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Geometric Pattern in the Quran Mushaf

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Abstract:

This article explores the geometric pattern found in the illumination of the Quran mushaf using an art formalistic approach. The study involves a visual analysis of the illumination focusing on elements of art and principles of design. The research uses Adobe Illustrator to analyse these geometric patterns, particularly highlighting the presence of rosettes or medallions, which resemble glowing stars or the sun, aligning with the concept of "Shamsa" (light). The findings contribute new insights into the field of art, particularly in understanding the geometric aspects of Quranic mushaf.

Keywords **— geometric pattern, Quran mushaf, formalistic**

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I. INTRODUCTION

The phrase "Lā ilāh illāllāh Muḥammad al-Rasūlullāh" in Islamic art emphasizes the core values of *tawḥīd* (the oneness of God) and strengthens the faith of Muslims. It carries deep significance, reminding believers of the beauty found in devotion and obedience to Allah (Abu Hassan, Amin & Tohid, 2017). In Islamic art, the concept of *tawḥīd* shapes the selection and emphasis on artistic elements, asserting that Allah is the sole God, without partners or comparable physical forms. As a result, Islamic art avoids figurative depictions of Allah or living beings (Sabri, Mokhtar & Mahamood, 2022). Geometric patterns in Islamic art reflect the beauty and order that Allah has established in creation, symbolizing the universe's perfection and harmony (Azad, 2020). For instance, motifs like stars, hexagons, and other geometric shapes are commonly used in Quranic ornamentation, mosques, and various Islamic artworks. Arabesque, a decorative pattern consisting of repeated vegetal or geometric elements, conveys a sense of continuous movement and rhythm, representing the ongoing life within Allah's creation. By understanding *tawḥīd* and its influence on Islamic art, society can better appreciate the distinctiveness and beauty of geometric and arabesque designs, recognizing how these abstract elements communicate Islamic values and beliefs.

II. OBJECTIVES

This article is intended to identify the geometric structures found in the illuminated Quran mushaf. Additionally, the article seeks to explore the development of basic geometric patterns and motifs, showcasing the accuracy and craftsmanship in utilizing these fundamental geometric designs.

III. SIGNIFICANCE OF THE STUDY

This study of the Quran mushaf primarily adopts a formalistic approach, focusing on analysing the visual elements within the decorative aspects of Quranic illumination. However, it is important to note that the study does not yet fully include iconographic analysis. Iconography involves interpreting and analysing the symbolic and

meaningful content depicted in artworks. Such studies delve deeper into the layers of meaning, symbolism, and narratives conveyed through illustrations, calligraphy, and other visual elements in the Quran manuscript (Mohd Din, Mokhtar, Wan Muhammad Daud, Muhammad & Mudzafar, 2021).

IV. QURAN MUSHAF

The Quran mushaf was revealed to Prophet Muhammad (PBUH) and narrated to the Muslims. The Quran is used as guideline and reference to mankind on this earth and to provide proof on the existence of the creator and divinely messenger that started with the first surah al-Fātiḥa [1] and ended with al-Nās [114]. The Quran has a distinct structure that facilitates easy reading. Each *juz'* contains words, sentences, verses, paragraphs, diacritic markings, and verse counts. These sections are adorned with decorations and reflectors. All decisions regarding the decoration of texts and folios were made with the purpose of enhancing readability and evoking emotional and aesthetic responses (Omar et al., 2023). Md Zain (2007) categorizes the decorative styles of Quran mushaf in the Malay world based on features such as color, overall format, decorative design, and *sulur* motifs. He also identified several key elements in manuscript illumination, including *Muwajjah, Shamsa*, frames, *jidar, sulur* motifs, and domes.

V. GEOMETRIC PATTERN

A geometric pattern is a design composed of shapes, lines, and angles that are repeated in a systematic and often symmetrical way. These patterns can include basic geometric shapes such as circles, squares, triangles, hexagons, and other polygons, arranged in various configurations to create complex and visually appealing designs.

A geometric pattern is an arrangement of shapes and forms that embody underlying mathematical principles and structures. Critchlow, K. (1976) a prominent figure in the study of sacred geometry, views geometric patterns as representations of fundamental principles of order and harmony present in the natural world and the cosmos. He emphasizes that these patterns are not merely decorative but are deeply rooted in the mathematical and spiritual dimensions of reality, reflecting universal truths and underlying structures that connect all aspects of existence. Geometric patterns serve as a bridge between the physical and metaphysical realms, embodying the principles of balance, proportion, and unity.

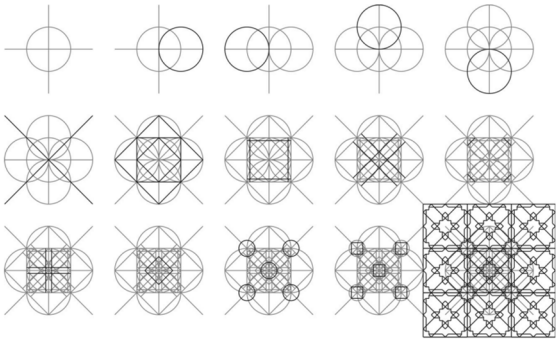

Figure 1. Compass and ruler construction of an Islamic geometric pattern (B. Dave, A. I. Li, N. Gu, H.-J. Park, eds).

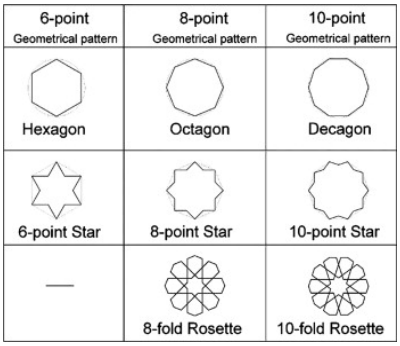

Figure 2. Islamic geometrical patterns (Y. Abdullahi, M.R.B. Embi, 2013).

VI. METHODOLOGY

The observation process involved capturing visual images through photography and taking manual notes. The researcher then analysed the basic geometric structures by focusing on formalistic aspects, including the elements of art

and principles of design, utilizing Adobe Illustrator software for formalistic visual analysis.

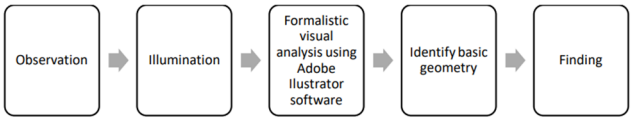

Figure 3. The method of analysis used follows the approach of Omar et al. (2023).

Figur 4. Examples of Quran Mushaf from Malay World.

VII. RESULT

Figure 2 was drawn by the researcher using lines and shapes to illustrate the fundamental geometric structure. Adobe Illustrator software was employed to accurately depict these lines and shapes. This illumination sheet is symmetrical, consisting of two identical sheets that are decorated as a pair. Initially, the researcher sketched on the right side of the sheet. The illumination sheet is organized into vertical and horizontal sections. The shapes near the margins feature square structures that act as layered frames, supporting the oval motif inside them. The central illumination showcases an oval structure serving as the focal point. This oval is nested within a square, which is then embellished with surrounding Quatrefoil shapes. The dome structures are adorned with intertwined floral motifs, with three triangular domes located on top of the *jidar*, outside the *jidar*, and at the end of the *jidar*. The domes have triangular shapes and are decorated with floral motifs that extend upwards.

VIII. CONCLUSION

In conclusion, the detailed analysis and sketching of Figure 4 highlight the intricate use of geometric patterns in the illumination sheet, emphasizing the symmetrical design and the interplay of shapes such as squares, ovals, and quatrefoils. The use of Adobe Illustrator software allowed for precise depiction, revealing the layered frames, central focal points, and the ornate dome structures adorned with floral motifs. This process underscores the careful consideration given to both the aesthetic and structural elements of the design, contributing to the overall harmony and balance of the illuminated manuscript.

In a broader context, these geometric patterns reflect the principles of Islamic geometry, which often embody concepts of unity, order, and the infinite nature of creation. The use of repetitive geometric shapes and patterns in Islamic art is not only a demonstration of artistic skill but also serves as a symbolic representation of the divine order in the universe, where each element is intricately connected and harmonized.

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REFERENCES

[1] Abu Hassan, N., Amin, P. & Tohid, S. (2017). The concept of tawhid in visual artworks. International Conference on Studies in Arts, Humanities and Social Sciences (SAHSS-2017). https://doi.org/10.17758/eirai.f0117454.

[2] Azad, A. (2020). Islamic values in Islamic art. Astrolabe: A CIS Student Research Journal, 2020(1), 1–24. Retrieved from https://www.hbku.edu.qa/sites/default/files/islamicvaluesinislamicart.pdf.

[3] Critchlow, K. (1976) Islamic Pattern: An analytical and Cosmological Approach, Schocken books, New York, NY.

[4] Hashim, S. F. M., Ibrahim, M., Jamil, A. A., Cob, S. A. C., Omar, M., & Razali, H. M. (2021a). Art appreciation of the Malaysia Independence Day logo 2020. AIP Conference Proceedings, 2347(Icamet), 1–8. https://doi.org/10.1063/5.0055655

[5] HMRazali, M.Ibrahim, M.Omar and SFMHashim (2022), The Role of Malaysian Batik to Preserve Art and Heritage Identity, International Journal of Scientific Research and Engineering Development (IJSRED)

[6] HMRazali, M.Ibrahim, M.Omar and SFMHashim (2021), Current challenges of the batik industry in Malaysia and proposed solutions, AIP Conference Proceedinghttps://doi.org/10.1063/5.0055651

[7] M.Omar, M.Ibrahim, HMRazali, and SFMHashim (2021), The beauty in the Malay manuscript appreciation of art, AIP Conference Proceedinghttps://doi.org/10.1063/5.0055659

[8] Md Zain, D. H. (2007). Ragam hias al-Quran di alam Melayu. Kuala Lumpur: Utusan Publication & Distributor Sdn. Bhd.

[9] Mohd Din, N. H., Mokhtar, M., Wan Muhammad Daud, W. S. A., Muhammad, S. A., & Mudzafar, N. (2021). The conceptual framework of Islamic art in the establishing style of art illumination in Malay manuscripts. DESIGN-DECODED 2021, August 24-25, Kedah, Malaysia. https://doi.org/10.4108/eai.24-8-2021.2315170.

[10] Omar, M., Ibrahim, M., Abdullah, I., Yaakub, R., Mohd Razali, H., Md Hashim, S. F., Daud, M. Z., & Jakaria, R. B. (2023). Geometrics in the illumination of Terengganu Quran manuscript (L.M.N.T 2002.1). Al-Irsyad: Journal of Islamic and Contemporary Issues, 8(2), 1107-1118. https://doi.org/10.53840/alirsyad.v8i2.372

[11] Sabri, M. F., Mokhtar, M., & Mahamood, M. (2022). The integrations of Islamic patterns in Malaysian contemporary art. International Journal of Academic Research in Progressive Education and Development, 11(4), 437– 449. https://doi.org/10.6007/ijarped/v11-i4/15868.

