

# The Role of Culture in Mashhad House in Architecture

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**Abstract** - The basic difference between human and other creatures is related to culture beside to, the culture is the base to compare various people of various societies. The basic factor to form identity is society and various tribes' today culture is result of the relation between human and nature during history. Native culture of people is result of this interface and local people selection based on natural possibilities and due to experimental development we can see various native cultures among the world. This issue shows importance of evaluation of cultural factors and their effects on Mashhad native architecture. Therefore, we can provide approaches:

**Keywords** - house, culture, house typology, native architecture.

## 1. INTRODUCTION

Growth and development of mass media in various countries during half of century, lead to decrease and elimination of relational obstacles, therefore, we can image new and small world. Therefore, various cultures have been combined and rural and urban societies follow uniformity. Using similar vehicles, home necessities and consumable goods, specifications and identities would become vague based on their stability one of the results is lack of identity of urbanization and architecture of buildings in Tabriz, Kerman, Mashhad, Shiraz, Yazd and Hamadan are identical and there is no difference, while, previously, buildings, structural context and city structures showed native desires and cultures, now, these specifications had been eliminated and historical and cultural context have been changed.

## 2. IRAN NATIVE ARCHITECTURE

A constructing Iran cities building that is one of the significant architectural samples of the word- show contradiction as below: nature exploitation and respect to it. The first is result of human innate and the second is result of culture. Based on first issue, events, possibilities, sizes and the relation between events during 4 seasons and 24 hours would be emphasized and the second is preventive solution to nature and some times, holy means have been defined to it.

## 3. IRANIAN RESIDENTIAL HOUSE

- Iranian traditional house include of private internal and external spaces.
- Previously, uniform spaces have been used in Iranian houses.
- Traditional houses were small
- There was to significant façade to buildings and just entrances had been built.
- The basic role of houses was maintaining house frontage
- Living between house walls had been symbol of family security.
- Paradise garden was center of any Iranian house.
- Iranian house was direct reflex of life culture and religious values.
- Welfare possibilities of traditional houses have been limited
- Traditionally people gathered at night
- Traditional Iran cities form created relation between private house scale and society scale.
- The center of Iranian traditional complex was location to run religious ceremonies or group activities
- Traditional houses were include of pedestrian routes
- Iranian local communities had been part of connected urban network.
- in Iranian architecture, to react to warm and dry climate, the first problem was sun radiations.

Table (1) Urban typology in traditional

Location in City		Frequency	Land Area	Case Study	Symbolic form (plan - section (	Pattern Sort by mass - Space	Type of Yard	Construction period
Within the immediate and surrounding tissue and down the street	shrine of Imam Reza (neighborhoods Noghhan and down the street)	much	Smaller than 100m <sup>2</sup>	Talaei home, Yazdan Parast home, Azizian home, Ahmadi home, Pisheh-Varan home		One side of the building	The central courtyard	Qajar Period (the space between (
		Very much	100 to 250 m <sup>2</sup>	Akbarzadeh home, Mosavinezhad home, Rahimian home, Amiri home, Hanasab home, Kermani home		Two opposite masses		
				Nazeran home, Ghandi home, Javaheri home, Torkaman home, Seyyedan home, Mohammadi home		Two masses perpendicular to each other two side of the building		
Between Garden City and surrounding tissue and organ in the sanctuary	in the sanctuary	normal	250 to 500 m <sup>2</sup>	Davodi home, Daroghe home, Barati home, Moghbelosaltaneh home, ghafori home		Three sides of the building	The central courtyard	Qajar Period (the space between (
		Very low	500 to 1000 m <sup>2</sup>	Amirfakhrian home		The four sides of the building		
The distance to the Haram (the neighborhood Mirage, organ and four gardens)	in the sanctuary	low	Larger than 1,000 m <sup>2</sup>	Malek home, Mosavi home, Sabzevari-ha home		Two yard	Home garden	Pahlavi period (among masses)
				Mostofi home, Salmasi home		Summerhouse		

Table (2) house typology in traditional

#### 4. GENERAL CULTURE (FOLKLORE MASHHAD)

The basic difference between human and other creatures is related to culture. Beside to, the culture is the basic difference between various peoples of various societies therefore; it is the most important factor to form identity in societies and tribes. This issue shows the importance of evaluation of effective factors to create culture and identification of Mashhad urban identity. It is necessary to say that extensive domain of culture, variety of discussions, definitions and relation to thought and science domain lead to create conditions that there would be the probability of error occurrence.

General definition of culture was provided by Taylor in 1871 in "elementary culture" book that is accepted in etiology and sociology. He wrote "civilization or culture based on tribology term is complex series include of knowledge, beliefs, art, law, ethics traditional and all possibilities that human select as member of society.

To describe culture specifications, we should emphasis on this issue that thought, sense and common performance of people form the culture. It means that culture is manifestation of mutual interface that should be followed in human communities, decorative series or cities. According to above concepts, this research attempts to identify cultural specifications of Mashhad urban society. Due to 1200 years history, this society include of great series of models, values and organs that create culture the community of votes, thought and human values with various cultural specifications that have been combined and lead to creation of human community as city. Existence of holy shrine of Imam Reza in Mashhad with 12 countries record and people desire to go to this honorable location (local and foreign) who love Imam Reza created unique condition and regardless of religious desires, challenges and interfaces between various cultures- similar or dissimilar- would be forged. Cultural interchange that would not be seen in other parts of country. Long term relation that its effects have been manifested in cultural difference of Mashhad city. Therefore, research about urban culture and its domain would not be possible now.

#### 5. HOUSE TYPOLOGY IN TRADITIONAL, MIDDLE AND NEW HOUSE TYPOLOGY IN TRADITIONAL CONTEXT

##### 5.1. House typology in traditional context:

Residential house orientation in traditional context is affected by Hezar Masjid Mountains due to face to wind current and using sun radiation in cold winters.

Due to easy accessibility to wood, traditional houses of Mashhad include of flat wood seals. Using mud to building due to high thermal capacity lead to decrease of heat penetration and storage to use at night. Compact nature of traditional context due to nearness of buildings lead to decrease external volume of buildings and heat transform through external facade have been decreased

(summer and winter), therefore heat penetrations during summer and heat loss during winter have been decreased. Creating other elements and spaces of traditional houses has been affected by various factors during long time.

Therefore, all elements have been developed uniformly.

This show the effect of all forces to create this condition the basic element of traditional house was yard.

Its form was square and small garden and pond were important parts of it. Constructing yard, moisture, temperature and light of house have been changed due to the relation between various parts. Also bio functions may be affected as cloth washing and dwelling (especially in summer). Therefore establishment of north part of building (sun-lit) and south part and distribution of kitchen and service spaces were very important necessity of room space continuity and mutual relation to prevent of using yard in winter were obstacles to stylolite special applicable roles and independent space designs (mehrzan consultant, Emamieh land preparation plan)

##### 5.2. House typology in middle context:

in this context, forming house architectural specifications would be affected by various factors as necessity to use vehicles, lighting, mutual conditioning among residential spaces, using more durable structures (baked brick instead of crude brick and lilted application of concrete and Iran) and centralized families in this context, the goal in creating concentrated spaces at one hand of residential land. Based on this pattern, some of the traditional functions have been decreased (yard) and central relations have been created. In fact instead of using yard , central space have been used in building using yard , central spaces have been used in building this structure, cold air penetration would be decreased, mutual relations have been increased and spatial independency would be maintained ( mehrzan consultant)

##### 5.3. House typology in new context:

House been formed based on variety of structural specification with attention to similar factors and trends, but there is some differences due to urban context. Some of the specifications include of driving accessibility to residential unit

Non-coordination and non- conformity to regional and climate specifications and architectural and cultural values as great dimension of windows, decrease of thickness of external walls and ceil , non – appropriate material application as stone in building facade generally in chess context with high density, residential lands are small. Also space possibilities should be used as common. There for various spaces should be distributed at underground and ground.

Table (3) house typology in urban shrine of Imam Reza

Analysis	Symbolic form (plan – section)	Pattern Sort by mass - Space	Type of Yard
On arrival at the house to get inside the fronts yard in front of it, The building is orientated towards the shrine and From inside the courtyard of building the shrine there is a perspective view		One side of the building	The central courtyard
There are two general mass, but the mass of the main shrine has orientation towards, More height and more than decorating your front mass.		Two opposite masses	
In the first case, There are two general mass, but the mass of the main shrine has orientation towards, More height and more than decorating your front mass. And In the latter case, The mass terrace and open space or where it is located to the side of the shrine has orientation		Two masses perpendicular to each other	
There are three masses. Usually a mass that opened the half with a terrace and is located in the space to the side of the shrine has orientation and Has caused the other masses will also be possible to see the shrine.		Three sides of the building	

## 6. BUILDING ORIENTATION

From orientation and climate viewpoint, the orient of houses of Esfahani as northern west-southern east is coordinated. Based on evaluation of city map, the oriental is similar. But based on more accurate evaluation, two other orientations have been seen.

Orientation of kiblah (facing the Rasteh)  
 Orientation to holy shrine of Imam Reza with centralized dome these three orientations are attractive that are inconformity to specifications of context. But two other orientations especially holy shrine are unique.



Fig. 1. The yellow dots to houses the shrine of Imam Reza

Table (3) Types of housing orientation Mashhad

Accordance with climate	Percent use in urban	Side of the building	Type of orientation
Completely corresponded	%75	Northwest - southeast	Esfahani
Does not match	% 15	Orientation to holy shrine of Imam Reza with centralized dome	Orientation to holy shrine of imam Reza
Nearly corresponded	% 10	Northeast - southwest	Rasteh

## 7. ORIENTATION OF KIBLAH

Based on Islamic urbanization, kiblah orientation is in direction of kaabeh. This is seen among mosques of cities although this is not the best orientation in city context but it is acceptable. Most of the Mashhad buildings have been build based on orient of Binalood and Hezar Masjid mountains , because of facing to wind direction and better use of sun radiation during cold winter using brick and mud lead to high thermal capacity and low heat penetration and storage to night.

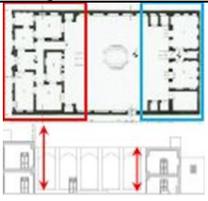
The compact natures of traditional context lead to nearness of buildings and external face of building have been decreased. Therefore, heat transfer would be performed through external face and heat penetration and heat loss would be prevented in summer and enter.

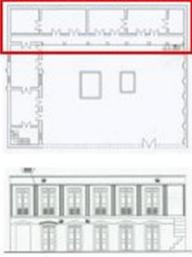
The basic element of house is yard due to creating moisture, conditioning and lightings.

This is separable and relational section to rooms and would be used to sleep, living and cloth washing (especially in summer). The basic part of house in

located at north to use south current in summer. Kitchen and service spaces have been distributed. Necessity of continuity of rooms, mutual relation to prevent of using yard in winter lead to non- stabilization of special applicable role of- yard to houses.

Table (3) Characteristics shrine nearby buildings

Image	Analysis		
	The proportions of the Shrine of the length, width and height are clearly larger than the back of the shrine.	Proportions	Structural
	Implementation techniques used in decorations, colors and materials to the shrine to the masses of variety and super quality is higher.	Decorating	
	Windows and doors of forms and proportions of the shrine with other pop forms and proportions are the same, but have bigger dimensions. Detailed its are busier and more diverse.	Windows and doors	
	The element of the measure, such as Cheraghdan and Taqanma to the main front porch in front of the shrine is located.	Characteristic elements	

	The main space such as the main Ivan, porch or terrace adjacent to the three-door room in the front of the sanctuary and other rooms, and the service is located in front of others and thus partially open outdoor terrace or balcony located on the front the opening of the shrine there is to see.	Small Space
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## 8. CONCLUSION

This research confirmed the significant changes of Iranian life styles. The goal is determination of principles of human nature and its relation to environment that would be continued. Therefore, the goal is not research about nostalgic historical methods but is emphasis on native architectural aspects traditional societies are rich layers of valid responses based on human and nature principles. Conformity principles and evaluated structures of these societies are valuable forms of health and balanced structures.

If we learn that there is innate principles that should be evaluate more accurately, we should go beyond of external styles to research and determination of what should be formed at future. In the world, building construction is in conformity to nature that is designed to improve climate condition- not ignoring them.

Usually design modern house would not be based on climate condition and energy loss would be increased.

## 9. RECOMMENDATIONS

1. Internal and external faces of modern houses should be reflex of cultural values and life patterns of probable residents.
2. The size of any residential units should be based on basic requirements of family members.
3. Any house should be related to space and landscape to supply transverse conditioning, light, space on time to create attractive perspective.
4. Any house should include of direct access to greed space, yard, court, balcon and roof also the heaven should be visible.
5. Residential unit domain should be separated from external space.
6. Among high and average buildings, the house of any family should be identified as separated unit from outside.
7. House entrance should be as go to:
8. Doors and windows at floor, ground or higher legal should be designed to supply people security.
9. House design should include of lowest dependency to climate protection mechanical methods.

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