A study on the effects of Iranian religions on its house architecture

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Abstract

Iranian traditional architecture is one of the world's architectures par excellence. It was one of the most important architectures in the medieval Islamic world. Iranian architecture has developed over millennia in response to its religion. Many traditional and vernacular buildings in Iran show that the architects had been so clever in harmonizing the Iranian religion and architecture in the past. The architects know how to adapt architecture to Iran's conditions.

From 1900 to now, thousands of new homes, apartment units and buildings have been constructed in Iran. In particular, the Iranian cities have expanded enormously and their great old structures are complemented by massive new urban developments. Learning from traditional architecture always can help us to take lessons on the Iranian beliefs directly from the past without extra expenditure.

This article will explain the impacts of Iranian religions (Zoroastrian and Islam) on its architecture, and the major focus of the paper is to introduce how Iranian architecture has been influenced by the religion. It will analyze the Iranian architecture in the past and will show how the Iranian architecture was in harmony with Iranian religion, as well as its ideology. Then it will demonstrate in detail how its new planning solutions have failed to continue the thoughts of the past.

Moreover, to better understand the role and relations of architecture and identity, this paper attempts to discover the changes of Iranian architecture through the last century. The results provide an effective strategy for future planning of Iranian cities.

To accomplish this purpose, this paper is organized as follows: after the introductory part, the Iranian architecture is introduced in Section II, followed by the explanation of the changes of its architecture in section III. Study results are presented in Section IV and finally the conclusions will be addressed in section V.

Key words: House Architecture, Iran, Muslim, Zoroastrian

1. Introduction:

According to different studies especially Rapaport(2003), culture is the main factor that impacts house construction and it has an important role in the social constancy. Over the centuries, the Iranians of different religions had to develop their architectural features of houses that would satisfy their religious requirements. Unfortunately, in the last century, urban identities in cultural cities with special identity such as Shiraz, Yazd and Isfahan have changed by undesirable apartments and different unsuitable buildings. Different religions with various behavior patterns have caused meaningful similarity and diversity on traditional houses in Iran.

It is necessary to recognize and protect Iranian tradition and discipline that have been the reasons for neighborhood relationship. The house architecture in Iran is formed under the influence of various factors (social, cultural, economy and politics) in its historical process. Due to importance of religious culture in Iran especially for Zoroastrians and Muslims, and their effects on housing design, this article tries to find the effects of Iranian religions on its house architecture. For this purpose, first we look at the Great Quran with logical analysis to consider hospitality and private boundaries in Islam. To understand this subject in Zoroastrian's architecture, we have studied Avesta (the best and first source of Zoroastrian's
holy book) and analyzed books related to the objectives of the study. According to Islamic beliefs, people with other religions who undertake protection of Islamic governor, can do their religious customs freely and they can have a peaceful coexistence with Muslims.

In other words, dominant religion should be unique and followers of other religions who follow their specific religion should obey the unique dominant religion's general affairs and problems. Islam recommends Muslims to have good justice with each other and the other religion followers (Javadi Amoli, 300-303:2011).

Knowing the basic patterns of house design of different tribes and groups with different culture and religions can help sustaining their architecture. This article determines that in Iran religion has been the most important impacts on formation of the architecture of houses.

2. The Iranian Architecture:

The history of Iran dates back to the pre-Islamic era. Its formal architecture, the shape of its houses and street network, and elements like the covered bazaar, mosques and shrines, have made Iran known as a typical Islamic country in the world. There was probably a sizable settlement on the site of many cities in the prehistoric period and cuneiform records from many historical sites show that Iran was a significant country for many years. According to historical sources, such as traveller's memoirs, the structure of the Iranian cities in the 18th century was based on organic structures. This organic shape was located where the major thoroughfares converged in the center of the cities.

The map of many historical cities in the last century shows that the old districts were clearly the most integrated places in those cities, which coincides the geographical center of the cities as well. Those cities were rightly characterized by their quarters (mahallas). Each city consisted of different distinct mahallas inhabited by separate communities with powerful social cohesion and different cultures. They had their own houses relevant to their religions. The physical construct of those mahallas have, to a large extent, remained intact. The most significant public place in each mahalla was a complex consisting of a square, some shops and a building with religious function.

All quarters (mahallas) in the historical cities had defined boundaries according to the affiliations of the residents to different local communities. Each quarter occupies an amorphous patch of the surface of those cities.

2-1 Islam religion and residential architecture:

a. Islam and private boundary

After entering Islam in Iran relation between men and women has changed and is the most important reason which formed boundaries of houses. In Islamic belief, Muslims should have suitable manner and house design should be symbol of religious manner. It should facilitate religious responsibilities for each Muslim. Iranian houses commonly attend to private boundary with consideration of honoring guests. Each house has separate boundaries for private and guests.

Entrance of the house is through narrow and covered lane. Direct entrance into the house is not possible. After entrance, the level changes and octagonal spaces with a beautifully decorated ceiling appear. Then comes a number of stairs, leading to another octagonal space after which entrance to the yard is possible. The houses with two yards have two entrances.
The second yard has separate entrance, usually, servant part and one guest rooms situated in this yard. Thus, any new comer cannot see the entirety of the house at one look. Also, the relatively long distance from door to yard provides enough time for the family members to go into their rooms. The octagonal space serves like a waiting room for the house. The entrance doors in Moslem house have two door knockers, one for men and one for women. These door knockers have different sounds so that the residents know if there is a man or a woman at the door, thus enabling women to be properly veiled when the knock is answered.

b. Islam and guest honoring
In Islamic belief honoring the guests are very important. “Guest is the friend of god” is one of the most important Muslims thoughts which have major effects on Iranian architecture especially on the houses architecture. The most important part of the house, in fact, is a guestroom which is situated at the Southeast portion. At the center of the front there is a five-door room with two small spaces attached to it. This room carries beautiful decoration such as mirror work. There is an independent entrance to this portion before reaching the yard. The guest room in Muslim houses, is a sign of respecting the guest. Sometimes, an independent place or yard is allocated to the guests (see Figure 2).

c. Direction of the houses
We confront two directions of the yard in numerous cities of Iran. The Muslim houses are situated towards the Holy Kaaba (south-west). Commonly in Muslim's quarters main axis of yard was lying north and south but in Zoroastrianism quarters was lying east and west axis.

2-2 Zoroastrian religion and residential architecture:
The most important Iranian religion before Islam was Zoroastrian. Their prophet was Zoroaster and they believed (worshiped) in one God. Their holy book is Avesta. (Dorant 1958:375). Although the Avesta which is used by Zoroastrian at this time isn't the whole primitive Avesta, it contains ancient vandidad and Gathas and new Avesta. Some researchers believe Vandidad is part of new Avesta. The Zoroastrian population is distributed among the cities and the villages in Iran. For centuries their stronghold was in the provinces of Yazd, Kermān and Fārs, but nowadays the largest populations are in Tehran, Shirāz, and Eşfahān.

Many researchers believe a religion like Zoroastrian has much emphasis on washing and cleaning the body and spirit (Doostkhah, 2006, 42). Avesta emphasizes that thinking should be in calmness. It says "Ahura Mazda (Great God), clearly knows you are pure, when the nice manner comes to me and educates me to think in calmness. It is the best way of studying (learning) (Doostkhah, 2006: 42). It is clear that houses should have suitable characteristics to provide religion necessities.

At new Avesta, we can't find a subject about house architect pattern, but there are some instructions at Vandidad (last Avesta) that separate women's room from other parts of house in the times of menses and child birth period. It is written, in these times " They should clean her way from each flower and bush (floral design) and the place which stays should scatter dry soil on earth to prevent from earth contamination and they should build a building half or one fifth higher than house surface, for her to prevent from fire contamination (her looking on fire) (Doostkhah 2006: 835) Most of the Zoroastrian houses had this room in the past. But,
recently, these rooms are used for other things because of changing in the traditions. Results on Zoroastrian houses show that:
a: Many Zoroastrian houses are built along two long axes: horizontal and vertical. The houses are in the direction of east-west direction which is different from city quarter's axes. Importance of light source in Zoroastrian belief is the factor for the east-west axes of Zoroastrian's houses (see Figure 3).
It is important for Zoroastrians to pray toward light and sun rising and sunset. Investigation shows Zoroastrians always pray in direction of light. They stand in direction of sunlight or moon light, worship and pray etc. (Kristiansen: 1999).
In fire temples also they put fire in the center of building and a priests stand in east part of building in direction of west and he celebrates the ceremony.
Zoroastrians don't have obligation to cover the women's hair from strangers and they do not need to have Hejab. Due to this matter their houses didn't use external and internal yard pattern (Reissi, 1996:186). Our research found that some houses which had internal part were for their servants, thus, their houses had a second yard for their servants.
Our investigation found that some Zoroastrian's houses have two guest rooms. The guest room which was close to the entrance of the house was for other religions guests and it is different from Muslims houses where the second guest room is for separating men and women.
In many Zoroastrian's houses, there are more than one yard, In general kitchen is in one of them and, birds place, stable and dog house are situated in this yard. In the other yard, they built W.C. because in Zoroastrian's religion water, fire and soil are holy and should be far away from pollution (Hinlez, 1989:49, 187). They didn't dig well for W.C. They had a small storage room which evacuated waste from alley to prevent soil to be polluted (Reeisi, 1996:215). Third yard or bigger one, like Muslims' yards separate rooms which were around it. In most yards, there is one belvedere which is its difference with Muslims' houses. Zoroastrianism teaches much respect for the divinity in all nature. In some Zoroastrian houses the picture of cedar tree can be seen on the brick work which is not common on Muslims houses façade. Some external walls are so high which can be for security of Zoroastrians' houses.

3. The change of Iranian architecture:
It is clear that every city changes over time but suitable policies and tools are necessary to control the development of cities in a sustainable manner. However, in order to define which sustainable urban planning strategies should be adopted, it is essential to fully understand the factors that caused buildings to be such houses in such a way.
In the last century, thousands of new houses, apartment units and buildings have been constructed in Iran. In particular, the Iranian cities have expanded enormously and their great old structures have complemented by the massive new urban developments. Unfortunately the cultural identity of many historical cities have been changed by undesirable apartments and different unsuitable buildings. The changes took place in different periods in which social, economic, and technological transformations caused physical and morphological changes.
In the recent decades, apartment buildings became prevalent. In this new type of residence, the physical characteristics of the house have changed considerably, while living habits and lifestyles have not changed at the same pace. In this period, traditional houses were largely abandoned while apartment buildings became more prevalent. In the new type of residence,
each household had smaller living areas and a shared courtyard (as opposed to the individual courtyard of traditional houses), which belongs to all families living in an apartment building. New building regulation, which allows buildings to cover 60% of the land parcel and left 40% for open space, had a great effect on the spatial organization of houses as well as on urban design. The central courtyard is now located in the front and multi-storied apartment buildings became the dominant type of preferred housing (Soltanzadeh, 2005). The biggest change was the assignment of single functions to the living spaces, transforming the multifunctional character of the room. The living room was dedicated for daily activities, the guest room for accepting relatives and friends, bedrooms as personal spaces, and kitchen, bathroom, and toilets for services (Soltanzadeh, 2005). This new type of residence introduced modern facilities for more comfortable living, but departed greatly from the familiar traditional houses (see Figure 1).

![Figure 1. Plan of a recent Residential Building with Two Units in Each Story, Tehran, Iran](image)

4. Study Results:
To get some results on the difference of Muslim houses and Zoroastrian houses, some plans and pictures of their houses are presented as below:
Figure 2. Picture, Plan and section of a Muslim house in Iran (Brujerdi House),
Figure 3. Picture, Plan and section of a Zoroastrian house in Iran

Figure 4. Entrance door for Muslim and Zoroastrian house in Iran
Table one shows the difference between Muslim houses and Zorasterian houses.

Table 1. Adaption of Muslim and Zoroastrian houses

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<th>Quarters</th>
<th>Muslims part</th>
<th>Zoroastrian Part</th>
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| **Guest Section’s Pattern** | 1. Guest section has been separated from private sections mostly due to Islamic rules.  
                             | 2. It is usually being extensively decorated.                                                             | 1. Guest section is being separated not because of their own religious causes. It is mostly due to separating the other religious followers from their own followers. |
| **Boundary Pattern**     | 1. Living and guest rooms have been separated.  
                             | 2. Houses usually include up to 3 separate yards making private and public sections that are oriented for different people live/enter house.  
                             | 3. Doors include 2 separate door knockers for men and women.                                              | 1. Houses may include 3 yards but as there is only one main yard and the other two are too small, they don’t meant to form different public and private sections.  
                             |                                                                                                           | 2. There are not any public or private sections within houses.                                             
                             |                                                                                                           | 3. Doors does NOT include 2 separate door knockers                                                        |
| **Façade pattern**       | 1. Brickwork decoration with geometric and abstract motifs.  
                             | 2. Using nature-compatible colors within decorations.                                                     | 1. Brickwork decoration with geometric motifs.                                                             
                             |                                                                                                           | 2. Usually decorated with a naturalistic motif of Cedar tree.                                             
                             |                                                                                                           | 3. Using nature-compatible colors within decorations.                                                     |
| **Specific cases**       | Children's rooms are being separated from parents.                                              | Women after delivering their babies and also in their period times should live in separate rooms within upper levels of their houses. |
| **Neighborhood**         | 1. Houses don't invade into other neighbor's bound.  
                             | 2. Houses generally designed with high parapets within their roofs.  
                             | 3. House windows do NOT open into public alleys.                                                          | 1. Houses don't invade into other neighbor's bound.  
                             |                                                                                                           | 2. Houses sometime designed with high parapets within their roofs.                                        
                             |                                                                                                           | 3. House windows do NOT open into public alleys.                                                          
                             |                                                                                                           | 4. Houses usually include high walls for security.                                                         |
| **Direction**            | Directed towards Mecca (Southern west in Iran)                                               | Directed towards East.                                                                                     |
| **Neighborhood’s Structure** | Compact textures with open public spaces outside houses usually include religious buildings such as Mosques. | 1. Garden-houses with open spaces within houses. The only public space would be fire temples.            |
| **House Landmarks**      | Large door frames decorated with special versus of Quran                                       | Large simple door frames not decorated with any special versus.                                            |
4. Concluding Remarks:

This study examined the changes in the urban form of Iranian cities. The results show that Living in Peace is the basic principle that organizes the social relation and friendship in the Islamic society. Recognition of the systems for the social relation is one of the most important objectives in Iranian city planning. Many Iranian cities are cities with quarters that belong to the different cultures and religions. They had their own houses relevant to their religions. So each religion's followers live in different houses with different cultural characters. As different life styles have caused formation of different traditional houses, recognition of the elements which affect house designs is very important to understand Iranian architecture. This article determines this hypothesis that says Zoroastrian's and Moslems house pattern is under the effect of their customs, culture and religion. Also it is found that private bound observation and guest honoring patterns in house architecture of Iran have been affected by Islamic culture and other cultures have accepted such customs. Some patterns have affected Zoroastrian's house architecture according to their religion's customs, beliefs and limitations. They built something related to their life, safety and religious instructions. This study also shows Muslims and Zoroastrian's neighbors have been affected by Iranian attitude which is similar in all Iranian houses regardless of their religions.

The major recommendation of this paper is the urging of an effort to a more objective understanding of the house design before any planning or design endeavors. It is recommended to have guidelines in urban design with acceptance of difference in their religions and establish the disciplines that preserve Muslims, Zoroastrians, Christians and Jewish psychological security and bounds. This is not only a lesson for Iranian cities, but a general guideline that has to be adopted for all urban designers and planners that are dealing with similar issues elsewhere.

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