



The Mosques Entrance Element Typology of the Il-Khani Era in The Central Plateau of Iran

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Abstract: *At first glance the architecture of mosques is simple and outer face is not also very different from other architectures, but with passing time and entering a mosque in Iran, Iranian architects inspired by the Islamic worldview and combining it with art major impact on the structure and formation ornaments on sacred architecture took place that studying the formation of art of the mosque during Ilkhani era, undoubtedly a sign of prosperity and the importance of building mosques in that period. The concept of entrance before Il-Khanan era was only a room entry for worshipers in the mosque but after the establishment of the Il-Khani entrance and the entrance of the mosque had a great importance in the evolution of architecture, especially in the central plateau of Iran. To search for entrance of properties and structure of narthex in this period Varamin mosque - Kashan Ali Ghahrood Mosque - Ashtar Jan mosque, Natanz- Bastam great mosques all of which are in the central plateau of Iran is discussed. The research method used in this study was used in the library and field. Finally, by examining the structures and tables of comparative studies it is concluded that the building's features are relatively common in the region.*

Keywords: *mosque, Il-Khani, Iran's central plateau, typology, entrance element*

1. INTRODUCTION

Entrance space in Iranian architecture gradually had a such importance that it can be an important part of the evolution of the traditional architecture of the country. One of the important points about the evolutionary process design of entrance spaces, especially the mosques of entrance, the entrance space in the space of only one component that is called gate, was formed. While gradually and over a historical process of the seven space: forecourt, pre-arch, door way, vestibule, gallery, narthex and shelter. Of course, how to design entrance space in relation to the adjacent decorate it and other surfaces and volumes also developed related to the design. The design of entrance of each building objectives and principles that conform to the building including: privacy, family, arriving with humility, to enter gradually, easy access to interior spaces or create difficulty in the index and readability the monument in the face of the city, creating the link between large buildings and public spaces were considered. Many mosques especially large comprehensive mosques have numerous entrances and ports to easily access worshipers to the mosque space. Entrance space that in the first century did not have much of

prosperity the architects were increasingly concerned. Gradually the mosque entrance designed so that the position on the axis of symmetry of the courtyard and in front of the front is Qibla and along the direction along the axis of Qibla the courtyard is a principle in the design of entrance space became an important mosque.

1. Methodology:

This study is done by descriptive-analytical method. And relying on a combination of inductive and deductive methods in research. In fact, this study aimed to analyze reviews of mosques of Ilkhani era in the central plateau of Iran, in fact, for review and entrance characteristics narthex structure during this period compared mosque of Varamin- Ghahrood Kashan Ali Mosque - Mosque of Ashtar John - Natanz- Bastam mosques all of which are discussed in the central plateau of Iran. Therefore, in this study we tried to find answers to the topics discussed, the main purpose of this study was to examine the elements in the mosques mentioned in Ilkhani era in the central plateau of Iran.

3. Literature review:

3.1 Entrance structures:

Each space has been entrance of one or more components, each of which has a functional and physical characteristics are more or less certain.

- **Forecourt:** large, open space in front of the narthex has been designed and built some of the major monuments. One of the important goals up to the entrance and has been differentiating it from the road or field. Construction of a dock forecourt fit a common pattern in the design and construction of many of the forecourts.
- **The arch:** Indoor and semi-open like the front narthex doorway was designed and built space distinguished road access to space. Stop waiting to enter the building that was being accomplished.
- **Door way:** It is a small space at the entrance. In terms of building space on both sides of the two pillar or wall is located at the entrance of the framework in which it is installed. In many buildings about half a meter deep port, but its size is about 1.5 meters.
- **vestibule:** cross or vestibule space in many types of entrance spaces have been designed and built. This space is often immediately after the ports were loaded and one of its functions was to split the route into two or more. In some public buildings or homes two or more of the narthex, which was split each of them special space including the outdoor and interior have been ended.
- **Gallery:** The simplest is to connect the entrance space and access between the two locations is its most important function. In some of the buildings along the route of the gallery was being accomplished and that this privacy issue by the end of the gallery which stretches indirectly yard had ended.
- **Porch:** The Ill-khani ear works such as the Mosque of Varamin is left and narthex is being used as a component of the entrance space.
- **shelter:** Often, part of the gallery that was closed and roofed lean. Pass the hot steam in the cities, creating shadows and creating a favorable environment for the movement of people or stop it. Usually tent in front of the entrance building was built without a forecourt has been great.

• **Narthex:** physically indoor, semi-open and continuous spatial and functional aspects of communication with the different nature of entrance of space often in the yard or around an eccentric space construction has been made.

3.2 entrance review of mosques in Ilkhani era

Ilkhanids after the occupation of Iran that possessed Seljuk art heritage and made changes on it led to the development of some of them. Changes in the architecture of the eighth century, there was only limited to the building of tombs. However, the biggest change in the sector, but Ilkhani era mosques also been transformed. Adding front door was of the most important developments, before Ilkhanid front door, or did not exist or had no effect.

3.3 Bastam Mosque

Bastam is located in six kilometers of north of the city anymore and almost incongruous collection of monuments from the Seljuk period and patriarch. Between 700 and 706 AD, the mosque has been built.

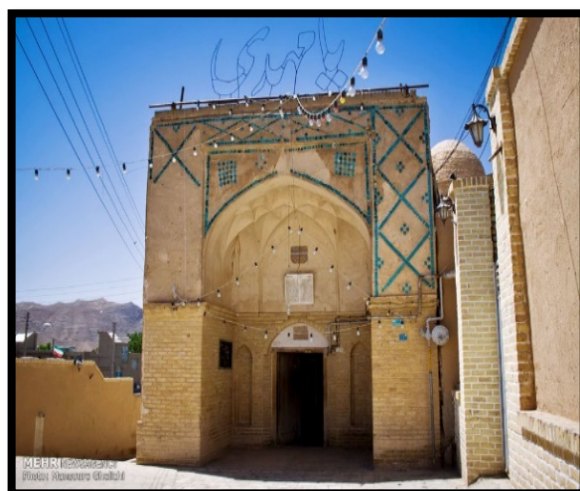


Figure 1: Bastam mosque (Source: Cultural Heritage)

Figure 2: entrance of Bastam mosque (Source: Cultural Heritage)

During the reign of Muslim, Sultan Muhammad Khodabande Aljayto IlKhan Mughal, other buildings were added to the Seljuk period and finally Ghazan Khan took Bastam collection and altar of beauty strips. Mosque being built directly in front of the tower, includes a rectangular courtyard that is open dimensions of 17×18.5 m in the East and North, two naves and two side, and gallery were located in mouth. At the entrance to the tower shack, next to the altar, the nave and the entrance, half of the month of Shawwal 700 AH date and the name of Muhammad ibn Ahmad Semnan and stucco decorations can be seen on both sides. In the 713 AH gallery and balcony at the time of Sultan Muhammad Khodabande Aljayto by the family of architects Damghani that their valuable work in different parts of the collection is created, or at least are decorated. All surfaces except plaster Muqarnas is covered with ceramic glazes narthex in roof projects, Narthex is about 10 meters

high and is made up of two distinct parts, each in its own qualified and have many values and in the past the main entrance because of the changes in the area of data collection, which today has lost almost their performance.

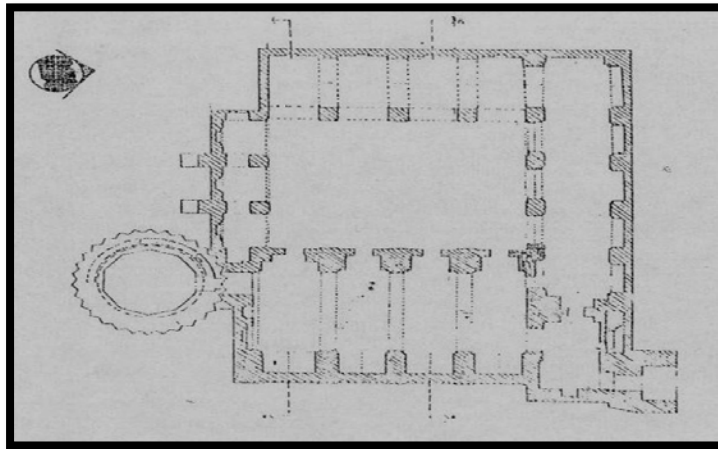


Figure 3: Bastam mosque plan (Source: Ilkhani Islamic architecture book)

3.4 Mosque of Ashtarjan

Ashtarjan is the main entrance of the mosque and has great importance in the evolution of Iranian architecture. Emphasizing the main entrance and narthex structure with double minaret and tends to be high in this part of the building was started from the Seljuk period.



Figure 4: entrance Mosque Ashtarjan (Source: Tourism Site Iran)



Figure 5: Ashtarjan Mosque (the source: Iran Tourism Site)

The main entrance is located in the eastern half of the north side of the building and more than 12 meters high. On either side of the head to form a narthex, the remains of two minarets can be seen that only one-third of them still remain. The decorative elements in the brickwork, tiling and using geometric motifs and writing, and some plants have been established. Multiple views with pointed arches on slender pillars vault built landed polygon or circular and rectangular frames placed, plays a major role in the division symmetrical of narthex levels. Mugharnas narthex roof space, which is made up of 6 floors dice combination of geometric tiles with blue, bicolor blue and turquoise and is adorned unglazed brick shaved. Inside the main vault narthex and all flat surfaces of the head (Quater and zone arcades, frames and tablets of different) with decorative motifs and geometrical or inscriptions multiple two third line and Kufi brick shaved or a combination of brick without glaze blue and turquoise tiles decorated in blue. One of the first known examples of this type of entrance narthex in the Seljuk mosque Imam Hassan Ardestān left. Building facade remains of the mosque a military Abarghou, entrance, known as the two minarets "Dardasht" Isfahan, minaret collapsed at the Mosque of Kerman, the head of the Yazd Mosque and entrance narthex of Imam Mosque (Mosque of Shah) of instances where the 8th century this trend continued. Tile decorations on the mosque Ashtarjan example of this type of index is decorated with tiles decorated in Ilkhani era's important monuments of this period such Soltanieh dome, mosque and tomb of old Bakran is comparable. The use of glazed brick prototypes in the Seljuk monuments can be seen, in the course of further developments found Kharazmshahi soared and Ilkhani era. Tile Art progress continued in the following centuries. Blue and turquoise tiles next to Ashtarjan mosque, was the first example of dated tile "saffron" too.

Fences and triple entries in the northern, eastern and western open relationship with bleached south narthex of mosque of and had made possible the surrounding yard. The side entrances in East and West bleached is blocked. The main entrance is located in the center of rotation of the entrance side is wider. Three of the entrances on the south side of the dome home designs by the altar and the decorative arch is repeated on both sides.

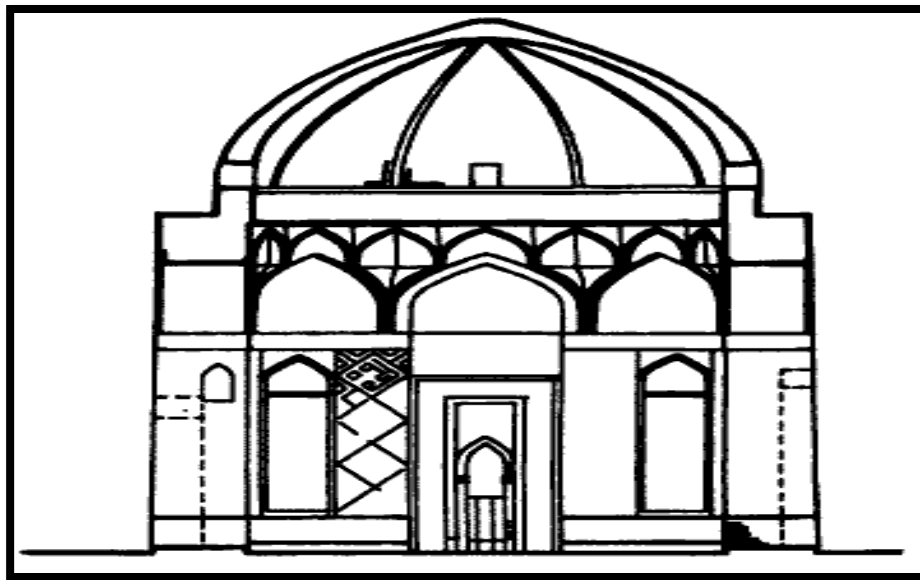


Figure6: Cross of Ashtarjan mosque (Source: Islamic architecture books Ilkhani era)

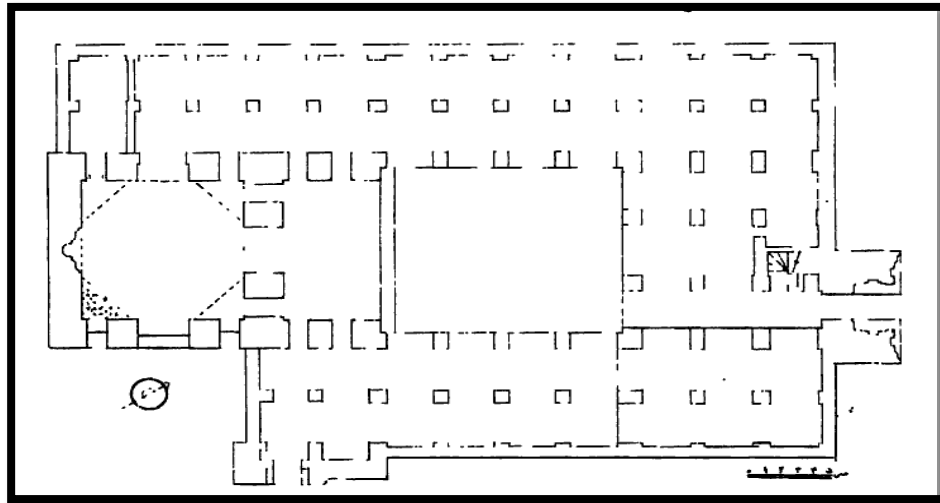


Figure 7: Ashtarjan Mosque plan (Source: Islamic architecture of Ilkhani era)

3.5 Natanz Mosque

Natanz Mosque, with octagonal dome of the yard, backyard narthex overlooking the courtyard and main prayer four sides of the courtyard and atrium that joins together, form and materials used in the brick and lime plaster coating. Although detailed exploration in this have not done, but there is evidence that there is a mosque in the older building. The building is quite small, crowded, with small proportions of proportion - perhaps due to the small building - but stingy in terms of decorations, representing the characteristics of that era. In this building there are three entrances, one southern entrance - which has a relatively high arch or lintel and the two side, two hangars for the view - and two other entries in the north. Northern entrances are flat on floor of the southern entrance by a wide gallery 16.82 meters in length and twelve rung of the long courtyard that way; therefore, the height of the twelve steps is indicative of the level difference between the bottom floor and the floor in front of the entrance to the alley south. So we conclude that the eight corners of the yard, located below ground level. Narthexes of mosque has a length and width are not equal and the difference depends on the position they are in the plan.

South Narthex width with of 6.5 m and a length of 4.14 m span has a high ceiling with Roman arch before and after the volume is approximately 10.75 meters. The south wall of the narthex altar is visible on both sides of the two entrances to the large yard is just the right entrance to the nave joins directly. Quarter on top of entrances and the altar, plaster is composed of designs and lines worked. North Portico of the width of 5.88 and 10.75 meters' height, so south narthex is 62 cm wider than the North Portico. The two sides of the narthex, two roofed atrium located on two floors. The upper gallerys with brick lattice fences are connected to each other by a passageway. North wall of Narthex has two bulkheads on two floors with Mogharnas plaster decorations and two small ports on either side of them. All the arch of the narthex, not original, but part of it, after the devastation has been renewed. Eastern Narthex of the building is 28.5 width and length of it is 11.12 meters. Although the length of three other Eastern Narthex Narthex is larger, but no hanging strips and lines. Side narthex, a port that is built in two floors. On the northern port, a fireplace with beautiful stucco reliefs to be seen.

The exterior columns of the two sides of the narthex has two-story horseshoe like. Western Narthex spans the width of 5.28 meters, such as Eastern Narthex and the length of 4.78 meters the other is lower narthexes. Narthex key reason for this is because if the size of other narthex was centered along the floor of the octagonal building (south nave dome) was the outer wall of at least about two meters to the west there was more. Narthex wall with plaster and no inscriptions and decorations. Two horseshoe exterior side Narthex has two floors. The parties also to the cornea of the Narthex, is built on two floors of the atrium. In the south narthex, chamber eight corners with brick dome that era is Deilami. The yard has a stucco altar tiles and inscriptions that now the pulpit six places with stones and other building materials based on a coating of plaster surrounds it, in the yard, there's no decoration. The yard is not at the center of the courtyard and Narthex North and South and the distance between opposite sides of 8 meters and 46 centimeters. As always door to the mosque opens around the end of the Narthex Home is located in the central part of the wall at the end of the south narthex filled out and to justify an altar secondary embedded in it, and the two sides of the two open ports Have. Nave eight corners has been at the center of one of the two ports. House completely destroyed and nothing remained except the entrance. The head of the monastery, which is one of the most beautiful views in Iran - made of bricks and turquoise and blue decorated tiles on some parts and epigraphic line basil. More unique features it is probably the work of craftsmen who built the great buildings in Tabriz, Soltaniyeh had graduated. This may be due to differences in complexity and decoration monasteries and well-lit mosque because the mosque when the artists were working in northern Iran. Cours because of the strength and variety of decorative patterns, as well as bumps and clear turquoise blue tiles and beautiful example is illustrative of that era. Entrance arches, tall and graceful and ornate back side of a large pill. The main volume facade instead of roles conventional plant flowers and arabesques, woven baskets role that is reminiscent of the tomb of Amir Ismail Samani in Bukhara. Other decoration includes a plan Rocard as enameled bricks, circles overlap and other geometric shapes with friezes and frames Kufic or tape margin such as a manuscript, earrings, indentations and baguette sub decoration luxurious, but set the induces a sense of harmony.



Figure 8: entrance of Natanz Mosque (Source: Iran tourism site)

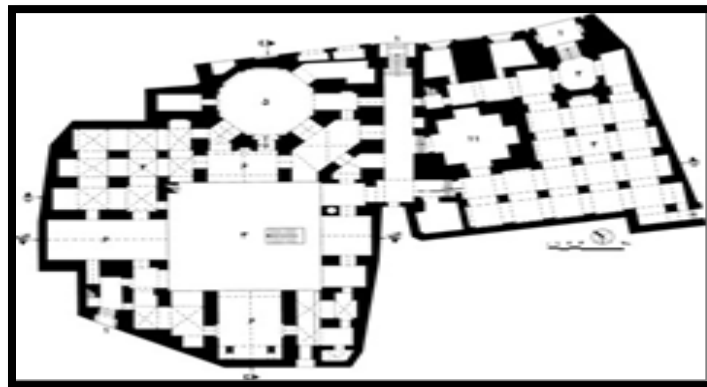


Figure 9: Plan for Natanz Mosque (Source: Islamic architecture books of Ilkhani era)

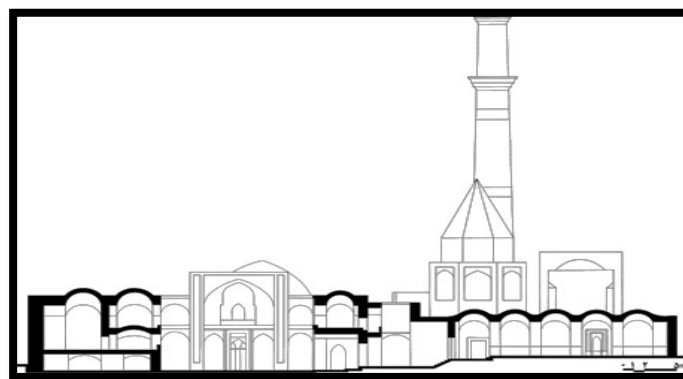


Figure 10: Cross section of Natanz Mosque (Source: Islamic architecture books of Ilkhani era)

3.6 Varamin mosque

Mosque with a map of the four narthexes built and includes entrance on the north side, the nave in the south, arcades East and West, between hall and dome, and it is important that an example of typical building and "ideal" that all four Narthex its construction has been built into a single unit for a period of balance and harmony with the structure has been consistent. All the dimensions 24×24 cm built with brick and tile, stucco and brickwork to master all been used in the decoration of the building. Entrance to the building has four narthexes on the north side of it and through Narthex east and west to the south side of the chapel is located is the east side of the mosque as a ferrying sub plays for pedestrians are using. The entrance on the north side is gorgeously decorated and of course the entrance decorative coating is generally collapsed. The entrance - the entrance of the Mosque of Natanz, Oshtorjan and Mozaffari Mosques of Kerman comparable to the mouth of 5.80, depth of 3.6 and height of 12 meters and the arch, decoration Mogharnas is decorated. Here tile decorations include a mix of bright and dark blue enameled pieces and ceramics without glaze that is used with geometric designs. The side walls of Narthex below Half Dome remains strong Pakar decorative tile mosaic with arabesques and knots Chinese style blue turquoise and azure implemented. Mogharnas entrance arch entrance also made of the same materials and the arrows that come out of a semicircle brick arch, is maintained. Door way designed

in such a way that the dignity and elegance dominates all the attention and people naturally and easily to the height of the altar of the chapel and transmits the dome. After three domed vestibule at the entrance of the square to the length and width of 6 meters, through which it can be moved to the north side of the courtyard of the East and West sequences. Large Narthex on the south side of the courtyard and on the sides of the narthex roof and in the eastern and northern sides in the middle of a small narthex and vaulted narthex located on the sides of four. Mosque with various arches and four-part songs have been covered arcades. Narthex spray arcades with tile decoration and half dome is decorated with beautiful Mogharnas. The two sides of Narthex Side Narthex opens to the vaulted doorway. Quarter the stucco arches and is decorated with vegetable plot. In the middle of the south side of the doorway with a pointed arch Narthex opens to a dome home. Arch round arch decorated with stucco. Eastern part of the mosque narthex and the Narthex contains 10 small arch in the middle of a large arch that forms on a roofed gallery.

The large arch at the eastern exit of the mosque without decorations. It seems that the western side of copy of Eastern side that has been lost.



Figure 11: entrance of Varamin mosque (Source: Fars News Agency)

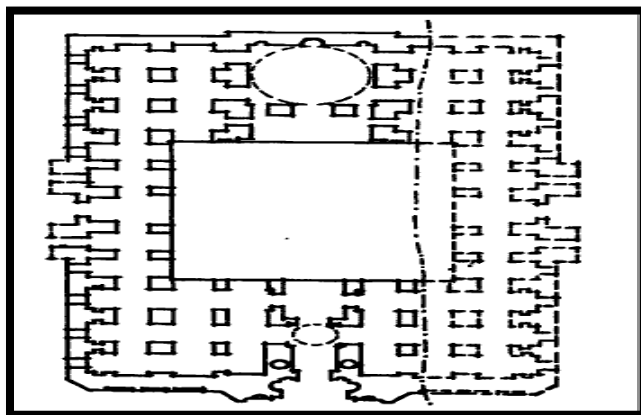


Figure 12: Plan of Varamin Mosque (Source: IRAN E-Islamic Architecture of Ilkhans)

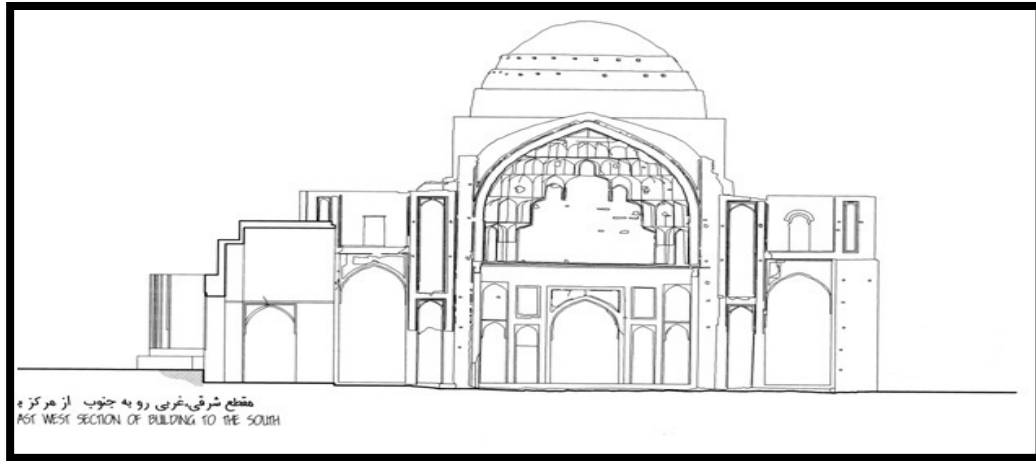


Figure 13: Cross of Varamin Mosque (Source: E-Islamic Architecture of Iran in Ilkhans)

3.7 Ali Ghahrood Kashan mosque

Kashan cold area which is located in Ghamsar from the country. The village is very important in terms of monuments. The city's most important monuments of the period Ilkhani is Ali Mosque and Kaleh mosque in people's view that Ghahrood of the early Islamic period, the ancient mosque construction that has two altar, wooden doors with inscriptions. The mosque has been plastered main altar does not seem that the Qajar era before the altar of this mosque is quite simple and short. On either side of this small mosque with a brick arch eyes, short upper holders to sit the women and children. Double doors historic mosque of the Safavid period and the date 1011 AH appears in the inscriptions; but one of the most magnificent monuments Ilkhani period Ali Ghahrood Kashan Mosque is no doubt. The mosque sanctuary and forecourt tiles and doors is very exquisite and unique, of course Ilkhani. The altar and the forecourt of the mosque tile six Ilkhani is seen since the golden shades. The mosque has two entrances and two separate men and women's prayer hall and a single minaret is made up. Exterior brick building recently refurbished and has new decorations. According to historical documents, the mosque has a large entrance and inlaid with inscriptions and tablets that on the lines of Kofi, third and abrogated verses from the Koran carved the inscription on the frame of the names and titles of founder and builder of the mosque in 700 AD. AH completed, is written. The mosque has two minarets with his short height and is now part of the old and the new men's brand new and it is related to Ilkhani era. It consists of a hall or the yard space around the four sides of a passageway and troughs in the bottom of the chamber like. Between the old and the new mosque area which is surrounded by glass and metal fences covered walls and doorways around the screen with colored tiles on the sidelines of the six-pointed star decorated Quran is written. The mosque is covered with the same type of tile that tiles and golden shades is related to the family of Abi Taher Kashani mosque dating back about 800 years ago, coinciding with the introduction of the Mughal era.

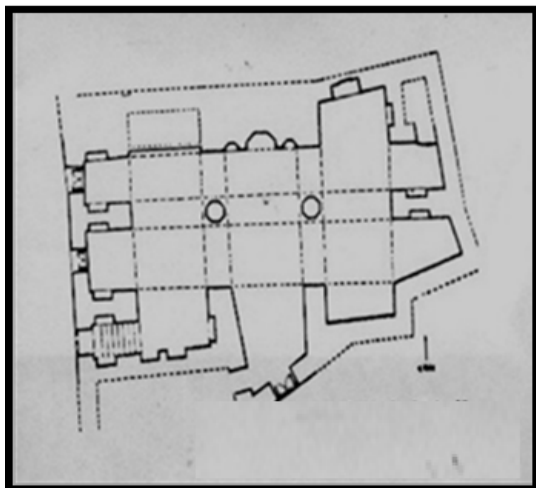


Figure 14: Plan for Mosque Ali Ghahrood (Source: Cultural Heritage)

Figure 15: Door way and entrance to the mosque of Ali Ghahrood (Source: Cultural Heritage)

Table 1: comparison the entrance elements in mosques

Kashan Ghahrood Mosque	Ali Varamin mosque	Natanz Mosque	Ashtarjan Mosque	Bastam Mosque	Features of entrance
Space for the building frontage is not considered	forecourt space is broad but the has no design	The space in front of the entrance to the forecourt with trees in the surrounding area have separated	It is not designed for forecourt only separated from the surrounding streets with little space	Little space is devoted to the forecourt and there is not a specific design	forecourt
Two arcades with brick lining	Blue tile decorated arcades with Mogharnas	Two bulkhead on two floors with decorative plaster Mogharnas	The arch with pointed arches on slender columns built-polygon or circle landed and placed in rectangular frames	The arch was designed plastered with decorations	arch
Brick port without decorations	No clear glaze and blue glaze pottery pieces	Small doorway brick	Brick With decorative tile	Doorway with material brick	doorway

Domed vestibule Square	Domed vestibule square to the length and width of 6 m.	Domed vestibule Square	Domed vestibule Square	does not have	vestibule
With little deviation from the mainstream discussions and confidentiality are respected	Halls designed in such a way that all four sides of the building are available	North entrance at ground level, but also at the southern entrance to the hallway and stairs into the courtyard we respected the confidentiality of the south narthex	Confidentiality discussed in the gallery of the building design and compliance with shaved or without glaze made with bricks	Narthex or sharing space with glazed pottery designs	narthex
The door is very exquisite in the period of Ilkhani and lack of narthex	Narthex spans 5.80 to 6.3 the depth and height of 12 meters is decorated with turquoise tiles	South cloister opening width of 6.5m and a length of 4.14 and 10.75 North Portico height and width 88/5 According to the width of 5.28 and 10.75 meters height Eastern narthex 11.12meters along the western narthex like Eastern Ivan 5.28 meters, but its length is 4.78 meters In some parts made of brick and decorated with tiles turquoise and lapis lazuli	The decorative elements in the brickwork, tiling and using geometric motifs and text and little blue and turquoise tiles plant formed along Ashtarjan Mosque, the first example of dated tile "saffron" is found 12 meters high and two minaret	With ornate plaster Mogharnas 10 meters high and is made up of two different parts	cloister

does not have	does not have	does not have	does not have	does not have	Sunshade
does not have	have it	have it	have it	have it	verandah

Conclusion

Of course architecture entrance and the entrance in Ilkhani era contributed to the development and evolution of architecture in Iran. Review this art in the course of Ilkhani and especially in the central plateau of Iran is the subject to many studies. In this paper, which focuses on a historical area with the use of multiple images, explain and describe the changes of the entrance architecture of mosque including developments of height index entries, elegance in the decoration of the facade and narthex, use of motifs and arabesques prolific use of stucco and tiled with colorful, bricks, paving and techniques of honeycomb. The Ilkhani Art obvious features that distinguish this period with other periods and its manifestation is beautifully showcased in this mosque.

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