Bagh-e Nazar باغ نظر

Bagh- e Nazar, 16 (70):55-70 /Apr. 2019
DOI: 10.22034/bagh.2019.84964

Persian translation of this paper entitled:
نقش قبله در جهت‌گیری مساجد سنتی شهر دزفول
is also published in this issue of journal.

The Role of Qibla in the Orientation of the Traditional Mosques in Dezful City

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Received 2018/07/17 revised 2018/11/03 accepted 2018/12/02 available online 2019/03/21

Abstract

Statement of the Problem: Since the advent of Islam, the design of mosques have been really important to the Islamic architects. Its importance is well-evident in the designing of all its elements which has introduced the mosque as the most outstanding edifice in Islamic architecture. Since long time ago, mosque architectures and designers have esteemed certain principles regarding the preservation of an orientation towards the God from the beginning of an individual's entry to the mosque till facing towards the Qibla as well as the maintenance of hierarchal movements. Thus, the most important problem of the present study is the role played by Qibla in spatial organization of the mosque. Based thereon, the issue has been investigated in the architecture of the traditional mosques in Dezful in terms of the spatial axis and movement hierarchy considerations so that the ground could be set for the designing and constructing of the contemporary mosques.

Purposes: According to the importance and role of Qibla in the mosques' spatial structures, the present study elucidates the role of Qibla in the architecture of the traditional mosques in Dezful in terms of the orientation influenced by Qibla axis, Qibla-aligned entry to the building, movement hierarchy and spatial axis.

Study Method: In terms of the method, the present study is recounted as an interpretational-historical research. The current study is also a case study that has been conducted relying on the library-documentary studies. The information and data have been collected based on a field research using maps and sketches.

Conclusion: The analyses are indicative of the idea that Qibla has been a notable consideration in the design of the majority of the mosques in this city. This way, the spatial axis and movement hierarchies have been carefully observed in respect to the visitors from the very beginning of the entering to the mosque to taking a Qibla-facing position.

Keywords: *Mosque, Dezful, Qibla orientation, Emam Mosque, Vakil Mosque.*

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Introduction and Statement of the Problem

As a container of the human beings' spiritual

life, the mosques are oriented towards their cordial wishes and they are seen as the source of peace and serenity to human beings so that they can find their goals, ultimate and identity in their spiritual life. The objective of human being is paying attention to the God, [we all belong to the God], their ultimate is reaching the God, [we all return to Him], and their identity stems from the God. This has given the mosque a particular stance and a significant role in the Islamic architecture and it has also caused the mosques to be recognized as an example of the Muslims' unity and orientation in life. From the perspective of the religious teachings and beliefs, the physical and psychological tranquility of the human beings lead to jovial peace. Achievement of the physical peace is nested in the heart of the religion and it is via the religious ways that the soul is invited to peace. Using the same teachings and based on the correct recognition of the human beings and their psychological and somatic beliefs, the traditional architecture has made efforts in line with devising diverse strategies along with genius to help the mankind reach peace of the psyche and physique. The Muslim architect believes that the heart`s tranquility lies in the religious and psychological peace. Instigated by his nature, human beings are truth-seekers. They are constantly trying to answers questions regarding where they have come, to where they are headed and also what direction they are aligned to at any moment. Thus, they are in a constant search for finding a situation and occasion to ponder and think about themselves. Architectures, familiar with such a human will, make efforts to create a sense of contemplation in the mosque and traditional houses and, thus, guide and orient the mosque and house towards the eminent God (Masa'eli, 2009: 32). Whatever the place and orientation that a person takes in the mosque, s/he finds oneself before the God and reaches cordial serenity. This refers to the very spiritual aspect of the mosque that everyone gathers around in one place towards a single direction and orientation for one purpose. No other place possesses such a characteristic. Such an intellectual and practical coherence is related to the human beings' single goal-oriented feature that is seeking for a certain Qibla towards his God to prove his servitude. Based on the God's order in the Holy Quran, Surah BAQARAH AYA 115,

وَ لِلّهِ الْمَشْرِقُ وَ الْمَغْرِبُ فَاَيْنَما تُوَلُّوا فَثَمَّ وَجْهُ اللهِ اِنَّ اللهَ واسِعٌ عَليمٌ

meaning that "the east and the west belong to the God; so, wherever you turn your face, you will see the visage of the God and, verily, the God is all-encompassing and all-knowing". Taking an orientation towards Qibla prevents the taste-based deviations from coming about and it is the paying attention to a single direction (Qibla) with tranquility and peace and presence of the heart that makes everyone find oneself before the God. The results are easing of knowledge by presence and upgradation of the theosophical ranks that are the reminders of sublime concepts and wayfaring from the external to the internal and the spiritual ascension of the human beings . In other words, it can be stated that Qibla shows a spiritual direction that influences the architecture and geometrical arrangement of the forms. This important issue makes the geometry of the space take a unit direction and also realigns all the internal elements and spaces that are based on an order laid on the foundations of sacrosanctity and spirituality along a single axis, Qibla (Ziabakhsh & Mokhtabad Amrei, 2012: 60). One of the preliminary stages in recognizing the architecture of the mosques is the analyzing of the existent maps and attempting to understand the path mosque designing process takes as well as realizing the strategic policies used by the designers in confrontation with the relevant variables (Tavakolian & Bahmani Kazerooni, 2015: 90). The present study deals with the pivotal role of Mosque orientation in the traditional mosques in Dezful so as to identify the methods of corroborating Qibla direction in the mosques of the foresaid city and thoroughly elaborate their perfection trends. In

line with aforementioned goals, several questions are posited as the followings:

• What role does Qibla play in the spatial organization of the mosque?

• What are the effective and influential factors in strengthening Qibla axis in Iran's traditional mosques?

Research Background

The studies performed in the area of the traditional mosques in Dezful have been mentioned sporadically in a book named "Dezful's main mosque and its history" (by Muhammad Ali Emam Ahwazi) that deals with the Grand Mosque and its method of formation as well as in the "culture annals of Khuzestan and Dezful" that have case-specifically introduced the mosques and historical places in Dezful. Researchers such as Najmeh Salarinasab, have dealt with the functional introduction and description of Dezful's main mosque as the integrator of the city from the functional, applied and cultural aspects (Salarinasab & Lary baghal, 2013); also, Kurosh Mo'meni has pointed to Dezful's main mosque and investigated the components and elements thereof in a research (Momeni, Attariyan & Soltani, 2014). Many various topics have been investigated in this field and there are many subjective discussions regarding the mosques and their relations with the geometry and architectural proportions and the majority of these discussions have been about an introduction of Dezful's main mosque. But, so far, no considerable study was found having dealt with the important role of Qibla in traditional mosques orientations in Dezful and, as it is known, Qibla is a very notable consideration in designing and forming of the mosques. Therefore, the present study analyzes the role of Qibla in the orientation of the traditional mosques in Dezful and this can be envisaged as an innovative aspect thereof.

Theoretical Foundations

• Importance of Mosque in Islamic Community

Surely, mosque is one of the most original religious edifices in Islam and its most sublime function pertains to the collective worshipping that occurs therein (Hillenbrand, 2008, 31). Mosque is a place for establishing communication with the God and expressing servitude and nothingness before the divinity and magnificence of the creator of the universe. It has been quoted from the great apostle of Islam (may Allah bestow him and his sacred progeny the best of His regards) that "say prayers wherever it was time for praying, do it immediately because the earth is your mosque". The sacredness of the mosque, though, is latent in the corresponding quotation of "the servitude of the servants and the divinity of the God". Thus, its splendor lies in its spirituality, not in its building and lofty edifice (Pourjafar, Amirkhani & Leylian, 2010: 21). From terminological viewpoints, the term "Masjed", is equivalent in English to the word "mosque", which has its roots taken from the term "Maskit" that has entered Arabic thence Persian from ancient Aramaic languages. This term was transformed into Masjed in Arabic and the root "Sajada", meaning prostration, was extracted from it and conjugated. But, it remained in its initial form in Persian. The term "Maskit" was still used in Iran during some centuries after Islam (Hojjat & Maleki, 2012: 7). Masjed or Maskit or Mosque means a place for prostration, for an Arabic term "Sojdeh" derived of "Sojood", meaning humbleness and complete surrender. It also refers to a place for prostrating before the God (Pourjafar, Amirkhani & Leylian, 2010: 21). The ultimate goal of mosques architecture is the supplying of the most subtle type of life unity and society concept and society concentration (Pope, 1994: 77; Bolkhari Ghahi, 2011: 378).

• Mosque Construction Pattern

The first mosque that was texturally built by the Islam's apostle based on an obligation not ornateness, served provisioning of the shelter to the prayers. Based on AYA 97 of SURAH Al-e-IMRAN, "Masjed Al-Haram is the first mosque

of the universe" and it became a pattern for the architects and architectural schools in Islamic world. Traditional architects applied certain hierarchies for the presence in the holy privacy of the God in their works so as to facilitate the very beginning of a person's entry to a mosque. The change of the architectural style of four-dome buildings was brought about due to Qibla orientation considerations. Based thereon, in order to transform the four-dome buildings to a mosque, the front parallel to Qibla axis should be kept open for the entry and exit of the prayers and three other fronts should accommodate the constructions (Fig. 1). In some of the cases, a porch was added along Qibla orientation to the four-dome space so that it could be applied as a connective space with no change in its main function. At the same time with combining the porch with the dome or nave in Qibla front, two-porch and four-porch designs were used for making the mosque design and space more splendid. In two-porch designs, the porch built in the beginning and in the same orientation of Qibla was more important and the second porch was positioned facing towards the aforesaid front. From the early decades of the preliminary hegira centuries, the entry spaces of mosques were designed and constructed in the simplest spatial and textural shapes following the conversion of the four-dome spaces to mosque in such a way that some of these mosques had one or several entry gates. Besides being devoid of the architectural designs, the entry spaces in the initial mosques, obeyed the principle that no one should enter the mosque from places situated on Qibla's front side or at least not from spots and places near altar for such a reason as not disrupting the continuity of prayer-sayings. This was considered as a general rule for specifying the position of the entries.

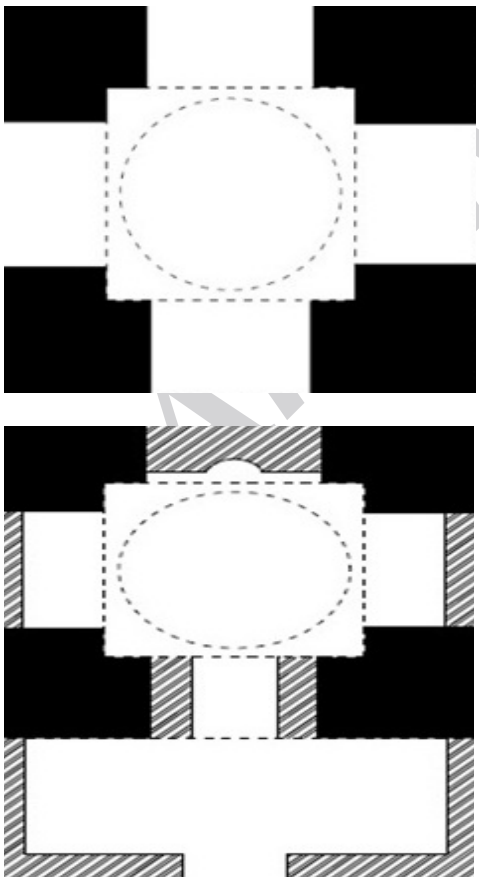


Fig. 1. The spatial change trend of Yazdkhast's four-dome mosque architecture. Source: Noghrehkar, 1997.

Spatial Hierarchy

The internal mosque spaces are aligned with Qibla axis based on their values and positions. The constituent elements of axis in Islamic mosques are altar, pulpit, chamber, porch and precinct, entrance, facade and counter; each of which has been differently important during the various times and in different locations according to the political, social, economic and climatic conditions as well as the pattern governing the mosque constructions in the region. Altar, worship spaces and main porches are the focal points of Qibla axis and they are the meeting points of the secondary axes. The ancillary spaces are doors, secondary porches, porticos and entrances of the other spaces that are positioned in more ancillary axes. The other elements like service and ancillary spaces are situated in the corners and irregular spaces. In general, all of the elements are organized in such a way that the worshipping space can be placed in the best part of the mosque (Noghrehkar, 1997: 223).

The Movement Axis in the Mosque

The architecture of the mosques are of equilibrium type whose main direction is to have no direction. The Qibla axis determination in a mosque is an inevitable issue (Fathi Azar & Hamzeh Nejad, 2014: 57). Due to the same reason, mosques are built aligned with Qibla axis. The traditional mosques were most predominantly built in bazar because there was a deep link between bazar and mosque. In cases that bazar was found stretched opposite to Qibla's direction, the turn in the desiMogning of the mosque is brought about in an intangible manner and with a special skill so that the individuals entering the mosque do not notice the turn of the mosque's direction. Two examples of such mosques are Emam Mosque in Isfahan and Vakil Mosque in Shiraz. Axis is the thing that directs the mosque's structure and element along a certain direction and causes the separation of the regular interior space from the highly tumultuous exterior space. In the mosques, axis is the factor causing the creation of movement hierarchy, shaping of the general structure, symmetry, rhyming of the elements in the same direction as the axis and emphasizing on Qibla direction (Ibid). The human movement axis in a mosque is usually begun with forecourt space, facade and precinct and it is stretched to the place wherein the prayer reaches tranquility to start his or her spiritual wayfaring. While considering the movement axis and the attention one, it has to be noted that in the movement axis the sole access to the intended place is not intended. Rather the creation of a sort of mental preparedness is one of the factors affecting the way of organizing the path and regularizing the spatial hierarchy (Haji Ebrahim Zargar, 2007: 108-109).

Qibla in Islam World

The Muslims' Qibla in the entire Islamic world is the sacred building of Ka'ba. The God points in the Holy Quran to Ka'ba as the first house for Muslims for worshipping and enumerates it as a factor of awareness and guidance of not only the Muslims but also all the human beings by commanding that "إِنَّ أَوَّلَ بَيْت وُضِعَ لِلنّاسِ لَلَّذى بِبَكَّةَ مُبارَكاً وَ هُدىً لِلْعالَمينَ فيهِ آياتٌ بَيِّناتٌ مَقامُ إِبْراهيمَ وَ مَنْ دَخَلَهُ كانَ آمِناً وَ لِلّهِ عَلَى النّاسِ حِجُّ الْبَيْتِ مَنِ اسْتَطاعَ إِلَيْهِ سَبيلاً وَ مَنْ كَفَرَ فَإِنَّ اللّهَ غَنِيٌّ عَنِ الْعالَمينَ", meaning "verily, the first house that was set for the people [and worshiping of the God] is the one in Mecca that is blessed and the source of the world-dwellers' guidance. There are vivid signs in there, [including] Ibrahim's standing-place and he who enters that house [of God] would be safe and the people are obliged before the God to go on Hajj pilgrimage, those who can afford finding a way thereto and those who utter blasphemy then, indeed, the God is needless of all the world-dwellers" (SURAH AL-e-IMRAN, AYAT: 96-97).

Mecca's direction is also called Qibla. Ka'ba house is like an axis that guides and directs the human community and it is like a pillar linking the heavens to the earth and it is like a beam enabling the ascension to the eternity. The direction changes in mosque and this adds to the geometrical richness of the texture and, then, all the directions unify to call on all the spatial cores to gather around a single axis in utmost regularity. Subsequently, the plan is organized and balanced about Qibla axis and the entrance, porches and the main and secondary spaces are valued about this axis (Noghrehkar, 2008: 523).

Qibla direction

should be clear in nave's space because the recognition of Qibla therein for saying prayers is the most superior. This is specified on the Qibla side front with such a prominent element as altar. Due to the digression that is caused by deviation of Qibla angle from the north and south, the mosques are designed so that the prayers' lines can be perpendicular to the walls surrounding the interior space. The naves and precincts in the ground floor are merged. The reason behind is that the front lines

should be fully filled with prayers and stretched as long as possible. Moreover, it has to be canonically ordered that a connection should be always held between a front and a back line. Despite their spatial independence, they have to be expanded on each side in a regular manner. From this point on, the elongation of Qibla parallel axis becomes superior. According to the two dimensions opposite to Qibla, the result would be the general shape of the naves approaching that of a square (Noghrehkar, 2010). The longitudinal axis of the majority of the mosque's yards is aligned with Qibla direction that was used not only for easing the movement but also occasionally for contemplation, teaching and saying prayers within the format of longitudinal space division into smaller compartments featuring intangible axes aligned with Qibla axis. The God is present in all places so paying attention to Qibla never means limiting the pure essence of God to a certain direction. Based on the idea that the human beings have a corporeal existence, the God has ordered everyone to say prayers towards the same point and aligned with a single axis so as to create unity and coordination amongst Muslims from all around the globe.

Qibla DirectionQibla direction in the main compartments is the first common order of all mosques. The order of the space in mosque architecture features two directions: horizontal direction towards Qibla that shows the position of the central altar of all the Muslims in the world and is emphasized by the general shape of the mosque. The long edge of the nave wherein the congregational prayer is held is also directed towards Mecca as the point at which the skies and earth are joined. The vertical direction of the mosque is marked by a dome in architecture. Dome is amongst the most symbolic elements in Islamic architecture. An axis is a means which indicates the unitary goal of all human begins which have the same road to reach the Ultimate. This has made the geometry be expanded from a single point towards revolving about perpendicular axes featuring the secret of life and freedom on each side which is deemed necessary. It also add to the independence of the spatial cores and the symphonious holiness of the dome space. Paying attention to a unit axis (Qibla) causes to concentrate on spirituality and it help human beings feel of being present before the mighty God. As a result of which the human's soul and psyche takes the command of the physique at hand. It would not be possible to reach the God or, in other words, start a journey in the spirituality world unless this governing of soul over body is confirmed (Fattahi & Omranipour, 2014: 97).

Investigating Qibla's Direction in the First Mosque

Masjed Al-Nabi, the shrine of the great apostle of Islam (may Allah bestow him and his sacred progeny the best of His regards), was designed based on a simple plan with his highness's being helped by migrants and assistors. The main properties of the mosque can be expressed as follows: a surrounded, vast and empty space with simple walls. At first, the mosque had two rows of palm, tree trunks as its interior wall, body facing Qibla that was called Zillah or shaded space, and the roof covered by branches and leaves of this same tree. This was not the preliminary plan of the mosque and it was created within a year. After it was ordered by God to change Qibla from Bayt Al-Moqaddas to Mecca, the shaded space's wall was destroyed so as to be faced towards Mecca. It was large enough to provide a room to about a hundred people. In the opposite side of the shaded space, there was another covered space having a half depth of that shaded place that was used by the prophet's old and poor followers. There was no other building in the yard. The three entry gates that provided access to the yard were not more than three orifices in the walls. The fast destruction and reconstruction of the shaded space after Qibla change was ordered is a sign of the fixed and regular use of this building

for worshipping and another definition can be roughly reached accordingly (Fig. 2&3).
The following methods were used in the preliminary mosques for the corroboration of Qibla.
• More porticos in the main nave.
• Stretching of the yard.
• Qibla wall with no window and its compensation by embedding more windows on the other fronts of the nave in an artistic manner and letting light pass through to the inside of the nave towards the Qibla.

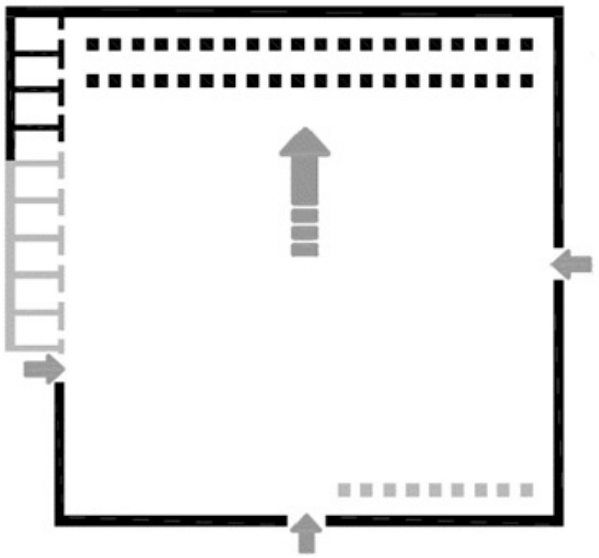


Fig. 2. Masjed Al-Nabi. Source: Courtesy of the authors.

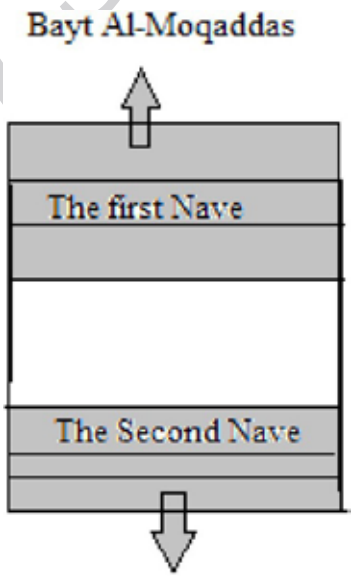


Fig. 3. Qibla change in Masjed Al-Nabi. Source: Courtesy of the authors.

Analyzing Qibla Axis in Two Successful Examples of Iran's Traditional Mosques

• (Emam Mosque in Isfahan and Vakil Mosque in Shiraz)

Emam Mosque in IsfahanEmam mosque is situated on the southern front of Naghsh-e-Jahan square. The mosque has been built with four porches reaching in the area to about 12264 square meters and approximate dimensions of 100×130m in the form of main mosques of the cities in Iran. The main mosques usually have four porches in four main directions with porticos and pavilions on their sides (Pirniya, 2005: 291). Entry can be made to the vault space from the southern entrance of the porches and this is the most beautiful and most important part of a mosque (Honarfar, 1971: 462). In order to align the nave with Qibla direction, the building's architect has used his outstanding creativity and innovation in 1649 (Emam Mosque was built in 1641) to create a 45-degree turn in the entrance part along the northern-southern direction of the mosque corridor. In fact, the architect has been constantly thinking about a way to depict a panorama of the sure intellectual and ideological basics in the designing of a building within the format of a balanced form while observing diversity and dynamicity (Fattahi & Omranipour, 2014: 100).

• Vakil Mosque in Shiraz

Vakil Mosque or Vakil Jameh Mosque is a relic from Zandiyeh Era in Shiraz. The mosque is about 9578 square meters in area, 5787 square meters in substructure, 120m in length and 80m in width. It was built in 1765 by Karim Khan Zand in Darb-e-Shahzadeh Neighborhood, the current Taleghani Street, within a distance from Vakil Public Bathroom and Vakil Bazar. The two jambs of the main entrance are each 8m long and 3m wide and positioned in the northern edge of the mosque and there is another entry gate at its side that opens to

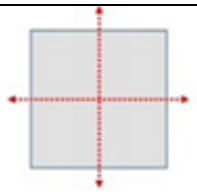
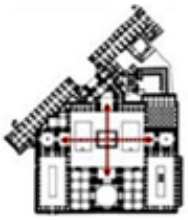
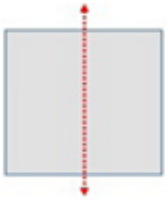
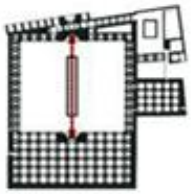
swords-makers bazar (Sami, 1984: 597). Unlike the Seleucid and Safavid mosques, this mosque has substituted its lofty texture underneath the dome with an unprecedented nave inducing comfort and order in a spiritual space (Pope, 1994).

• **The Spatial Axis Structure in Emam and Vakil** MosquesBy the spatial axis, the hypothetical line between two points or two different functions is intended. Considering axes' principles preserves the balance, symmetry, centrality, simplicity, order and integration in a building. Three main axes can be seen in the architecture. The first state emphasizes on the centrality and guidance of human being from the exterior to the interior function. The second state pertains to the spiritual preparation of the human being and allowing everyone directly enter the vault space. This axis is stretched between the precinct and Qibla. In the third state, the axis is perpendicular to Qibla direction and it is often taken into consideration for its being aligned with the development direction of the mosque building (Fattahi & Omranipour, 2014: 102). An overview can be attained about the types and attitudes of the architecture in Safavid and Zand Eras by the investigation of the constituent components of the two mosques. These components are: 1) entrance, including the forecourt, facade, vestibule, corridor; 2) porches; 3) vault space (Emam Mosque); 4) nave (that has been displayed in a more accentuated manner in Vakil Mosque for the absence of the vault space); 5) school (taking a peripheral form in Vakil Mosque: background-oriented architecture); 6) porticos; 7) service spaces (shared in their shapes and forms by both of the mosques); 8) central yard the size of which differs depending on the spatial geometry and mosque type (Table 1).

Human Entry Hierarchies in Emam and Vakil Mosques

The observation of the ranks and degrees for reaching perfection has always been considered in the Muslims' religious and theosophical cultur e. Based on this principle, no urban space, building or architecture can be created with negligence of its higher and lower ranks and orders. It is in its hierarchical place that every urban space, building or architecture finds meaning hence losing it outside its specific hierarchy (Habibi, 2011: 104). To induce the concept of transition from the earthy world, in architecture, as well, an individual is called upon for leaving a stage behind and pass into the next sometimes by the language of remembrance and sometimes in a perceptional process (Nasr, 2001: 210). Hierarchy can also be observed in the formation of a space in such a way that there is a sort of spatial rank in the designing of a porch or room that is essentially based on connection, transferring and achievement (Ardalan & Bakhtiyar, 2011: 71). This spatial system forms the basis of the plan for continuing the positive space (Ibid: 73). The principle is expressive of the gradual aspect of arriving at the space and it is objectified in a hierarchical form of access from the exterior to the interior spaces. The most distinct position of the principle's manifestation is the emphasis on the zoning of the spatial privacies between the public and semi-public spaces. The entry ventricle and vestibule are the turning points in the design of the hierarchical system of these mosques. Therefore, movement and relationship in the two mosques of Emam and Vakil, occur in the form of connection, transmission and achievement. Connection comes about in the contact point of the square and bazar with the forecourt of the mosque and isolates the human being from the outside and corporeal world and blows a fresh spirit into the human being's body. In transmission (acting as a means of bridging the human being to the ethereal world), the human being is confronted with elements that strengthen senses and spirits and prepare the human being for unification with the beloved. Then, achievement is gained that is the very southern porch and the main vault space in Emam Mosque. The arabesque traceries make multiplicities reach unity and enable

Table 1. The relationships of the spatial axis structures in Emam and Vakil Mosques. Source: authors.

Mosque	Type	Schematic view	An overview	Image
Emam	Four-porched			
Vakil	Nave-like, two-porched			

humans' ascension. Such a movement path can be seen with the same principles in Vakil mosque but with the difference that the pond and the rhythm of the eastern and western porticos considerably ease the movement (Table 2).

Study Method

The present study tries analyzing and investigating the role of Qibla in spatial organization of Dezful mosques through combining interpretational and historical methods and examining the case sample as well as relying on the library-documentary research. To this end, two successful and remarkable pattern examples, (Emam Mosque in Isfahan and Vakil Mosque in Shiraz) the orientation of which was influenced by Qibla mosque, have been analyzed and examined. Then, eight samples of mosques in Dezful were selected based on a purposive sampling method. Their overall building designs were analyzed in terms of their orientations towards Qibla.

Findings

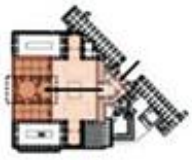
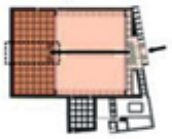
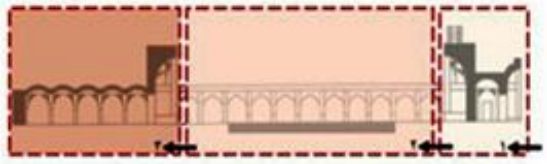
● **Analyzing the Traditional Mosques in Dezful**

Dezful is a city in the southwestern part of Iran. It is the thirtieth highly populated city of the country and the capital of Dezful County. It is about 4762 square kilometers in area and it is situated in an elevation of 143m from the sea level. It shares borders with the northern cities in Khuzestan Province. Dezful is of utmost importance for the fact that Dez River passes through the city. Moreover, it features an important historical background dating back to Sassanid era, though, it has also been prosperous even before that period. The reason is that it was considered as a part of the territories of Ilamites and Achaemenids Empire. It was originally termed "Dezhpol", turned into "Dezfil" and "Desfil" in native dialects and Arabized as "Dezful". The names "Dezful" and "Dezfil" seem to have been derived of "Dezh", meaning castle. So the city might have been originally a barrack or an outpost. Iranian mosques have numerous elements and components, each of which have been gradually added to the initial pattern of the mosque during various periods of time. The following diagram exhibits the main elements of the traditional mosques (Fig. 4).

Entrance: It establishes a connection between the outside and inside of the building and incorporates forecourt, facade, vestibule and corridor.

Yard and precinct: It is a square or rectangular space

Table 2. human entry hierarchy in Emam and Vakil Mosques. Source: authors.

Mosque	Movement type	Plan	Cross-section
Emam	1) Connection 2) Transmission 3) Achievement		
Vakil			

which creates a feeling of spiritual freedom of the outside world and a spiritual sense. In the middle of the precinct, water is displayed as a symbol of purity and cleanliness inside a large pond, usually circular, square, rectangular and/or octagonal in shape (Mirdanesh, 2006: 114-115).

Minaret: It is a tall and narrow tower usually at the side of the mosque and on the holy shrines taking circular, octagonal or square shapes and it is also used for calling the people to prayers (Ibid).

Altar: It is a symbol of the Muslims' Qibla and a turning point of the mosque. All of the Islamic mosques in Muslim countries have altars (Ibid).

Porch: In its initial form, it is made up of a roof, open on the one side, and it gradually became a distinctive feature of the Iranian mosques. It is usually placed in the periphery of the precinct or yard of the mosque and it per se creates hierarchy for entry into the naves (the main place of performing worship rites) (Dashti Shafi'ei, Bagheri & Salimi, 2013).

Vault space: it is a vast, lofty and covered space featuring a circular coverage with a span wider than the other spots.

Nave: it is a roofed space with parallel columns and it is created by the repetition of similar four-domes. It opens into the mosque's main hall on the one side and it is occasionally seen on all four sides of the Iranian mosques.

Portico: it is a covered column-organized space in the periphery of the main hall of the mosque and the walls of the mosque are usually constructed behind these columns.

After investigating the subject and performing historical studies and analyzing the various examples of the preliminary Islamic mosques up to the contemporary Iranian style mosques (Emam Mosque in Isfahan and Vakil Mosque in Shiraz), the importance and the influence method of Qibla axis on the formation of the Iranian-Islamic mosques were figured out. Now, supported by the historical study and analysis of the various examples of the initial Islamic mosques till the recent Iranian style mosques, in Emam Mosque in Isfahan and Vakil Mosque in Shiraz, the role of Qibla direction is examined in the architecture of the traditional mosques in Dezful meanwhile elaborating and extracting the theoretical framework. The analysis of the traditional mosques in this city can be done in two general sets in terms of Qibla topicality. The first set encompasses the mosques in line with Qibla axis and the second set embraces the need for rotation to be aligned with Qibla axis. Following this classification, a total of eight mosques in

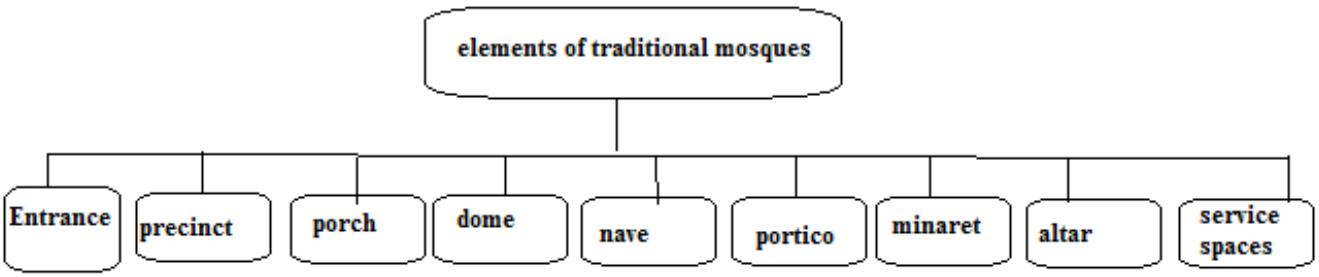


Fig. 4. introducing the elements of traditional mosques. Source: authors.

Dezful were analyzed as explained in Table 3.

A comparative Study of the Traditional Mosques' Architecture in Dezful

In this section, the similarities and differences of the intended mosques have been investigated in terms of their architecture according to the aforementioned indices. The results have been given in Table 4.

• Commonalities in Terms of Architecture

• All of the mosques have vault space, nave and a yard.

• The spatial elements are situated on four sides in the periphery of the precinct.

•Yard is used as the main access route in all of the mosques.

• All of the mosques are introversive.

Difference Aspects in Terms of Architecture:

• Only Jam'e' Mosque and Shah Rokn Al-Din Mosque have porch and others do not have any.

• The plan of Morshed Bokan Mosque is symmetrical and those of the other mosques are asymmetrical.

• The plan geometry of Lab-e-Khandagh Mosque is square and it is rectangular in all of the other mosques.

• The access route of Jame'e Masque and Shah Rokn Al-Din Mosque goes through the precinct and porch but in other mosques it goes through the precinct only.

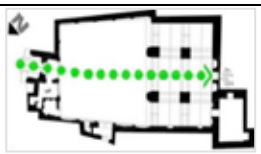
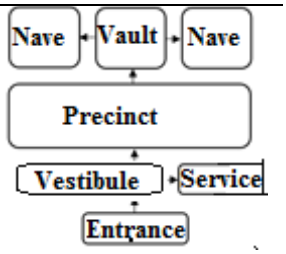
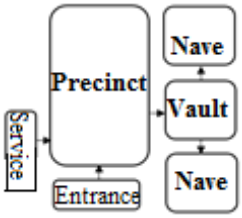
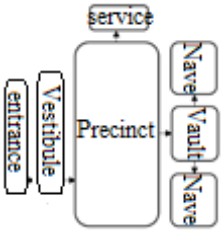
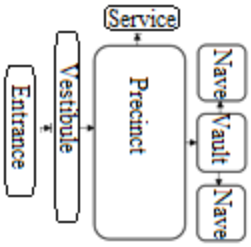
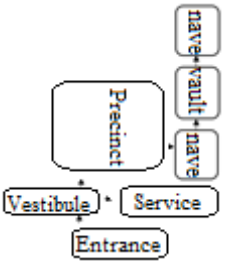
Discussions

A historical review of the evolution of mosques since the advent of Islam is indicative of the idea that paying attention to Qibla direction has played an effective role in the spatial organization of the traditional mosques in Iran in such a way that, due to the importance and position of Qibla, the mosque building has undergone a unnoticeable deviation towards Qibla in the two compared mosques, Emam Mosque in Isfahan and Vakil Mosque in Shiraz. Moreover, the observation of the movement hierarchy and spatial axis in the mosque buildings has caused the strengthening of Qibla direction, guidance of the human being from the interior to the exterior space and creation of balance, symmetry, order and integration in the building. The investigation of Qibla direction in eight traditional mosques from Qajar and Safavid eras in Dezful within the format of the current research paper indicated that in all of these mosques the movement hierarchies and spatial axis have been well observed and the investigation of the entry direction in these mosques is reflective of the idea that the entrance is aligned along the Qibla in all four of Darvazeh, Jam'e', Lab-e-Khandagh and Nabavi mosques and not aligned along the Qibla's axis in Haj Sufi, Mo'azzi, Morshed Bokan and Shah Rokn Al-Din Mosques.

Conclusion

The architects of the Iranian mosques have

Table 3. Structural analysis of the traditional mosques in Dezful. Source: authors.

Mosque name	Explanations	Exhibiting the mosque in context	Qibla axis analysis	Spatial diagram
Quds City Entrance	A historically valuable mosque with the observation of all the traditional architectural principles and use of Ma'aqali and colorful tiles and its name has been due to its closeness to one of the city's entrances during Qajar era			
Haj Sufi	It belongs to Qajar era and it is situated in Dezful's Siahpoushan Neighborhood. It was registered as a national monument of Iran on 17th of March, 2002			
Jame'e	It is one of the oldest mosques in the current city center. The main nave of the mosque and its columns are indicative of its long age. Based on the stone inscriptions in the mosque, some of the repairs can be attributed to Safavid era.			
Lab-e-Khandagh	It is one of the old mosques in Dezful and belongs to Qajar era. The building date is not exactly clear but 1910 has been mentioned on one of the walls as a repair date.			
Mo'azzi	The mosque belongs to the later periods of Qajar era (early Pahlavi era) and it is situated in bazar neighborhood. It is located in the old texture of the city in Ali Malik Alley.			

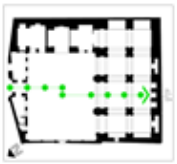
endeavored to create unity in the entirety as well as in every single component of the mosque building through emphasizing on Qibla`s direction. They tried to implement a design in such a manner

Table 4. A comparative study of the traditional mosques in Dezful. Source: authors.

		Mosque		Darvazeh	Haj Sufi	Jame'e	Lab-e-Khandagh	Mo'azzi	Morshed Bokan	Nabavi	Shah Rokn-Al-Din
	Index										
Architecture	Properties	Period		Qajar	Qajar	Safavid	Qajar	Qajar	Safavid	Qajar	Safavid
		Mosque components	entrance	√	√	√	√	√	√	√	√
			Vestibule	√	√	√	√	√	√	√	√
			Precinct	√	√	√	√	√	√	√	√
			Nave	√	√	√	√	√	√	√	√
			Vault	√	√	√	√	√	√	√	√
			Porch	—	—	√	—	—	—	—	√
			Service	√	√	√	√	√	√	√	√
		Plan		Asymmetrical	Asymmetrical	Asymmetrical	Asymmetrical	Asymmetrical	Asymmetrical	Asymmetrical	Asymmetrical
		Plan geometry		Rectangular	Rectangular	Rectangular	Square	Rectangular	Rectangular	Rectangular	Rectangular
		Number of yards		1	1	1	1	1	1	1	1
		Method of functional-spatial elements' placement		On four sides in the periphery of the yard	On four sides in the periphery of the yard	On four sides in the periphery of the yard	On four sides in the periphery of the yard	On four sides in the periphery of the yard	On four sides in the periphery of the yard	On four sides in the periphery of the yard	On four sides in the periphery of the yard
		Connections and accesses		Via precinct	Via precinct	Via precinct and porch	Via precinct	Via precinct	Via precinct	Via precinct	Via precinct and porch
	Functional	Precinct-yard		Connective heart of the complex	Connective heart of the complex	Connective heart of the complex	Connective heart of the complex	Connective heart of the complex	Connective heart of the complex	Connective heart of the complex	Connective heart of the complex
	perceptional	Introversion-extroversion		Introversive	Introversive	Introversive	Introversive	Introversive	Introversive	Introversive	Introversive

that an individual can enter the mosque in a clean manner. He demands permission, without questioning, to be directed towards the Qibla ,by the means of the precinct space. Due to the same reason, the human's intention is aligned with the altar and Qibla direction following which s/he can start worshipping and entreaty to the God in a space replete with tranquility. The movement hierarchy and the spatial axes in the building`s geometry cause the preservation of the divine orientation, emphasis

Table 5. The comparison of the traditional mosques in Dezful. Source: authors.

Mosque name	Movement hierarchy	Spatial axis	Entrance in line with Qibla	Plan
Darvazeh	Observed	Observed	Aligned	
Haj Sufi	Observed	Observed	Unaligned	
Jame'e	Observed	Observed	aligned	
Lab-e-Khandagh	Observed	Observed	aligned	
Mo'azzi	Observed	Observed	Unaligned	
Morshed Bokan	Observed	Observed	Unaligned	
Nabavi	Observed	Observed	aligned	
Shah Rokn Al-Din	Observed	Observed	Unaligned	

on centrality, fortification and privatization, smart rotation of the forms via a legible geometry and the guidance of human being till taking a position in line with Qibla`s axis. Furthermore, the axes and the observation of the hierarchy principle in the building's geometry consciously guide the human being from an exterior space to an interior space to take a position before the righteous One. After investigating the architectural principles and values, paying attention to Qibla direction in Islamic-Iranian mosques, comparing and analyzing the traditional mosques in Dezful, it was found out that these mosques do not differ much from the two example mosques, namely Emam Mosque in Isfahan and Vakil Mosque in Shiraz, in terms of their spatial axes and movement hierarchy. Based thereupon, the spatial axes and movement hierarchy were found being observed in all of the studies regarding mosques. The perfect explication of the study has been given in the Table 5.

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HOW TO CITE THIS ARTICLE

Hayati, H. , Fakheri Ra'ou, M. & Karavani, B. (2019). The Role of Qibla in the Orientation of the Traditional Mosques in Dezful City. Bagh- e Nazar, 16 (70):55-70.

DOI: 10.22034/bagh.2019.84964
URL: http://www.bagh-sj.com/article_84964_en.html