

'Symbols' as Expression Tools of Islam and Their Usage Methods in Palace Architecture

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Abstract

Islamic architecture consists of religion, politics, philosophy, and aesthetics. The religious expression of symbols in Islamic architecture is also extremely important in architecture. These religious symbols, which are used in palace buildings and generally in administrative places in the Islamic world, are shaped depending on the function of the buildings. In this period, the palace complexes were considered to be the most important structures representing state politics and economy. In this study, the purposes and methods of use of religious symbols used in many palace complexes of Islamic architecture were investigated. While investigating the main source and usage rules of these symbols in palace architecture, the Quran, which is the foundation of Islam, was examined and the dependence of these symbols on numbers was tried to be revealed with examples.

Keywords: Islamic architecture; religious symbols; geometric figures; arabesque ornaments; palace buildings

Introduction

As a result of the spread of Islam to many parts of the world, starting from the 7th century to Asia, Africa and even Europe, Islamic architecture was shaped by the influence of different cultures and made significant contributions to world architecture. The creation of special forms in Islamic architecture, which are different from the architecture of other religions and unique to them, has been the most important goal facing the craftsmen. The way these religious symbols are

used in the language of architecture constitutes the most mysterious and beautiful parts of Islamic architecture.

Carving, ornamentation, calligraphic kufic scripts and arabesque ornaments are widely used on stone, wood, etc. materials, which belong to Islamic architecture and are used in building decorations. The symbols, which were formed as a result of the synthesis of numbers and geometric figures applied in the design of many medieval buildings, expressed the religion of Islam in architecture.

The new arabesque patterns of that era, which were formed by the merging and interaction of different geometric figures used in Islamic architecture, continue each other as the symbol of infinity. The ornaments, which generally had an 'open' composition, creating a form of endless development, allowed the covering of long and wide surfaces. The development of composition means not only the infinity of space for the craftsmen, but also 'filling the void' with its 'pattern in pattern' feature. Craftsmen created ornaments with simple tools and cheap construction materials (clay, brick, natural stone, etc.), applying geometric forms such as circles, triangles and rectangles and based on their own knowledge of mathematics, geometry and engineering.

According to many scientists, the development of art is not possible without geometry, or in other words, art cannot be performed without knowing geometry. In architecture, geometry was a gateway to higher levels of human consciousness. For this reason, it was frequently used in Islamic architecture. In fact, it would be more correct to look for the basis of Islamic architecture in religious demands and especially in the Qur'an. The reason why Islamic art is fond of geometry can be summarized as, from a mystical point of view, we can rise to Allah's perfection only with geometric clarity or perfection (Çaycı, 2017, p. 57).

Symbols Used in Islamic Architecture

In architecture, the common feature of the peoples who accepted Islam is the use of symbols belonging to religion. This is why, the same symbols, used in buildings belonging to Islamic architecture, have the same meanings even though they contain different expressions in different periods. The meeting point of religion and architecture has always been symbols, and the aim of the craftsmen has been to express religion mysteriously in the language of architecture, depending on the function of the building. Symbols of the religion of Islam have important functions in medieval architecture.

Although the depiction of animate beings was widely used in structures in the newly spread periods of Islam and the interior designs and wall paintings of the buildings in the last periods of the Middle Ages (17-18th centuries), we witness that they were replaced with ornaments in the following years. In some years, it is possible to see that the depiction of animate beings was not used at all.

In fact, depiction of animate beings was thought to be banned by the Qur'an in Muslim countries. Most Islamic scholars reveal that there is no such prohibition in the Qur'an. The expressions clearly stated for 'idols' in the Qur'an are validated within the art forms in the hadiths. Although depiction of animate beings was very common during the period, many Islamic scholars strictly prohibited it. The most well-known of these is Nevevi, who also forbade shadow drawing, according to four hadiths dating based on the 13th century (Louis, 1962, pp. 1–2).

Many of the geometric figures, which form the main part of arabesque decorations in Islamic architecture, gain different meanings by being converted into religious symbols and combined with some numbers. In fact, the religious meaning of many numbers in the religion of Islam is also confirmed in the verses of the Qur'an. The confirmation of this is also seen in the verse of the Qur'an; 'Allah has encompassed whatever is with them and has enumerated all things in number' (Al-Jinn, 72:28).

The Symbolic Meanings of the Numbers Used in Palace Architecture

Since the numbers 3, 4, 5, 6, 7, 8 have special meanings in Islam, craftsmen have tried to transfer them to the language of architecture. From these numbers, it is important to first investigate the symbolic meaning of the number 'Three' in Islam and how it is used in architecture.

The Qur'an tells Muslims about the three stages of the soul. There are three blessed months in Islamic religion: Rajab, Sha'ban and Ramadan. At the same time, the three most important geometric figures in Islamic architecture are circle, triangle and rectangle. These have the meaning of soul, consciousness and body in the religion of Islam.

As it is known, Prophet Muhammad (s.a.v) used to recite Al-Falaq, An Nas and Al-Ikhlâs surahs three times in addition to Al-Fatiha before going to bed (*Istiaze ve Besmele Talimi*, no date). Three is the first of the odd numbers, and therefore the first order is said to be equal to three (Pekçetin, 2018). It is seen that the number

three is used in the verses of the Qur'an and in many other verses like; Al-Baqarah, (2:196, 2:228), Ali 'Imran, (3:41), Hud, (11:65), Ya-Sîn, (36:14), Fatir, (35:1).

It is known that in the architecture of palace complexes in the medieval Islamic world, the planning structure was designed with three courtyards, three balconies or three sections (Abbasova and Abbasov, 2020a). An example of this is the Mshatta Palace (Qasr Al- Mshatta, 743-744), one of the oldest monuments of Islamic architecture, located east of Jerusalem in Jordan and completed by the Umayyad caliphs, II Valid. The palace is rectangular in shape, surrounded by castle walls and divided into three parallel sections. The area in the middle courtyard of the palace, the court of honor, serves as divanhâne (Damgaard, 2013) (Figure 1a).

Another example of such complexes is the Hakani (El-Cevsaku'l Hakani) and Belkuvara Palaces, an early Abbasid palace complex built in Samara between 8-9th centuries (Brend, 2008, pp. 32–38). The plans of the Hakani and Belkuvara Palace complexes, taken from the Umayyad palaces, were also arranged in three parts and were handled in a centrally closed manner (Hillenbrand, 1999, pp. 43–44). The front view of the Hakani Palace consists of three parallel iwans with a height of 11,10 m, with three sharp arched facades ('Dumetulcendel–Elbise', 1994, p. 51). Belkuvara Palace complex, built between 854 and 859, has a rectangular plan with a side length of 1,250 m and is surrounded by a wall with towers. The rectangular plan of the complex, on the other hand, is divided into three parts, parallel to each other from the inside ('Dumetulcendel–Elbise', 1994, p. 53).

Another example is Madinat al-Zahra, near Cordoba. Madinat al-Zahra, which was built between 936-1010 and was the palace city of Caliph III Abdurrahman, is divided into three balconies. At the highest point of the land was the palace of the caliph, and on the middle terrace were administrative buildings, divanhânes, rooms for senior officials and their families, and workers' rooms on the lower terrace. This palace was built on a rectangular area of 750x1,500 m, the government and administrative center was also established here ('Manisa Mevlevihanesi–Meks', 2003, pp. 320–322).

Generally, as a result of the belief that the number three in Islam has many religious meanings and miracles, the courtyard structure of the palace complexes is divided into three. The Shirvanshahs Palace (15th century) in Azerbaijan, the largest state in the Caucasus, the Alhambra Palace (13-15th century) in Spain and the Topkapı Palace (started in 15th century) in Turkey can be shown as examples of such plan structure (Eldem and Akozan, 1982, p. 34).

The Palace of the Shirvanshahs complex was built in a scenic location at the top of the 'İçerişehir' castle in Baku during the reigns of Shirvan rulers Shirvanshah Ibrahim I (1382-1417) and Halillullah I (1417-1465). This complex has also been recorded as an architectural monument of Azerbaijan (Figure 1b). Paying attention to the layout structure of The Palace of the Shirvanshahs complex, it is seen that the city was built inside the castle walls, in a strategically convenient location and divided into three courtyards with an area of approximately one hectare. In the first courtyard of the complex, there is a palace building with a complex configuration. In the second courtyard, there is a 1.5 m high, octagonal central kiosk on the stylobate, which functions as a divanhâne in the middle, and a row of open galleries surrounding it from all sides. In the third courtyard, there are Shirvanshahs Shrine, Palace Masjid, an octagonal shrine named Yahyâ-yı Şirvani, and on the north wall of the tomb is Key-Kubad Masjid, which was built in a combined form (Useinov, Bretanitsky and Salamzade, 1963, pp. 187–210).

The construction of the Topkapı Palace complex, which has survived to the present day in a very good condition, started in 1466 and was the residence of the Ottoman sultans until 1839 (Kuban, 2007, p. 184). During this time, the Topkapı Palace complex also underwent different changes and as a result of these changes, its area expanded. When the first construction period of the palace is examined, it is seen that its area is 700,000 m², smaller than today and had three courtyards (Kuban, 2007). In addition to the asymmetrical plan of the first courtyard, there was an area where the public gathered on special occasions and people who applied to the state (requesters) could gather. In the second courtyard, there are buildings for the servants of the palace and the church used for ammunition. In the third courtyard, there is the palace of the ruler, Sultan's audience hall and the Hazire (the place with the mosque and tombs). The Hazire was built between the second courtyard and the third courtyard (Eldem and Akozan, 1982, p. 34) (Figure 1c).

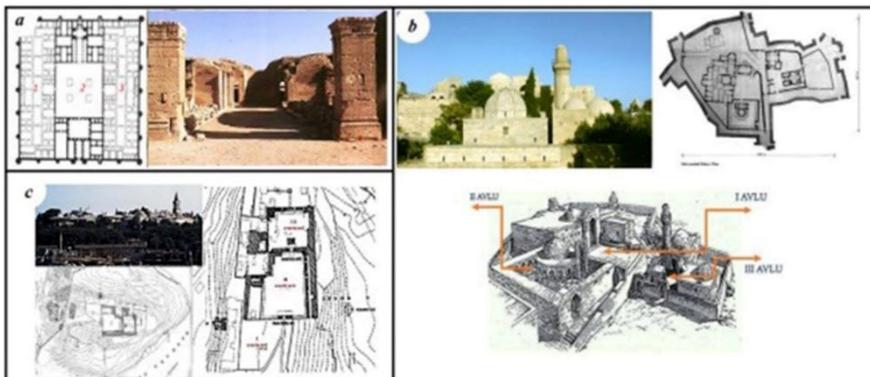


Figure 1. *Examples of three-part palace complexes of the Islamic world*

a- Ruins and plan of Mshatta Palace (Hattstein and Delius, 2009, p. 77); *b- General view, plan and isometry of the Shirvanshahs complex* (Meniashvili, 2013); (*Tarixi Şirvanşahlar Sarayı*, no date); *c- General view of Topkapı Palace, layout plan and plan of the part built during the reign of Fatih Sultan Mehmet in the 14th century* (Eldem and Akozan, 1982, p. 34); (*Topkapı Sarayı*, no date, p. 34)

When the symbolic meaning of the number 'four' in Islam is investigated, it is found that this symbol is known among the people as the symbol of water, air, fire, Earth and of course, the symbol of all four seasons. In Islamic architecture, the symbol has two different meanings.

In the religion of Islam, the first of the meanings of the number four in the verses of the Qur'an can be found in the Umayyad palaces. Next to the throne rooms of the palace complexes of the Islamic world, there are sometimes four groups of five rooms called 'Beyt'. It is possible to see the meaning of this architectural form in the verse of the Qur'an (An-Nisa, 4:3), which allows a Muslim person to marry four women at the same time, but treats each of them the fairly (Hattstein and Delius, 2009, p. 77). As an example of this group of rooms, four symmetrical groups of five rooms located on either side of the throne room of the Mshatta palace complex can be shown (Figure 2a).

Although these groups, called 'Beyt', first appeared in the Umayyad palace architecture, they continued in Islamic architecture with their construction next to the palace throne rooms. However, in some palace complexes these groups are used in a more simplified form, as in the Khirbat al-Minya and Chehel Sotoun Palace (Figure 2b, 2c). As it is known, the Mshatta and Khirbat al-Minya Palaces were built in the 8th century and the Chehel Sotoun Palace in the 17th century. In other words, the 'Beyt' form belonging to the Islamic religion was used in the same way and meaning in Safavid architecture centuries later.

Secondly, the form of the number four in architecture was called the 'Garden of Paradise' and was widely used in palace gardens. In this form, the number four denotes the four symbols of tea in Heaven, such as water, milk, honey, and wine (Muhammad, 47:15). In fact, 'Charbagh' stands on the basis of the garden form in Islamic culture, and when translated from Persian, it means garden.

It is also seen in this four-part garden design model that Islamic cultures follow the 'Charbagh' principles; symmetry and repetition. However, the application of these principles in garden design is an area that has not been adequately researched. Specifically, we conclude that the characteristics of these gardens may be a

representation of the eternal divine as well as the principles of justice and equality. The characteristics of these gardens may be a representation of the eternal divine as well as the principles of justice and equality. The characteristics of 'Charbagh' may be linked to the need to distribute water efficiently, following a scheme such as that expressed in the biological circulation system, or the importance of the symbolism often attached to these gardens (Patuano and Lima, 2021).

The formation of the 'Charbagh' form for the first time in Islamic architecture was created by bringing together the verses of the Qur'an and the descriptions mentioned in the hadiths of Prophet Muhammad (s.a.v). It is very important for Muslims that the art, design and practice of the garden be in accordance with the religious belief. Classic 'Charbagh' consists of a garden that symbolically emphasizes the space in four directions and has a pool or fountain in the center and water flows from here to all four sides (Çetinkaya and Çetinkaya, 2019).

An example of this type of garden architecture can be found in the 9th century Abbasid architecture in the Belkuvara Palace in Samara (Figure 2d). This type of garden form, which later became widespread throughout the Islamic world, was mostly used in palace architecture. Even in the Safavid architecture, which is a completely different Islamic state, the use of this form was found in the Court of the Lions in the Alhambra Palace in the city of Granada (Figure 2e). The garden form of the 'Hasht Behesht' (The Eight Heavens) Palace complex, which belongs to the 17th century in Isfahan, is another important example. Another example is the Sun Palace of Nadir Shah Afshar, built in the Kalat region of Khorasan Razavi province in the 18th century. This palace was named Hurşit Palace (meaning: Sun) in honor of Nadir Shah's wife (*Iran News Daily*, 2021).

Since the contact point of the two water channels in the plan of the 'Charbagh' forms is considered the most focal point of the garden (Çetinkaya and Çetinkaya, 2019, pp. 18–23), this palace building was built at the intersection of the water channels. In all these examples, it is possible to see the importance of the four numbers in Islamic architecture.

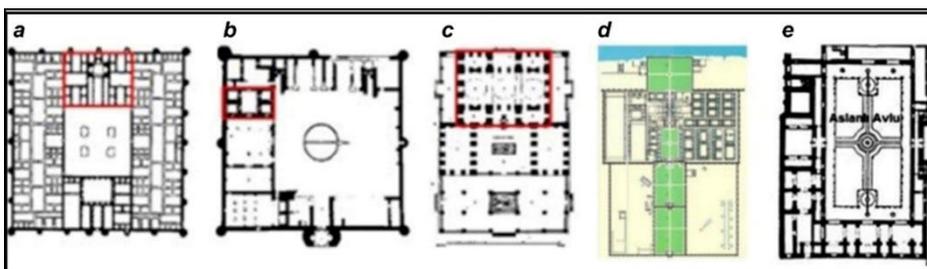


Figure 2. *The use of the number four in Islamic architecture*

a- Plan of Mshatta Palace (Hattstein and Delius, 2009); b- Plan of the Khirbat al-Minya Palace ('Hirbetü'l-Minye', 1998); c- Plan of Chehel Sotoun Palace; d- Plan of Belkuvara Palace (Balkuvara Sarayı, 2019); e- Plan of the Lion courtyard of the Alhambra Palace complex (Hattstein and Delius, 2009).

The number 'five' is also important for Islam. Pattern forms expressing the number five in architecture were used in ornaments. If we look at the meaning of the number five in Islam, we see that it has three different meanings. The first of these is that the word 'Allah' has five letters. The Five Pillars of Islam (Shahada (Declaration of Faith), Salah (Prayer), Zakat (Almsgiving), Sawm (Fasting), Hajj (Pilgrimage)) form the basis of Islam. And the hand figure in Islam (The religious five) also symbolizes the Muhammad Prophet (s.a.v), Ali (r.a), Fatime (r.a), Hasan (r.a) and Hüseyin (r.a) (Bibikova, no date).

The five-pointed star shape found in the decorations of Islamic architecture often means 'Hamsa' and 'Ahl al-Bayt' in shia and bektashi symbolism (Gurbanov, 2013, p. 128). The main reason why the five-pointed star symbol is rarely encountered in the ornaments of medieval architectural structures belonging to the Islamic religion is that this form, which consists of geometric forms, can be repeated forever according to Islamic ornament laws. This form can be observed on the Crown gate of the divanhâne of the Shirvanshahs Palace complex, built in Baku, the capital of Azerbaijan, on the ceiling of the Two Sisters Hall of the Alhambra Palace complex, and in the geometric figures formed by muqarnas (Figure 3a).

In Islamic architecture, 'Hamsa' forms, which were found after the 15th centuries and expressing the number five, were also used for decoration purposes in architecture. The 'Hamsa' symbol was mysteriously used in different forms in decorations used in many palace complexes. An example of this is the use of the main entrance of the Alhambra Palace complex in Granada, on the forehead of the Crown Gate (Figure 3b). This form is depicted here in the form of an open hand, completely like an Islamic symbol. Interestingly, the open hand symbol was incorporated into Christian religious symbolism through the religion of Islam. Thus, while Spain was attached to the Arab Caliphate, the 'Hamsa' symbol was adopted as a protective symbol, the amulet, and the 'Hand of Fatima' in local Christian communities. It is also known that after the period when the Hamsa symbol was used in Islamic architecture, it underwent some changes and was used in a completely symmetrical form. It is also possible to see this symbol expressed in different forms in the decorations of the Alhambra Palace (Figure 3c).

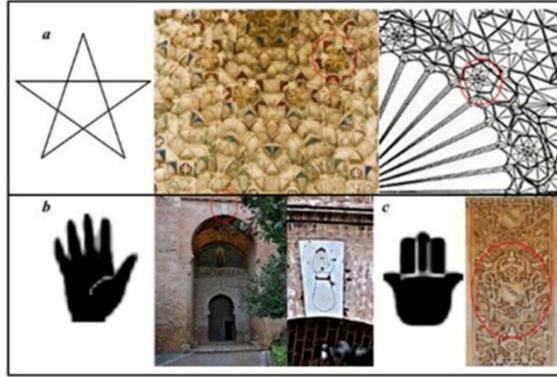


Figure 3. *Forms of the number five used in Islamic architecture*

a- The five-pointed star form, the use of the star form on the ceiling of the Two Sisters Hall of the Alhambra Palace complex and the Crown Gate muqarnasta of the divanhâne of the Shirvanshahs complex; b- The open hand symbol and the use of this form above the entrance Crown Gate of the Alhambra Palace complex (Hattstein and Delius, 2009); c- The Hamsa form and its use in the decoration of the Alhambra Palace complex (Bozdemir, 2018)

When we investigate the history of this ornament, which has a very interesting form, it has been observed that it evokes the symbol of the flag cap in the wars used in the army of Shah Ismail in the 16th century. In order to confirm the similarity of this form, we can show the miniatures of the Safavids depicting the battle scene in 1503 as an example (Gurbanov, 2016) (Figure 4a, 4b, 4c). We also see the Hamsa symbol being expressed in a different form on the wall decorations of the Alhambra Palace. Here, a three-finger-like form is shaped in the upper part of the symbol, while the side fingers represent similarly symmetrically side-facing dragon heads (Figure 4d).

Although the meanings of Islamic symbols used in architecture or in different state symbols remained unchanged, they were also subject to some changes depending on the people or state using the forms. Sometimes the separate use of some parts of the symbols is found in Islamic architecture. For example, the dragon (sometimes snake-like) form used in the above-mentioned Hamsa symbol is also found in the decorations of the The Khan's Palace (Bakhchisaray) complexes in the 16th-18th century (Figure 4e, 4f). However, this form is now differentiated by the use of three-fingered headless and only depictions of the dragon part.

An example of this is the use of two dragon symbols, such as the monarch's omen, in the depiction on the main entrance Crown Gate of The Khan's Palace complex

built in the 16th century in Crimea (Kançal-Ferrari, 2005, p. 125) (Figure 4f). A second example similar to this form is the Shaki Khans Palace in Azerbaijan, which is the most important historical and architectural monument of the Caucasus from the 18th century. This symbol can be observed in the paintings adorning the wall of the room where the khan was conducted in official business in the palace. In this depiction, dragons are depicted spraying flowers instead of fire. This depiction means that the ruler is kind and compassionate to those who are weaker than himself and do not abuse his power (*Sheki Khans' Palace, Azerbaijan*, no date) (Figure 4e). Many ornaments, symbols and even the hidden meanings in the drawings depicted in these palace complexes gave secret messages about the magnificence of power to the guests who came to the rulers.



Figure 4. *Forms of the number five used in Islamic architecture*

a- *Shah Ismail period, the head part of the flag of the Safavid army-hamsa (Muradov, 2017); b- Miniature and fragment depicting the war between Shah Ismail and Akkoyunlu Sultan Murad (1503) (Neciyev, 2017c); c- The part where the miniature and the flag head reflecting the war moment of Shah Ismail's army are depicted (Muradov, 2017); d- Detail of the ornament depicting the hamsa form in the Alhambra Palace complex (Anastasia, 2018); e- Wall depictions of The Palace of Shaki Khans (*Sheki Khans' Palace, Azerbaijan*, no date); f- Dragon symbol depicted on the entrance crown gate of The Khan's Palace (Kançal-Ferrari, 2005, p. 125)*

The number 'Six', which is important in Islam, also expresses different meanings and creates mysterious forms in architecture. One of the important issues is that the star forms used in architecture have different meanings in Islamic culture depending on the number of corners. One of the different meanings of the star forms used in Islamic culture; it is that the Feleks are moved by the 'Kulli nafs' and are the place of the angels (Çaycı, 2017, p. 73).

The meaning of the star symbols used in architecture varies according to the number of its vertices. An example of this is the six-pointed star symbol, an ornamental form often used in palace buildings. Since this form is more common in Jewish culture, this symbol is thought to belong to the Jews. However, it was widely used even in the architectural designs of the religious buildings of different societies that accepted Islam in the periods when the religion of Islam was newly widespread (Abbasova and Abbasov, 2020b).

The meaning of the six-pointed star symbol in Islamic culture is different. Here, the symbol formed by two equal-sided triangles is called 'Mühr'ü Süleyman' (The Seal of Solomon) or sometimes, 'Hatemi Süleyman' in the religion of Islam. According to the Islamic belief, the hadith that means 'Before the Doomsday, a dabbe (The beast of the Earth) will emerge from the underground with the staff of 'Mühr'ü Süleyman' and Musa in his hand, and he will illuminate the faces of Muslims with his staff and seal the faces of the disbelievers with his seal' (Müsned, II, 259; İbn Mâce, 'Fiten', 31) is also known. There is a belief among Muslim societies that the devil cannot enter the place where the 'Mühr'ü Süleyman' symbol is located, and according to this belief, its use in medieval Islamic architecture has also become widespread ('Muhammediyye–Munazara', 2006, p. 525). The belief that this symbol has a protective power caused it to be used in the flag symbols of Turkish states and sometimes even on the clothes of the princes in the Middle Ages (Yaylacı, 2019) (Figure 5a).

As the first example of its use in Islamic architecture, the window in the form of a six-pointed star next to the main entrance door of the Hisham's Palace (Khirbat al-Mafjar), which is considered to be Umayyad architecture and built in Palestine in the 8th century, can be seen (Figure 5b).



Figure 5. *Ornament symbols of the six-pointed star used in the Islamic world*

a- 'Müht'ü Süleyman' (The Seal of Solomon) symbol in Barbaros Hayrettin Pasha Sanjak (1517-1546) in the Ottoman Empire and ornaments used in the prince's clothing in the middle centuries (Yaylacı, 2019); b- The side of the Hisham's Palace main entrance gate (Hattstein and Delius, 2009)

Another example of the use of this symbol in palace architecture is the use of the six-pointed 'Müht'ü Süleyman' star, in two different forms, on the crown gate of the divanhâne in Shirvanshahs Palace complex in the city of Baku. There are different kufic scripts in both stars (Figure 6a). In the first, the phrase 'There is no god but Allah, Muhammad is his Prophet' was repeated 6 times, and in the second, 'The names of Allah and the Prophet' were repeated 12 times (Useinov, Bretanitsky and Salamzade, 1963, pp. 187–210) (Figure 6b-1, 6b-2).

This symbol was used in different forms at least six times in the guest room of the The Khan's palace, on the walls of the divanhâne which was built by I. Mengli Giray Khan in Crimea (Kaňçal-Ferrari, 2005, p. 59) (Figure 6c). At the same time, in the Han masjid of this complex, the window above the mihrab was completely given the form of the 'Müht'ü Süleyman' star (Kaňçal-Ferrari, 2005, pp. 156–157) (Figure 6d).

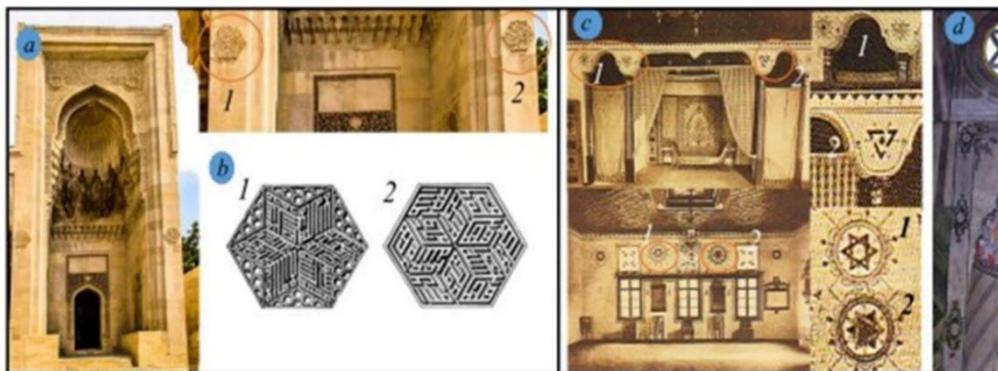


Figure 6. *Ornamental symbols of the six-pointed star symbols in the palace architecture of the Islamic world*

a- Crown gate of the divanhâne of the Shirvanshahs Palace complex (Shirvanshah Sarayı, no date); b- Fragments of crown gate ornaments (Shirvanshah Sarayı, no date); c- The Khan's Palace divanhâne; d- Mihrab view of The Khan's Palace masjid (Butko, 2009)

The symbolic forms of the number 'seven' are seen in ornamental decorations in Islamic architecture. The place of use and the meaning of the number seven in the Qur'an are not less; 'Seven skies', 'Seven nights', 'Seven days', 'Seven roads', 'Seven seas' etc (Yaylacı, 2019). The number seven is mentioned in the Qur'an in

the Al-Mulk and Luqman surahs as follows: 'Who created seven heavens in layers. You do not see in the creation of the Most Merciful any inconsistency. So return vision; do you see any breaks?' (Al-Mulk, 67:3), 'Then return vision twice again. Vision will return to you humbled while it is fatigued' (Al-Mulk, 67:4) and 'And if whatever trees upon the earth were pens and the sea, replenished thereafter by seven seas, the words of Allah would not be exhausted. Indeed, Allah is Exalted in Might and Wise' (Luqman, 31:27).

In Islamic architecture, the number seven is mostly used in the decoration of palace buildings. For example, muqarnas, the most mysterious form of architectural ornaments, were made with seven floors, and in some cases, it was thought to be associated with the number eight. As an example, it is possible to show the muqarna of the Crown Gate of the divanhâne in the Palace of the Shirvanshahs (Figure 7a). Here, the seven gates of heaven are symbolically shaped by revealing seven different levels in decreasing proportions, and the eighth floor above is symbolically shaped with a semi-domed form that will direct the lodge of Allah to heaven. Another example is that the muqarnas used in the decoration of the crown gate of the Chehel Sotoun Palace, built in Isfahan, which belongs to the Safavid architecture, were built in seven floors (Figure 7b).



Figure 7. Expression forms of the number seven in Islamic architecture
a- The muqarnas adorning the crown door of the divanhâne of the Shirvanshahs Palace and its drawings (Urmen19, 2014); (Partensky, 2016); b- The view of the Crown gate of the Chehel Sotoun Palace and the appearance of the muqarnas that adorn it

Another number that has a greater meaning in Islamic culture and is frequently used as a symbol in architectural ornaments and forms is 'Eight'. Considering that this symbol has an important meaning in Islam, it can be said that it forms the basis of the typological octagonal shape found in some buildings in Islamic architecture. The number eight is expressed in different forms in Islamic architecture. These are

the octagonal figure and eight-pointed star forms. When we pay attention to the installation forms of these geometric figures, we see that the most important geometric figures of Islamic architecture: circle, rectangle and triangle, are used at the same time to create octagonal forms continuously. The eight-pointed star form used in Islamic architecture is divided into two different designs. The first consists of two rectangles and the other consists of four triangles. In the center of both figures, an octagonal figure is formed (Figure 8a).

Octagon figures and eight-pointed star symbols were widely used in architectural decorations as well as in architectural building forms of the Islamic world. Although the eight-pointed star and octagonal figures used in ornaments in Islamic architecture differ with their complex installation structures, the installation systems of these forms used in architectural works have a more difficult mechanism. The use of the form in which three octagonal figures and three eight-pointed stars continue each other can be found in the Dome of the Rock, one of the most important temples of the Islamic world (Figure 8b).

The eight-pointed star and crescent, which are widely used in the Islamic world, have been accepted as state symbols of peoples who have accepted Islam since the Middle Ages. The eight-pointed star, which has many meanings, is symbolically associated with eight deeds in the Islamic world: 'Compassion, patience, honesty, keeping secrets, loyalty, generosity, gratitude, not being arrogant and greedy'. And in the Akhirah, the eight doors of Heaven will be opened to the face of the believing Muslim who acts in accordance with these deeds (Gurbanov, 2016).

Crescent and eight-pointed star were depicted on the green and red flags, which were known as the basic flag of the Safavid state in the Middle Ages. According to historical sources, this flag was used until the reign of Shah Tahmasib I. In the period of Shah Ismail I (Khatai), 'Crescent-Sun' symbols; According to the political thoughts of that period, it is associated with the Prophet Muhammad (s.a.v) and Ali (r.a) (Gurbanov, 2016). Khatai explains the meaning of this symbol in one of his poems as follows:

*Hatayi'm rahm etmem yalana
Özün teslim eder kendi gelene
Ay Ali'dir, Gün Muhammed bilene
Bak nazar eyle de hemen ârif ol,
'Ay Ali'dir, gün Muhammed' (Safarli and Khalil, 2005)*

Based on these lines and also the last line (The moon is Ali, the day is Mohammed), it can be concluded that the eight-pointed star on the flag is a symbol

of the Sun. According to historical sources, the meanings of these symbols during the reign of the Safavids were really dependent on Prophet Muhammad (s.a.v) and Ali (r.a). The eight-pointed star, which was the symbol of the flag, was replaced with the symbol of the sun and the moon with the symbol of the lion in the following periods (Gurbanov, 2013, pp. 126–127); (Necefli and Dedeyev, 2018). From here, it has been confirmed that the symbol of the Lion is accepted as the symbol of the title of Ali (r.a) in the Muslim world (Hillenbrand, 1999, p. 63). It confirms that the eight-pointed star, one of the symbols of 'Crescent and Star', is accepted as the symbol of the Sun and that it is a symbol of the Prophet Muhammad (s.a.v) in Islamic culture, essentially in its architecture (Figure 8c).

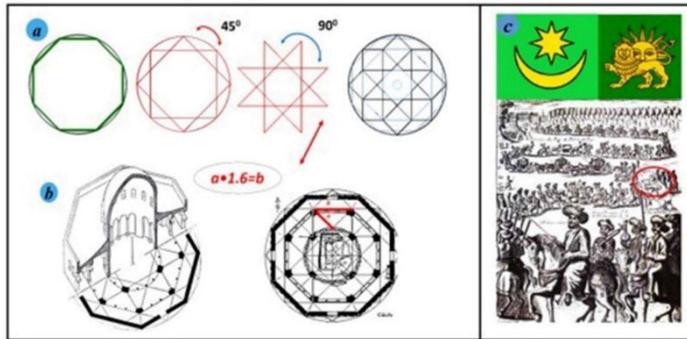


Figure 8. Expression forms of the number eight in the Islamic world and architecture

a- Forms of installation of octagonal and eight-pointed star figures; b- The Dome of the Rock isometric section and plan (Balkuvara Sarayı, 2019); c- Safavid flags depicting the 'Crescent and Star' and 'Sun and Lion' symbols (Neciyev, 2017b); (Neciyev, 2017a).

The figure eight and the figure forms consisting of it have been accepted as a symbol of heaven in Islamic architecture. It is possible to see an example of this in the decorations of the Alhambra Palace divanhâne. In the palace, the 18-meter-high ceiling of the throne room of the Embassy is made of 8,000 cedar trees and interlaced star ornaments. An octagon is formed as a result of the ornaments formed in decreasing proportions as it rises (Figure 9a). At the top of this octagon, the form of the different layers, equal to the seven layers of heaven, is symbolically shaped in the dome, which symbolically means the eighth floor where Allah resides in architectural language (Hattstein and Delius, 2009, p. 289). These symbols were used many times in the ceiling decorations of the complex's Mexuar, that is, small divanhâne (Figure 9b).



Figure 9. *Expression forms of the figure eight with geometric figures in Islamic architecture*

a- Hall of the Ambassadors throne room portion of the Alhambra Palace complex, ceiling and wall decoration (L'Alhambra de Grenade, no date); b- Mexuar and wooden ceiling decoration (Özbaran, 2017)

Another similar palace structure is the Hasht Behesht (Eight Heavens), which was built in Isfahan in the 17th century by Süleyman I. Here, the dome of the central hall, where the divanhâne door opens, is made of seven layers of muqarnas, and the eighth floor is built above the dome like an octagonal figure that illuminates the hall (Figure 10a).

Another example of this form was used in the iwans of the Tach Khaouli Palace, which was built in Uzbekistan in 1830-1838. Here, the eight-pointed star shifts to the ten-pointed star and is completed with an octagonal figure at the end of the inner layered form in varying proportions (Sokov, 2019) (Figure 10b).

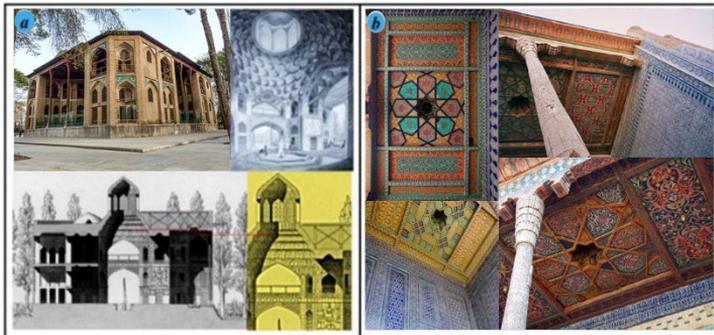


Figure 10. *Expression forms of the figure eight in Islamic architecture*

a- View of The Hasht Behesht pavilion and views of the muqarnas adorning the dome of the central hall section (Kiyani, 2017); b- Decorations used in the iwans of the Tach Khaouli Palace (Tash Khauli, no date)

The Dome of the Rock temple was built by the Umayyad caliph Abdülmelik bin Mervan in 686-691 on the rock (Hajaru'l-Muallak), which is considered sacred by all monotheistic religions. The Dome of the Rock, which has an octagonal plan from the outside, has two octagonal and circular areas on the inside.

It is mentioned in the Qur'an (Al-Isra, 17:1) about the place where this temple was built as follows: 'Exalted is He who took His Servant by night from al-Masjid al-Ḥarām to al-Masjid al-Aqṣā, whose surroundings We have blessed, to show him of Our signs. Indeed, He is the Hearing, the Seeing'. Muslim scholars of tafsir interpret this expression as a reference to the mysterious night journey from Mecca to Jerusalem on the back of the Prophet's extraordinary winged mount, Burak. It is said that the journey of the Prophet Muhammad (s.a.v), ascending to the sky and ascending to the level of Allah, started from the rock that gave its name to the Dome of the Rock in Jerusalem. Depending on this discourse, a special respect is given to this rock (Hattstein and Delius, 2009, p. 66).

As we have mentioned before, the octagonal form in Islam has been accepted as a symbol of heaven and the eight-pointed star as the symbol that stylized the Prophet Muhammad (s.a.v). For this reason, although the plan structure of the temple is octagonal according to the architectural form, the rock center where the Prophet Muhammad (s.a.v) ascended to Allah's level was established as an eight-pointed star as a core and surrounded by the carrier system of the structure.

This system was widely used in many palace structures from the time of the spread of Islam until the end of the Middle Ages. Examples include the divanhâne of the Shirvanshahs complex (15th century), the Chehel Sotoun Palace (16th century) the Safavid Palace (Keyani, 2018, p. 83), the Palace of the Sun, Hasht Behesht Palace (17th century) and of course, the Mshatta Palace complex (8th century), which is an example of Umayyad architecture.

The plan structure of the Shirvanshahs Palace complex is very similar to the Dome of the Rock. Although the rules of the golden ratio are slightly different, they were used in the planning of both buildings (Figure 11a). In the Shirvanshahs divanhâne, unlike the Dome of the Rock, the columns were designed outside and the wall part inside. Another example is the Mshatta Palace complex, where many of the Islamic symbols are used in its architectural design. Mshatta Palace, an Umayyad architectural monument like the Dome of the Rock which is older than other palaces, was formed as a result of the intersection of octagonal and octagonal star geometric figures, although its form structure is rectangular. Another feature of this palace complex is that the dimensions of the court of honor were created by

reducing the octagonal figure outside three times. The courtyard was designed as the special point of this palace complex (Figure 11b). The last example is the use of the golden ratio in the plan structure of the Palace of the Sun and the effect of the continuity of the stars on the formation of the main form at the junction points, as in other examples (Figure 11c).

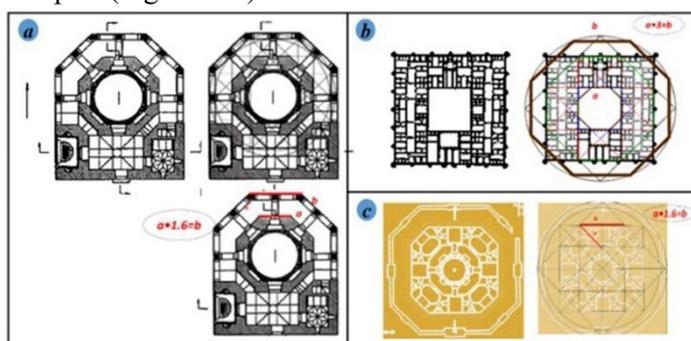


Figure 11. *The use of the number eight in Islamic architectural forms*
a- *Plan structure of the divanhâne, of the Shirvanshahs Palace complex (Shirvanshah Sarayı, no date); b- Plan structure of the Mşatta Palace complex; c- Plan of the Sun Palace (Acedemical, 2019) (Drawings were made on the images in AutoCAD program)*

Conclusion

The means of expression of religion in the language of architecture have always been the focus of experts. The religion of Islam also influenced the whole world culture and contributed to the innovation of World architecture. Today, in order to explain the meaning of the means of expression of the Islamic religion in architecture, it is necessary to examine the Qur'an, which is the basis of the Islamic religious resources and at the same time as architecture. The symbols that express the religion of Islam in architecture are mainly formed as a result of symbolizing the verses in the Qur'an. Of course, it is not right to consider symbols, numbers and geometric figures sacred. The main purpose of the use of these forms in Islamic architecture is the reflection of religion in the language of architecture. In palace complexes, which are the architectural forms in which symbols are most widely used, such symbols are not only used to express religion, but also have some meanings depending on the function of the building.

The religious symbols used in the Umayyad and Abbasid architecture, in which the religion of Islam first spread, preserved their characteristics and continued to be used until the end of the Middle Ages. It is possible to frequently encounter

examples of these religious symbols used in Islamic architecture, especially religious architectural monuments and palace architecture in the Middle Eastern countries, Andalusia and the South Caucasus regions. In this study, first of all, the architectures of Islamic palace complexes belonging to different states and different religious and historical eras were examined and it was noted that the meanings of some symbols used in these structures were different from the previously known meanings. As a result of the study, the dependence of the forms used in the religious symbols used in Islamic architecture to the numbers can be explained with the meanings in the verses of the Qur'an. The formation of these religious symbols has been a tool for Islamic architecture to create its own language.

As stated in the study, the numbers three and four were reflected in the compositional structure of the palace architecture. The numbers five, six and seven were synthesized with geometric figures and new forms were created in architecture with arabesque patterns and the combination of circle, rectangle and triangle. The forms that make use of the synthesis of the number eight with geometric patterns were frequently used both in the decorations of the palace architecture and in architectural forms. Octagon and eight-pointed star figures, which are mostly used in the architectural forms of palace buildings, were made by applying the 'Golden Ratio' rules.

Many symbols used in the language of architecture were also widely used in Islamic culture in the same sense and were also included in the flag attributes of some states. In this way, as a result of the widespread comparison of symbols, it has allowed to obtain more precise information and to find many innovations in terms of architecture.

We can say that the Islamic world applies its own language and rules in architecture by creating symbolic forms. In this context, as we examine the rules and language of the creation of symbolic forms in architecture, a deeper perception of palace architecture can be interpreted.

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