

International Journal of Architectural Engineering & Urban Planning



The impact of religious and behavioral patterns on the order of vernacular settlements: A comparative case study

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Received: January 2012, Accepted: September 2012

Abstract

Considering the acceptance of culture as the principle predictor of understanding housing elements, including religious and behavioral patterns, is becoming increasingly important. This understanding can be clearly visualized in a city such as Kerman. Kerman is located in South-East of Iran andhas a diverse culture witha residential district in which Muslims, Zoroastrians, and Jews liveside by side in harmony. In this paper, the impact of religious and behavioral patterns on the interactive structure of houses, which belong to the followers of the above mentioned religions, will be explained. The results of this study could be used as a practical guideline and framework by the planners who are organizing approaches for designing and renovating buildings in these districts. The paper implements a combinationalresearch method using documentation, field study, interviews, observation and logical reasoning in order to discuss the matter of privacy and hospitality and its impacts on formation of the houses. Furthermore, apart from the study of ethnography, the paper demonstrates the fact that there are at least two impressive layers affecting the traditional architectural housing in Kerman. The first layer is derived from the dominant cultural patterns of privacy; respecting the rights of neighbors and hospitality that are acceptable by all religions. Adhering to these two principles is practical even today. Moreover, the second layer affecting the architectural housing of the Jews and Zoroastrians is derived from their traditions and religious beliefs.

Keywords: Religious Culture; Privacy; Hospitality; Neighborhood rights; Houses of the followers of Islam; Houses of the followers of the Zoroastrian faith and Jewish faith.

1. Introduction

Both social and cultural demands on privacy and hospitality of the residents have influenced Persian Architecture, especially their private dwellings. These two factors, privacy and hospitality, can be treated as independent subjects of study, as not all houses are required to satisfy both of these demands. This concept was quite visible in some houses in different parts of the country. Those that were adapted to the needs of hospitality showed no physical structures to satisfy the need for privacy. However, house-types which commonly satisfied both of these needs did it, sometimes, by combining both of these factors. While, at other times did it so by creating

Housing in cultural provinces of Iran, such as Kerman, has experienced dramatic changes during this period in time. This has taken place because of the constructions that were inconsistent with the environment and the public culture. Therefore, it is essential to recognize and maintain the structure and the influence of the dominant culture which has had an impact on houses and traditional quarters. Designers as growers, cause the strength of the popular linkages, because commitment to culture is the spirit of design and a successful environment could only be achieved through paying full attention to the social and cultural aspects [2]. In other words:

distinct and separate spatial domains which satisfied only one of these needs in each of the domains. As a result, certain kinds of building-forms and internal layouts became more familiar and preferred than others. Some of them, also, shared a similarity with those in other Islamic countries. These similarities were due to the common concerns over privacy and hospitality. Although it is clear that the relationship between men and women was a key aspect of the design to gain privacy in Islamic Persia, both physical and documentary evidence of the same is sparse in the pre-Islamic period [1].

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The commitment of architects to the cultural aspects is very important. For this very reason, this paper has given priority to culture and its influence on the architecture. It, therefore, concentrates on the Islamic teachings and their effects, primarily, on those of Muslim inhabitants, and then, the impression of this culture on the Zoroastrian and Jewish dwellings of Kerman.

The dominant behavioral patterns of various religions have led to significant similarities and differences in the houses in Kerman [3]. In other words; personal-social relationships follow culture and religion. "Space for activities", is shaped and determined under the influence of these cultures. Another important issue which this paper deals with is the simultaneous attention to creation of appropriate patterns for observance of privacy and pattern of hospitality seen in the traditional houses. Observations of this privacy start from two adjacent rooms, one of them belonging to parents and the other to the children. It, then, continues into the separation of the private area of the house from the reception area. Finally, this pattern of privacy could be seen at the neighborhood level.

2. Research Method

Many of the architectural studies are interdisciplinary and require a combination of specific methods [2]. Keeping this in mind and the fact that this research is in deals with environmental psychology and identification of the impact of customs and religious beliefs on the residential environment, combination of methods and a dialectical pattern are used. Furthermore, in order to achieve a comprehensive theory, the research challenges and hypothesis are defined as follows:

a. The main factor that caused differences incirculation order and formation of the traditional houses in Kerman was derived from behavioral patterns and the religious beliefs of its inhabitants.

b. The dominant culture, which is consistent with the nature of human beings, is the most important factor that caused similarities in circulation order and formation of the traditional houses in the quarters of Kerman.

First, by referring to the holy Quran, the matter of hospitality and private territory in Islam using an analytical-logical approach are discussed. Simultaneously, by referring to the main sources of the followers of the Zoroastrian religion and the Jewish faith such as the Avesta and the Torah and their related analytical books, the same issue is reviewed. Second, in order to gather information from the territory of the research place (quarters of Kerman); in addition to comprehensive Library research, field study methods such as interviews and live participant observation are used. Finally, through a study using a comparative approach; the results are discussed, in order to survey the hypothesis and specify the final theoretical expression of the research.

3. Culture, The Main Forming Element of the Houses

It is believed that the house rather than the physical structure is a multi-dimensional organization with its performance affected by social, cultural, religious regulations, economic and environmental conditions. This makes the "house" a cultural issue. In fact, the shape and its organization are influenced by culture and the house is the product [4, 5]. As a matter of fact, houses consistent with cultures and their organization of space; show the social relationships of the inhabitants. Throughout reviewing the house forms in seventy three different cultures, it was observed that the degree of interior divisions depends on the amount of socio-political complexity of that culture [6].

Forms of behavior seen in any society with a dominant culture are called cultural public features. Meanwhile, within these general categories, there are differences in values and behavior of the followers of different religions, which are discussed below.

4. Pattern of Privacy in Islam

In Islamic teachings, it is mentionedthat the relationship and circulation pattern of the houses should be a symbol of behavioral patterns that facilitates religious obligations for Muslims. The culture that promotes reverence and respect toward guests and observance of privacy in society has a major influence on Iranian architecture and a particular impact on the architecture of the houses. The nature of private life is different in the Islamic era from that of the pre-Islamic period. Islam believes that sexual and emotional activities should be focused on the family nucleus in order to consolidate family life and reduce social stress [7]. Furthermore, Islam prescribes the role of men and women in ways which have a direct impact on architectural elements. Some verses of the holy Quran stress the importance of a few knockson the door before entering a house:

"O you who believe! Do not enter houses other than your houses until you have asked permission and saluted their inmates; this is better for you may be mindful" [8].

"But if you do not find any one therein, then do not enter until permission is given to you; and if it is said to you: Go back; this purer for you; and Allah is cognizant of what you do"[8].

In the time of Prophet Muhammad (d. 632 A.D.), the Arab people entered each other's houses without a prior notice. The above verses, inspired by God, sought to change this behavior. The correct code of behavior was demonstrated by Muhammad: "I said hello to the inhabitant of the house and when I received a response went inside"[7].

The matter of getting permission in Islam is an obligatory onenot just a moral issue. It is not only concerned with entering of the neighbors and strangers to the house and family privacy [8], but also includes the children's entry to their parents' room[8] and that of their siblings, as well. In fact, they are obliged to get permission; three times before puberty and any time after that, in order to enter their parents' sleeping chamber. Therefore, in a Muslim's house and at a specific age, location of the accommodation for children and parents are separated, so the house has a variety of rooms. In this way, Nasir-i-din Tusi, in 13th century, devoted a chapter of his book to the human dwellings. He claimed that a good house should be very stable and the men's and women's areas should be partitioned [9]. Furthermore, the emphasis of Islam on

specifying the private zone at nighthas to having noticeable physical walls around the house such as a wooden fence and stile tomark the outer space and the territory in the Persian houses. This territory is a place that is forbidden for others to enter or cause visual disturbance. Therefore, the house space, including the courtyard and the rooms, are private territories of a human being that no one should be allowed to enter without permission. Privacy as a fundamental human interest is seen in all cultures. The house is a private zone and its privacy should not be violated by any one [10].

5. Hospitality and Respecting Neighborhood Rights in Islam

Islam has a particular order that insists upon maintenance of the intimate kindness and brotherhood among all people and importance of the family nucleus as the main unit of a society. In fact, hospitality has its roots in the elation of friendship which exists among all members of the Islamic society. Islam emphasizes that all Moslems are brothers and sisters [11]. The holy Quran says:

"Believers are surely brothers. So restore friendship among your brothers. Have fear of Allah so that you may attain mercy"[12].

Several practical ways were presented by Imams to consolidate the relationship between the members of an Islamic society. One way is by paying each other visits in their houses [13]. "The guest is the beloved of God" is a common expression among the Muslims. The guest should always be received very warmly [14]. It advises that the best part of the room or the house should be offered to the guest, though he may, for reasons of humility, decline to sit there [15]. Ghazali advises that the guest should not sit in the best place and near the women's area [15]. Furthermore, respecting parents and lending a hand to close relatives when in trouble is also extended to the neighbors. This is clearly indicated in the verses of the holy Quran as follows:

"[O, men!] Worship Allah and do not join Partner with Him; and do good to your Parents, relatives, orphans, the needy, The neighbor who is a near relative, The neighbor who is a stranger, the very Close friend, the wayfarers and to those Slaves whom you own: Verily, Allah Does not like the conceited arrogant" [16].

These cultural principles achieved favorable results in maintaining good and caring neighborly relations, inclusive of their respective rights, within the lives of the traditional Muslims. This religion was also becoming so powerful that a link between neighborhood and affection was clearly visible to the onlookers. Nasr points out that "neighbors were known as a second family" [11].

6. Dominant Culture In a City With Various Religions

The dominant public culture in traditional Iranian cities has provided an opportunity to achieve peace in proportion with the spirit for life in them. Meanwhile, according to Islamic teachings, the followers of other divine religions have the freedom to practice their religious principles and live peacefully with each other. For example, Imam Ali

recommends kindness and affection towards people in his letter to Malik Ashtar who was the governor of Egypt where the followers of various religions used to live:

"You must create in your mind kindness, compassion and love for your subjects. ... Amongst your subjects there are two kinds of people: those who have the same religion as you have; they are brothers to you, and those who have religions other than that of yours, they are human beings like you" [17].

Although, Islam is overwhelmingly the dominant religion in Iran, it should be mentioned that the similarities between the traditional Zoroastrian houses and those of the Muslims are not merely due to the dominancy of Islamic culture in Iran [18]. The city of Kerman is known for its hospitality and being receptive to the followers of different religions who have gathered there to live peacefully with each other. Cultural tolerance and compatibility, with all the ideas and methods, have made it possible foreveryone in the city to have the right to free expression and opinion. Consequently, the followers of all religions and faiths could live on this land [19]. This culture, that depends on the nature of desert inhabitants and is also rooted in the Islamic teachings. Sometimes, in adjacent neighborhoods, followers of different religions perform their religious ceremonies, in mosques, temples, synagogues and churches. (Fig. 4)

Among all the quartersstudied, the quarter of "Shah-e Adel", with a history of 950 years of settlements, predominantly houses Muslim inhabitants. The other quarter, called "Zarisf", well-known as the Zoroastrian quarter, is known to have several hundred years of residential history, despite the fact that the settlement of the Zoroastrians and formation of the current situation goes back to the Qajar era. The quarter of "Dolatkhaneh" is the third one, well-known as the Jewish quarter among the public. It has a residential history of about 300 years [20]. It is noteworthy that the Zoroastrian quarter of "Zarisf" was closer to the fort of the city and adjacent to the extramural agricultural lands. The Jewish quarter is located inside thefort of the city. (Fig. 2)

7. The Observation Pattern of Privacy in Houses of Muslims in the quarter of Shah-e Adel

Two courtyard orientations of the houses in Kerman were observed: Firstly, the north-south courtyard orientation in the quarter of "Shah-e Adel" and secondly, the east-west orientation in the quarter of "Zarisf", which is the predominant orientation of the important places in houses. An analytical study of the climate shows that even though the dominant wind in the winter blows from the south-west and in summer from the north and north-east, [21] the direction of 5 to 10 degrees of the north-south axis towards the east is actually the best direction for the orientation of a house in Kerman. Orientation of houses in the quarter of Shah-e Adel and many other quarters of Muslim inhabitants have been synchronized with the direction of Kiblah, generally with a rotation of 30 degrees towardsthe East.

In the of Muslim's quarters, including Shah-e Adel, the observation of privacy and hospitality was established through a variety of architectural patterns. Generally, the pattern of privacy in this quarter was established from the front door of

the houses, which typically have high walls. Moreover, the juxtaposition of the house, as a group, is in such a way that the neighbors could not disturb each other. These houses have common elements such as an entrance, a vestibule and a hall. The attention to privacy is first manifested in the door itself. All visitors must announce themselves by knocking before entering the house. Traditionally, there always was two door knockers placed side by side, one a kind of metal ring, the other a larger metal hammer. The former, the softer of the two, would be used by the female visitors, the latter, which was louder and of a different tone, was used by the male visitors. Another mark of privacy is the shape of the passageway that leads from the entrance to the courtyard. This could be a straight line, an "L-shape" or have some form of a chicane. The intention is always to prevent direct view of the interior. If a linear form of passageway is adopted, this usually leads to one corner of the courtyard, where there are no household activities.

The vestibule or "Hashti" is another important circulation element. This is a point for a brief break and can be used as a temporary reception room for those people who do not need to enter the guest room. In double-courtyard houses, the vestibule is an element that gives access to both the reception and the private areas. So today, the vestibule still has a precise social and architectural function. Plan wise, the Hashti is commonly octagonal, but it can be square, rectangular, or of other polygonal shapes. It normally contains the main entrance, and gives access both to the roof and to the corridor leading to the courtyard. There are usually two or three niches, which are places for people to sit when they do not need to enter the guest room.

Houses with one and two courtyards are more common in Kerman, especially in the quarter of Shah-e Adel. Not only, are these houses compatible with the climatic conditions, but also meet the needs of privacy. The observation of privacy and hospitality in houses with one courtyard are compatible with each other in two ways:

- 1. The private and the guest zones are separately located around the courtyard. (Sometimes, there are two reception rooms located on either side of the entrance vestibule.) (Fig. 1)
- 2. The private and the guest zones are located close to each

other onthe same level, but totally separated. (Fig. 1)

The quality and intensity of segregation of the private and reception rooms is increased in houses that have more than one courtyard. In fact, the existence of a second courtyard is generally because of the necessity to follow along with hospitality, and the observancefor privacy or separation of the crewfrom the inhabitants. The entrance porch of this courtyard is located in the Hashti (vestibule) which is connected to the entrance of the house. There is usually a reception room and a place for the crew located in the second courtyard of the houses with two courtyards. In this case, the second one has a separate entrance.

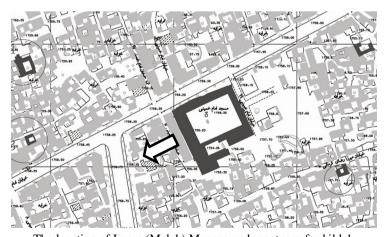
8. The Impact of Zoroastrian Beliefs on the Formation of their Houses in ZarisfQuarter

Before the Introduction of Islam, Zoroastrianism was the dominant religion in Iran. Zoroastrians lost their holy book when Alexander conquered Iran. They did not have one until the Sassanid era, when this book was rewritten [22]. Zoroastrianism is one of those religions which have influenced Iranian culture considerably prior to Islam. Many researchers believe that other than Zoroastrianism, very few religions have put such an emphasis on purifying the soul and body [23]. Although many parts of Avesta, the Zoroastrians' book, are not available, those left stress the need to think in quiet: "O creator, I learned you well when my good nature came to me and taught me the best way to acquire knowledge, which is in fact thinking in quiet" [23]. It is clear that this is possible if there can be the right conditions at home. It must be a house compatible with the climate and not subject to trespassing.

It must be mentioned that the current Avesta is not exactly the same as the original one. It includes parts of Gatha's of the old Avesta and the new Avesta. Some researchers refer to "Vandidad" as a concluding part of the new Avesta. This part, which isquite different from the other parts, and somehow incompatible with the first part, represents the creeds and customs of the western Mads and most of the religious rules and details [23]. For example, there are some orders according to which women's rooms should be separated during their monthly



The house with two courtyards in the *Shah-e Adel* quarter.



The location of Imam (Malek) Mosque and sanctuary for kiblah.

Fig. 1 The Shah-e Adel quarter of Kerman (belongs to Muslims), the location of Imam (Malek) Mosque and sanctuary for kiblah, (Source: Authors).

period or pregnancy. It says that "there should be nothing on her way and the land must be dry wherever she stays so that the land would not be contaminated, and they should construct a building for her; one half to one fifth, above the house so that she can not look at the fire otherwise she may pollute it"[23]. However, the field studies from the Moobeds and the experts of the Cultural Heritage of Kerman confirm the existence of such a room in their traditional houses. However, it seems that the function of these rooms have changed in the last 50 years. Although, there is no direct mention of the pattern of privacy and guest theme in Avesta, the field studies demonstrate the following results:

A. The east-west direction is more dominant in many houses located in the Zoroastrian district of Zarsif neighborhood. In fact, this can be analyzed from two perspectives:

1. Such houses are in the suburbs, and this direction was chosen for protection against the storms. As Pirnia called it Kermanian Ron [24].

2. Because of the importance of light in Zoroastrianism, as they pray in the direction of light [25], and also the importance of sunrise and sunset, which were studied in the Zarisf neighborhood, it showed that the main space is based on the East-West direction in such a way that the important places were either toward the East or the West. In the Zoroastrian houses in Yazd the larger platform for praying was found to be toward the east [26]. In Atash-kadeh, fire was in the center and Moobed was in the eastern part and ceremonies were performed toward the west.(Fig. 2)

B. Because of their culture of Hijab covering, the Zoroastrian houses in Yazd and Kerman do not have the pattern of interior & exterior courtyards [26]. For example, it is not necessary for Zoroastrians to cover their hair completely from the people of their own religion. The field studies demonstrate that a part of the courtyard located in a Zoroastrian house belongs to the servants. (Fig. 3) In contrast, there are at least two separated

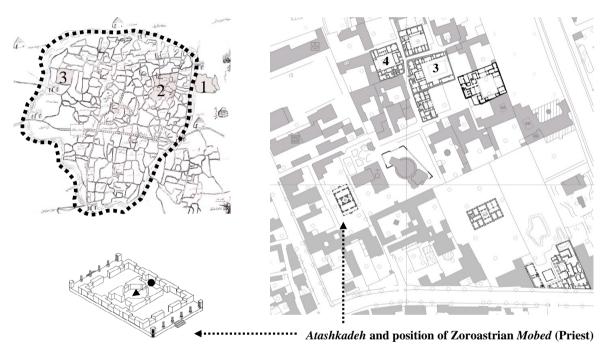


Fig. 2 The quarters of Kerman in GhajarEra (Left one) & the recent situation of Zarisf quarter (Right one), (Source:Authors)

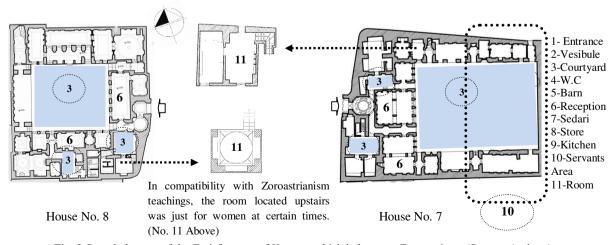


Fig. 3 Sample houses of the Zarisfquarter of Kerman which belongs to Zoroastrians, (Source: Authors)

courtyards for servants and the settled family, known as interior & exterior courtyards, in a Muslim's house.

C. Field studies show that houses with two guest rooms in the Zoroastrians' houses are basically different from the ones in the Muslims' houses. In fact, two guest rooms in the Muslim houses are used in order to separate the men from the women. Whilst, one of these two guest rooms in the Zoroastrian houses is used for the guests who are not of the same religion.

D. There are no windows leading to the public pathways except some opaque ones at a high position.

E. The Zoroastrian houses usually have three yards with one of them leading to the kitchen given that they usually hold ceremonies in a big space in Yazd and Kerman. The other one leads to the restroom, which like the Zoroastrian houses in Yazd; do not have a well so that the soil would not be contaminated. Instead, they used a kind of storehouse from which the contents could be carried away [26]. However, this issue has also been due to its use as a fertilizer in agriculture. As well as a birds' house and as barn, there is also a place for dogs. The third courtyard (larger one), as mentioned, is a joint space between adjacent rooms like the one in the Muslim's houses.

F. Although, it has been previously mentioned by Mazumdar & Mazumdar, that Zoroastrians had to keep their buildings low and were forbidden to use double lange (leaf) doors [30], the field studies demonstrate that most of the traditional Zoroastrian houses located in the Zarisf quarter of Kerman have great Sardar (Entrance Portal) with double lange (leaf) doors like those of the Muslims. They also have at least one great courtyard. (Fig. 6) Meanwhile, there is a place between the courtyard and alley called "Hashti" (Rectangular Vestibule) which is a joint space located in the entrance vestibule for the purpose of blocking visibility from the outside.

G. In compatibility with the teachings in Zoroastrianism, the upstairs was just for women at certain times; however, an interview with the locals shows that this place, like the Zoroastrians' houses in Yazd [26], was located on the first floor near the kitchen. (Fig. 3)

H. Cypresses are seen more in Zoroastrians' houses than those of the Muslims. In fact, Zoroastrians believe that the

seed of this tree was brought from Zoroaster with Avesta [32]. As the result of this, the outward appearance is a combination of abstract shapes and trees such as cypress and walnut, which were used as ornaments. (Fig. 6)

9. The Impact of Jewish Beliefs on the Formation of Their Houses in Dolat-KhanehQuarter

Dolat-Khaneh quarter is one of the traditional quarters of Kerman which dates back to about 300 years ago. Three groups of people have been living there since then. Actually, the Zoroastrians and the Jews are the majority and the Muslims are the minority in this quarter [20]. After purchasing Zoroastrians' houses, the Jewish people have settled more and more in this quarter and this quarter is now well-known as a "Jewish Quarter". It is noteworthy that there are different religions' temples in this area or near it; so that they can pray toward their own sacred directions. (Fig. 4, 5) As it was mentioned, dealing or associating with different religions is to be protected in an Islamic country since it is not forbidden for Muslims to do so. Meanwhile, the spirit of hospitality in Kerman has probably provided a peaceful way of life for the people of different religions. There are similarities and differences between the Jewish, the Muslims and the Zoroastrians' Quarter in the structure and formation of their houses. The field studies demonstrate the following characteristics for the houses in the Jewish quarter:

- 1. Houses in the Jewish Quarter are consistent with the climate, interior decorations and the ornaments; quite simple in comparison with the other quarters. In fact, the houses in the Jewish Quarter are relatively smaller than those in the other quarters. Apparently, this is the result of eliminating the rectangular vestibules, joints between rooms and having a courtyard. Meanwhile, the reception room is quite simple and does not have the common modular pattern called "Se-Dari" and "Panj-Dari" as in the traditional houses of Iran.
- 2. While religious minorities usually maintain a suitable connection with each other, field studies show that there used to be a door connecting between two neighborhoods in case of necessity. Furthermore, the pattern of a dead-end alley with

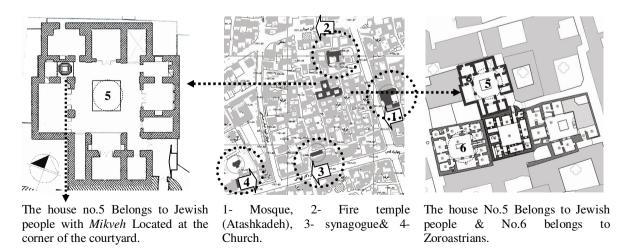


Fig. 4 The Dolat-Khanehquarter of Kerman (Jewish), sacred directions are identified by arrows. 1- Mosque, 2- Fire temple (Atashkadeh), 3- Synagogue & 4- Church, (Source: Authors)

Sabat (alley with roof or balcony) that leads to the entrances of the houses is another common pattern in the quarter.

- 3. In the house number five (Fig. 4), there is a space dedicated to a small pool that is similar to the specifications of a special pool called "Mikveh". Mikveh is a small pool which usually measures 1.5 meters in width by 1.5 meters in length and more than 1.5 meters in depth. Mikveh is connected to another pool called "Kashar" and finally, to the flowing water. According to the commands of cleanliness and purity of the Jewish religion, it is necessary for women to souse in Mikveh after their periods (Called "nida"). Nowadays, it is located in the southern part of the synagogue of Kerman, because it is not possible for all the inhabitants to construct it in their houses.
- 4. Wife and husband should not make contact with each other during the special days called "Nida". They should also avoid physical contact with each other during these days. Therefore, the necessity for a specially separated room becomes tangible in Jewish houses.
- 5. Combination of adobe with the cover of thatch is a common Housing construction material.
- 6. There was a friendly and close connection between the neighbors in this quarter. Presumably, it is derived from the

religious teachings and beliefs of the settled people. For example, the necessity for considering the rights of the neighbors and protecting them has been mentioned in Torah as follows: "you must love your neighbor as yourself" [33], "You must not oppress your neighbor or commit robbery against him" [33] and "If you build a new house, you must construct a guard rail around your roof to avoid being culpable in the event someone should fall from it" [34].

7. As Jewish people organized their environment with security elements, vast areas of this quarter were placed approximately 5 meters lower than the other adjacent quarters. Although it might have provided an access to the underground water sources in the past, presumably, it was because of the location of the Jewish Quarter inside the city fort. (Fig. 2)

8. Another feature of the Jewish Quarter is the nature of being relatively dense and compact (majority of houses have a simple small or medium-sized courtyard) in comparison with the Shah-e Adel Quarter and Zarisf Quarter. Despite the width of the alleys becoming smaller and the pattern of dead-end alleys becoming dominant, the proximity pattern of the neighborhoods became more compact than the other mentioned quarters. Furthermore, there are other references,



The church of Kerman & the sacred direction toward the East window facing sunrise.

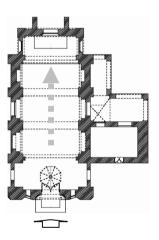


Fig. 5 The church of Kerman & the sacred direction toward the East facing sunrise located in the Dolat-Khaneh quarter, (Source: Authors, Modeling and Drafting by A. Iranmanesh and S. Karamad)







Fig. 6 From right: 1- A double lange (leaf) doors in Zarisfquarter, 2- The entrance portal of a house located in Zarisf quarter, and 3- The ornaments of a Zoroastrian house located in Jewish Quarter, (Source: Authors).

such as in the holy Quran, which implies that the historical process of urban living of the Jewish people was in such a way that they used to be built adjacently and toward each other with straight forward accessibility.

Conclusion

Detailed information from the various ethnic groups and their individual and collective behavioral patterns can provide designers with necessary guidance and frameworks in the process of designing living quarters that are realistic rather than the merely mental and unrealistic imaginations. As it was previously mentioned, Kerman is a city with cultural diversity and quarters which houses people who believe in various religions. The followers of these religions have been allowed to have courtyard houses in accordance with their religion and traditions. Meanwhile, they have tried to express their distinct cultural features using an architectural language. However, tranquility and peace are the most fundamental elements of social relations and friendship in the traditional cities of Iran, including Kerman. Therefore, detection and recognition of this system and assisting its inclusion are the most important goals that must be followed during the renovation of the quarters.

It can be understood from the comparative study of the traditional houses in Islamic, Zoroastrian and Jewish quarters of Kerman (Table 1) that there are at least two impressive layers affecting the traditional architectural housing in Kerman. Despite the inevitable impacts of culture on architectural space, the first impressive layer that has provided the housing architecture of Kerman with a sense of unity has been derived from the dominant cultural patterns of privacy, respecting the rights of the neighbors and their hospitality. These factors are acceptable by all religions and could also be practical in the present time. The second layer affecting the architectural housing of the Jews and Zoroastrians is derived from their religious beliefs and traditions.

In fact, the second layer has shaped certain areas in accordance with the religious culture. This has been in response to the matter of security, occupation and religious orders related to women and the followers of the same

religion. For example some houses have an extra room to meet the special needs of women during their monthly cycle or when they were pregnant. As the result of this, a couple following the Zoroastrian and Jewish religious faiths required at least two rooms in their house. On the other hand, a couple following Islam could manage in a house with only one room; even though, other rooms are recommended for the purpose of extending hospitality towards their guests and for their children use, who have to ask for permission to enter their parents' room.

To sum it up, the fundamental need of the inhabitants for a private sphere should be seriously considered in the forthcoming urban developments. Regarding the private territory, the paper suggests considering specific territory of the low-rise courtyard housing for the contemporary and future urban housing developments. Furthermore, the study suggest that planners establish reasonable approaches in developing the codification of design criteria and renovation of these quarters, so that these approaches can preserve the privacy and psychological security of the Muslims, Zoroastrians and Jewish people.

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Table A brief Comparison of traditional houses in Islamic, Zoroastrian and Jewish quarters of Kerman, (Source: Authors)

Islamic Quarter	Zoroastrian Quarter	Jewish Quarter
Reception area is separated from the private territory and the living area	Reception area is separated from the private territory because of the behavioral patterns	A simple separated reception area without special architectural ornaments
Architectural ornaments, especially in facades, include brickworks with abstract geometrical order	Architectural ornaments include brickwork with natural forms	Mostly, covered with a simple thatch in facades and without any special ornaments inside
The parents' room is separated from the ones for children	An extra room to meet the special needs of women during their monthly cycle or when they were pregnant	A room to meet the special needs of women during their monthly cycle
Compact urban fabric with squares and public places, with a religious character	The houses are mostly located at the middle of a great private garden	A compact urban fabric without squares and public places
Overall orientation is from Northeast to the Southwest direction	In most cases, the orientation is East to West	Mostly, Northeast to the Southwest direction
Great entrance portal with the inscription of the Quran verses	Mostly, a great entrance portal without special inscription	In most cases, a simple entrance portal without any inscription

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