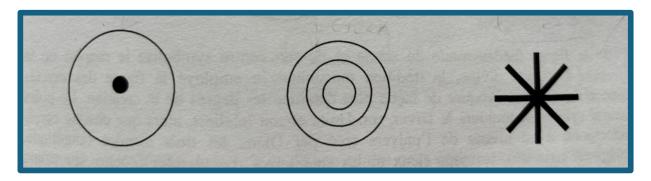
# Triangles and Sacred Geometry in Islamic Art

Aïsha G.

## a) The powerful magic of triangles

Thank you, first of all, for giving me the opportunity to talk about triangles from an Islamic perspective. In this holy month of Ramadhan, which will end on the new moon of April 10th. Triangles are important in all forms of spirituality.

We know that in Islam, there is no figurative representation of God and his prophets, who are sacred lights. We also know that the diffusion of light via the network of triangles is a divine service. The triangle is also a sacred tool in the sacred geometry of Islamic art. This art is based on the repetition of geometric shapes that are often in a sacred place, such as a mosque, a temple, a synagogue or a church. According to certain religions and spiritual movements, God created the world according to a geometric plan. ... "Plato said that God creates geometrically constantly and continually" (*Convivialium disputationum*, liber 8,2).<sup>1</sup>



The expansion of the universe <sup>2</sup>

This is why *Allah* is present in the Islamic artistic space *via* the geometric shapes which showcase all of His creation. The Islamic geometry found in mosques, the palaces of the Taj Mahal or the Alhambra in Spain glorifies divine creation by directly linking it to the terrestrial world. And the human soul is receptive to this.

<sup>&</sup>lt;sup>1</sup> https://fr.wikipedia.org/wiki/Géométrie sacree

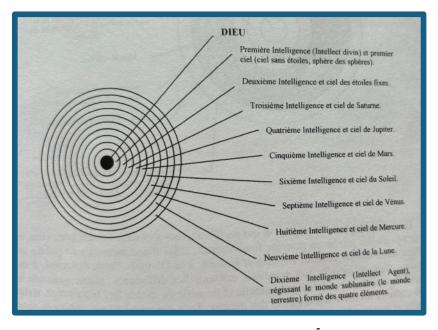
<sup>&</sup>lt;sup>2</sup> Ringgenberg, Patrick, *L'univers symbolique des arts islamiques* (The symbolic universe of Islamic arts), ed.

L'Harmattan, 2009, p. 67

### b) The radiation of the circular triangle

The basic geometric figures of Islamic ornamental art are the point, the circle and the radius. Some geometric figures (circles, sun, cross) symbolize the expansion and structure of the universe. The domed rooms evoke the sky and the earth. Furthermore, several aesthetic principles of Islamic art are based on the relationship between the one and the many, capable of expressing the relationship between the divine unity and the complexity of creation.<sup>3</sup>

Indeed, looking at the circle with spokes like the wheel of a bicycle, we will see later that the rays of a circle are at the base of circular triangles whose rotary movement can generate energy irradiation. In this case, we can imagine that the divine light is projected from the central point of the circle towards the periphery, through the lines which form the rays of this circle. The movement of the circle then produces infinite radiation. This is one of the effects of the radiance of the circular triangles, which evoke both the evolutionary spiral rise towards the heavens and the precipitation of the divine into matter.<sup>4</sup>



The radiating concentric circles<sup>5</sup>

In addition, the dome of a Muslim palace or a mosque symbolizes the cosmic vault, the starry sky, the spiritual and divine Sky. For Muslim authors, the planets and stars represent invisible realities. Sohravardî - a medieval philosopher - distinguished three ways of seeing the starry sky: the common man sees only an expanse of blue color punctuated with white points (the stars), the astronomer or the astrologer studies the movement of the stars and their relationships to the zodiac, while spiritual men perceive the esoteric and invisible meaning of the sky. Rumi – another philosopher - speaks of " the sky roof which is the place of assembly of souls".

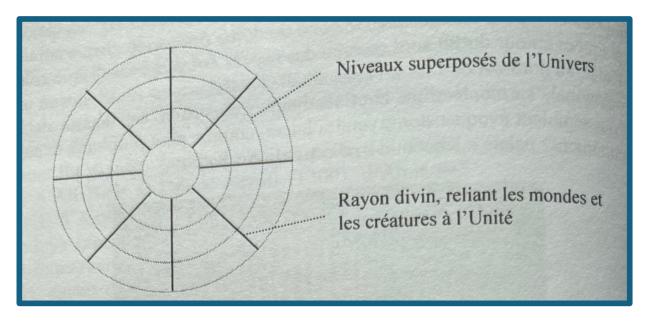
<sup>&</sup>lt;sup>3</sup> *Ibid.*, Ringgenberg, Patrick., p. 11

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> *Ibid.*, p. 63

<sup>&</sup>lt;sup>6</sup> *Ibid.*, p. 98-99

Even Ibn Arabi evokes the representation of the sun as symbolizing the relationships between creatures and the one God. The geometric symbolism of lines radiating from a central point towards the circumference of a circle evokes the unique relationship each creature has with Oneness. Each creature is a kind of ray which emanates from God, so that each one has a particular and specific relationship with God: if the central point is the same for all, the rays which spring from it, are as numerous as the beings coming from the Light divine.<sup>7</sup>



Rotative triangles<sup>8</sup>

The circle gives movement and rhythm to these triangles which swirl from earth to sky and from sky to earth. The triangles are part of a rising spiral for the elevation of spirits towards God, as the whirling dervishes do by spinning around for hours.

This circular and infinite movement explains the hypnotic magic of Islamic geometric patterns.

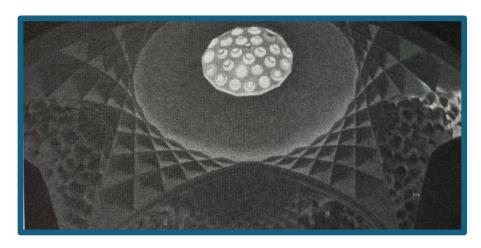
#### The Mugarnas

The cone is shaped like a triangle for divine light to fall into the temple via this conical dome. Indeed, from the tip of the dome, divine light is distributed all along the walls, and the columns of a mosque (or a palace). Indeed, jagged sculptures resemble waterfalls poured on those who thirst for spirituality. These geometric constructions are the *Muqarnas*.

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<sup>&</sup>lt;sup>7</sup> *Ibid.*, Ringgenberg, Patrick, p. 73

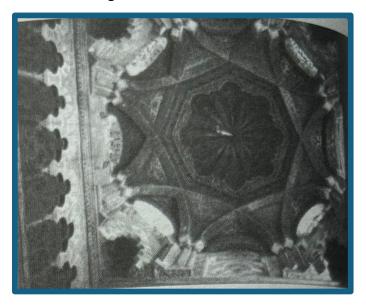
<sup>&</sup>lt;sup>8</sup> *Ibid.*, p. 78



Mugarnas, in Hammam Gandj-e Ali Khân, Iran (1611-12)9

Divine water is then distributed from these celestial domes to flow down the walls. This celestial water nourishes the plants and animals which adorn the walls. The architect thus represents the garden of Eden descended to earth. The floor covered with carpets, equally decorated with sacred geometric patterns, "is the third terrestrial plane that the faithful tread protected by ... the paradise temple of God". <sup>10</sup>

In his study of the Alhambra, Oleg Grabar hypothesized that the decoration of *muqarnas* [creates] a complex play of light refractions which change during the day with the movement of the sun, which constitutes a reflective image of the sky<sup>11</sup>. It is a cascading radiance, which evokes an ordered and hierarchical gush of worlds from the divine Sun.



Mosque of Cordoba, Spain 10th century<sup>12</sup>

<sup>&</sup>lt;sup>9</sup> Ibid., Ringgenberg, Patrick, p. 107

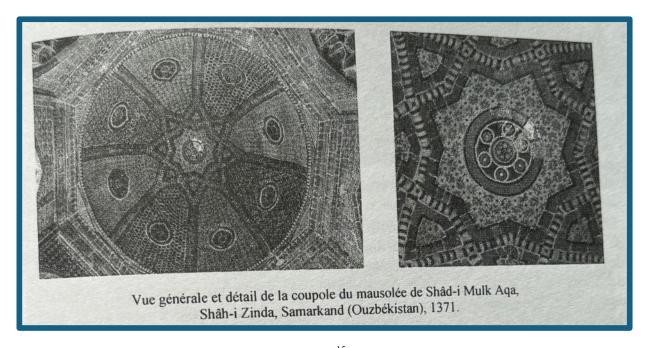
<sup>&</sup>lt;sup>10</sup> Ibid. p. 77.

<sup>&</sup>lt;sup>11</sup> Ibid. p. 104

<sup>&</sup>lt;sup>12</sup> *Ibid.*, p. 94

Surmounting a square or rectangular structure with a dome requires a transitional device, and in time a distinctive solution for this, known as *muqarnas*, arose in Islamic architecture. Muqarnas are structured on tiered horizontal layers joined by flat and curved surfaces which articulate their descent. - echoing the idea of spiritual light cascading from the Heavens to condense as crystalline matter on Earth. They are also used in niches, for example the niche, or mihrab, that marks the mosque wall facing Mecca.<sup>13</sup>

Furthermore, like the circle with these triangular rays - a geometric figure seen previously - the *Muqarnas* represent the birth of the multiple from the One. Deployed around a deep center, the *Muqarnas* illuminate the light of day and evoke the refraction of divine Unity in the multiplicity of Names, archetypes and celestial worlds.<sup>14</sup>



Domes 15

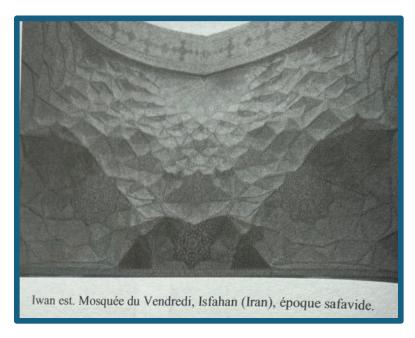
Thus, Islamic architecture uses Muqarnas which have channels of distribution of the divine triple energy which can be found in the daily service of the triangles. In this hierarchical activity, meditators, like architectural craftsmen, construct kinds of Muqarnas - these spatial and three-dimensional triangular figures - with mental substance.

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<sup>&</sup>lt;sup>13</sup> Islamic Design by Daud Sutton, p. 48

<sup>&</sup>lt;sup>14</sup> Ibid. Ringgenberg, Patrick, p. 105

<sup>&</sup>lt;sup>15</sup> *Ibid.*, p. 95



Muqarnas of a mosque in Isfahan 16

The anonymous work, in Islamic architecture, carried out by artisans of the ancient Muslim brotherhoods' activity is like that of the anonymous NGWS. This architectural work on the mental level, serves to better precipitate and diffuse spiritual light on humanity, has evolved and is done in group synergy where the mental artisans are as anonymous as those from the lands of Islam.



Friday Mosque, Isfahan (Iran) 15th century. 17

<sup>&</sup>lt;sup>16</sup> *Ibid.*, Ringgenberg, Patrick p. 96

<sup>&</sup>lt;sup>17</sup> *Ibid.*, p. 88

## c) The protective veil of the spider's web

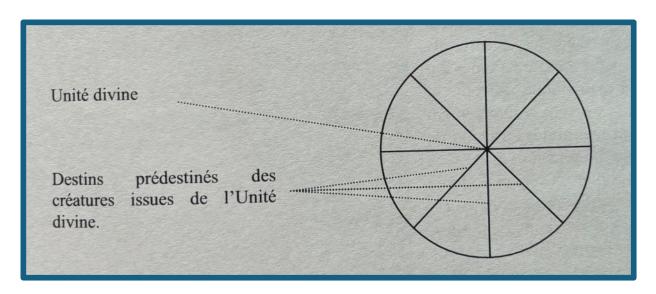
The spider web principle also uses the geometric figure of the triangle. In Islamic decoration, this is a radiating circle of triangles. Its projections are onto several planes from heaven to earth, via concentric circles. It appears on wall mosaics that repeat endlessly.

The spider web has two symbolic and spiritual functions: to protect and to hide. It is purely esoteric.

We also know the motto of the planetary center of Darjeeling, India: I hide the light.

The prophet of Islam is himself a sacred light that must be hidden to be protected. The spider web played an important role in the life of the Islamic Prophet. On the way to exile towards Medina, the Prophet Muhammad took refuge in a cave. Immediately a spider wove a web just in front of the entrance to the cave. Thus, the Quraysh, who pursued Muhammad to kill him, believed that the cave was empty.

According to the Sufis, the spider web functions as a woven veil of the manifested Creation, (tadjali). But this veil reveals the Divinity to those who know how to recognize it. In Islam tradition, it is like an illusory curtain (pardeh) used to divert the uneducated people's eyes. The beauty perception is a spiritual faculty.

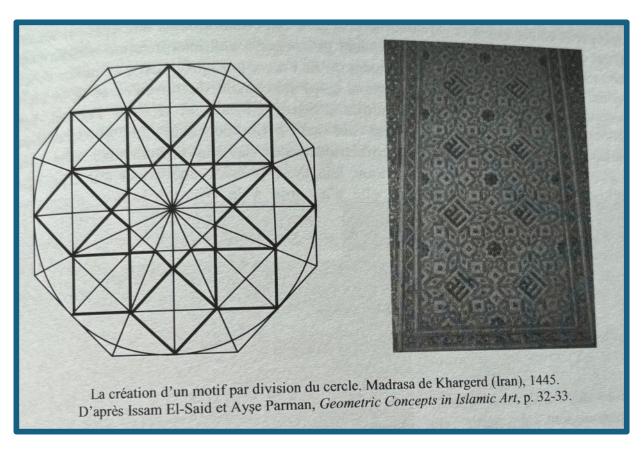


From one to many 18

But God remains united to the manifested world. Through the radiant weaving of the spider's web, each thread connects the Creator to His creature. From a cosmological point of view, the spider's web superimposes two symbols: the hierarchical levels of Creation (concentric circles), and the connection to all divine worlds (lines connecting the circles in the center). The spider's web appears as a complete synthesis of Creation and its relationship to God. There is therefore a sacred and powerful interdependence between the visible and invisible worlds.

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<sup>&</sup>lt;sup>18</sup> *Ibid.*, Ringgenberg, Patrick, p. 78



The spiderweb 19

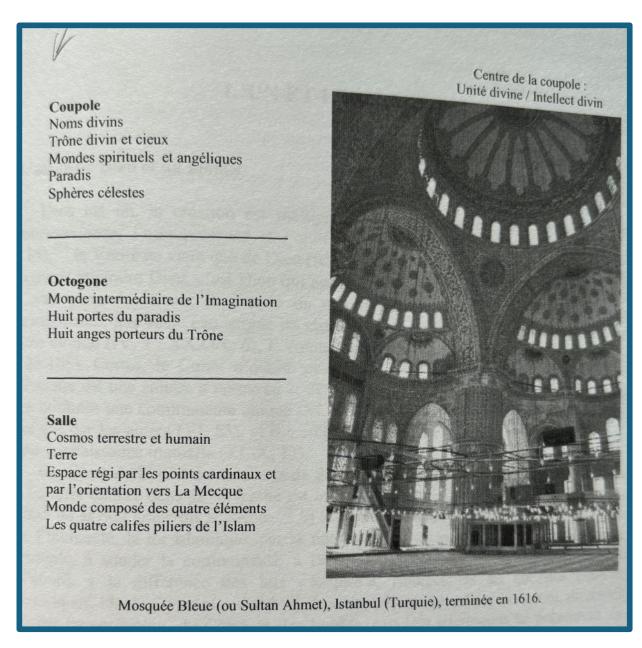
## d) Conclusion

Through the Islamic ornamental art, God is omnipresent in the architectural space, in each mosaic of multiple colors covers all the space. God is present from floor to ceiling.

For example, the Blue Mosque of Istanbul <sup>20</sup> is made up of a dome where the divine names, the throne of God, and the heavens of the spiritual and angelic worlds are depicted. These are the celestial spheres of Paradise. At the level of the octagon, there is the intermediate world of the imagination with the eight gates of Paradise and the eight throne-bearing angels. In the Hall of the Mosque, we find the earthly cosmos of humans – the believers prostrate themselves before the God's Majesty and His creation. The prayer room represents the Earth in a space oriented through Mecca. The manifested World is also represented with its four natural elements woven on the prayer rugs richly decorated with geometric animal and vegetal figures.

<sup>&</sup>lt;sup>19</sup> *Ibid.*, Ringgenberg, Patrick, p. 133

<sup>&</sup>lt;sup>20</sup> Blue Mosque or Sultan Ahmet, Istanbul, completed in 1616.



The symbolic structure of the Blue Mosque, Istanbul (Turkey), 17th century. <sup>21</sup>

Thus, the disciple is immersed in the temple of God, enveloped, irradiated and protected by His Creator. Traditional Islamic seeks to transport the viewer from immersion in the mundane to serene contemplation.

Islamic design can be thought of as a form of visual music; the repetition and rhythm of its motifs establish an inner sense of balance and act as a visual extension of the invocatory remembrance of the Divine.

We can say that Islamic art does not need figurative representation because it reveals God in all sacred geometry. There is no need to paint a saint, since the disciple is in direct contact with God, Who is as close as possible to humans (in the domes, walls, columns and the carpets of

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<sup>&</sup>lt;sup>21</sup> *Ibid.*, Ringgenberg, Patrick p. 121

mosques and palaces). Indeed, the Quran is the God's word without intermediary, which speaks directly to His believers.

I will end with a word from the Creator to His human creatures:

We certainly created humans and We know what their soul whispers to them and We are closer to him than his jugular vein.  $^{22}$ 

I thank you very much for your attention and I will answer with pleasure to your questions.



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<sup>&</sup>lt;sup>22</sup> Koran, 50, 16