A survey of the effect of cultural roots of society on design of house architecture (Case study: Traditional culture of Iran society, Iranian-Islamic houses)

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Abstract

The traditional architecture of Iran is full of concepts based on the Iranian-Islamic culture and beliefs. These concepts are the results of trial and error, improving ideas and great culture of Iran and have created a structure based on climate and life style of these people. There are many architectural works in the houses in Qajar era in Behbahan city (Khuzestan, Iran) manifesting this theoretical basics. The present study is interpretive-descriptive design by library and field design. At first, some resources are used to review the architectural concepts, culture and privacy terms of Iran, then by an exact view, the Iranian-Islamic houses are analyzed to prove that the architectural plans on that time were based on materialistic and spiritual requirements of people culture and tradition. The architectural works indicate the direct effect of traditional culture of Iranian society on the design of architecture of houses.

Keywords:
Culture, Society, Architectural design,
Privacy, Behbahan

Introduction:

The perception of traditional foundation and concepts in Iranian architecture is not possible without the recognition of cultural and social environment including these concepts and we should also be aware of cultural factors. Any interpretation of concepts without considering the roots of these concepts is not valid. Traditional communities live in a spiritual space with qualitative and quantitative consistency. Like architecture, the architectural products are based on complete world view creating creative forces of human being directing it to an ultimate goal (Seifian and Mahmoudi, 2007). The traditional architecture of Iran is full of human concepts and approaches emphasizing on security and comfort of residents of houses (Mahdavinejad, 2002). The architecture of Iran in pre-Islam and in Akhamanid era in Persepolis or Apadan, focused on privacy. This approach in traditional buildings has caused that many researchers consider cultural-religious approaches and after Islam, climatic factors as the important factors on a structural model (Mahdavinejad, 2004). It seems that the result of these features has caused that Iranian traditional houses are used for keeping comfort besides maintaining a good relationship with the external environment. On the other hand, significance of study in this field is of great importance. Today, with great progress in new building technologies, the design of architecture of houses has maintained its special model. Not only this trend was not continued, the quality of design of architecture of houses was reduced in Iran.

Study methodology:

The study method is applied in terms of purpose and descriptive-analytic and case study. To explain the achievements, different methods of study are used. In some parts of study, the study method is library and documents method. Note taking is also used in this study. In other parts of study, field method is used by camera to collect information. In some parts of study, to be aware of the conditions, history and tradition of region, interview with experts and local people is made. To describe findings and data processing,
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 descriptive-interpretive and descriptive-analytic methods are used. The cases in this study are valuable houses of Behbahan town in Khuzestan province and Iran.

Findings:

Theoretical basics of study:
1 - Review of vernacular architecture
The main reason of analysis of any environment is learning it. Vernacular architecture has important features to find the methods in vernacular architecture and the efforts to adapt them in contemporary construction as one of the most important goals of vernacular architecture studies in 21th century (Asquith, L. and Vellinga, 2006). Many researchers including “Socha Ozkan” have focused on vernacular architecture in contemporary buildings. The review of vernacular architecture leads to a correct perception of environment and architectural and cultural models. The local forms and aesthetics values refer to a part of our language and social values and symbols. These symbols are based on personal and social identity and reflect social values (Linam, 1999).

In addition, the study of vernacular architecture allows us to compare contemporary construction with the buildings made based on vernacular architecture. The comprehensive study of environment can affect the initial ideas of design. These effects are based on cultural-environmental factors in each environment (Asquith, L. and Vellinga, 2006). We should fulfill the needs of residents as structured.

2 - The traditional concepts and principles in Iranian architecture:
Today, most theorists and experts of architecture and urbanization believe that review, searching and understanding of traditional architecture of any region or country are possible only by investigation of effective factors including cultural-social ground including different factors and criteria. Any research without considering these factors is not valid. According to Seyed Hossein Nasr, “tradition” is an unchanging item and it is applied in different times and places and it is also used to transfer teachings to human being and it also actualizes teaching in human being (Seyed Hossein Nasr, 2000).

Islamic civilization presents a good example of a traditional civilization as not formed without some unchanging principles. It can be said that Islamic art is pondering in Quranic revelation, soul and matter world. The Iranian traditional architecture is an image of world or human being. In the world dimension, human body is a place in which soul is placed and soul is an important element in human being. Like architecture, in urbanization, such perception is true and it has a unity based on such thought. This system is based on the fact that the healthiest form of human being life is occurred in a place as consistent with him (unavoidable). It can be said that it is equal with human body arising from other counterparts in the world (Ardalan, 2001). As human being and the world are the products of divine art and divine attributes, a type of unity is created to the creator and extensive science and techniques are created accepting unavoidable hierarchy. Like the world, human being reflects divine principle. Human being is related to the world. He is the small world (Alam-e Saghir) and like the big world (Alam-e Kabir) reflects divine reality (Ardalan, 2001). By knowing that Islamic art is divine originally, the perceptions of human being are formed and his awareness is formed by the general space as the external view of great creation world and in one by one of the small elements as a part of the great world can show some aspects of divine attributes and this is used to achieve a goal. Religious art has divine originality as religious art examples are based on divine reality and show symbolic existence and human soul is released of temporary facts (Bokhart, 1997).

In traditional architecture of Iran, some principles are applied by an artist architect based on his worldview. Dealing with roots is dealing with principles. Understanding about a principle is understanding about the meaning of what directing human community civilization with common culture and belief (Memarian, 2005). Some principles including unity, hierarchy, order, symmetry, scale and fit, the principle of spatial and contradiction interaction and privacy are observed as well using architectural tools including matter and materials, form, color, light, water and etc. in traditional buildings. A holy architecture is beautiful as dependent upon the most important duties of human being as making the sky and earth as close (Bokhart, 1986).

3- The impact of culture on architecture of communities:
In a general definition, culture is the result of different efforts of human being in creation arising from his freedom. The set of tradition, beliefs and traditions of a society affecting the internal aspects can create
culture. As a social phenomenon, architecture is based on culture and affects it. Also, it is a reflection of human thoughts with space, aesthetics and culture. The architectural style of each era reflects the culture and art of that era and it is consistent with the changes in life and art fields. Any new style of architecture is based on principles and traditions of the previous style. There is a relationship between various styles and it is difficult to make a distinction between them. Orientation of cultures is based on human nature and this is effective on formation of living place. This space is considered has human being need and these needs are fulfilled based on divine nature and wisdom. Beside a technical or artistic specialization, we should consider cultural aspects of architecture. Architecture space is developed based on cultural concepts over time and is manifested at spatial dimension. As a communication system, art is associated with language and culture and we should recognize cultural field in which art is created, otherwise its concepts are not perceived well. The cultural features of any era are found in its architecture and if architecture is affected by different conditions of a period, social, political, economic and cultural conditions, architecture can be recognized independent with special attributes (Roger H. et al., 2013).

The effective cultural factors on formation of architecture space:
Like other arts, in architecture, we can observe the effect of some deep national and religious phenomena as sustainable models. Some of the models in Iranian architecture like Charsafe and Charbagh as the main factors of culture and civilization of a nation can be sustainable and lasting. They are stable and dynamic. In the history of art of a nation, there are various styles and there are also some styles in some different geographical fields in a period. Some values in arts and some industries are considered for a short period. These values have no basic effect and they are created with different artistic and cultural exchanges among different groups and nations in a country. For example, fashion is emerged after cultural and social changes and it is not lasting. Beside the above factors, we can not ignore the role of innovation of an artist in forming any artistic work including architectural works. Innovation of artists depends upon the history and culture of design in a society on one hand and upon the individual abilities of an artist on the other hand. This factor is associated to the artistic awareness and rich culture of artistic exchanges of a society with another one. In other words, the innovation of an artist is not occurred alone and it is occurred in social-historical ground affecting the content and form of an artistic form (Diba, 1999).

The valuable concepts in traditional (old) culture of Iran:

The concept of privacy:
At first, a literal meaning in dictionary is presented. The Persian term for privacy is “Mahramiat”. According to Dehkhoda dictionary, privacy is:
Privacy: confidentiality and special confidential place. Thus, no one is allowed to enter this privacy. Border (Harim) is shelter, personal house preventing invasion. Privacy in architecture and urbanization is giving structure to space as it has structural and meaning borders. Having privacy in spatial field is based on the security principles and having meaning in semantic field giving value and respect for architectural space as comfort is achieved (Mahdavinejad and Mashayekhi, 2010).
There are various examples regarding the significance of religion and its relationship with house. The sacredness of house is seen in various cultures. Normally, entering house has special manners. Obtaining permission for “others” requires special stages. The form of house and its direction is based on religious beliefs of determining privacy in architecture and separating internal and external spaces from each other and this indicates separation and ownership (Rappaport, 2009). Privacy creates comfort. Obtaining permission is based on hierarchy giving comfort to the residents. This is less emphasized in the western architecture and urbanization. The term privacy is followed in privacy security and it was observed before modernism period, even in some modern buildings with special functionalism. In western contemporary architecture, with new styles of deconstruction or folding, by elimination of hierarchy, spatial fluidity was formed and privacy was less emphasized.
The lack of direct visual relationship between internal space and urban space is considered from climatic and cultural perspectives. Great part of Iran is dedicated to arid climate with low rainfall with sand storm. The builders in these regions design the houses as there is no direct relationship with geographical factors and a safe place is provided for residents (Memarian, 1994).
A central yard was used in ancient Iran architecture. The city border and township division were the main principles in urbanization. Old castle (Kohandezh), Sharestan and Rebz were applied as protectors against
invasions as one of the important principles of formation of ancient Iranian cities. It seems that introversion and privacy mostly are regarding security and political, social and class divisions of the society and climatic factors. With the advent of Islamic world view in Iran in 7th century presenting equality, some changes were made in structural system of ancient Iran cities as the lowest structural and spatial changes were occurred. The townships were divided based on job, race or language and the houses of different classes were beside each other and Rebz was renovated (a wall around the city). The significance of that part of city in which people were living outside of high income class was one of the important changes. Rapid development of Rebz and ignoring internal city (Sharestan) indicated the change of worldview. The method of construction of introvert buildings with central yard continued in Islamic era and some of the first mosques were built by this method as Fahrej Jame mosque and Tarikhane mosque in Damqan. The new world view formed new principles in thoughts of people and some changes were made in architecture and urbanization. The new view to privacy and its application in traditional architecture were changed and the best examples of application of this principle in traditional architecture after Islam were manifested. Here, we analyze the principles of traditional Iranian architecture involved in formation of privacy in the past architecture.

Hierarchy:
According to Oxford dictionary, hierarchy is a system in which people, beliefs are classified from top to down (Huff, 1995). According to Geography dictionary, hierarchy is any order of phenomena mentioned as a ranking or classification (Mayhew, 2003). Cowan (2005) applies two terms of hierarchy of spaces and hierarchy of residential areas in definition of urban hierarchy. The former is organizing residential areas based on their size and performance and the latter is about a set of continued spaces with different sizes and functions (Cowan, 2005). The purpose of authors to define this term is evaluating the hierarchy of existing spaces in traditional houses of Iranian architecture as follows.

The relevant elements and spaces of privacy in Iranian houses:
In Islamic ear, the architectural design of houses was based on the culture, tradition and religion. Privacy is of great importance among Muslims and it is considered in yard, rooms, Iwan, roof, window, mashrabiya, tall wall, etc. Door knockers in houses are great symbols of privacy. Then privacy is important in vestibule and yard of house. Later, relevant spaces of privacy and introversion are explained.

Entrance:
Entrance spaces are part of sequences of spaces of the entire house. The door of house is a barrier to enter for foreigners and it is also a place for welcoming the guests. This space is used as waiting entrance for new entrants and sometimes the pedestrians have a rest there. Some principles regarding the design of entrance of traditional buildings are defined later. The privacy in house should be observed, the entrance permission is performed gradually. The entrance process indicates being humble. The house façade is distinct in external shell of building (The façade to the alleys and passage) (Kateb, 2005).

We can observe many differences in comparison of some of entrances (old houses) with the designed entrances in contemporary middle rising houses. As shown, in entrance of older houses, there are some hierarchies for guests creating privacy. There is not such difference in current houses and there is no hierarchy to enter these houses. Based on the great history of architectural design and rich culture in society, we should improve the old legacy based on availability of new technologies of progress.
Yard: With direct relationship with our private life, houses are of great importance in Islamic architecture. The house of a Muslim should protect his privacy and be designed in accordance to Islamic rules. The major effect of Islam in the structure of a traditional house is its introversion. The traditional houses built in accordance to the beliefs of Iranian Muslims not being visible from outside. In such houses, the spaces are designed as with the entrance of foreigners, their private life is not disturbed. Burkhart considers yards as unique to Muslims’ houses in his other books. He writes Muslims’ houses receive light and fresh air through their inner yards not from streets. If you observe Islamic cities, you will find dead-ends and winding alleys along streets which are the path to enormous houses (Burkhart, 1986: P. 198) (Burkhart, 1990).

In old houses of Behbahan, yard was of great importance. The direction of yard is based on climatic items and dominant ray in each region can create thermal comfort and some spaces can be created for lighting from inner space. Also, water pond is effective on optimization of air temperature in this region. In current houses, the yards are limited to yards in apartments and it is a space for car parking. Also, in houses, the direction of street is important in direction of yard without considering climatic conditions.

Vestibule: Vestibule is a space in which most of entrance spaces are designed. This space is after the entrance space. One of its functions is dividing the entrance path into two or some directions. In some of public buildings, there are two or some ways from vestibule and each of them leads to a special space including inner space of building-yard. In the buildings in which there is only one way from their vestibule, the vestibule space has not the function of a dividing space and it is used as a space for waiting and magnificence of entrance path. The vestibules have regular geometrical forms and they have low height with entrance space. The vestibule of big buildings is high, decorated with titles, platform and lighting. In the design of this space, some measurements are taken as entrance space. For example, from religious dimensions about privacy, we can see that there is no direct view to private space by opening the door. In terms of values and national norms (hospitality and respecting), we can refer to some platforms beside vestibule to create a good space to light a candle, resting, waiting and mental preparation to enter the main space. By reducing the lighting of space and increasing light gradually in the path can prepare the guest to see a new space. Also, Karbani in ceiling of this space can make the guest familiar with the decorations of the house gradually (Bemanian et al., 2010). This decoration makes guests closer to the building (humanized architecture and religious dimension) and at this stage, a person can have an opportunity for decision.
This element interprets the function and reasons of using it in traditional houses of Behbahan and is eliminated from all spaces of contemporary residential houses.

**Window**: Window in Iranian architecture is full of delicate forms including sash window. This type of window is an old element in Iranian architecture. One of the functions of meshed surface of sashed windows is lighting of inner space and creating secure space from the view of external intruder. Many climatic, aesthetic approaches are important in formation of this model.

As shown in the Figures, in Iranian traditional houses namely in Behbahan, orientation, length and width of windows are different in each of fronts of buildings. Based on radiation in each front, we can observe different type of window. Also, all windows of houses were opening to the interior spaces. In current buildings, there is only one lighting front, we can not consider climatic issues in their design.

**Discussion and Conclusion:**

Based on the present study, the architecture based on thought, culture and traditions of people in Iran can fulfill all needs of human being and by special arrangement of spaces of each house, privacy is considered as an important element based on the culture and religion of people. In pre-modern era, the houses were formed based on the climate (hot and humid) and the yard was enclosed and it was also enclosed with living spaces in three or four sides. In other words, this valuable space by creating a private space was separated from the exterior space. It seems that the change of circulation of Iranian houses in contemporary era is moving from exogenous introversion to endogenous extroversion and many valuable concepts of Iranian culture were eliminated.

Thus, a review of traditional houses in this regard is necessary. The current housing is imitation of western culture and wrong use of technology without considering rich culture of Iran. It seems that by renovation of the past architecture approaches and using new technology achievements, we can improve the quality of life
in current houses. Based on the consistency of effective procedures and spatial quality created based on privacy and introversion, it is proposed that in the design of contemporary houses, we should consider “culture” and dependent elements as privacy as one of the main principles of architecture design. Finally, the important factors on architecture of housing was culture and import western architecture in people houses can be effective on their culture and it has adverse effect on Iranian-Islamic society and besides eliminating old legacy of architecture of this country, can reduce the cultural level of society. It is proposed to emphasized on the education of architects of Iran in Universities besides training technologies and new technical issues of building namely cultural studies in each region can be of great importance.

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