

Manifestation of Islamic Decorative Arts in the Architecture of Gonbad-e-Kabood and Gonbad-e-Ghaffariyeh

Saed Sattarnejad* Samad Parvin**

Abstract: *The construction of tombs in the era of Islamic architecture is usually considered as being a manifestation of beliefs and rituals related to the honoring of the dead, along with other religious buildings, including mosques. The various structural methods of the tombs have been influenced by varied cultural and material factors. However, contrasting opinions and votes have been allocated to the issue of tombs laws in Islamic jurisprudence. At any rate, a foregone conclusion is that the presence of a large number of these buildings in many Islamic countries emphasises their special position in the Islamic society. Different types of Islamic decorative arts can be studied in accordance with the importance of the most beautiful historical domes of Iran, namely Kabood and Ghaffariyeh domes. This research is based on the study of some applied elements, such as tiling (Kashi Kari) and brickwork, as well as some of the architectural elements in the domes of Maragheh, like polo, which have not been observed in other Iranian buildings.*

Keywords: *Gonbad-e-Ghaffariyeh, Gonbad-e-Kabood, Mosaic tile, Glaze tile, Seljuk, Ilkhani*

Research purposes

1- Introduction of architectural features in the decoration of Gonbad-e-Kabood and Gonbad-e-Ghaffariyeh

Research questions

1- What are the differences and similarities between the decorations of Gonbad-e-Ghaffariyeh and the decorations of the tower of tombs in Maragheh in the past centuries?
2- What are the indicators and attributes of both techniques and decorations used in the period of the Ilkhani in comparison to the past periods?

* Ph.D. student of archaeology of Islamic periods, University of Mohaghegh Ardabili, Faculty of Literature and Human Sciences. saeidsattarnejad@yahoo.com

** Undergraduate M.A. Student of archaeology, University of Mohaghegh Ardabili, Faculty of Literature and Human Sciences. arjaan1370@gmail.com

Introduction

Grave, cemetery, tombs. Plural noun. 1. Burial place. 2. The building on the tomb. Plural: tombs (Moeen dictionary, below the name of the «tomb»). In Turkish, the «sin» term is used as an equivalent to the word «tomb».

The construction of the tombs in the era of Islamic architecture is generally seen as being a manifestation of beliefs and rituals related to the honoring of the dead, along with other religious buildings, including mosques, and almost proceed in parallel to it. The various structural methods of the tombs have been influenced by varied cultural and material factors. However, contrasting opinions and votes have been allocated to the issue of tombs laws in Islamic jurisprudence, but most of all the presence of a large number of these buildings in many Islamic countries indicates their special position in the Islamic society.

One of the most important periods of the creation of these tombs in the seventh and the eighth centuries AH that is worth talking about is the period of Mughal Ilkhan's rule. Considering the centrality of the Ilkhanate in Maragheh during this very period, we particularly draw attention to the formation of a number of tomb towers in the city. The mosques are completely decorated in Maragheh. Thus, in 1185 AD approximately, Hassan Bin Pirooz Maraghe was one of the Iranian industrialist stonecutters who worked in the Asia Minor. In fact, some of the tile workers, architects, and stonecutter artists who fled from Iran when the Mongol invasion took place (or maybe earlier), had been working in Asia Minor. During the Ilkhan period, the magnificence and beauty of these tombs were enhanced by Kufi lines using one-colour tiles, as well as glazed bricks.

Considering that the Seljuk period is approximately in accordance with the Romanesque style and the Ilkhan period with the Gothic style in terms of some chronological guide marks, it may be surprising the resemblance of the evolution of Romanesque to Gothic in Europe to these two periods in Iran. Besides, some of the characteristics that will be mentioned later on will reinforce such an analogy¹.

Ilkhanid Architecture

In terms of aesthetics, Ilkhanid architecture has not created a new style in the history of Iranian architecture, as it can be largely considered as the sequence of Seljuk architecture. Its features emphasise the vertical line, especially through the use of windows and the construction of surfaces with niches, moldings, as well as concentrated masses on a few relatively jumping-off points. However, this technique is not seen as being absolutely essential to a style. These techniques, such as those representing narrow

¹ Donald Wilber, *Islamic Architecture of Iran during the Ilkhanis*, 1964, p.35.

pillars in the angles, emphasise the vertical orientation of a building, particularly from the inside. The dome and its stem have been longer; the old forms have been continued, but, in exchange, a kind of structural profile has been used to impact on the onion shape of the Timurid period. The double-layer dome, which first appeared in Seljuk architecture, became widespread in the architecture of the Ilkhan period too. A series of crossed arches with small vaults attached to them (it is either a building profile succession or possibly a staircase building profile, and their peak has been crossed by a hollow decorative arcade) have shaped a considerable arcade. The emphasis has been placed on the *iwān* (an arcade or a rectangular hall with one end entirely open), which is somewhat high here, and it often has two minarets from both sides. The muqarnas structures have been frequently used along with complicated shapes².

The clay has been used to build walls and baked bricks for encrusting. The arcades and domes have been completely built with baked bricks. The application of stones in building, specific to the Azerbaijan region, have been used in the lower part of the walls. Sometimes, stone decorations have been used, like in the case of some caravansaries influenced by the Syrian architecture. On the other hand, stone have been used for encrusting in one of the later buildings of Ilkhani inside the courtyard of Shiraz Jame' Mosque³.

Gonbad-e-Kabood

This building is located in Maragheh province, 37 ° 23 '24.39 "N, 46 ° 14' 20.86" E, next to the Maragheh cylindrical tower. As to its shape, it is a ten-sided prism like. Its entrance door has different decorations (**Fig. 2**). It is said to be the tomb of the mother of Hollakoo or Goey tower⁴ (**Fig. 1**), yet the assignment of this building to the tomb of the mother of Hollakoo has not been confirmed⁵. According to the Quranic inscriptions in the tomb, André Godard denied its assignment to the mother of Hollakoo, who was a Christian. He says that the tomb is the grave of an unknown person of Muslim elders. On the other hand, Godard believes that the building of this tomb does not belong to the Mogul period, since the construction of such a tomb in the Maragheh, the capital of Holoku, which was the centre of the opposition to Islam, seems quite unlikely, unless it was built in the era of the Seventh Mongol Ilkhan, Ghazan Khan. Then, referring to the architectural style of the Ghazan era, he has added that the building cannot originate from this period. Consequently, its construction dates back before the time of

² Umberto Sharatou, Ernst Grobe, *Ilkhani and Timurid art*, 2005, p.86.

³ *Ibidem*, p.95.

⁴ Abdul Ali Karang, *Antiques of Azerbaijan*, 1995, p.13.

⁵ Nosrat-o-Allah Mashkoti, *List of historical monuments and ancient places of Iran*, 1970, p.10.

Hollakoo. Thus, Godard estimates this date from 582 to 656 AH and constructs his hypothesis by rebuilding the inscriptions.



Fig. 1 General view of Gonbad-e-Kabood

Like other domes from Northwest of Iran, Gonbad-e-Kabood is a two-storey building⁶. The first storey is a stone crypt of two-forty metres. The second storey is a brick room built on a crypt of fourteen-forty metres (**Fig. 2**), whereas the body of this dome is ten-sided and a hemisphere dome has

⁶ Younes Morvarid, *Afrazeh Rood*, 1982, p.296.

been created on this very storey⁷ (Fig. 3). The end of its dome has collapsed, therefore major parts of its plastering, decoration, and writing have been lost. The inscription, which is located inside the building, under the dome and twisted around the tomb with the lines of the manuscript on the wide border, is the part of the first verse of Sura 67 of the Quran⁸.

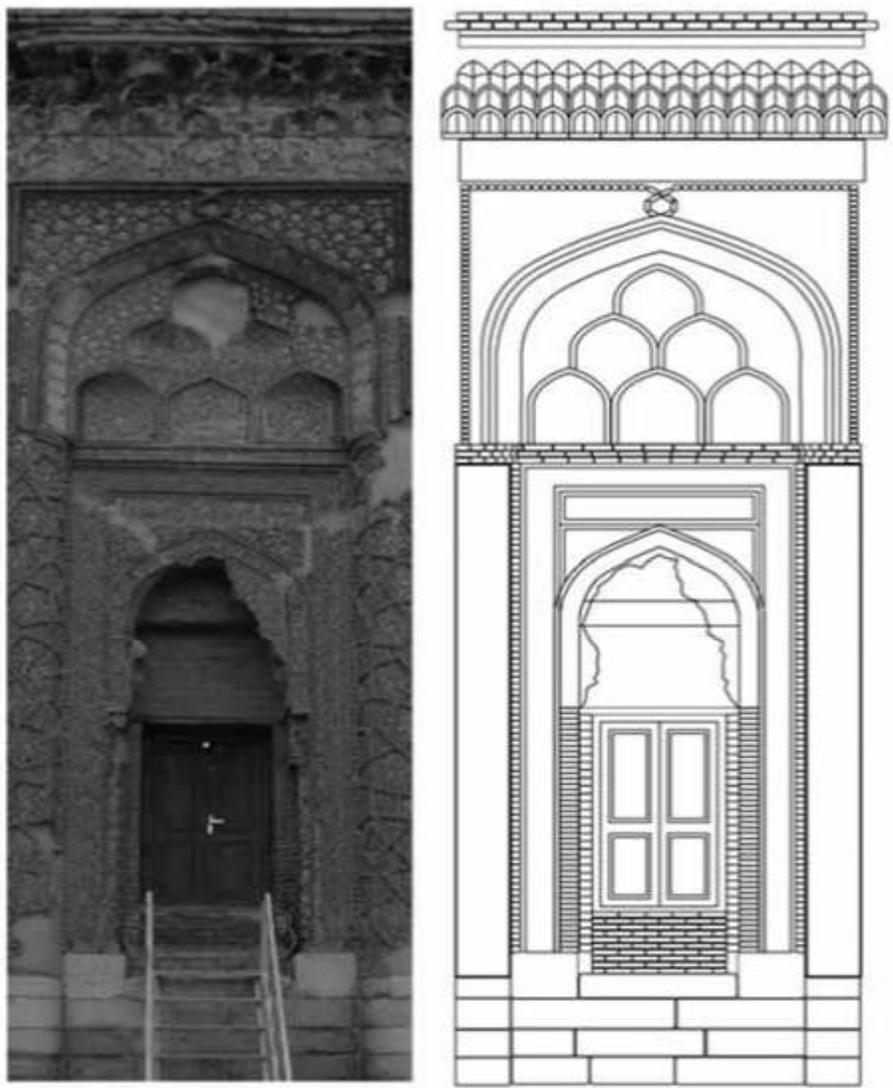


Fig. 2 The entrance door of the Gonbad-e-Kabood

⁷ Majid Sepehrvand, *Maragheh in the course of Iranian history*, 2002, p.73.

⁸ Younes Morvarid, *op. cit.*, 1982, p.298.

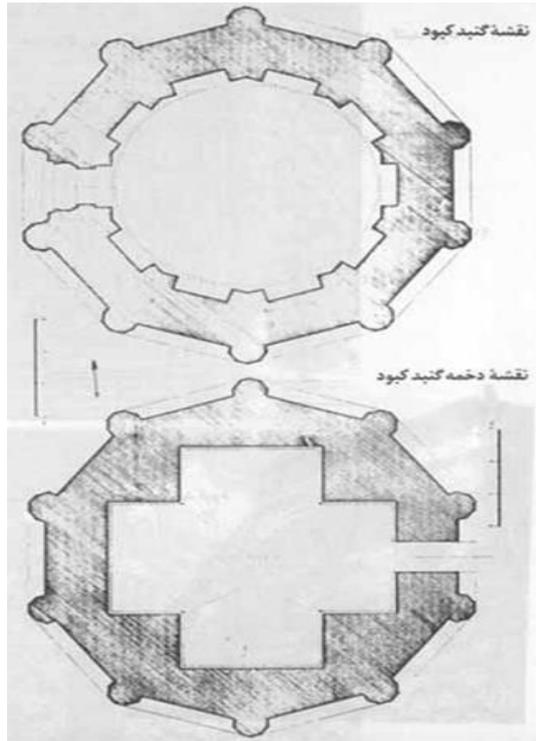


Fig. 3 The Plan of the Gonbad-e-Kabood

What is expected from the molded inscription in the crypt is that the dome has been made as a tomb tower (**Fig. 4**). This building has two stories including the main space and the crypt⁹.



Fig. 4 View of the crypt

⁹ Yousef Beyg Bapour, *Tombs, epitaphs and Documents of Maraghe*, 2009, p.46.

Wilson writes that the ornamentation of this building is pure evidence of the ability and skill of Iranian workers. The exterior body of the dome has been decorated under the form of trains, geometric shapes, and the three simple rows of Muqarnas. Its interior walls has had painting decorations which disappeared over time and only a small part of them remained¹⁰.

The tomb is ten-sided tower. Its exterior view have been beautifully decorated with the composite of turquoise-coloured unfinished, glazed brick and pottery with geometric designs. Experts consider this building as being similar to the Mausoleum of Momine Khatun, located in Nakhchivan City. The mausoleum of Momine Khatun (dating back to 582 AH) is an ornamented and attractive building, which, some years after its construction, has been a model for the construction of Gonbad-e-Kabood. The Gonbad-e-Kabood has also delicate and elegant decorations of unfinished, glazed pottery and serves as a pattern to the decorations of this period. The decoration of the dome is excessive though. Still, the importance of decorating is preferable to the style of the building. Finally, it can be noticed that the tower is, in fact, an industrial work. All in all, this memorial is a striking proof of the skill and proficiency of Iranian workers¹¹.

Decoration of Gonbad-e-Kabood

The decoration of the building is twofold: interior decoration and exterior decoration, crypt room and main room. There are also four groups that can be classified as follows:

- 1- Brickwork
- 2- Inscription (Inscriptions and decorative lines of carved bricks)
- 3- Tiling (Turquoise glazed tiles)
- 4- Muqarnas *kari*

Brickwork

Brick (or *Agur*) is a Babylonian word and also the name of the written clay on which orders, charters, laws were written. The Sumerians and Babylonians have made a dough mud from the rivers in order to obtain the clay after the flood's downturn¹². Bricks are the most important elements in Middle East architecture due to their strength, sustainability and high stability. Until the invention of the brick, stucco has been the most important architectural module (unit), but it was replaced after discovering the brick and its properties. Step by step, the use of bricks as decorative elements has further expanded. In addition to the decoration of buildings with the common brick module (the same rectangular and common brick form), architects and

¹⁰ Ismail Dibaj, *Ancient monuments or antiquities and historic buildings of Azerbaijan*, 1968, p.90.

¹¹ Gholamali Hatam, *op. cit.*, p.226.

¹² Ahmad Hami, *Building materials science*, 1998, p.142.

artists have made various bricks under the form of glazed bricks (bas-relief or embellished motifs), molded bricks (in geometric and non-geometric shapes), extruded bricks, etc. By expanding these methods, the possibility of creating motifs in various geometric and non-geometric shapes has been consequently provided in various architectures. As a result, various decorative forms have been implemented¹³.

The bricks have been the most important material at architects' disposal. In order to remove the bricks from dry and dusty forms, the architect used to engrave, then arrange them under the form of a diamond, put some of them lower, etc. This type of material has been used on a large scale for the purpose of building and decorating, which strongly stands in contrast with the use of the stone in the Islamic world; perhaps this is due to the visual aspect of stone, which cannot have the specific elegance of bricks (Fig. 5).

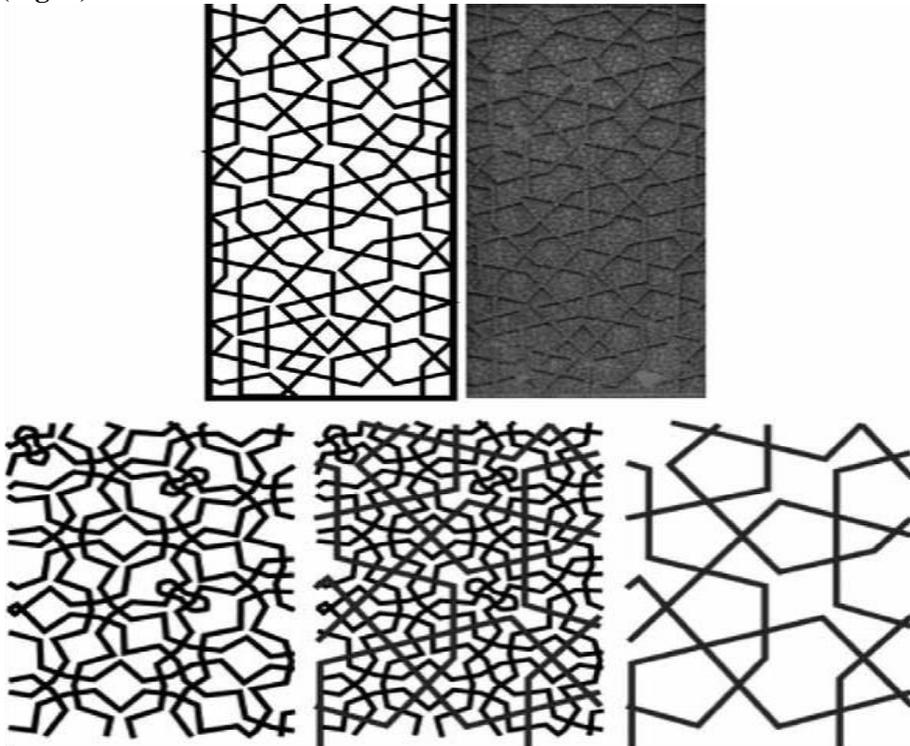


Fig. 5 Brickwork motifs in Gonbad-e-Kabood

After the Mongol invasion of Iran, the use of bricks was reduced. The main reason was the migration of many artists from Iran. After a period of interruption and stagnation in Iranian architecture, when the Ilkhans wanted or needed to rebuild their ancestors' heritage, they called architects

¹³ Rasoul Mousavi Haji, Maziar Nikbar, *Applied Arts in islamic period*, 2015, p.32

(previously fled to the southern regions of Iran because of the insecurity created by the Mongol invasion) from the southern lands to their own land¹⁴. One of the most important aspect in Gonbad-e-Kabood is the use of red bricks. In the Seljuk era, brick decoration reached perfection, and the brick itself was used as a building material and for the purpose of decorating the buildings. Shapes such as square, triangle, diamond, lancet, right, can be seen in the external surface of these constructions¹⁵.

In this case, girih tiles of bricks can also be used with tile, which is also obvious in Gonbad-e- Ghafarieh's structure.

Inscriptions

Inscriptions are the only visual element that directly carry the meaning of the word. These two aspects, namely the image (appearance) and the content or text, are of great importance to the buildings's aspect of the Islamic period in Iran. Inscriptions should be really investigated in their own context. Besides, they are the most praiseworthy elements in the status of the pure design, but, at the same time, Muslims consider them to be intrinsic¹⁶. Inside the building, under the springing of the dome, a part of the first verse of Sura 68 of the Quran has been molded with the Naskh script on a wide margin. A stone has been placed in the inner wall of the western arch of which verses 26 and 27 of the Sura 55 of the Quran (Verse 26. *Whatsoever is on the earth is transient. Verse 27. And only the Essence of your Lord full of Majesty and Honor shall remain forever*) have been carved with beautiful motifs¹⁷.

Tiling (Kashi Kari)

The tile consists of two parts in terms of nature and composition of the material: the body part, which is similar to the brick and pottery, and the glaze part, which is similar to the glass. In fact, the tile is a kind of artificial stone made by man from the very beginning. It is actually an artificial stone having a motif and colour with a glaze or enamel on it. Mosaic (a natural stone with different colours) has been used before the invention of the tile in various civilizations. Nowadays, artificial mosaics are also produced and they are very similar to the tile, but in a more compact and harder form. On the other hand, it should not be ignored that the principal use of the mosaic was generally for the floor of the building and its placement on the floor of the building definitely requires a considerable compressive resistance. While the main application of the tile is on the body and the facade of buildings, not on their floor, in most sources, tiles and mosaics are often classified as a group,

¹⁴ Mohammad Karim Pirnia, *Stylistics of Iranian Architecture*, 2001, p.64.

¹⁵ Shakiba Sharifian, Sadegh Khodaparast, *op. cit.*, p.74.

¹⁶ Arthur Pope, *Persian Architecture*, 2007, p.15.

¹⁷ Salmasi Zadeh, *Red Dome or redness of the dome of Maragheh*, 1974, p.650.

whether tile or mosaic. Thus, what is referred to them as primary tiles in some sources, it consists, in fact, of a piece of distinct coloured stones putting them together to achieve a kind of painting¹⁸.

In the Islamic period, Seljuk period can be considered as the beginning of the art of the tile. The duration includes the use of a kind of work of the square kufic script and a geometric knot of turquoise tile pieces in the field of brick. It can be seen under the corbel without Muqarnas and training of the Isfahan mosque. Later on, the art of tiling (one of the decorative elements used in this building) in the Ilkhani period was based on some definite principles. At the entrance and external blind arcade (**Fig. 6**) one can notice a beautiful composite of tiling and brickwork, authentic artistic creations. In addition to that, the exterior blind arcades were decorated with turquoise tiles and the appellation of the dome is also due to watercolour and presence of turquoise tiles.

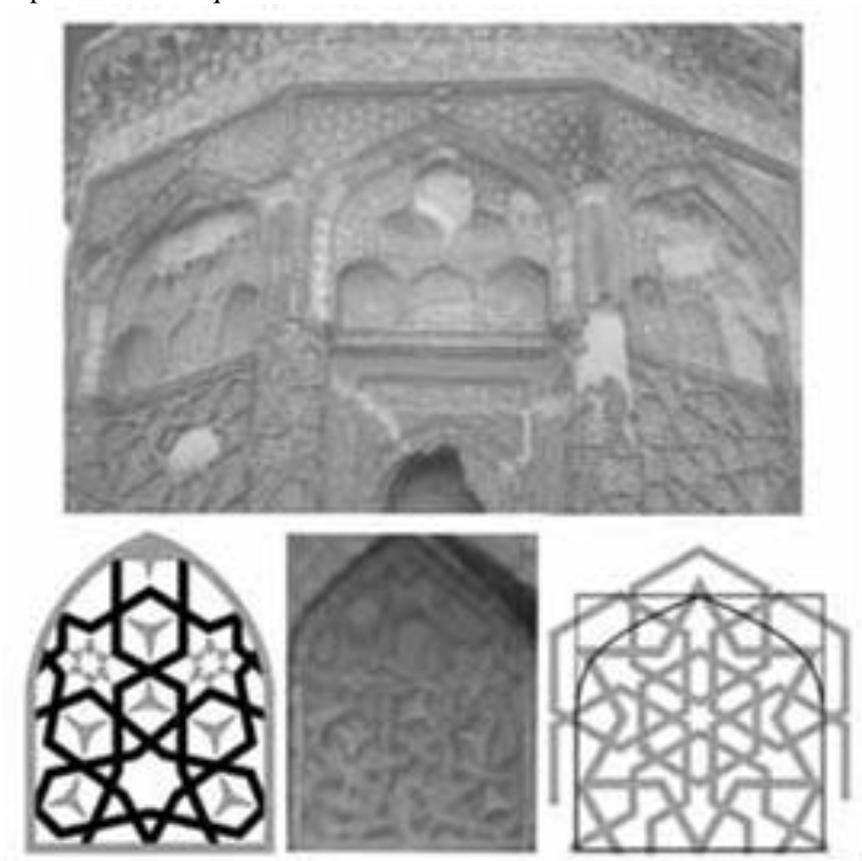


Fig. 6 The composite of tiling and brickwork arts

¹⁸ Rasoul Mousavi Haji, Maziar Nikbar, *op. cit.*, p.120.

Muqarnas

Muqarnas (or stalactite work) is one of the most beautiful decorative elements of architectural arrays. It may be carried out with plaster, brick, tile or even wood. However, the most common types are plaster and tile. In Old Persian, it was also called *Ahoopa*. This term was referred to a six-sided building or hexagonal house¹⁹. Muqarnas plays an important role in capturing the beauty of Iranian buildings, especially mosques and mausoleums. They are used in the form of layers built on together in order to design buildings or to change gradually one geometric form into another geometric form. Muqarnas can also be considered as one of the most effective elements in constructing domes for transferring and dividing exerted forces properly on the underlying walls, which has lost its initial application and has been used more for decorating. The Muqarnas are usually used in dropped surfaces of the corners, under the ceiling. Nevertheless, the location of this decorative element is above the walls, ceilings or entrance corners. Therefore, some consider the origin of Muqarnas as being a reason in decorating the squinches under the ceiling²⁰. Some architects have also used Muqarnas in front of the buildings. They have constructed the building in such a way that it does not cause the building to be heavy and does not put pressure on its foundation.

Muqarnas' decorations are usually used in front of the building. The Muqarnas used in this mausoleum can be divided into two categories: the first category consists of a number of arcades with broken arches or vaulting, each of which is located on the top of a charter side and has three rows of Muqarnas. The second category, which is located right at the base of the dome, consists of a few small arcades and a number of circular surfaces above them, seen like hanging Muqarnas²¹.

Gonbad-e-Ghafariyeh

The historical dome of Ghafariyeh is located in the northwestern part of Maragheh, alongside the Sufi Chai River, on the coordinates of 37 ° 23 '40.83 "N, 46 ° 13' 52.37" E. This building is one of the most beautiful buildings of the eighth century AD built in the days of Sultan Abu Sa'id Bahadur Khan, the king of Ilkhani. The plan of this building is square-shaped and is placed on the rocky platform like the rest of Azerbaijan tombs²². (**Fig. 7**).

¹⁹ *Ibidem*, p.97.

²⁰ Mohammad Kiani, *Iranian Architectural Decoration in the Islamic Period*, 1997, p.45.

²¹ Gholamali Hatam, *op. cit.*, p.226.

²² Ismail Dibaj, *op. cit.*, p.91.



Fig. 7 Gonbad-e-Ghafarih of Maragheh

According to historical texts, during the reign of Sultan Ya'qub ibn Hassan Beq Aq Qoyunlu, when a mystic called Nizamuddin Ahmed bin Hussein Ghaffari returned from the pilgrimage, he built a mansion near the building and dedicated a property and garden for its use. That is why, this mansion and related buildings, as well as the tower, became known as Ghafarih. Of course, in the appellation of Ghafarih, the reference to the nearby school was borrowed²³. Gonbad-e-Ghaffarih is inspired by a Gonbad-e-Sorkh and is in the form of a square brick which is located on a platform, above a cellar. Its four corners had been decorated by pillars with brick decoration. The entrance is located in the north. **(Fig. 8)**.

²³ André Godard, Maxime Siroux, *Iranian Works*, 1993, p.304.

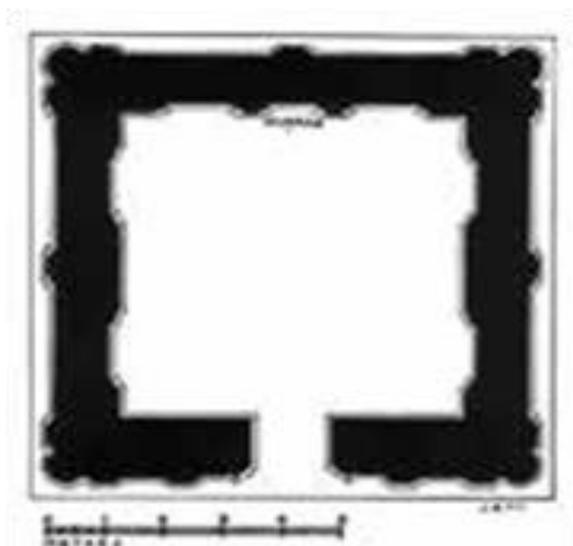


Fig. 8 The plan of Gonbad-e-Ghaffariyeh

At the top of the vaults of each arcade, except the inscription, there is a margin having three circular shapes, containing two symmetrical patterns of polo. This building was the mausoleum of Amir Shams al-Din Qara-sen-Qur, the regent of Egypt, who died in Maragheh²⁴. The main view is located in the north, whereas the cellar entrance of the tomb is located in the east. The portal (doorway) has a central arcade or a pre-arc of Muqarnas and the inscriptions around it are Noqul and Sper. Each side of the east, west, and south has two rectangular or blind window frames. This building has a two-sided dome, completely collapsed. The interior part has been plastered like other towers in the area. The signs of colours and designs are seen above the altar²⁵. We should mention that Gonbad-e-Ghaffariyeh is different from other tower of Maragheh tombs and other tombs from Iran in the past centuries. The reason for this difference lies in the use of two techniques of mosaic tile and glazed tile, which originate from the period of the Ilkhani. In terms of the architectural form, there are also differences in comparison to other tomb towers in Iran. As the tower of the tombs in Iran is mostly tower-shaped, there is a sign called *polo*²⁶ (Fig. 9).

²⁴ Arthur Pope, *op. cit.*, p.1300.

²⁵ *Ibidem*.

²⁶ Hamid Farahmand Brugeni, Parvin Soleimani, *The typology of the decorations of the Gonbad-e-Ghaffariyeh of Maragheh based on the comparative model*, 2012, p.139.



Fig. 9 The pattern of polo in Gonbad-e-Ghaffarieh

According to the techniques of implementation, the decorations of the Gonbad-e-Ghaffarieh can be divided into three general categories, as follows: the first group, giriĥ tiles (or giriĥ chīnī) with the incorporation of bricks and tiles or knitting together, the second one, consisting of mosaic tiles, and, finally, the third group, mainly consisting of glazed tiles (**Fig. 10** and **11**).

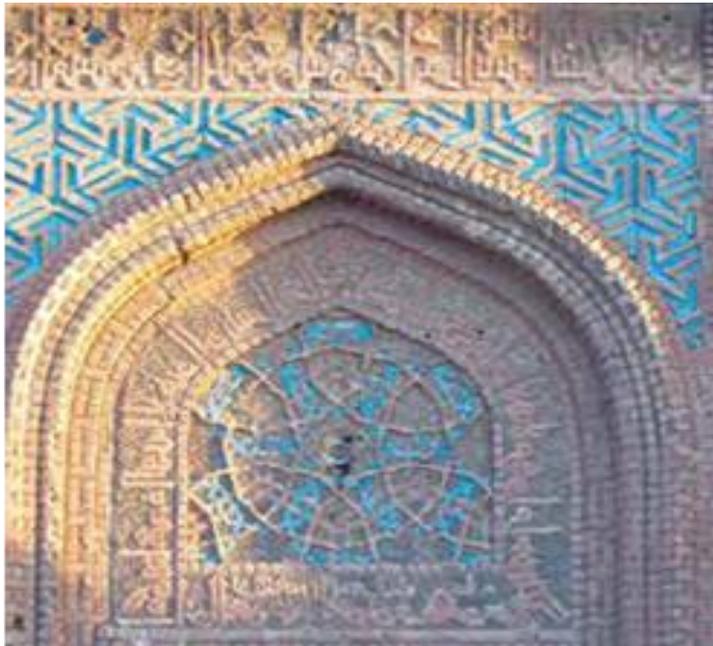


Fig. 10 Giriĥ tiles with the incorporation of brick and tile in Gonbad-e-Ghaffarieh

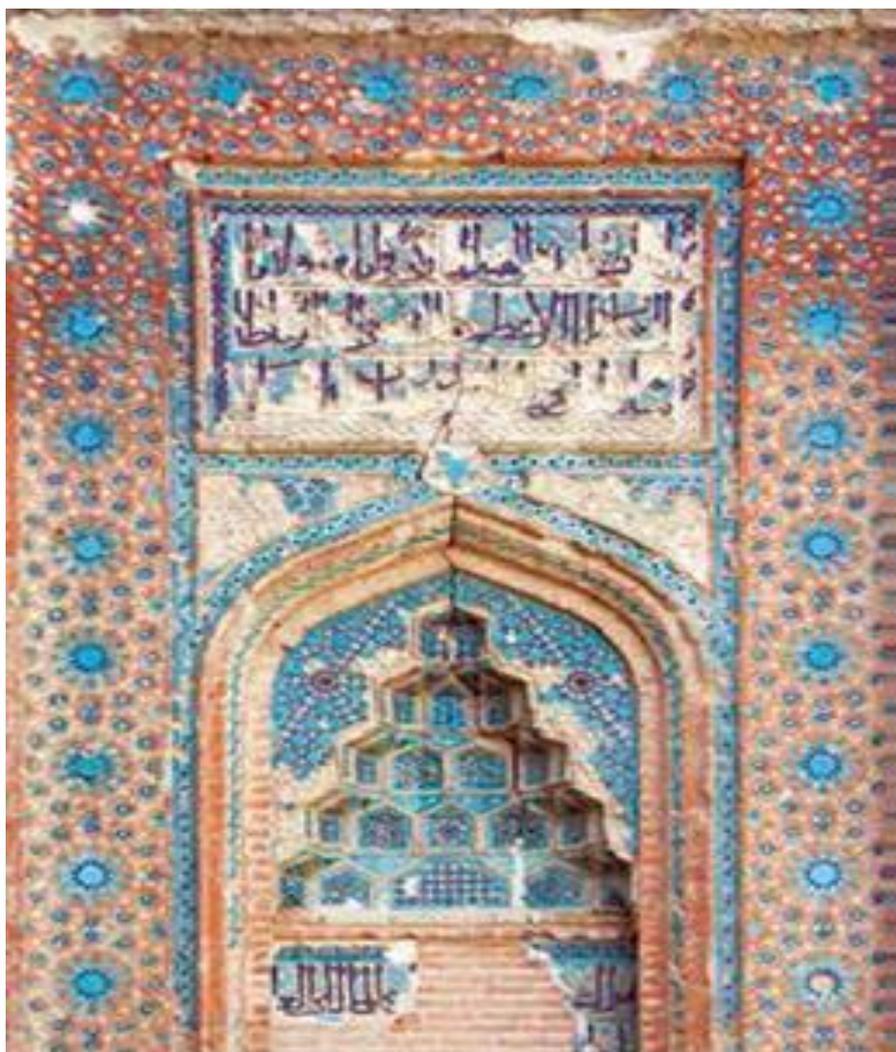


Fig. 11 Brick working of glazed tiles in Gonbad-e-Ghaffariyeh

Besides mosaic tiles and girih tiles with bricks and tile techniques, another technique has also been used in Gonbad-e-Ghaffarie (whose origin is the Ilkhanite era), although less applied in comparison to other techniques. When it comes to the implementation of the glaze technique after the installation of tiles, in the middle of the rocks, an enamel is placed between patterns, in order to highlight the colour of the pottery itself and show its appearance among tiles²⁷.

²⁷ Mohammad Karim Pirnia, *Introduction to the Islamic Architecture of Iran*, 2005, p.386.

Conclusion

Over the centuries, Iranian architecture has undergone various changes in terms of structure and beauty, and it has gradually and continuously evolved from its traditional and initial form. Despite the losses caused by invasions and cultural impacts, it achieved great personal features apart from other Muslim countries. The main advantages of the Iranian architecture are: considerable attention to the shape and scale, structural innovations, especially in the construction of the dome, and beautiful decorations that are truly unique.

These techniques have been used in Kabood and Gonbad-e-Ghaffarieh: girih tiles with brick, mosaic and glaze tiling, molding. The «girih tile» technique, along with the brick and tile, have been used in structural elements such as Nogul, central arcades, and blind windows. The mosaic technique initially started with the composition of brick and tile in the fifth century AH. This technique was used during the Ilkhani period with the composition of tile having two colours of turquoise and cerulean when decorating the buildings, until the Timurid and Safavid periods, when it flourished in colour variations. It can be assumed that the decorations implemented by combining brick and tile (as geometric knots) have gradually been opened their way to the mosaic tile technique. Thus, the brick has been replaced by the tile.

Finally, we must underline that the initial application of the glazed tile can be identified in the Ilkhan period. This technique has not been implemented in any other tomb before the implementation in the Tomb of Sheikh Abd al-Samad Natanz, Ghaffarieh of Maragheh and the Pir Bakran mausoleum. Maybe it should be mentioned that Ghaffarieh of Maragheh is the first tomb reflecting the glaze technique. In fact, the domes of Maragheh show the complementary series of decorative elements from the Seljuk period to the Ilkhani and later on, Safavid period.

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Bibliography:

Beyg Bapapour, Yousef, *Tombs, epitaphs and Documents of Maragheh*, Qom : Islamic Reserve Consortium Publication, 2009.

Dibaj, Ismail, *Ancient monuments or antiquities and historic buildings of Azerbaijan*, Tehran: The Society of National Monuments Publication, 1968.

Farahmand Brugeni, Hamid and Soleimani, Parvin, *The typology of the decorations of the Gonbad-e-Ghaffarieh of Maragheh based on the comparative model*, Journal of Islamic Art Studies, issue 16, 2012.

Godard, André and Siroux, Maxime, *Iranian Works*, Translated by Abolhassan Sarv Ghadam, volume 3, Tehran: Islamic Research Foundation, 1993.

Hami, Ahmad, *Building materials science*, volume 3, Tehran: Tehran University, 1998.

Hatam, Gholamali, *Islamic Architecture of Iran during the Seljuk period*, Tehran: Jahad Daneshgahi, 2008.

Karang, Abdul Ali, *Antiques of Azerbaijan*, Tehran: Society for National Heritage, 1995.

Kiani, Mohammad, *Iranian Architectural Decoration in the Islamic Period*, V 1, Tehran: Cultural Heritage Organization, 1997.

Mashkoti, Nosrat-o-Allah, *List of historical monuments and ancient places of Iran*, The first publication of the National Organization for the Protection of Iranian Antiquities, Tehran: National Organization for the Protection of Iranian Antiquities, 1970.

Morvarid, Younes, *Afrazeh Rood*, Tehran: Ouhadi, 1982.

Mousavi Haji, Rasoul and Nikbar, Maziar, *Applied Arts in islamic period*, Tehran: Samt, 2015.

Pirnia, Mohammad Karim, *Stylistics of Iranian Architecture*, volume 1, Tehran: Soroush Danesh, 2001.

Pirnia, Mohammad Karim, *Introduction to the Islamic Architecture of Iran*, Gholam Hossein Memarian, Tehran: Soroush Danesh Publication, 2005.

Pope, Arthur, *Persian Architecture*, translated by Golam Hossein Sadri Afshar, Tehran: Naqshe Jahan publication, 2007.

Pope, Arthur, *Survey of Persian Art*, Tehran: Scientific Cultural Publication, 2009.

Salmasi Zadeh, Javad, *Red Dome or redness of the dome of Maragheh*, Vahid Literature and Languages Magazine, 1974.

Sepehrvand, Majid, *Maragheh in the course of Iranian history*, Tabriz: Ahrar, 2002.

Sharatou, Umberto and Grobe, Ernst, *Ilkhani and Timurid art*, translation by Dr. Yaghoob Ajand, Tehran: Mola Publications, 2005.

Sharifian, Shakiba and Khodaparast, Sadegh, *A Look at the Gonbad-e Kabood*, The Magazine of Moon and Art Book, September, issue 180, 2014.

Wilber, Donald, *Islamic Architecture of Iran during the Ilkhanis*, Translated by Abdollah Faryar, Tehran: Publishing Firm and Publishing Book, 1964.