Street, the south-east facade of 88<sup>th</sup> house is leaning against Church Street, and north-west façade is leaning against the Orthodox Church. This house has a door which opens to both sides and when using the exit the door from the



Church side, it is reaching to the rear entrance of the Church, which is currently closed but actively used in the past.



Figure 67: House 88

As the moment the house was observed, when entering the house through the door located in the street side, it accessing a corridor that is using as the hall of the house and there are rooms on the left and right sides of the hall. However, when the French Cadastral map, which was prepared in 1934, was examined, it is understood that these rooms were added to the original structure later. As it is understood, the courtyard is reached by a step from the entrance level in the original form of the structure. When the added structure is excluded from the observation, the original structure starts after entering the courtyard and it is located in north-west side as a double-storey building.

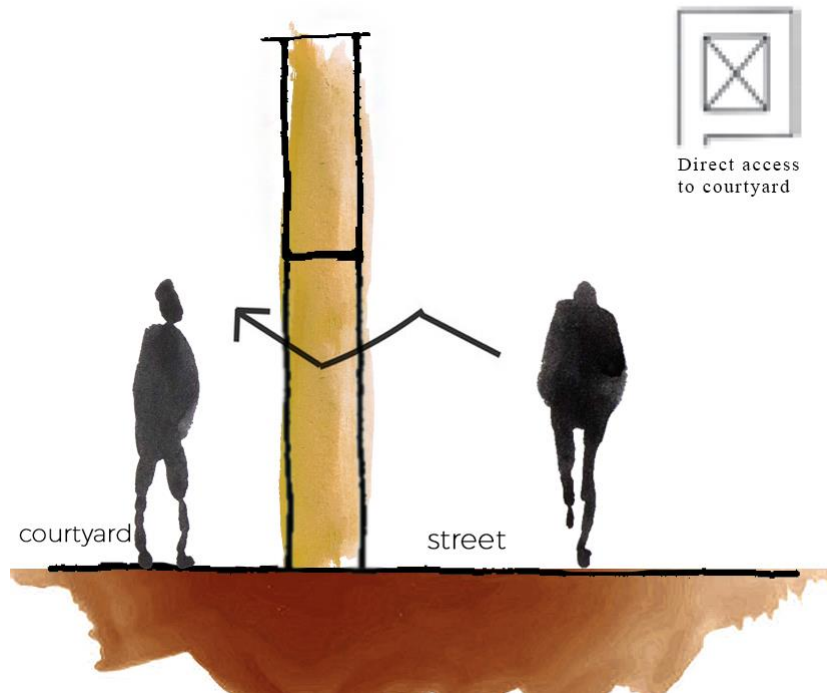


Figure 68: Sample entrance schematic of the House 88



Figure 69: Privacy Penetration Gradient of House 88

The upper floor is reached by a single-armed stairs on the right. It was observed that the kitchen is located in the north-east corner of the house after the entrance of the house, and it is thought that this is preserved in the same place as the original structure, as can be seen from the cadastral map. It was also observed that the place using as bathroom and toilet and located in the part wall between the neighbors had not existed in the original form of the house and this part have been added later. It is thought that the toilet was on the left side after entering the courtyard before as it was

read from the cadastral map. When observing the original structure, on the ground floor there are two living rooms and the upper floor has two bedrooms.



Figure 70: House 88

The connections of the house with other houses' courtyards is limited with the walls on both sides of the courtyard. One of these walls is used together with next-door house commonly (single-wall) and it was raised later and its former length was 2m and its thickness was about 35cm. It is understood from the cadastral map that the front side of house facing the street was consisted of a single wall surrounding the courtyard and the gate was facing the wall of the house opposite the street.

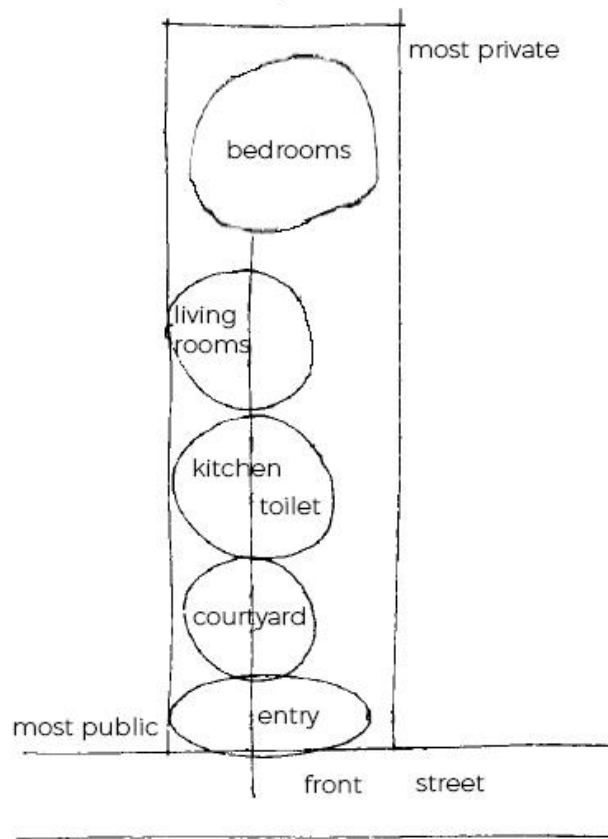


Figure 71: Privacy Penetration Gradient of House 88

### House 97

The 97<sup>th</sup> House is on the 1<sup>st</sup> Church Street and while its north-east façade leans against the Kahraman Street, the south-east façade leans against the Church Street. The entrance of the house is located on the south-east side of the Church Street and there is no entrance from the other front.



Figure 72: House 97

The entrance of the house opens directly to the courtyard, which is the most important part of the house and serves as a service area for all places. The courtyard of the house is reached by a step from the street.

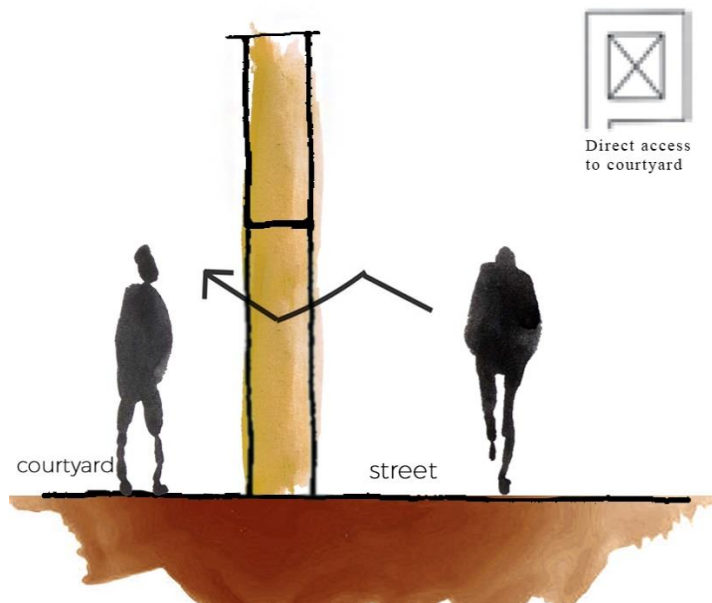


Figure 73: Sample entrance schematic of the House 97



Figure 74: Entrance of House 97

When entering the house, the stairs on the left side of the entrance door, goes up to the upper floor. The toilet is located behind the stairs, and it is understood from the cadastral map that the place of this toilet has not changed before. As a result of the investigations made, some changes have been identified in the original structure. One of them is that the original form of the kitchen, which is seen on opposite side of the courtyard, was one-storey structure but one more storey has been added to this structure. This section was combined with the upper floor of the original structure and another room was obtained with this way. There were only 2 bedrooms on the upper floor in the original structure. Being located in the right side after entering the courtyard of the house and also facing the Kahraman Street, two rooms are used as living room and lounge. The windows of these rooms are located 1 meter above the street level.





Figure 75: House 97

When the wall of the Church Street is examined, it can be observed that its length is about 5 meters currently, but it is understood that the old height is around 3 meters. When looking at the wall thicknesses, the wall facing the street is 55cm thick and the thickness of the wall between the neighbors is 35cm. It was also observed that the entrance of this house is not facing the entrance of the opposite house. When take a look at the windows facing Kahraman Street, it was observed that one of them is facing the door of the opposite house.

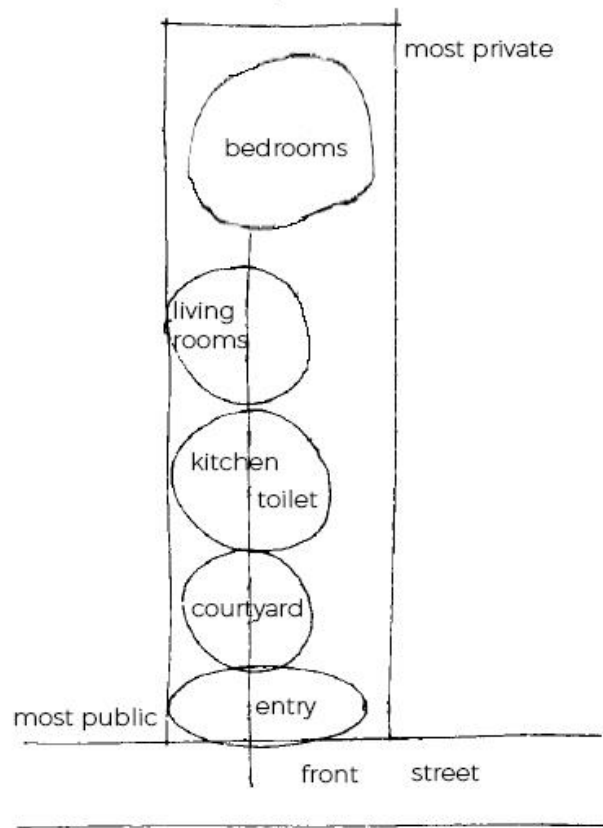


Figure 76: Privacy Penetration Gradient of House 97

### 3.5.2 Turkish Muslim neighborhood

In Antakya, there are various neighborhoods which Turkish Muslims are living. The majority of population was Turkish Muslims are in the historical process. They were settling in the same quarter of the city and living all together. However, when considering the establishing time of the neighborhoods, one of the distinguishable Turkish Muslim neighborhood was the one which established around the Kiremitli Mosque. In this chapter, this neighborhood is going to be analyzed.



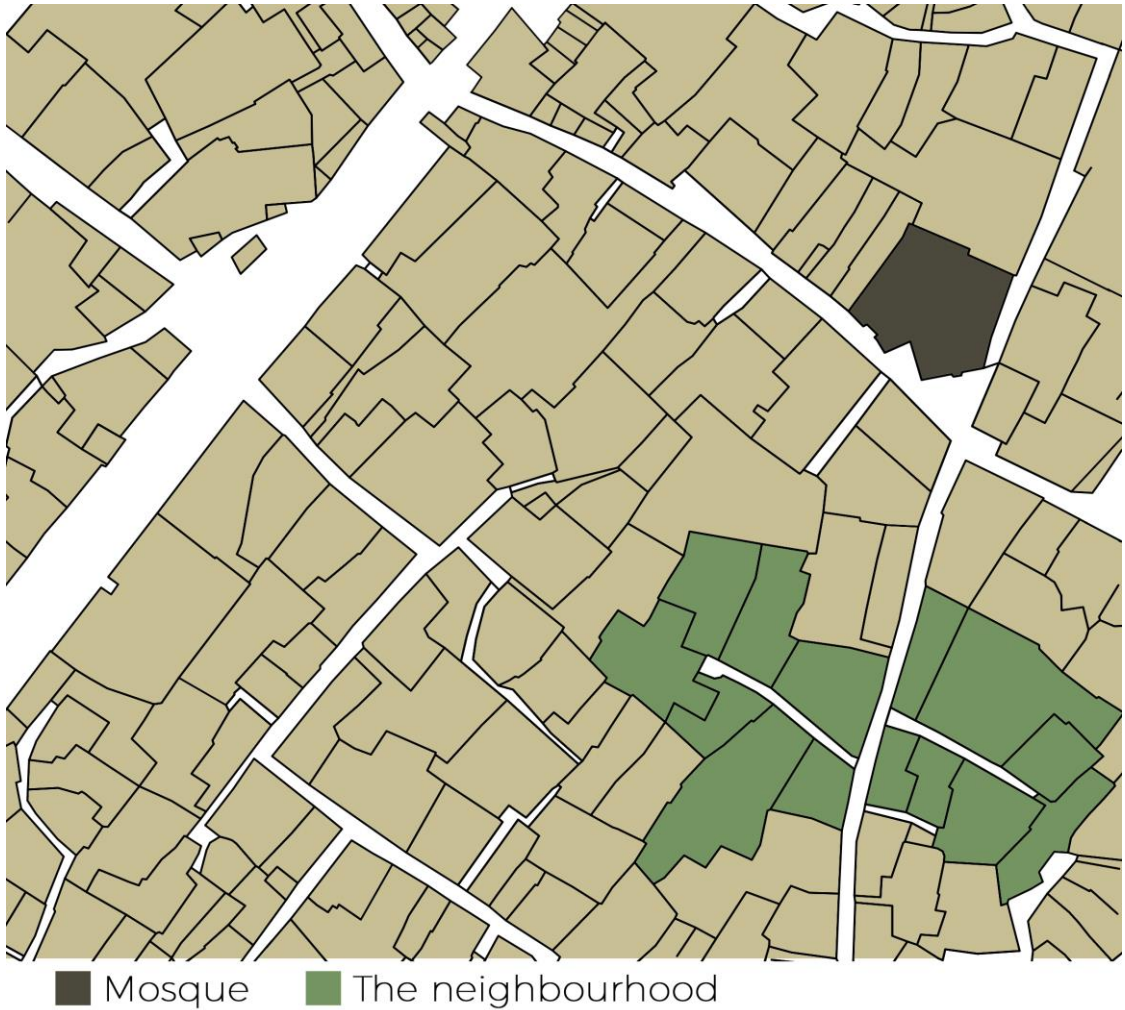


Figure 77: Turkish Muslim Neighbourhood and its around

### 3.5.2.1 Street

In the study carried out in the Turkish neighborhood, two cul-de-sac, which are the closest distance to the Kiremitli Mosque, have been selected, and these two cul-de-sacs are located within Özdemir Street. There are 15 residences in these two cul-de-sacs, seven in one and eight in the other.



Figure 78: Özdemir Street

When the physical structures of these two cul-de-sacs were examined, it was observed that their widths ranged from 160cm to 200cm. These streets are surrounded by the walls of the houses. Since the original situation of the houses were taken into consideration and the later sections were not evaluated, it was observed that there were no extension regarding the original conditions of the houses.

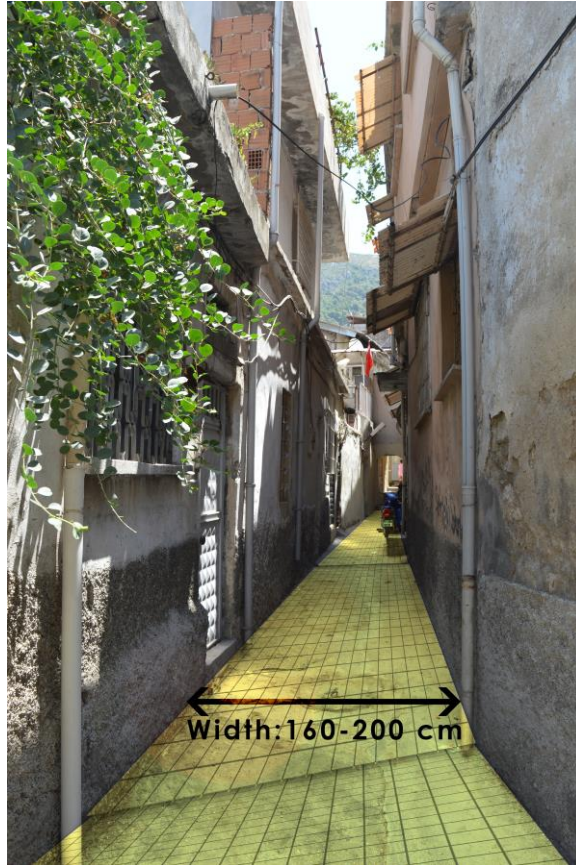


Figure 79: Width of Özdemir Street & Entrance of the cul-de-sac

### 3.5.2.2 Houses

The Özdemir Street has 15 houses in its cul-de-sacs. Nowadays, some of the houses in the street could not be reachable and the opportunity for evaluation could not be found. 3 of the houses are evaluated and analyzed amongst all. Analyzes are trying to identify location, giving technical informations, physical details and trying to understand privacy settings. Moreover, the physical structures of the houses such as circulation, spatial organization and usages are examined.

#### House 536

536<sup>th</sup> house is on the cul-de-sac on the Özdemir Street, and its entrance is located on the south-west side. This house is on the end of the cul-de-sac. The entrance of the house reached after a step down from the street level, but raised street level does not

allow this. It is thought that the old street level was the same as the entrance of the house. After entering the house, it is accessing to the section called “Gap”, then access to the courtyard through this gap.



Figure 80: House 536

The three sides of the courtyard is formed by the parts of the structure, and one side is formed by the wall between the next-door neighbor. There is this wall on the right after entering the courtyard, immediately after walking straight, one-armed staircase leaning against this wall but it is understood that this wall has been added afterwards.





Figure 81: Sample entrance schematic of the House 536



Figure 82: Entrance of House 536

After entering the courtyard and walking towards the north-west side of the house, it is reachable to the two-storey structure which forms main part of the original structure. On the downstairs of this section, there are two rooms serving as living rooms. On the ground floor located on the left side after entering the courtyard, there is a semi-opened room of which three side is closed (one side facing the living room's windows) and a room that is used as a bedroom of which function in the past

is unknown. The kitchen is located on the left side after entering the courtyard. When the cadastral map is surveyed, the access to the second floor of the house is provided via a staircase, making “L” shape towards the top of a room which is now serving as a bedroom and marked in upper part starting from the next of the kitchen when entering the courtyard. It was observed that the rooms on the upper floor were used as bedrooms.



Figure 83: House 536

It was observed that the house has no openings facing the outside, and it is completely introverted structure. The party wall, located on the courtyard’s part facing the next-door, has a height of 3 meters and its thickness is 50cm. The height of the wall above the entrance gate is 2.5 meters and its thickness is 75 cm.

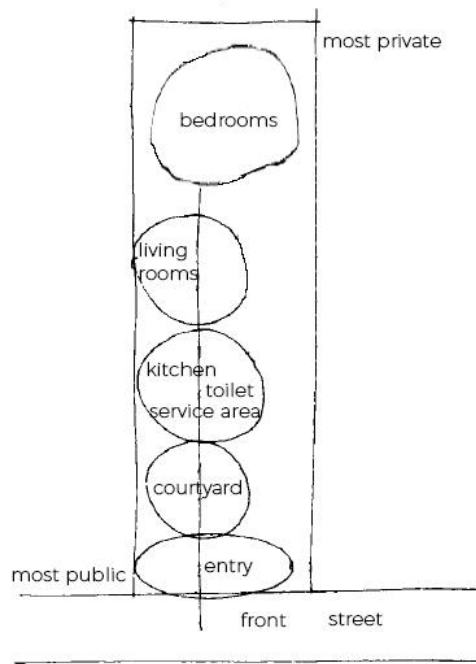


Figure 84: Privacy Penetration Gradient of House 536

### House 893

Before starting the examination of this house, it was determined with the surveying of the cadastral map that the house have de largest courtyard and living space in the cul-de-sac. However, when the examination is made, it is seen that the house is now divided into 4 and a large part of its courtyard is occupied and turned into a residence. Normally, the courtyard should be reached after entering the house through the gate, which is estimated to be the original entrance door, as of yet, the different houses on the upper and lower floor by accessing the entrance door with a through a garden corridor. The original structure is still standing between these illegal structures and even it lost its former condition, it can be read and its condition can be examined. The evaluation will be carried out and evaluated by ignoring the parts that have been added after and which disrupt the original structure.



Figure 85: House 893

The original structure is located at the south-west and the north-west of the courtyard. The south-west corner of the building facing the cul-de-sac street. The part located on the north-west corner was built as living room in downstairs and bedroom in the upstairs and it is still used in this way. Although the evaluation of the south-west part has not been completed due to the changes in the structure, it is estimated that it was a single-storey and some of it was the service area of the house.



Figure 86: Sample entrance schematic of the House 893





Figure 87: House 893

In the examinations carried out on the facade of the house facing the cul-de-sac street, it was observed that there were two windows facing the outside, but one of them was opened later. The window of the original building is 1 meter high from the street level, and it is not facing the window or the gate of the located across the street.

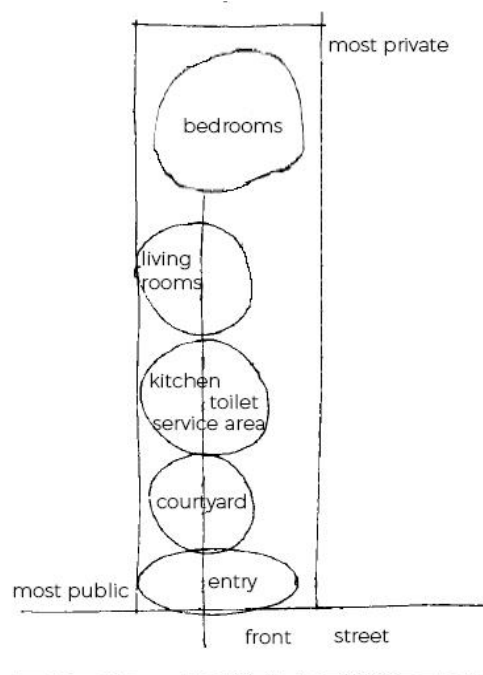


Figure 88: Privacy Penetration Gradient of House 893

## House 895

895<sup>th</sup> house is located in the end of the cul-de-sac on the Özdemir Street. The entrance of the house is opened from the north-west side to the street and there is no entrance from the other facades. Entering the house through an arched stone gate and after ascend 1 step from this gate it has access the “gap” section. After accessing the gap section, it is directing to the courtyard by ascending 4 steps more.



Figure 89: House 895

After reaching the courtyard, there is a building on the right side with a room and kitchen on the ground floor, which is clearly understood that it was added this the structure later. It is seen in the survey of the cadastral map that this structure is not exist and only forms the courtyard of the house. When original structure taken into account, on the left hand side, there is a living room downstairs. The upstairs of the house can be accessed through a ladder on the south-east side of the house after entering the courtyard, there is a semi-open area and access to the bedrooms are in this place. It is estimated that this structure previously was a single room, but it is currently divided into two parts.

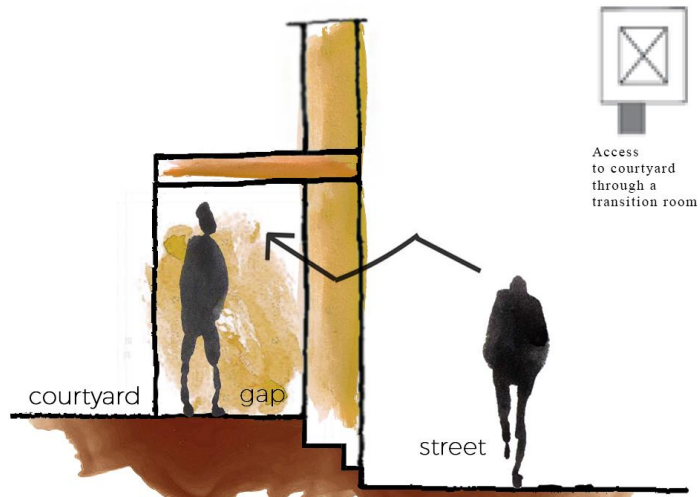


Figure 90: Sample entrance schematic of the House 895

The house has no openings except the street door facing the outside. When, current status of the wall taken into account, the height of the wall about 5 meters, but it is understood that the wall has been raised and the former height was 2.4 meters. When looking at the wall thicknesses, the wall facing the street and the wall where the door is located is 60cm.



Figure 91: Entrance of House 895



Figure 92: House 895

The thickness of the party wall between the neighbor houses could not be measured since it no longer exists. It was observed that the house is not face with windows or gates of the other houses since it is located at the end of the cul-de-sac and the lack of the opening towards outside.

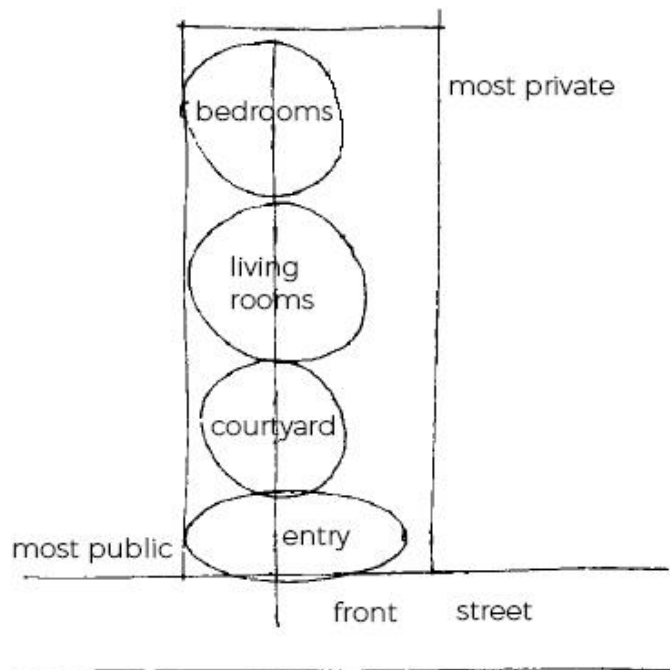


Figure 93: Privacy Penetration Gradient of House 895



### 3.5.3 Arab Muslim neighborhood

In Antakya, there are various neighborhoods which Arab Muslim are living. One of the minority of population was Arab Muslims are in the historical process. They were settling in the same quarter of the city and living all together. However, when considering the establishing time of the neighborhoods, one of the distinguishable Arab Muslim neighborhood was the one which established around the Affan Mosque. In this chapter, this neighborhood is going to be analyzed.

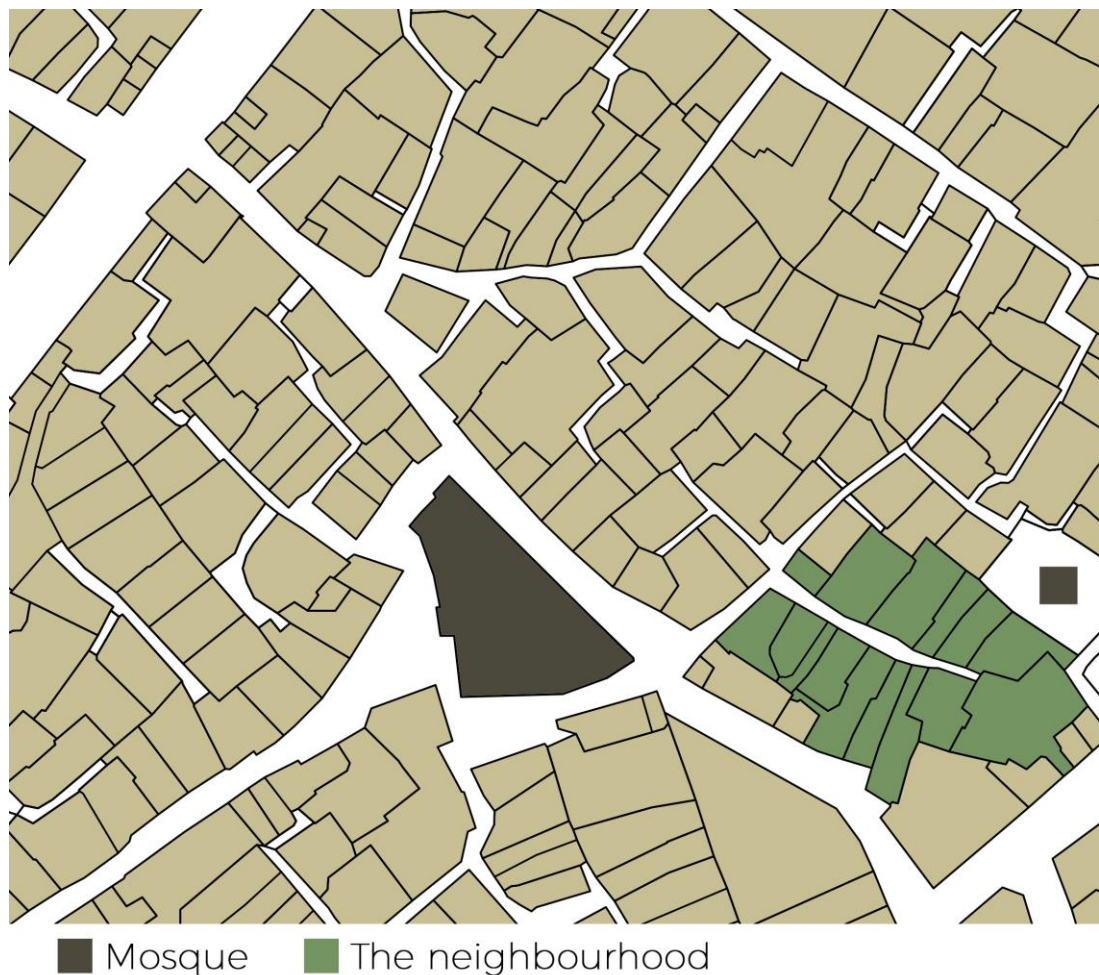


Figure 94: Arab Muslim neighborhood and its around

#### 3.5.3.1 Street

In the study conducted in the Arab neighborhood, the cul-de-sac closest to the Affan

Mosque was chosen and, this cul-de-sac is located in Gümüşlü Street. There are 15 houses in this cul-de-sac.



Figure 95: Gümüşlü Street

When the physical structure of the cul-de-sac was examined, it was observed that the width of the street is 170cm. This street is surrounded by the walls of the houses. Since the original situation of the houses were taken into consideration and the later

sections were not evaluated, it was observed that there were no extension regarding the original conditions of the houses.

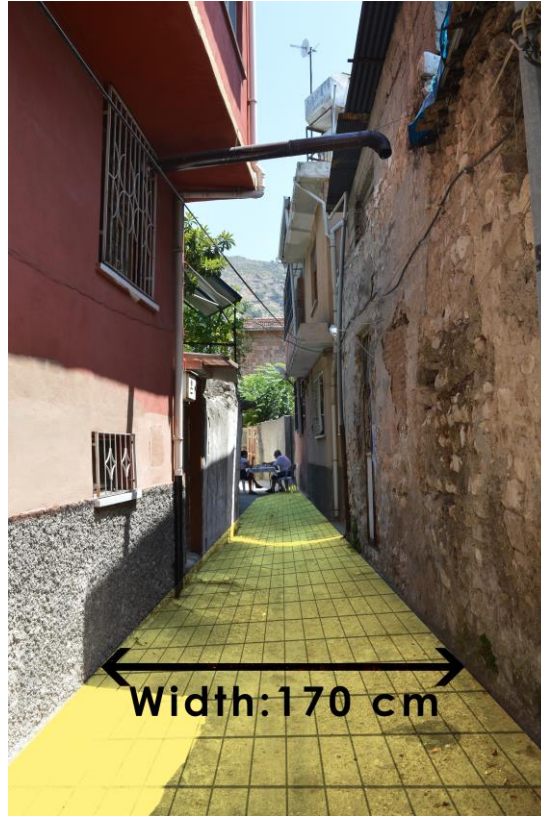


Figure 96: Width of Gümüşlü Street & Entrance of the cul-de-sac

### 3.5.3.2 Houses

The Gümüşlü Street has 15 houses in its chosen cul-de-sac. Nowadays, some of the houses in the street could not be reachable and the opportunity for evaluation could not be found. 4 of the houses are evaluated and analyzed amongst all. Analyzes are trying to identify location, giving technical informations, physical details and trying to understand privacy settings. Moreover, the physical structures of the houses such as circulation, spatial organization and usages are examined.

#### House 649

649<sup>th</sup> House is located in the cul-de-sac on the Gümüşlü Street. The entrance is on

the south-west facade of the house and its facade on the cul-de-sac is consisting from a wall. The level of the main entrance of the house is 1 step higher than the street level, and the courtyard is directly reached from this step.



Figure 97: House 649

It was seen that the courtyard is wide and when walked across this courtyard two-storey building is facing to the courtyard. There are two rooms on the ground floor of this building and they both serve as living rooms. It has been learned that these rooms had served as two different living spaces for two different families. When surveying the cadastral map, a structure was seen at the right corner of the house, which is leaning against the wall and next-door house. It has been determined that this part is still exist in this section as of the date of review. It has been also determined that this structure constitutes the service area of the house and the kitchen and toilet are located within this structure. The upper floor of the house can be accessed via staircase located on the back of the house and it is reaching to the



bedroom from this section. The upper floor has been a living space for a separate family in the past, and has changed its function later.

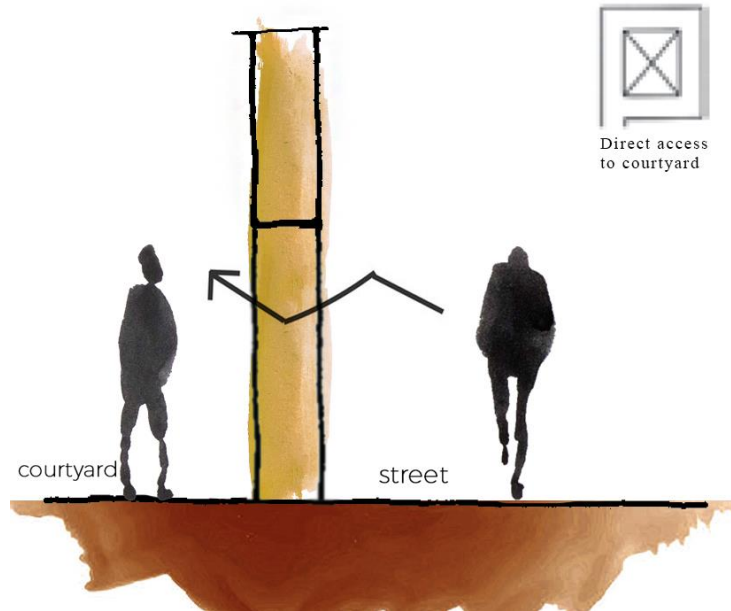


Figure 98: Sample entrance schematic of the House 649



Figure 99: Entrance of House 649

As a result of the measurement made on the wall between the house and the next-door house, it was observed that the wall height is 2.1 meters and the thickness is 45 cm. There is no opening except the entrance door on the wall facing the street, and

this wall's height is 2.9 meters, thickness is 45cm. It is observed that the entrance of the house does not face the entrance or the window of opposite building.



Figure 100: House 649

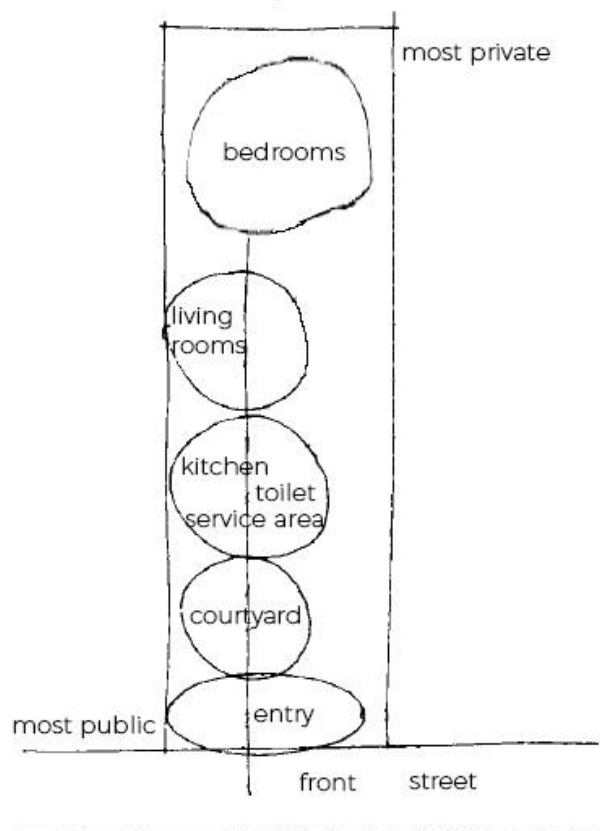


Figure 101: Privacy Penetration Gradient of House 649

### Houses 650-651

Houses 650 and 651 are located in a cul-de-sac on Gümüşlü Street. The entrance of

both houses is from the south-west facade and the façade of the cul-de-sac consists of a wall. The level of the main entrance of 650<sup>th</sup> house is two steps above from the street level and directly reaching to the courtyard when entering from this entrance. It was seen that the courtyard is wide and when walked across this courtyard, there is a two-storey building.



Figure 102: Houses 650 and 651



Figure 103: Houses 650 and 651

It was learned that the original structure was a single storey and it was understood that an additional floor was added later. There is a single room on the ground floor of this building and serves as a living room. However, when this section was examined, it was observed that two rooms and a part of the 651<sup>st</sup> house are merged and it was learned that these three rooms was serving as a living areas for three different families before. When the original structure was tried to be read and examined, the location of the kitchen and the toilet was not determined. It is now seen that these two service areas was located in the former courtyard of the house no. 651, since the original structure is merged with the next house 651. The party wall between 650<sup>th</sup> and 651<sup>st</sup> house has been disappeared as a result of merging, and the wall of the 651<sup>st</sup> street between the other next-door house is still standing.

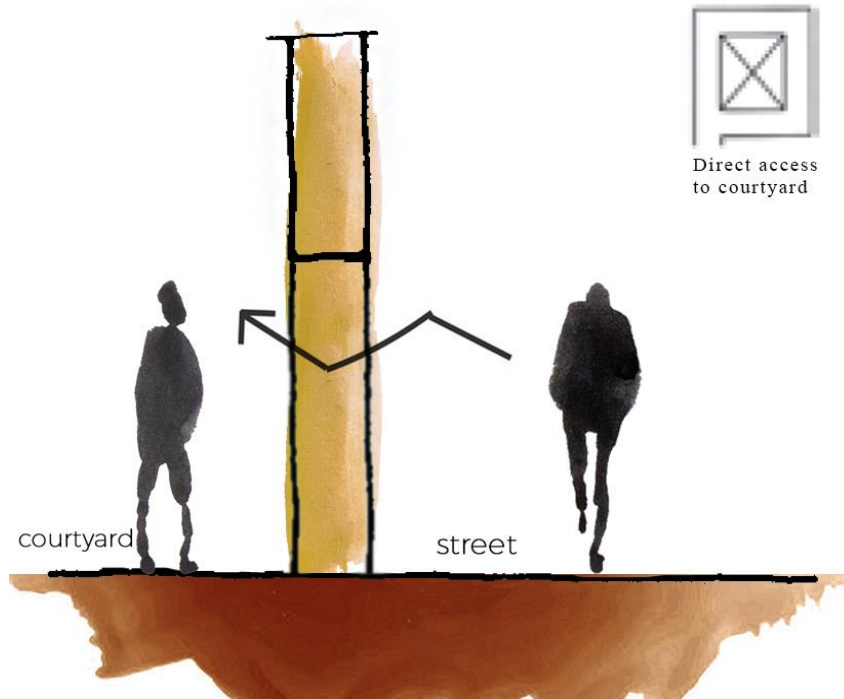


Figure 104: Sample entrance schematic of the Houses 650-651



Figure 105: Entrance of Houses 650-651

As a result of the measurement made on the wall between these neighbor houses, it was observed that the wall height was 2.9 meters and the thickness was 45 cm. There is no openings on the common wall of the houses on the ground floor facing the street, and the height of the wall facing the street was 2 meters and its thickness was 45 cm. It was also observed that the entrances of the houses is not facing the entrance



of the opposite buildings.



Figure 106: Houses 650 and 651

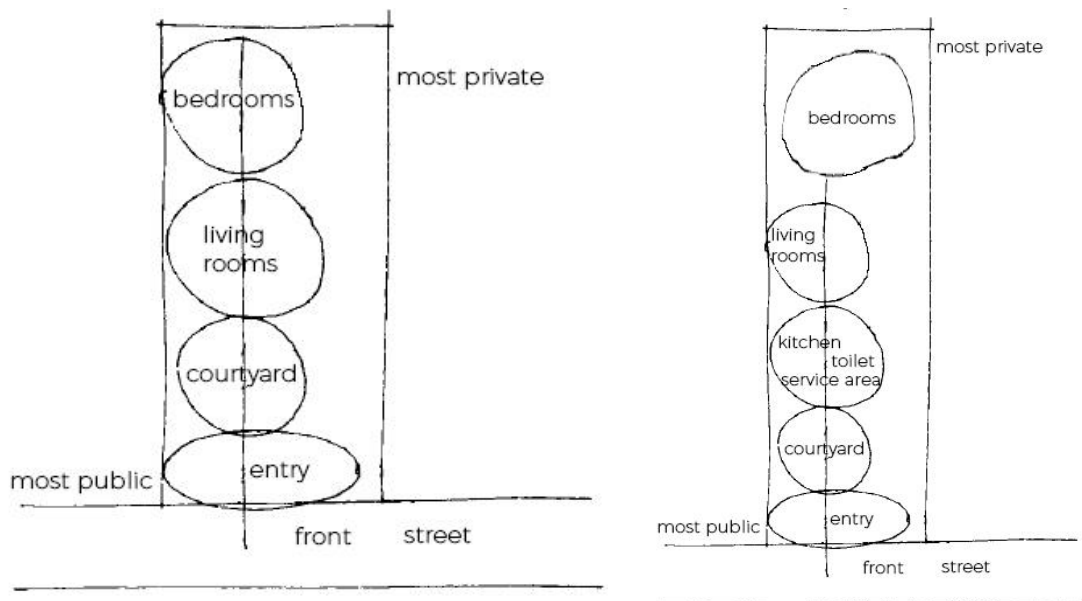


Figure 107: Privacy Penetration Gradient of Houses 650 and 651

### House 652

House 652 is located in a cul-de-sac-street on Gümüşlü Street. The entrance of the house is on the south-west side and the façade of the cul-de-sac is formed by a wall.



Figure 108: House 652

The level of the main entrance of the house is 2 step higher than the street level and normally, the courtyard of the house should be reached directly after entering from the entrance, but directly entrance into a house through an additional structure to the original structure made in the past.

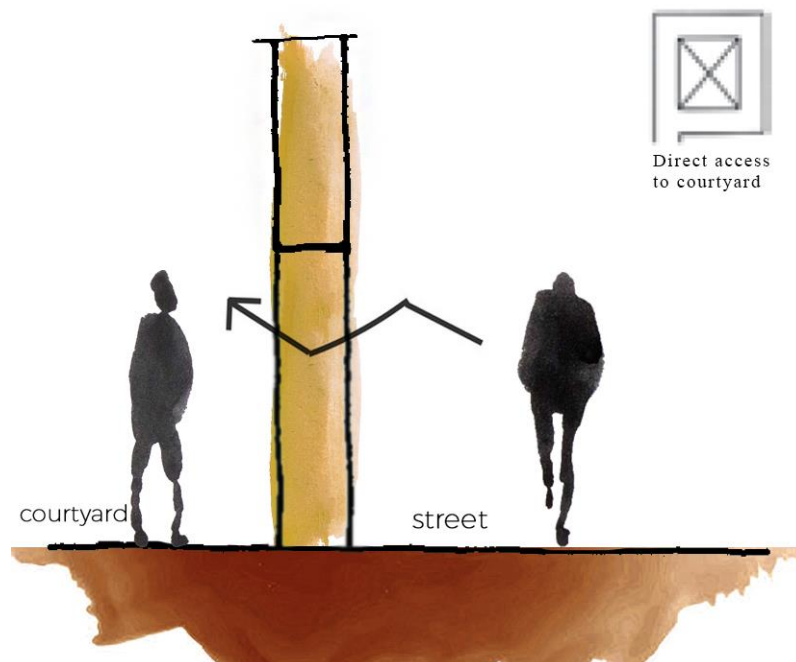


Figure 109: Sample entrance schematic of the House 652



Figure 110: House 652

After passing this structure, the courtyard and the original structure can be reached. There is a two-storey building in the place of the original building but it was learned that the original structure was one-storey and it was understood from this point that an additional floor was built. There is a single room on the ground floor of this building and serves as a living room. Bu it was understood that this room had been serving as a living room for a family. After examining the cadastral map, a structure was seen at the right corner of the house, which is leaning against the wall and next-door house, and while the purpose of this structure is not known exactly, it is thought that some part of this structure had been serving as a toilet, and the other part had been serving as a kitchen.



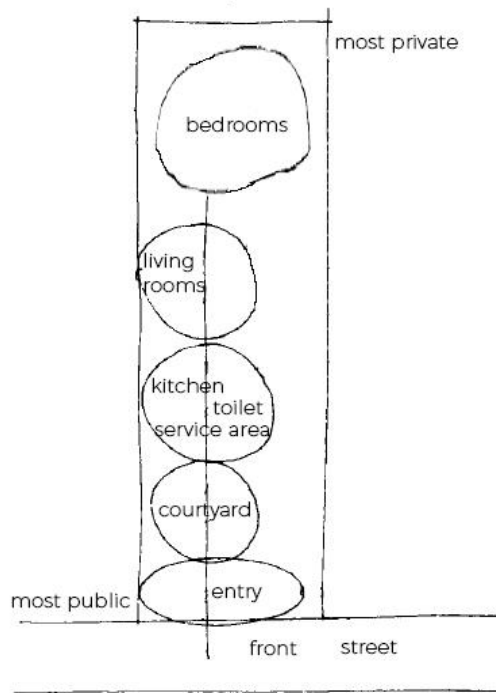


Figure 111: Privacy Penetration Gradient of House 652

As a result of the measurement made on the wall between the house and the neighbor house, it was determined that wall height was 3 meters and the thickness was 50 cm. There is no opening except the door on the wall facing the street and the height of this wall is 2.9 meters, the thickness is 45cm. It is observed that the entrance of the house does not face the entrance or the window of the opposite building.

### 3.6 Summary of the Chapter

In this chapter of the study, Location of Antakya, General History of Antakya, Quarters, Neighborhoods and Ethnic Population in Antakya and, The Influence of Islam on the Physical Environment of Neighborhoods in Antakya are examined. Analysis are prepared according to all the data which collected to examine case of Antakya and its physical environment of neighborhoods.

In the last section of the chapter, The Influence of Islam on the Physical Environment of Neighborhoods in Antakya, selected neighborhoods and their components; cul-de-

sacs and houses have been investigated in terms of spatial organization, uses of spaces/functional analysis, privacy penetration gradient and house-street relation. The defined criteria helped to discover the general physical settings of the Islamic architecture and its effects on these neighborhoods. From 3 neighborhoods which are named as Arab Christian neighborhood, Turkish Muslim neighborhood and Arab Muslim neighborhood, 12 houses in total could be reached and examined above.

As a result of all the analysis, data are collected to understand the role of Islam on the physical environment of these three neighborhoods. For make a comparison and understand the differences between these neighborhoods, next chapter is going to examine and compare all the findings together and discuss.

## **Chapter 4**

### **FINDINGS AND DISCUSSION**

#### **4.1 General Explanations**

The individuality of the neighborhoods with its streets and houses in old city of Antakya is thoroughly examined in the previous chapters by considering several factors such as: street configurations and cul-de-sacs, courtyard houses, spatial organization, use of spaces/functional analysis, household and physical settings of the houses. Based on the findings and discussions of all streets and houses, it has been acquired that some of identities.

As it is mentioned before, one of the main feature of the city which is shaping the texture is its streets. When looked at the streets of the traditional urban texture of Antakya, cul-de-sacs are distinguishable. Selected cul-de-sacs that analyzed in previous chapter are also carrying different characteristic features. Cul-de-sacs are shaped by the houses. For understand the differences and their characteristics it is significant to bring them together and compare accordingly. They all analyzed above and findings are collected about the courtyards of the houses, their spatial organizations, use of spaces/functional analysis, household and physical settings of the houses. In next section they will be compared accordingly.

#### **4.2 Comparison Evaluation**

In Arab Christian neighborhood, Kilise Street is mainly different than others. It is established around a church and there are two gates that allows people enter from

back side of the church. It is also displaying the tied connection of the Christian community and their way of life. One other significant feature is entrance of the cul-de-sac which has Sabat (building-bridging) and creating a gate-like passage with a door. Furthermore, when compared with the other neighborhoods, it has the longest cul-de-sac which has other cul-de-sac in it. It is presenting the inner community life of the Christians. It is also possible to say, this inner life style in neighborhood has some security concerns. When looked to the other physical characteristics like extension of the houses, two of the houses have extension. Their heights and widths are carrying similar lengths, besides the street width is also has the standard limitations like other cities in Islamic world.

Table 1: Findings of the street and houses in Kilise Street

<b>Kilise Street</b>			
	<b>Cul-de-sac width</b>	<b>Extension heights</b>	<b>Extension widths</b>
<b>House 62</b>	195cm	200cm	90cm
<b>House 68</b>	195cm	X	X
<b>House 75</b>	195cm	210cm	50cm
<b>House 88</b>	195cm	X	X
<b>House 97</b>	195cm	X	X

In Turkish Muslim neighborhood, Özdemiş Street starting from the mosque and this starting point is creating a public space in the neighborhood. In this area, there is a shop and some other public spaces. The street has two cul-de-sacs in it and they are selected to be analyzed. These two cul-de-sacs are located in the same distance to the mosque and facing to each other. When looked to the length of these cul-de-sacs, they are not so deep like Christian neighborhood. They have 15 houses at total. Furthermore, in the cul-de-sacs, there is no extension to examine. However, it is

conceivable to say the street width is has the standard limitations like other cities in Islamic world.

Table 2: Findings of the street and houses in Özdemir Street

<b>Özdemir Street</b>			
	<b>Cul-de-sac width</b>	<b>Extension heights</b>	<b>Extension widths</b>
<b>House 536</b>	170cm	X	X
<b>House 893</b>	170cm	X	X
<b>House 895</b>	170cm	X	X

In Arab Muslim neighborhood, Gümüşlü Street is starting from the mosque which is center of the neighborhood. The mosque and its around creating a public space in the neighborhood. There are many cul-de-sacs around but the closest one is selected and analyzed accordingly. This cul-de-sac, when compared with the other two neighborhood, is the smallest one. It has 15 houses at total. Furthermore, in the cul-de-sacs, there is no extension to examine. However, it is conceivable to say the street width is has the standard limitations like other cities in Islamic world.

Table 3: Findings of the street and houses in Gümüşlü Street

<b>Gümüşlü Street</b>			
	<b>Cul-de-sac width</b>	<b>Extension heights</b>	<b>Extension widths</b>
<b>House 649</b>	190cm	X	X
<b>House 650</b>	200cm	X	X
<b>House 651</b>	170cm	X	X
<b>House 652</b>	160cm	X	X

Based on the analyses, it is possible to classify some certain characteristics of them. These are specified accordingly, privacy settings of the houses and relationships with

their neighbors. In privacy settings, there are two types of privacy, visual and acoustical. Visual privacy has internal and external settings. Internal settings are some design considerations like door and window positions, building heights. Internal setting is generally about courtyard position and its characteristic. Acoustical privacy also has internal and external settings. While internal setting is looking to thicknesses of the wall through the neighbors, external setting is looking to thicknesses of the wall through the street.

In Kilise Street, 5 houses are analyzed. In table 4, observed settings are sorted through. When looking the whole table, it is obvious that they are all carrying and fitting to the privacy settings except some of the odd ones. In House 68, the entrance door of the house is facing to the neighbor's window. And, in House 97, window of the house is facing through the neighbor's door. In building heights, House 68 and 75 are the odd ones, their upper floors are facing to neighbor's courtyard.

Table 4: Findings of the houses in Kilise Street

Kilise Street							
Types of privacy	Location	Design considerations	Houses				
			House 62	House 68	House 75	House 88	House 97
Visual	External	<b>Doors:</b> Entrance doors are not directly facing the opposite neighbours	Not facing	Door is facing to neighbour's window	Not facing	Not facing	Not facing
		<b>Windows:</b> Above eye level and not directly facing the opposite neighbours	Not facing	Not facing	Not facing	Not facing	Facing through the neighbour's door
		<b>Building Heights:</b> Similar building heights and not directly facing the opposite neighbours	Not facing	Second floor is facing to neighbour's courtyard	Second floor is facing to neighbour's courtyard	Not facing	Not facing
	Internal	<b>Courtyard:</b> Providing microclimate and not visible from other neighbours	Providing microclimate and not visible	Providing microclimate and not visible	Providing microclimate and not visible	Providing microclimate and not visible	Providing microclimate and not visible
Acoustical	External	<b>Thicknesses of the wall through the street:</b>	Not allowing penetrations of voices	Not allowing penetrations of voices	Not allowing penetrations of voices	Not allowing penetrations of voices	Not allowing penetrations of voices
	Internal	<b>Thicknesses of the wall through to neighbours:</b>	Not allowing penetrations of voices	Not allowing penetrations of voices	Not allowing penetrations of voices	Not allowing penetrations of voices	Not allowing penetrations of voices

In Özdemir Street, 3 houses are analyzed. In table 5, observed settings are sorted through. When looking the whole table, it is obvious that they are all carrying and fitting to the privacy settings except one of them. And it just not correct in one of the concern. House 893 height has not appropriate to the privacy settings like others. Its upper floor is facing to neighbor's courtyard.

Table 5: Findings of the houses in Özdemir Street

Özdemir Street					
Types of privacy	Location	Design considerations	Houses		
			House 536	House 893	House 895
Visual	External	<b>Doors:</b> Entrance doors are not directly facing the opposite neighbours	Not facing	Not facing	Not facing
		<b>Windows:</b> Above eye level and not directly facing the opposite neighbours	Not facing	Not facing	Not facing
		<b>Building Heights:</b> Similar building heights and not directly facing the opposite neighbours	Not facing	Second floor is facing to neighbour's courtyard	Not facing
	Internal	<b>Courtyard:</b> Providing microclimate and not visible from other neighbours	Providing microclimate and not visible	Providing microclimate and not visible	Providing microclimate and not visible
Acoustical	External	<b>Thicknesses of the wall through the street:</b>	Not allowing penetrations of voices	Not allowing penetrations of voices	Not allowing penetrations of voices
	Internal	<b>Thicknesses of the wall through the neighbours:</b>	Not allowing penetrations of voices	Not allowing penetrations of voices	Not allowing penetrations of voices

In Gümüşlü Street, 4 houses are analyzed. In table 6, observed settings are sorted through. When looking the whole table, it is obvious that they are all carrying and appropriate to the privacy settings.

Table 6: Findings of the houses in Gümüşlü Street

Gümüşlü Street						
Types of privacy	Location	Design considerations	Houses			
			House 649	House 650	House 651	House 652
Visual	External	<b>Doors:</b> Entrance doors are not directly facing the opposite neighbours	Not facing	Not facing	Not facing	Not facing
		<b>Windows:</b> Above eye level and not directly facing the opposite neighbours	Not facing	Not facing	Not facing	Not facing
		<b>Building Heights:</b> Similar building heights and not directly facing the opposite neighbours	Not facing	Not facing	Not facing	Not facing
	Internal	<b>Courtyard:</b> Providing microclimate and not visible from other neighbours	Providing microclimate and not visible	Providing microclimate and not visible	Providing microclimate and not visible	Providing microclimate and not visible
Acoustical	External	<b>Thicknesses of the wall through the street:</b>	Not allowing penetrations of voices	Not allowing penetrations of voices	Not allowing penetrations of voices	Not allowing penetrations of voices
	Internal	<b>Thicknesses of the wall through to neighbours:</b>	Not allowing penetrations of voices	Not allowing penetrations of voices	Not allowing penetrations of voices	Not allowing penetrations of voices

### 4.3 Summary of the Chapter

In findings, all the informations which are collected in analysis are compared. From the specific identities of cul-de-sacs through the houses and their privacy settings are examined.

When looked at the characteristics of the cul-de-sacs, first observable differences amongst all is the length of cul-de-sacs. In Arab Christian neighborhood, while it is the longest cul-de-sac and has a deep end, in other cul-de-sacs lengths are not that long. In Table-1, Table-2 and Table-3, width of the cul-de-sacs are shown. When all compared, it is presenting, they all have similar characteristics. In Arab Christian neighborhood, another important component is the entrance of the cul-de-sac which has Sabat (building-bridging) and creating a gate-like passage with a door, while



others do not have. It can be interpreted as a security concerns of the neighborhood from rest of the city, while others are not carrying any concern.

In Table-4, Table-5 and Table-6, houses, their courtyards and privacy settings are shown. In these tables, door and windows positions, buildings heights, courtyard positions are examined as visual privacy settings of the houses. And, thicknesses of the walls and their relations with other houses are examined as acoustical privacy settings of the houses. General observations in privacy settings as visual, doors and windows are not positioning and facing the opposite neighbors. Building heights are generally similar and not directly facing the neighbor's courtyards or internal spaces, and it is creating a microclimate in household. In acoustic privacy, thicknesses of the walls are similar and they generally all set physically for not to have penetrations of voices. All these settings are similar in the three of the neighborhoods.

To sum up, it is possible to mention that, all the general characteristics are observed in all. Some of exceptional features are readable from the finding tables, however, it is not affecting the whole. When it is compared, it is presenting the general harmony at all.

## Chapter 5

### CONCLUSION

In Chapter 2, the model of Islamic City, History of Islamic City, Criticism on Islamic City Model and Physical Characteristics of Islamic City was discussed in detailed. As it is mentioned in that chapter, Islamic City and city model is a creation of orientalist perspective to the cities which has lived under the Islamic rule. The value systems of communities, these systems are inspired by religion, it cannot be anything more natural than the effects of various aspects of human life.

However, in a wide geography, Islam affected many countries and cities in history and its traces are still readable today. As a result of this situation, many cities are carrying some of the architectural characteristics and physical settings in their texture. One of the general features is the neighborhoods. In most of the cities which have lived under the Islamic rule, they are divided into small units and neighborhoods. Beyond an administrative division, this division has a clearly demonstrated physical dimension. There are, of course, some reasons for the division of Islamic cities into neighborhoods and their reflection in the physical appearance of the city. With being under the Islamic domination of people from other religions and cultures with the conquest and the acceptance of Islam by other nations except the Arabs, it is seen that the difference between religion and nationality is also effective in neighborhood separation and it is generally seen that people belonging to the same religion or nation live in a certain neighborhood. It is also understood

that the administration of the Islamic state and its cities is indirectly influential in the physical distinction between the neighbourhoods. Since the Islamic cities did not have an autonomous management, the public had to ensure their own security and the cities that form the city population were surrounded by walls and doors in the period when central authority was weak. The phenomenon of physical division in the form of neighbourhoods is a situation seen in the residential areas of cities. There is no such distinction in the central areas of the cities. In accordance with traditional Islamic understanding that allows for pluralism, the neighborhoods where Jews, Christians and Muslims live intensively, helps to reinforce individuals' own faith and values as well as psychologically high sense of belonging. Therefore, a Christian who lives in a traditional city must stick to their principles as well as Jews and Muslims. The neighborhood structure has brought inhabitants under a strict control in this respect.

From this point, it was one the aim of this study to understand the characteristics of the different ethnic and religious based neighborhoods in the city which is quite significant in the urban texture of Antakya. For the evaluation and understand the differentiation between the neighborhoods which is physical division of the residential areas, physical features of the streets and houses are analyzed according to specific data which some of the scholars define as Islamic city features.

The main aim of this study was to define and understand the Islamic effects on the texture of traditional built environment and the urban texture of the Antakya in its different neighborhoods which based on diverse ethnic and religious groups. In short, it is possible to indicate that, all the general characters which examined in the chapters above are also seen in the different neighborhoods of Antakya. Although all

of the features are available in all of them. Besides that, between the different religious and ethnic groups, while they were free to live as they want with their principles, they prefer to live and set their life styles in similar ways as observed.

Antakya is an important city as historical, religious, archaeological, commercial, sociological and geopolitical location. It is an important settlement where the characteristics of many civilizations are blended. It should not be forgotten that the city, which today has the title of “City of Civilizations”, has gained this title primarily due to its urban archaeological characteristics and historical accumulation. This study, which is presented in the city of Antakya, has developed recommendations for the discovery, preservation, visibility and public awareness of multilayered cultural heritage. If the city loses its multi-religious and ethnic identity, the characteristics of the city will be lost. In this study, the periods that city lived under the Islamic rule, which hold a significant place in the history of Antakya, and the neighborhoods with all its features shaped itself during this era are examined. It was important to find out and discover all these features about the city. From this point, it is going to help and deliver guidance for other follow up studies which is going to help to city and its cultural heritage.

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