

## Understanding the Allotropic Influences of Pointed Stars in the Islamic Funerary Architecture “From Philosophical Discourse to Architectural Realm

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### Abstract

Architecture is the art and skill of building engaged to accomplish the realistic and significant necessity of human society. Islamic Funerary Architecture is one of the most admired and building tradition. It is mainly known for its brilliant colors, rich designs and has unique elements that make it very appealing and dazzling. One of the greatest features of architecture in the Islamic world is to focus on the inner or exterior space. The most important Islamic funerary architectural types for large buildings are Shrine, the tomb, mausoleum and the palaces. The funerary architecture of the Islamic world is notable for its diversity which can be seen in many aspects of funerary buildings including concept of space, decorative modes, structure systems, and geometric pattern. Islamic funerary architecture uses patterns of interesting geometric figures or shapes to provide decoration or visual interest. Geometric patterns are a common element of Islamic funerary art and architecture. Islamic geometric patterns are formed from four basic shapes: a circle, squares, stars, and multi-sided polygons. The star shape is derived from squares or triangles inscribed in a circle, and the 6 and 8-pointed star is a common element in Islamic art. In this term paper, I will highlight the

importance of pointed stars because, quite simply, they are irresistible and charming to observe in the Islamic funerary architecture. Along with fulfilling different functions of pointed star, they give us a clear sense of visual beauty. This research paper is an attempt to review and study the importance of geometric pattern of pointed stars, and the procedure adopted that how the conceptual interpretation of pointed star is translated into diverse spatial configurations for multiple purposes.

**Keywords:** Pointed stars, Types, History, Allotropic influences, Islamic Funerary Architecture.

### Introduction

In Islam, Muslims are forbidden to attract animals and objects in such symbolic art that data was not highlighted by the fear of human or animal idolatry (Ahad, 2010). Due to punctuality, Muslim artists express their creativity in different ways and they turned towards geometric pattern and especially those stars were prominent. Islamic geometric patterns are formed from four basic shapes: circles, squares, stars, and multi-sided polygons. The circle and the square are the most basic shapes (Juliao David, 2018). The star shape is derived from squares or triangles inscribed in a circle, and the different

types of pointed stars is a common element in Islamic funerary architecture (Juliao David, 2018). Islamic geometric patterns are elaborate artistic designs made by repeating, and combining basic geometric forms in large arrays. The shapes can be combined in a virtually unlimited number of designs and arrays (Juliao David, 2018). The simple elements create complex designs that offer the possibility of infinite growth by repeating and expanding the elements (Juliao David, 2018). The geometric patterns often incorporate other types of ornamentation (Islam, 2020). The use of geometric star patterns dates from the early times of Islam. Some of the oldest examples are from the 9th-century and consist of isolated shapes and eight-pointed stars. The designs evolved during the following centuries and increased in complexity and level of detail. In addition to geometric patterns, calligraphy and arabesque patterns are the other two types of non-figurative Islamic art (Juliao David, 2018).

The origins of Islamic geometric star patterns are clearly impossible to establish. There are many ornamental influences, and very few remaining buildings and objects of art from the early formative period to know definitively when or precisely how this intrinsically Islamic ornamental convention began (Bonner, 2017). The use of stars were used as a decorative motif and practiced by the pre-Islamic cultures of Byzantium, Egypt and Sassanid Persia, and their use was incorporated within or as a decorative schema providing the basic role of multiple stars design (Bonner, 2017). The seventh and eighth centuries Umayyad's easily supported the geometric aesthetic conventions of his subjects. The geometric ornament of the Umayyad's is derives from earlier examples, the main difference between pre-Islamic patterns with several stars, as found in some of the Hellenic mosaic pavements, and then produced under the Umayyad in harmony with the overall design. In the earlier Hellenic work, the stars are independent elements scattered across the plane, and relating to one another through geometric proximity and similitude (Islam, 2020). In contrast, within the Islamic star pattern aesthetic, the points of each star move from the outside so that the adjacent stars develop an interconnected network combined with similar extended lines in which each star is an integral part of a unified aggregate (Henry Richard, no date). The interweaving treatment of the pattern lines along with a repeated increase for self-

geometrical design. Islamic geometric patterns developed in later centuries, they laid the styling foundational for the establishment of the Islamic geometric aesthetic (Islam, 2020). Umayyad's Abbasid successors were particularly important in the cultivating the geometric arts. The history of Islamic geometric star patterns can be regarded as a sequential evolution from simplicity to complexity (Bonner, 2017). The ninth and tenth centuries, new form of ornament was characterized by an overall geometric matrix with primary stars or regular polygons located upon the vertices of a repetitive grid (Bonner, 2017). The geometric star patterns from this earliest period is characterized by hexagons or six-pointed stars located at the peaks of any triangular or hexagonal repetition unit, and is usually placed at the peaks of a square repetition unit by 8-pointed stars, octagons or squares. In the central and western regions of Abbasid influence many of these types are found in tombs (Bonner, 2017). However, it is in the eastern regions of Abbasid influence that the discipline of Islamic geometric pattern making seems to have benefited from the most innovative and influential artistic attention. Many ornamental motifs have an example of the classic star and cross design with 8-pointed stars at each top of the orthogonal grid (Bonner, 2017).

The following benefits of selecting star geometric art to convey creativity are described by the Islamic artist, as represented by light in Islam, there is no image of God and it means that unlike other religions like Christianity, Buddhism, or Hinduism, Islam does not take any picture to represent its god (Ahad, 2010). The stars created light in the sky, so it is not surprising that Muslims chose the stars to decorate the holy buildings as well as to represent the light for the holy texts (Ahad, 2010). Stars are leaders in the desert; the first Muslims were inhabitants of the desert and depend on stars for guidance such as in navigating through the desert or the sea. In addition to being a navigation help, the stars also play a role in pointing out the direction of Qibla and deciding the direction, which every Muslim faces during their prayers. Thus, a star is important in the daily life of the early Muslim and becomes a part of the Islamic aesthetic (Ahad, 2010). Repetitive geometrical patterns are a glimpse into the spiritual world and perfection: geometry has been associated with metaphysical properties long before Islam. As a spiritual doorway to the divine

plane between Muslim, other, interdependent and integrated geometrical art studying Greek mathematical works (Ahad , 2010).

### Analysis Study of Diverse Tombs

#### Humayun's Tomb

(Eight pointed star)

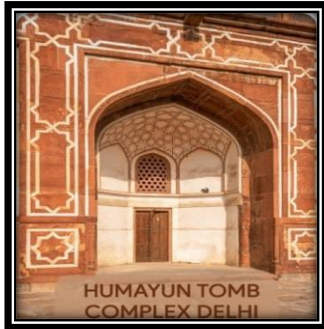
A red milestone rests on the feet of the pillar that upholds the massive plinth of humayun's tomb, the eight-point star of Najmat al-Quds or Jerusalem silent testament tolerates for this enormous contribution

Arabic art relies solely on decorative maps of Islam's faith, beautiful calligraphy and



geometric symbols that embellish aesthetics and spirituality to embellish magnificent buildings with beauty and grace without deviating from the Quran's ban.

A monumental building that had not only spurred the Arabs for mastering and perfecting the techniques of transcendent architecture and decorative art to surpass those of other religions but also become a mark for their first Qibla, Jerusalem, whose geometric representation was the Najmat-al-Quds, an eight-pointed star with a long history, which the Arabs adopted and modified to decorate places,



tombs, courtyards and carve on coins, to serve as an auspicious reminder. Two overlapping squares joined together to form the eight-pointed star.



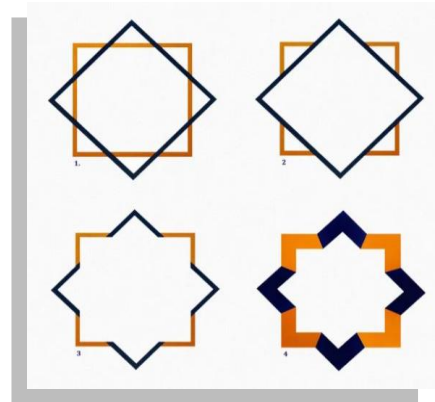
The design of the star predates the founding of Islam in Arabia and appears in older civilizations of Sumer and Akkadia as well as in later Hebrew, Parthian, Sassanian and Christian Byzantine art in various renditions, with not all variations of the star created using squares.

#### Origin of Eight-Pointed Star

Six-pointed, the hexagram, which appeared in ancient cultures across the world with vastly different interpretations and was used as an architectural element by both the rulers of the Delhi Sultanate and the later known as Indo-Islamic architecture. The eight-pointed star has also been observed to have existed in various renditions with civilizations and cultures. The Islamic Najmat-al-Quds and its predecessor the Rub-el-Hizb, are two unique variations of the eight-pointed star that inherits at its

core a set of overlapping squares and a symbol that can be more strongly impact on funerary Islamic architecture.

The Islamic funerary



architecture facilitated the delivery of technical construction methods, and interior decoration, and especially geometry, in the heart of Muslim Arabia. Inside the Holy place was adorned with magnificent works of marble and intricate glass mosaics, which roamed smoothly with a similar octagonal distribution to the shrine. In the history of Islam, the Arabic calligrapher in the form of Hellenistic designs inspired by 8 pointed stars is connected as a symbol in interior decoration and its construction patterns.

Eight-point star has been used as a decorative element in Islamic architecture. Also used in the Islamic version made on textile in Al-Andalus, 8 is a happy number in Islam. Thus the importance of 8 was deep-rooted in both octagon and inherited star of the shrine and resonated with spiritual influences in almost all cases. In Islam 8 formed the number of gates of Islamic paradise, the eighth step upon which Muhammad saw the angels prostrating with reverential veneration during his heavenly journey.

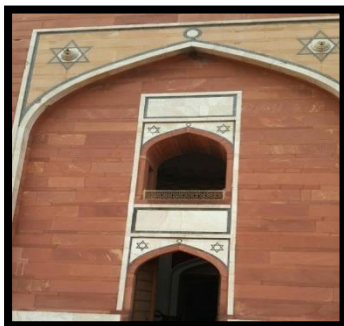
The theoretical importance of the eight-point star for Muslim Arabs was not only similarity in terms of their own beliefs, but when the two geometric squares were developed together; it fully appreciates the structure of the shrine from both the interior and the outside. That's why it was used in Islamic tombs, when you avoid human, you have to choose more ways.

**Hexagram Six-Pointed Star of Humayun's Tomb**

The massive mausoleum was constructed in sandstone and white marble between 1562-1571. Humayun's tomb, which brings us back to one of the most intriguing aspects: the prevalence of the six-pointed star, the same which is commonly associated with Judaism today, and therefore which seems particularly striking in Islamic architecture of the sixteenth century and later.



The six-pointed star was a potent symbol of astrology long before Humayun, and even long before it became one of the paramount symbols of Judaism. In astrology, the six-pointed star is the perfect alignment of heavenly bodies, rare and divine and auspicious; the symbol thus to stargazers was a connotation of perfection, auspiciousness, balance, harmony, equality.



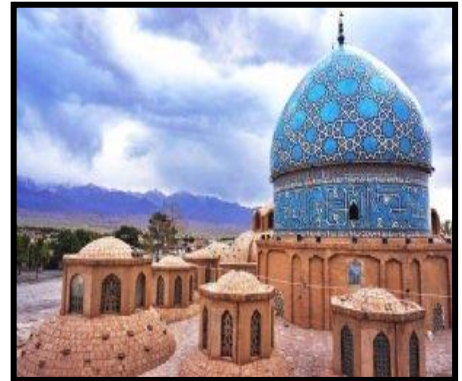
The six-pointed star is the Star of Creation. Its six points stand for the six days of creation, and are also represent the six

attributes of God: power, wisdom, majesty, love, mercy and justice. The 6 pointed stars are the same as the Star of David.

**Tomb of Shah Naimatullah Vali:**

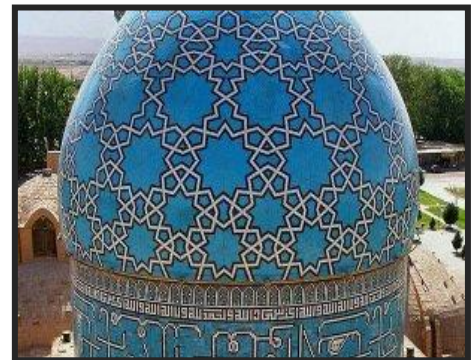
Shah Nematollah Vali Shrine is a solemn home to Shah Nematollah Vali who was an important religious figure in the history of Iran. Shah Nematollah Vali Shrine is located in Imam Khomeini Street, Mahan, and Kerman province. On the corner of Mahan city, there is a turquoise dome that one of the most famous Iranian poets and mystics

buried in this tomb. The Hezar Shah structure is the axis of this aggregate, and its primary construction dates back to



the year 840 AH. Ahmad Shah Bahmani was responsible for the expenditure. The complex includes

some courtyards and other sections which are as follows when one moves from the street toward the interior of the mosque.



The blue girih-tiled dome contains stars with, from the top, 5, 7, 9, 12, 11, 9 and 10 points in turn. 11-pointed stars are rare in Islamic art.

The star motif is one of the most important geometric patterns in Islamic funerary architecture. It appears in countless variations, from five to sixteen points,



in a variety of materials, scales and applications. Stars are engraved in stonework, decorative ironwork, ceramics, stained glass tracery windows, as well as in marble floors and wooden screens. Particular attention is paid to principles of repetition and continuous permutation. It is not essential that we see different types of pointed stars on the wall in Islamic tombs and it can be seen on the top of the roof and on the exterior of the dome and it is used to make the funerary architecture specific.

### Amulet with Pointed Stars; Egypt Bronze Kelsey Museum of Archeology:

The ring on top of the pendant shows that it is to be worn as a necklace. The pentagram may belong to a **six-point star** known as a seal of Solomon. A five-six-point star recalls the seal or sign that allowed Solomon to retain his power over evil spirits.



Often the seal of Solomon can be found in talisman shirts, prayer books, and amulets. This type of protective design and wear items are included in the Islamic world as a form of magic which is used to protect the wearer from both physical and spiritual damage.



shirts, prayer books, and amulets. This type of protective design and wear items are included in the Islamic world as a



A magical object (talismans, amulets) is imbued with protective powers, and all cultures are the manifestation of such objects. In the Islamic world, they tolerate Quranic carvings as well as astrological symbols and religious narratives. Many Muslims believe that an

object which is derived from the word of Allah almighty will protect it from reading or seeing and that the word of Allah has the power to avoid evil the level of a magical object can be covered with prayer, signs, numbers and decorative maps.

### Conclusion

Geometrical patterns of pointed star develop one of the three non-figural types of decoration in Islamic art, including calligraphy and plant patterns. Pointed stars are popularly associated with Islamic art, mostly due to their unusual quality.

Islamic artists allocated key elements from the classical tradition, and then set up intricate and carvings on them to invent a new form of decoration emphasizing the importance of unity and order. These unique new styles of geometric pattern of pointed stars were the outstanding intellectual contribution of Islamic mathematicians, astronomers and scientists.

The pointed star has intimate spiritual significance in the mystical branch of Islamic Funerary architecture. It appears primarily on the universal symbol of architecture, the winged heart. It is called as an expression of divine light that enters the heart during creation and exits from the heart during annihilation. It was not used in a special place that it was be known by this recognition. It was used every element of architecture where visual interest should be highlighted. It was also used in the occultism purposes (amulet, talisman) which were used for protection purposes. The allotropic influence of pointed star can't be denied in Islamic Funerary architecture.

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