

OVERVIEW OF THE IDENTITY-BASED ELEMENTS IN ISLAMIC-IRANIAN ARCHITECTURE IN DESIGN OF BUILDINGS

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ABSTRACT

The identity-based structures in Islamic-Iranian architecture have been developed from two principles: 1- divine and religious concepts, 2-spiritual achievements of the man, that is, culture. Yet, unfortunately, Islamic-Iranian identity has lost its place in contemporary architecture of Iran. Contemporary architecture of Iran has sustained away from the divine and cultural concepts which are determined for it through the ideals derived from the world view, highlighting the appearance of western architecture. For this purpose, the present research aims to investigate the identity-based elements in Islamic-Iranian architecture in design of buildings. To achieve this, we have intended to acquire recognition from identity-based elements in Islamic-Iranian architecture using library studies and observations via the qualitative approach. Using the identity-based patterns in Islamic-Iranian architecture in design of contemporary buildings, the designers can acquire design of identity-based buildings and resolve the spatial restrictions so as to create a novel pattern.

Keywords: *Iranian Identity, Traditional Buildings, Islamic-Iranian Architecture*

INTRODUCTION

Identity can be known as the traces of the general concept of civilization that can be traced back to the long lost past. This trace has been regarded as the culture or identity of civilization; indeed identity represents a process and the metaphor of process to identity represents this point that identity has been taken into account as a value within the community either a good or a bad value. Anyhow, identity has been constantly taken into account and assumed as a gift grant from one generation to another generation. Identity of each nation has been developed from a distinctive structure. The identity-based structures in Islamic-Iranian architecture have been developed from two principles: 1- divine and religious concepts, 2- spiritual achievements of the man, that is, culture, so that both have played a major role in formation of Iranian identity to which numerous agents have intervened, including the environment which has been regarded as an effective agent in formation of culture. Identity of any community gives a new looking to other communities through which a background is built in other's minds, so that identity of the Iranian architecture has given a new looking to other cultures in order that everyone knows Iran and Iranian people through those identities, mentioned that the architecture will be recalled without identity in case those features and concepts are not witnessed in Iranian architecture. Thereby, the Iranian identity is that identity which has been developed in our minds and other cultures, which causes expectations from Iranian architecture. Yet, unfortunately, Islamic-Iranian identity has lost its place in contemporary architecture of Iran. Contemporary architecture of Iran has sustained away from the divine and cultural concepts which are determined for it through the ideals derived from the worldview, highlighting the appearance of western architecture. Numerous disturbances are witnessed in contemporary architecture that the product out of it neither can be called a modern architecture nor an Iranian architecture. The sample of contemporary architecture can be witnessed in the metropolises which represent a model of the small cities lacking content and meaning that they have required for it. Contemporary architecture represents an architecture which is totally inconsistent with the architecture existing in the past or today. The Iranian architecture contains a series of fundamental concepts that give identity and meaning to the architecture. Contemporary architects have been influenced of western architecture rather than the Islamic concepts which have been rooted in Iranian culture and religion. Iranian architecture with all its beauty

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and educational factors has been currently transferred to an irrelevant construction. For this purpose, the present research aims to investigate the identity-based elements in Islamic-Iranian architecture in design of buildings. To achieve this, we have intended to acquire recognition from identity-based elements in Islamic-Iranian architecture using library studies and observations via the qualitative approach.

Identity and the Concept of Identity

Identity can be defined in an individual and national form. Individual identity includes the personality characteristics of a person that such characteristics raise differentiation of that person from others. Indeed, various dimensions of the person's personality specify the person's identity. Yet, national identity implies permanent reproduction of the pattern of values, symbols, memories, myths and traditions which develop distinctive heritage of the nations. National identity refers to a concept which strives to diminish the conflicts existing in the group identities and converge them in a more superior identity, that is, national identity. Hence, ultimately national identity has a prevailing aspect under which rest of sub-identities have been characterized. Some scholars have described the identity with an emphasis on the personality aspect, including Sheikhavandi's description for the identity, says, identity represents a series of the characteristics which provide the possibility to describe an object or a person (Sheikhavandi, 2003). Some socialists have described the issue of identity with a controversial view. In point of view of this group, identity can be mentioned against non-self. The element of identity will not be represented, in case there is a uniform space. In this perspective, identity implies existence, assumed as a means to recognize the person among others (Tajik, 1998). National identity implies sense of belonging and loyalty to the common elements and symbols in the national community. The most important national elements and symbols which cause differentiation include: territory, religion and tradition, customs and rituals, history, language and literature, people, government (Yousefi, 2003). In point of view of Yousefi, inside a national community, extent of members' loyalty and belonging to each of the aforementioned symbols and elements specify the severity of their sense of national identity (ibid, p. 18).

MATERIALS AND METHODS

Methods and Fundamental Principles of Islamic-Iranian Architecture

In general, our information on how to construct and design as well as other affairs affiliated to construction at Islamic age is so limited. Without doubt, establishment of buildings including religious complexes or non-religious complexes requires having information on the sciences such as geometry, mathematics and design, so that the architects have managed to develop magnificent architectures over the years, using such sciences.

Unfortunately, important contents and images on how to establish buildings are not witnessed in historical texts at Islamic age. Some researchers believe that lack of useful contents about the architects at Islamic age and design and construction methods lies on this fact that the architects have been drawn into attention much less than the poets, philosophers and historians; Yet, this seems improper, because needing to the architects and planners to establish residential and commercial areas has been proven (Ghotbi, 2008). From the very beginning, several principles have been considered in Iranian architecture, manifested in this art in a proper way; such principles include: Humanized architecture, self-adequacy, analysis, avoidance of idleness, introspection.

For instance, if we compare massive monuments and architectural forms with simple architecture in Khorasan's architecture, there will be seen no similarity between them, yet both have sought expressing the superior place of human on the land. Further, both have had their special narrative. Both have sought to express that human is a creature superior to the phenomena and rest of creatures around him/her. In Party architecture, such thinking has been expressed through extrinsic majesty and through intrinsic majesty in Khorasan architecture. Gigantic proportions such as *ivan madaen* have been accounted as a physical reflection of human's dominance on his surrounding, and this idea has been expressed by reducing the mass and increasing the space of architecture at the early Islamic centuries. Creation of light and diverse spaces enriched with spatial manifestations is mentioned as the major feature in the architecture at the Islamic age in Iran (Pirnia, 2010).

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The Materials used in Islamic-Iranian Architecture

The materials which have been being used in creation of Islamic-Iranian buildings are diverse, that some of them have been mentioned as follows:

Brick: brick has been regarded as the most important material used in the construction before and after Islam. The bricks used in architecture are generally in a squared form, which have been being built in brick workshop throughout Iran. in addition to using brick in the form of building, the brick played a major role in decoration of building, being used in various parts of the building such as ivans, domes, minarets, rooms and so forth (Zomorshidi, 2013).



Image 1: Khrqan tomb towers

Plaster

Plastering has been used to decorate the interior surfaces of buildings, write inscriptions, and decorate the altars, domes and porches. Most of the buildings in Seljuk & Ilkhanid Period have been decorated with plastering. The importance of plastering in Islamic buildings has gone beyond that the artists were known with ‘Jesas’, and name of most of them have been remained on the inscriptions used in the buildings (Zomorshidi *et al.*, 2004).



Image 2: Plastering in altar of Masjede Jame

Furthermore, plasterist at the fifth century to tenth century have used various approaches including colorful plastering, grid plastering, flat plastering, and so forth.

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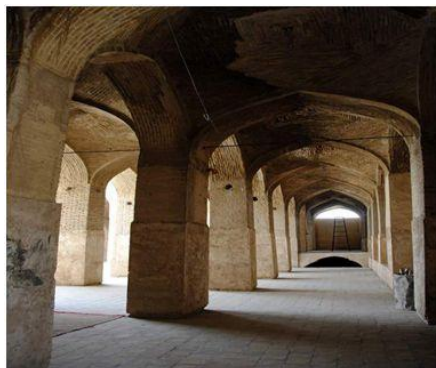


Image 3: A façade of Ashtarjan great mosque

Tile

Tile has had a major role in decoration of buildings at Islamic period, being used via different methods by the tillers. Using one-colored tiles, seven-colored tiles, mosaic tiles and an integration of brick and tile in the Seljuk, Ilkhanid and Timurid and Safavid periods have been common in decoration of building, continued till the current age (Rabiei, 2012).



Image 4: The Jāmeḥ Mosque of Isfahān

Decoration of various parts in the building from coverage of the dome and minaret to interior surface of the building and under the dome and walls and altar with various tiles especially mosaic tiles have granted a beautification to religious and non-religious buildings at Islamic age.



Image 5: Tiling in altar of The Jāmeḥ Mosque of Yazd

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Clay

Clay is another material which has been used in Iranian architecture. At Islamic period, clay has been being used in the entire building or in some parts, including the walls.

Stone

Using stone has been prioritized in the foundation of building and walls, that various types of stones including sandstone, limestone and marble have being used to build inscriptions (Bemanian *et al.*, 2010).

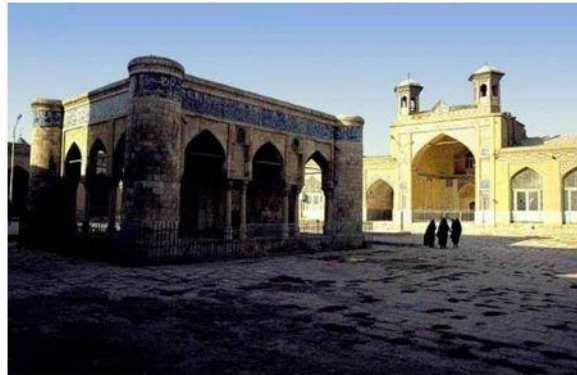


Image 6: Atiq Jame Mosque Shiraz

Wood

Using wood to build doors, windows, enshrine boxes, columns and roof beams and frames is a major feature in Islamic architecture which has been prevailed in Mazandaran and Guilan (Varamin: Jamé Mosque, Tabriz: Arg Alishah, Sari: Imam Zadeh Saleh).

Glass

Overview of the historical texts and observation of miniatures in sixth to twelfth century AD indicate that glass has been widely used in Iranian buildings and traditional architecture (Khargerd: Ghiasie school; shah-i-zinda; Alighapoo) (Hosseini, 2012).

Identity-based Elements in Islamic-Iranian Architecture

Any building at Islamic age including religious buildings such as mosque and school or non-religious buildings such as Carvansara and palace are developed from various spaces, and sometimes a new space might be annexed to the rest of buildings, such as a minaret in mosque and school, that is mentioned as an element in the building.

Mian Sara

Mian Sara is a feature in Islamic architecture. There is generally a central courtyard or patio in mosques, schools and Carvansara. Mian Sara enjoyed two important roles at Islamic age : 1- Mian Sara provided the need of Muslims to ablution in mosques and schools and the need of passengers to rest, loading and unloading at the yard of Carvansara; 2- Mian Sara separated the building from noise and activity of daily living, through setting the interior space. Mian Sara has been generally in square and rectangular form, in which sometimes polygons and circular maps have been, used (Naghizade, 1998).

Ivan

Ivan has been being used since Parthian era and constructed in different ways to date. Ivan which is developed from a ceiling is closed in three sides and opened to the Mian Sara. Ivans are constructed in form of entry and exit spaces, avoiding solarization and granting the building eminence and glory. Ivan is a space considered for decoration in the building through creation of mogharnas.

Porch

Porch is called to the columned indoor spaces developed from spring arches which are built around the courtyard or the Mian Sara in the mosques or religious place, which the opening of these spaces is across the courtyard, connecting the entrance of mosque to the Shabestan.

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Dome

Dome likewise ivan is one of the most important elements in Iranian architecture that dates back to before Islam. Dome in Islamic architecture enjoys a wide range of features, being used more than any other coverage. Iranian domes enjoy different forms, that some include: Conical dome, continuous and discrete dome (Okhovat *et al.*, 2010). The majesty and beauty of Iranian architecture at Islamic age rely on the domes existing in it, which have been decorated with engraved tiling (Sheikh Lotf Allah Mosque).

Columned Shabestan

Columned Shabestans with little height have been built around domes. Such Columned Shabestans have been built in a way that it can develop or minimize them by adding or removing openings. In this regard, it can enclose such an indoor region with a blade-like wall which has had no construction function (Torbat e jam mosque).

Chahar Sofeh

Chahar Sofeh with huge applications has been evolved in the eighth century. This building implies a space with square or rectangular form which has been enclosed with the rooms connected to each other, so that several rooms for the kings have been appeared around the central space of Chahar sofeh. The term "Chahar sofeh" can be used for a room or four arches or a rectangular hall, covered with several arches (Mohammadi, 2013); simple Chahar sofehs have been built at the corner of the building which has set in the middle of yard (Khargerd school).

Chamber

Chamber or room has been generally being built around the central yard or Mian Sara in a square, rectangular and/or polygon form. Such chambers have been being built at schools for the use of seminaries and at Carvansara for the rest of passengers. In some cases, the chambers have been being built in two stories, that going to upstairs was possible through communication corridors. There has been generally sufficient light in such rooms in which the ceiling has been short and made of arch.

Minaret

Minaret implies luminance, referring to a tall building which is built besides religious buildings including schools, mosques and holy shrines. One of the oldest minarets belongs to Great Mosque of Damascus. rest of remaining minarets date back to the early Islamic, of which it can refer to the minaret in Samereh mosque. However it has remained unknown that where the oldest minaret in Iran, great mosque of Semnan and Damghan can be known as the oldest minarets in Iran (Dargahi, 2005).

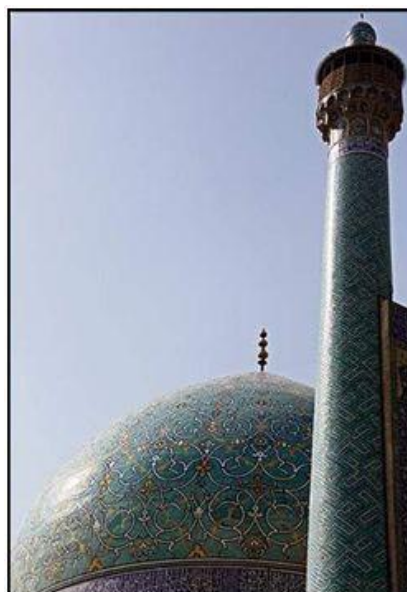


Image 7: Dome and minaret in Jamé Mosque of Isfahan

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Windward

From the very beginning, windward has been regarded as one of the elements in buildings in warm and dry areas of Iran. Any windward encompasses Ventilation tower on top of building. There is a string of vertical openings above each tower oriented to blowing winds (Mahmoudi, 2004).

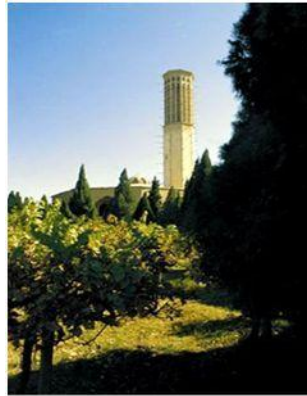


Image 8: Windward at Dowlat abad

Windward has been used properly in various buildings in desert cities of Iran including Kashan, Yazd and Kerman. Even a variety of windward have been built in some buildings.

Crypt

Religious or political characters are buried in most of cemeteries' underground. Since the underground floor should have had an area for religious ceremonies or pilgrimage, burial place has been built in a floor under the ground. Establishment of crypt has been more likely common in cemeteries at North of Iran and Azerbaijan. Since the eighth century AD, wooden enshrine was installed on the tombs as a symbol. Existence of an inlaid wooden box on tomb of most of artists is a common idea.

A Variety of Buildings in Islamic-Iranian Architecture

Overview on Iranian architecture implies how such architecture has expanded during the past fifteen centuries. At any period, several buildings with different features have been built in villages, towns, caravan roads, desert areas, mountain passes and cities, that each building has had a distinctive application.

In general, buildings at Islamic age can be classified into two groups:

a- religious buildings: this includes mosques, tombs, schools, hosseinieh, takaya, Mosalla.

b-non-religious buildings: this includes bridges, palaces, caravansara, bathrooms, warehouses.

In following, a concise explanation for each building above has been mentioned:

Mosques

Mosques, constantly with a major role in Muslim's life, have been mentioned as the most important religious buildings at any city and village. Importance of mosques within cities has gone beyond so far as the city will have no value without a great mosque. There have been simple maps for mosques in Islamic era, yet the maps got complicated by the passage of time under diversification of patterns and decorations. Map of the mosques has gone through transformations since the fourth century AH, whereby various mosques were established in the cities. The most important maps employed in the mosques include the map with one porch, two porches, four porches, and composition of four arches and one porch, that the architects at Islamic age have taken them from the architecture methods at Parthian and Sassanid era. For instance, the map with four porches in construction of most of building has been inspired of map of Parthian palace (Dargahi, 2006).

Schools

At Islamic age, teaching religious sciences was accomplished at mosques. Gradually, by development of Islamic science, education space was separated from the mosques. At the fifth century AH, encouraged by

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Khaje Nezam al- Molk, various schools were built in prominent Islamic cities including Baghdad, Ray, Nishapur and Jorjan (Iran). Later, the map with four porches drawn into attention by the architects was considered as a common pattern for the education spaces. Around the porches, one story-two stories chambers have been built for the students' and seminaries' residency. Except hours of teaching, schools have been being used as mosques.

Sacred Sites and Shrines

Such buildings can be classified into two groups of religious and non-religious shrines. Sacred sites have been known as the holy shrines in most of cities and villages and received respect by the Muslims especially Shia. Further, such buildings have undergone development over the time, and transformed to splendid centers (Baharlo, 2012). Sacred sites and shrines have been established via circular, square and octagonal maps through various architecture methods.



Image 9: Tower of Gonbad-e Kavus

In Iran, establishment of sacred sites and shrines has a long record in Islamic age, at which unique features of architecture prevail. Such buildings have been conventionalized by the names of tower, dome, monument and tomb.

Levee and Bridges

Levee and bridge have been regarded as non-religious buildings which have been established in trajectory of routes and upward rivers. The most important bridges have been established in the caravan routes and the places in which river floods have been uncontrollable. At the ancient Iran, when the man enabled to suppress water and specify the route in which water passes and use the tree logs for passing through the river, bridge construction has been started. In addition to facilitation of coming and going, Iranian architects have considered creation of levee in establishment of bridges. At the ancient and Islamic age, Iran has engaged in development of bridge construction from the eighth century to date. Remaining of bridges and dams indicates the type of architecture at the ancient and Islamic age. Interest and taste of Iranian architect have been taken into account in decoration of bridges, that is, decorations including tiling and bricking has been employed on some bridges (Baharlo, 2012).



Image 10: Esfahan-pool khajo

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Palaces

In Iran, establishment of palaces dates back to the long lost past. Modern concept of palace differs from the concept of this word in the past. In the past, distinctive buildings with a superior architecture to the rest of buildings have been being established, having numerous applications, e.g. such buildings might have been being used as a temple once and a castle later.

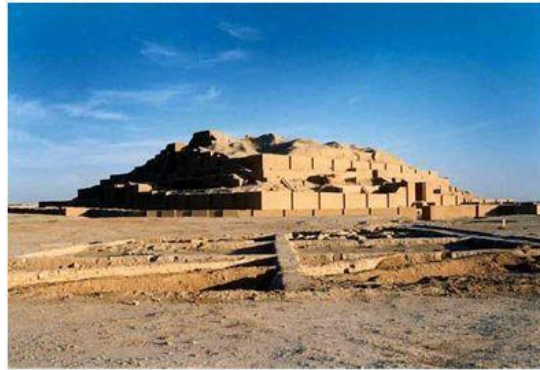


Image 11: A view of zigorat chaghazanbil

The nature of such buildings gradually has gone through transformation and were settled as the palaces for dominance of kings (Fletcher, 2009).

Caravanserai

In Iran, architecture of caravanserai is diverse. With regard to geographical position of Iran, various caravanserais with different features have been established. To construct suburban caravanserais, four-porch, two-porch, octagonal, circular and highland maps have been used. Persian Gulf's four-porch design has been more likely used in establishment of the caravanserais such as schools and mosques. The four-porch design has been more likely used in establishment of the caravanserais such as mosques and schools, and several rooms around the yard have been built for the use of passengers. Some caravanserais have been decorated with tiling, plastering and tiling.



Image 15: Caravanserais of Robot Sharaf

Bathrooms

Bathroom has been mentioned as another non-religious building in Iran, built in various villages and cities. According to archaeological evidence, among the oldest bathrooms, it can refer to a bathroom in Persepolis at Achaemenid period and a bathroom in Assyrian palace at Parthian period. In Islamic cities, bathrooms have been being built in city's main passages, bazaars and palaces, such that no problem rises to provide drinking water and remove the wastewater. It can say that bathrooms followed by mosque and school have been taken into account as the most important urban buildings (Baharloo, 2012).

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Image 16: Ganjali Khan Complex, Kerman

Warehouses

Geographical position of various regions in Iran has widely influenced the inventions of architecture at this territory. From the very beginning, a particular attention has been paid to storage of water and its consumption in low-water seasons, for which warehouse has been established. Water storage in Ziggurat temple at Achaemenid period has been mentioned as the oldest sample (Fletcher, 2009).

Bazaars

The record of creation of bazaar in Iran dates back to a long time ago. According to the historical evidence, bazaar has been one of the important elements in most of the cities before Islam. Bazaars have been being built along the most important routes within city, that the bazaar has been the major thoroughfare in the city, connecting the most important gates to the center of city. The best materials and architecture methods have been being used in the buildings within bazaars. The stone and brick have been being used in columns and walls in the buildings of bazaars; further plaster and brick have been being used to cover the ceiling, and dome has been being used to cover the large openings. Thatch has been also used to cover the roofs at bazaars, because thatch has been both moisture and thermal insulation. Soil has been more likely used in the floors within bazaars, yet stone and brick have been also used in some cases (Haj, 2004).



Image 18: A view of traditional bazaar of Tabriz

CONCLUSION

To maintain the cultural heritage which undertakes a part of the collective history dependant on how is the effect of the collective memoirs and cultural and social values of individuals, architects and urban planners must draw a particular attention to this issue that recognition, maintenance and revitalization of identity-based elements are the features of civilization. Identity-based elements realize the historical continuity and cultural bond and national spirit. Space must accompany the addressees and create sense of belonging and comfort in them. In the bond between space and addressee, the stabilization of identity comes to realize. The architect cannot plan for the stabilization of identity properly. Design in a long-term

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will have no guarantee for the person's satisfaction, because the early ideas of the design meet the state of the personality of the person which has started from the past and continued till today. Indeed, the changes develop the identity rather than the certain impression and expectation at a period of time. Hence, the construction or the space which are assumed for a certain person or an alien should not have been thorough so far as no change can be brought about in it in future. To sum up, life has not been an artwork, but has been as a narrative which will continue, in which the identity has been assumed as a continuous matter based on the mutual relationship between collective and individual history which requires for the changes in time and place. Therefore, the designer should undertake resolving or defects and restrictions in the space so as to create a novel idea.

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