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The Interpretation of Patterns and Symmetry in the Qur'an: Does Mathematics Serve as Proof of Divinity or Merely an Aesthetic Interpretation?

Nurhikmah

Universitas Islam Negeri Alauddin Makassar, Indonesia hikmahnur192@gmail.com

Ibnu Imam Al Ayyubi

Sekolah Tinggi Agama Islam Darul Falah, Indonesia ibnuimam996@staidaf.ac.id

Ai Sri Masfuroh

Sekolah Tinggi Agama Islam Darul Falah, Indonesia aisrimasfuroh1@gmail.com

Firda Noerzanah

Sekolah Tinggi Agama Islam Darul Falah, Indonesia firdanzh@gmail.com

Siti Rahmawati

Indonesian Overseas School (SILN) Makkah, Saudi Arabia alice.sitirahmawati@gmail.com

Abstract:

This study aims to explore the meaning of patterns and symmetry in the Qur'an and the role of mathematics in the context of divinity and aesthetics. Using a qualitative approach with a phenomenological study design, this research involves scholars of Qur'anic interpretation, religious educators,

and mathematicians who understand the relationship between mathematics and religion. A total of nine participants were selected through purposive sampling based on specific criteria:(1) academic or professional background in Qur'anic exegesis, religious education, or mathematics, (2) engagement in interdisciplinary discourse between science and religion, and (3) willingness to participate in in-depth interviews. Data were collected through in-depth interviews and textual analysis of the Our'an using an interpretative approach. The findings indicate that patterns and symmetry in the Qur'an serve as aesthetic elements and representations of the order in God's creation. Most participants perceive this order as evidence of God's power in creating the universe with mathematical laws humans can comprehend. However, some perspectives view patterns and symmetry primarily as aesthetic interpretations that enrich the spiritual experience of Muslims. Overall, this study opens opportunities for integrating the understanding of patterns and symmetry in the Qur'an with mathematics education, allowing science and religion to be comprehended as a harmonious unity.

Keywords: Qur'an, mathematics, divinity, aesthetics, phenomenology

A. Introduction

The Qur'an, as the holy book of Islam, not only serves as a spiritual and moral guide but also contains structural complexities that invite analysis from various perspectives, including linguistics, literature, and even mathematics¹. The depth of its verse arrangements reveals patterns and symmetries that have captivated researchers across multiple disciplines. This phenomenon has sparked an ongoing discourse on whether this order indicates deliberate divine design or merely a result of the aesthetic and rhetorical characteristics inherent in the classical Arabic literary tradition.

Interpretations of patterns and symmetry in the Qur'an have given rise to diverse perspectives. On one hand, some scholars believe that the numerical order and geometric patterns found in the Qur'an are manifestations of a scientific miracle,

¹ Ghulam Murtadlo et al., "Mendalami Living Qur'an: Analisis Pendidikan Dalam Memahami Dan Menghidupkan Al-Qur'An," *PANDU : Jurnal Pendidikan Anak Dan Pendidikan Umum* 1, no. 2 (2023): 112–18, https://doi.org/10.59966/pandu.v1i2.206; Purbatua Manurung, Abdul Hasan Saragih, and Pagar Hasibuan, "A Study of the Philosophy of Education and Analysis of the Principles of Implementing Education According to the Al-Qur'an," *Pharos Journal of Theology*, no. 105(2) (2024), https://doi.org/10.46222/pharosjot.105.28; Amrindono Amrindono, "Metode Pembelajaran Al-Qur'an Bagi Anak Usia Dini," *Smart Kids: Jurnal Pendidikan Islam Anak Usia Dini* 4, no. 1 (2022): 8–16, https://doi.org/10.30631/smartkids.v4i1.106.

serving as strong evidence of its divine origin². They argue that these patterns transcend human capabilities, representing a miraculous phenomenon that could not have emerged without divine intervention. On the other hand, a more critical and skeptical viewpoint suggests that these phenomena can be explained through linguistic approaches, literary analysis, or even the cognitive tendency of humans to perceive patterns in complexity a psychological phenomenon known as apophenia.

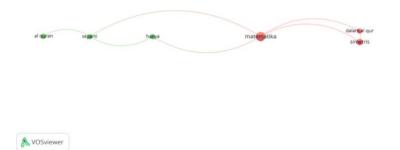
Although numerous studies have explored the mathematical aspects of the Qur'an, there remains a significant gap in critically evaluating the methodologies used to identify and analyze these patterns. Most existing research tends to be descriptive and affirmative, emphasizing the reinforcement of miracle claims without thoroughly examining the potential for interpretive bias. These studies rarely explore the historical, social, and linguistic contexts that may have influenced the composition of the text. Critical inquiries explicitly questioning whether these mathematical findings hold genuine theological significance or are simply part of an aesthetic construction similar to those found in other literary texts are still relatively scarce.

In response, the researcher reviews several articles to identify research novelty and gaps in understanding the meaning of patterns and symmetry in the Qur'an: Is mathematics a proof of divinity or merely an aesthetic interpretation? The researcher conducts a literature review using the VOS viewer application to

² Asep Sugandi et al., "Overcoming Student Difficulties in Completing Analytical Geometry Problems in Linear Equation Using Goegebra Scripting," in Proceedings of the International Conference of Science and Technology for the Internet of Things (Yogyakarta: EAI, 2018), https://doi.org/10.4108/eai.19-10-2018.2281360; Andi Pramono, "Pola Geometri Pada Seni Dan Arsitektur Islam Di Andalusia," Journal of Islamic Architecture 1, no. 3 (2012), https://doi.org/10.18860/jia.v1i3.1772; Antonius KAP Simbolon, "Penggunaan Software Geogebra Dalam Meningkatkan Kemampuan Matematis Siswa Pada Pembelajaran Geometri Di SMPN2 Tanjung Morawa," Jurnal Cendekia: Jurnal Pendidikan Matematika 4, no. 2 (November 6, 2020): 1106-14, https://doi.org/10.31004/cendekia.v4i2.351; Septiana Wijayanti, Triyono Triyono, and M Wahid Syaifuddin, "Penggunaan Model-Eliciting Activities (MEAs) Untuk Meningkatkan Kemampuan Berpikir Reflektif Pada Pembelajaran Geometri Transformasi," JURNAL E-DuMath 7, no. 1 (2021): 1-5, https://doi.org/10.52657/je.v7i1.1330; Osman Birgin and Faden Topuz, "Effect of the GeoGebra Software-Supported Collaborative Learning Environment on Seventh Grade Students' Geometry Achievement, Retention and Attitudes," The Journal of Educational Research 114, no. 5 (2021): 474-94, https://doi.org/10.1080/00220671.2021.1983505.

analyze existing publications on this topic, aiming to map the interconnected relationships between studies through a matrix network analysis.

Figure: 1 Bibliometric Analysis of the Interpretation of Patterns and Symmetry in the Qur'an



Using bibliometric analysis through the VOS viewer application, the researcher examines SINTA-indexed articles from 2020 to 2025 related to the Interpretation of Patterns and Symmetry in the Qur'an: Is Mathematics Proof of Divinity or Mere Aesthetic Interpretation? With the assistance of the Publish or Perish version 8 application, the analysis visualizes a bibliometric network to assess the trend development of research in this area. The findings indicate that research addressing "the interpretation of patterns and symmetry in the Qur'an: Is mathematics proof of divinity or mere aesthetic interpretation?" remains scarce. This gap in the literature, combined with field studies, has motivated the researcher to conduct a deeper exploration of this topic.

This study examines the meaning behind the patterns and symmetry found in the Qur'an, considering two primary perspectives: as evidence of divine authenticity or as an aesthetic expression within the literary tradition. It will evaluate the mathematical claims frequently associated with the so-called scientific miracles of the Qur'an, analyze the methodologies used to identify these patterns, and contextualize the findings from broader theological, literary, and cognitive perspectives. Through this approach, the study aspires to contribute a more balanced and critical perspective to the academic discourse on the intersection of mathematics, aesthetics, and spirituality in sacred texts.

B. Literature Review

1. The Concept of Patterns and Symmetry in Mathematics

In mathematics, a pattern is defined as a sequence or arrangement of elements that follow a specific rule in a repetitive manner. These patterns

can appear in various forms, such as numerical sequences, geometric shapes, or logical relationships between elements³. For instance, in an arithmetic sequence, there is a pattern of addition or subtraction with a constant difference between each number. In contrast, a fixed ratio between elements characterizes a geometric sequence. Patterns facilitate predictions, problemsolving, and the understanding of more complex structures. Patterns are also found in everyday life, such as in plant growth, DNA sequences, and musical rhythms. Theoretically, patterns help identify order and relationships between variables in various systems. Mathematics utilizes patterns to develop formulas, models, and algorithms that are fundamental in science and technology. The ability to recognize and analyze patterns is essential for the development of mathematical logic, computer programming, and artificial intelligence.

On the other hand, symmetry is a concept that describes balance and harmony within an object or structure. Symmetry occurs when an object can be divided or transformed in a specific way without altering its overall shape or appearance⁴. In mathematics, several types of symmetry exist, including reflection, rotational, and translational. Reflection symmetry occurs when a shape has a mirror line or plane that divides the object into two identical parts. Rotational symmetry appears when an object can be rotated around a central point and still appear the same after rotation. Meanwhile, translational symmetry means that a certain distance can shift an object in a specific direction without changing its shape. This concept is widely applied

³ Hijriati Hijriati, Zikra Hayati, and Karnisah Karnisah, "Jarimatika Method of Daily Prayer: Does It Affect Children's Spiritual Intelligence?," *Atfālunā Journal of Islamic Early Childhood Education* 6, no. 1 (2023): 61–70, https://doi.org/10.32505/atfaluna.v6i1.6042; Muhamad Jaeni et al., "From Manuscripts to Moderation: Sundanese Wisdom in Countering Religious Radicalism," *Religious: Jurnal Studi Agama-Agama Dan Lintas Budaya* 7, no. 1 (2023): 65–76, https://doi.org/10.15575/rjsalb.v7i1.21446.

⁴ Irni Latifa Irsal and Nurma Yunita, "The Correlation between Memorizing the Qur'an Ability and Students' Logical-Mathematical Intelligence," Jurnal Pendidikan Matematika (Kudus) 5, no. 2 (2022): 255, https://doi.org/10.21043/jpmk.v5i2.16586; Titania Ramadhani et al., "Exploration of the Numerical Value of One in the Qur'an," INOMATIKA 4, no. 2 (2022): 214-23, https://doi.org/10.35438/inomatika.v4i2.336; Thoriq Aziz Jayana et al., "Wasathiyah Quality Management: A Approach in Islamic Education Quality Management," Tarbawi: Jurnal Keilmuan Manajemen Pendidikan 8, no. 01 (2022): 79-88, https://doi.org/10.32678/tarbawi.v8i01.5821; Mutahar Qassem, "Style and Meaning in Translations of the Qur'anic Verb-Noun Collocations into English," PSU Research Review 5, no. 3 (2021): 201–14, https://doi.org/10.1108/prr-12-2020-0041.

in geometry, physics, art, and architecture, demonstrating how mathematics plays a role in understanding and creating visual harmony across various fields.

The combination of patterns and symmetry forms the foundation of many complex mathematical structures. For example, in fractal theory, selfrepeating patterns with scale symmetry are found in natural formations such as crystals, clouds, and coastlines. Symmetric patterns are also central to group theory in abstract mathematics, which analyzes algebraic structures and properties of geometric transformations. In this context, symmetry is not merely about visual aesthetics but also reflects fundamental principles in physical laws, such as in the theory of relativity and quantum mechanics. Numerical patterns that exhibit symmetry, such as palindromic numbers or the arrangement of Pascal's triangle, demonstrate how order and balance play a crucial role in uncovering the fundamental nature of numbers and mathematical structures.

Furthermore, the study of patterns and symmetry is not limited to pure mathematics but also serves as a foundation for analyzing religious texts, including the Qur'an. Numerical patterns and symmetrical structures found in the arrangement of verses or surahs are often interpreted as indications of intentional design. Some researchers attempt to link these mathematical patterns to evidence of divine authorship, while others perceive them as part of linguistic beauty and literary aesthetics. In this context, patterns and symmetry bridge science and spirituality, opening a space for reflection on how the order of the universe can be understood through the lens of mathematics. This phenomenon also sparks philosophical debates on whether such order is objective proof of divine creation or merely a subjective interpretation constructed by the human mind.

2. Historical Study of Patterns in the Qur'an

The historical study of patterns and symmetry in the Qur'an has attracted the attention of Muslim scholars and scientists since the early days of Islam. They observed that the Qur'an not only contains spiritual teachings but also possesses a structure that demonstrates order and balance⁵. For instance,

⁵ Makrifatu Nur Afifah, Aep Saepudin, and Huriah Rachmah, "Implementasi Metode Talaqqi Dalam Meningkatkan Kemampuan Menghafal Al-Quran," *Bandung Conference Series: Islamic Education* 2, no. 2 (2022): 515–22, https://doi.org/10.29313/bcsied.v2i2.3834; Gusti Rahmat Gusti, Abdul Ghaffar, and Pirhat Abbas, "Konsep Ummī Dalam Al-Qur'an," *Journal of Comprehensive Islamic Studies* 1, no. 2 (February 3, 2023): 373–90, https://doi.org/10.56436/jocis.v1i2.119; Edi Hermanto et al., "Kisah Dalam Al-Qur'an (Studi

some researchers have identified mathematical concepts such as numbers, sets, geometry, and sequences within Qur'anic verses. These studies suggest that these patterns are not mere coincidences but rather a distinctive feature of the Qur'an's textual structure. Classical scholars such as Al-Farra' and Sibawaih also explored linguistic aspects that reveal symmetry and harmony in the arrangement of verses. This laid the foundation for contemporary studies that delve deeper into the numerical and structural dimensions of the Qur'an.

In the 20th century, interest in numerical analysis of the Qur'an grew with the emergence of the "Code 19" theory popularized by Rashad Khalifa. He claimed that the number 19 holds special significance in the structure of the Qur'an, such as the number of letters in the *Basmala* and the frequency of certain words appearing in multiples of 19⁶. Although this theory remains controversial and has received criticism from various scholars, it has sparked further research into mathematical patterns within the sacred text. Some scholars view these patterns as evidence of divine design, while others regard them as the result of statistical interpretation. This research has also inspired new approaches in Qur'anic studies, integrating data analysis methods with classical exegesis. Consequently, discussions on numerical patterns continue to evolve within academic circles.

Additionally, several studies highlight the use of mathematical concepts in the Qur'an to explain natural phenomena and the laws governing the universe ⁷. For example, some research explores verses related to creation and the

Kitab Madkhal Ila Al-Quran Al Karim Karya Mohammed Abed Al-Jabiri)," *PERADA* 3, no. 1 (2020): 1–10, https://doi.org/10.35961/perada.v3i1.132; Umi Nasikhah and Herwani Herwani, "Peran Keluarga Dalam Mengajarkan Al-Qur'an Kepada Anak Sejak Dini," *Borneo : Journal of Islamic Studies* 2, no. 2 (2022): 115–24, https://doi.org/10.37567/borneo.v2i2.961.

⁶ Muhammad Alam Ramadhan and Wahyu Hidayat, "Analisis Manajemen Risiko Dalam Mengatasi Tantangan Siswa Buta Huruf Al- Quran Di SMAN 1 Lembang," *Ta Lim Jurnal Pendidikan Agama Islam Dan Manajemen Pendidikan Islam* 3, no. 1 (2024): 11–24, https://doi.org/10.59098/talim.v3i1.1704; Ahmad Nurrohim, Suharjianto Suharjianto, and Putri Lista Samsiatun, "Analitik Darajah Dalam Q.S Al Baqarah Ayat 228 Analisis Komperatif Dalam Tafsir Al Munir Dan Waahatut Tafassiir," *Syntax Idea* 6, no. 5 (2024): 2408–16, https://doi.org/10.46799/syntax-idea.v6i5.3430.

⁷ Muhammad Alam Ramadhan and Wahyu Hidayat, "Analisis Manajemen Risiko Dalam Mengatasi Tantangan Siswa Buta Huruf Al- Quran Di SMAN 1 Lembang"; Nurrohim, Suharjianto, and Lista Samsiatun, "Analitik Darajah Dalam Q.S Al Baqarah Ayat 228 Analisis Komperatif Dalam Tafsir Al Munir Dan Waahatut Tafassiir."

order of the cosmos, linking them to modern mathematical concepts. This includes understanding proportions, symmetry in biological structures, and natural phenomena that align with mathematical principles. Such studies aim to demonstrate that the Qur'an is spiritually relevant and consistent with contemporary scientific discoveries. Some modern Muslim scientists have even developed Islamic cosmological theories based on Qur'anic verses that exhibit significant numerical and structural patterns. This indicates how sacred texts can serve as an inspiration for advancements in science and technology.

Overall, the historical study of patterns and symmetry in the Qur'an suggests that this sacred text offers spiritual guidance and elements that can be analyzed through mathematical approaches. This opens opportunities for integrating science and religion while encouraging further research on how mathematical concepts can be discovered and understood within the Qur'anic context. Such research also enriches Muslims' understanding of the beauty and depth of the Quran, which is not only textual but also structural. Researchers can explore new dimensions in interpreting divine revelation by combining scientific methodologies with traditional exegesis. Moreover, this study affirms that the Qur'an is a text with multiple layers of meaning, making it relevant for exploration from various academic perspectives.

3. Examples of Mathematical Patterns in the Qur'an

The Qur'an contains various mathematical concepts embedded within its verses, including numbers, arithmetic operations, geometry, sets, and numerical patterns⁸. One of the most prominent examples is found in Surah Al-Baqarah (2:282), which contains the longest verse in the Qur'an regarding financial transactions, highlighting the importance of accurate calculations in economic dealings. Additionally, Surah An-Nisa' (4:11-12) explains inheritance laws, involving fractions, proportions, and fundamental

⁸ Nur Asliyah and Rusydi Ananda, "The Effect of Memorizing the Quran on Students' Mathematical Logical Intelligence," Desimal: Jurnal Matematika 5, no. 1 (2022): 61-68, https://doi.org/10.24042/djm.v5i1.11521; Muhammad Zia Alghar, Aam Choirotul Cholidiyah, and Dwi Setiawati Radjak, "Integrative Mathematics: Mathematical Concepts in Hadiths with the Theme of Uqiyah," West Science Islamic Studies 1, no. 01 (2023): 93-101, https://doi.org/10.58812/wsiss.v1i01.285; Syahrial Ayub et al., "Kaffah Science Learning Model: The Meaning and Its Influence on the Character of Pre-Service Teachers," SHS Web of Conferences 182 (2024): 01012, https://doi.org/10.1051/shsconf/202418201012; Mahdalena Mahdalena and Nurlaila Nurlaila, "Quranic-Based Basic Mathematics Course for Students in Universities," Islamic Jurnal As-Salam 8. no. 1 (2024): 64–79, https://doi.org/10.37249/assalam.v8i1.735.

arithmetic concepts. These inheritance laws not only illustrate the clarity of Islamic legal principles but also demonstrate how mathematical principles are applied to ensure fairness in wealth distribution. Another fascinating numerical pattern is found in the frequency of certain words, such as the word *yaum* (day), which appears exactly 365 times, reflecting the number of days in a year. This suggests an underlying order within the Qur'anic text, consistent with real-world temporal cycles.

Beyond numerical patterns, the Qur'an also exhibits structural symmetry that is intriguing to analyze. One of the most notable forms of symmetry is known as "ring composition" or chiastic structure, where themes or verses are arranged in a mirrored pattern, such as A-B-C-B'-A', creating thematic balance. A well-documented example is the overall structure of Surah Al-Baqarah, which displays symmetry in legal rulings, stories of prophets, and moral teachings. This phenomenon not only highlights the literary beauty of the Qur'an but also showcases its well-organized logical structure. Additionally, Rashad Khalifa's "Code 19" theory emphasizes numerical patterns related to the number 19, observed in the structure of *Basmala*, letter counts, and the frequency of specific words. While controversial, this theory has inspired many studies in Qur'anic numerology, fueling discussions on whether these patterns serve as divine evidence or are mere statistical coincidences.

4. Linguistic Symmetry and Literary Structure of the Qur'an

The Qur'an is not only regarded as a sacred text with spiritual teachings but also as a literary masterpiece with a complex and beautiful linguistic structure. Literary approaches to understanding the Qur'an emphasize its unique rhetorical styles, figures of speech, and narrative structures⁹. For instance, the use of repetition, metaphors, and alliteration in Qur'anic verses creates a rhythmic and aesthetic appeal that strengthens moral and spiritual messages. Such recurring patterns are often found in verses emphasizing core themes such as monotheism, the Day of Judgment, and justice. Stylistic studies of the Qur'an analyze these elements to understand how messages are

⁹ Midhat Jugo, "Značenjske Intencije Apsolutnog Objekta u Kur'anskom Tekstu," *Zbornik Radova 18*, no. 20 (2022): 269–90, https://doi.org/10.51728/issn.1840-4448.2022.20.269; Arin Rinda Rosalina, "Penggunaan Ayat-Ayat Al-Qur'an Dalam Sastra Melayu (Kajian Hermeneutik Terhadap Karya Sastra Hamzah Fansuri)," *Al-Tsaqafa : Jurnal Ilmiah Peradaban Islam* 19, no. 2 (2023): 196–211, https://doi.org/10.15575/al-tsaqafa.v19i2.19212.

effectively and aesthetically conveyed, even to readers who do not understand Arabic. Furthermore, analyses of narrative structures in the stories of prophets reveal recurring patterns, such as dramatic climaxes followed by resolutions, reinforcing moral lessons. This affirms that the Qur'anic structure is aesthetically pleasing and strategically designed for message delivery.

Modern linguistic analysis has been applied to examine the structure and meaning within the Qur'an. This approach includes phonology, morphology, syntax, and semantics to understand how meaning is constructed and conveyed. For example, research on the stylistic structure of *khabariyyah* (informative) verses in the Qur'an has revealed specific constructions used to communicate messages with clarity and impact. These unique grammatical structures reinforce messages without losing literary beauty. Additionally, studies on syntactic patterns have shown how the balance between clauses and phrases creates harmony in recitation. By integrating linguistic and literary approaches, researchers can further explore the complexity and beauty of the Qur'anic language, as well as its effective message delivery.

Structuralist linguistic approaches have also been employed to analyze symmetry in the Qur'an. Researchers have discovered that many surahs and verses follow chiastic patterns, where central ideas are placed in the middle, surrounded symmetrically by supporting themes. A frequently discussed example is the structure of Surah Al-Baqarah, which exhibits balance in themes of law, ethics, and faith. This symmetry enhances aesthetic beauty and serves as a rhetorical tool to reinforce core messages. Furthermore, some studies have found hidden mathematical patterns in word and letter arrangements, supporting hypotheses about a meticulously structured divine design. This suggests that the Qur'an contains layers of meaning accessible through traditional exegesis and systematic structural analysis.

Modern hermeneutic approaches have contributed to understanding the Qur'an's patterns. Hermeneutics allows for reading the text while considering its historical, cultural, and linguistic contexts. Through this method, researchers can explore how the structure and language of the Qur'an functioned within the Arab society during the time of the Prophet Muhammad. Moreover, this approach opens new interpretative avenues relevant to modern challenges, such as the relationship between science, mathematics, and spirituality. This interdisciplinary approach broadens our understanding of the Qur'an as a text that is not only sacred but also rich in

meaning and universal relevance. Thus, literary and linguistic analyses become essential tools for unveiling the wonders of the Qur'an from a broader perspective.

5. Is This Pattern Evidence of Divine Existence?

The relationship between mathematical patterns and the concept of divinity in the Qur'an often serves as a source of reflection on understanding the grandeur of Allah's creation. The numerical patterns found in the Qur'an, such as the balance in the occurrence of certain words, are seen as evidence of order that could not possibly be coincidental¹⁰. For example, the words *dunya* (world) and *akhirat* (hereafter) are each mentioned 115 times, reflecting the balance between worldly life and the afterlife. Such balance displays an extraordinary harmony, indicating that the structure of the Qur'an is not merely the work of ordinary human composition. In this context, mathematics is viewed as a universal language used to demonstrate the signs of Allah's greatness (*ayatullah*). These patterns are also seen as part of the ijaz (miracle) of the Qur'an, which is found in its linguistic beauty and hidden order within it. Thus, mathematical patterns in the Qur'an are not only subjects of scientific study but also serve as a means to reinforce belief in the existence and majesty of Allah.

Furthermore, the concept of divinity in the Qur'an is often associated with the order of the universe, which is also governed by mathematical principles. The Qur'an repeatedly invites humanity to reflect on Allah's creation, such as the heavens, the earth, and the movement of celestial bodies, all of which are governed by the laws of physics and mathematics. For instance, in Surah Al-Mulk (67:3-4), Allah invites people to look at the sky and find no flaw in His creation, demonstrating the perfection of cosmic design. This order indicates the presence of mathematical principles that govern planetary motion, gravity, and other natural phenomena. From this perspective, science between modern mathematics bridges and theological understanding, where natural laws are seen as manifestations of divine will. This reinforces the idea that mathematical order is not just a scientific

¹⁰ Raqib Moslimany, Anzar Otaibi, and Frugo Shaikh, "Designing a Holistic Curriculum: Challenges and Opportunities in Islamic Education," *Journal on Islamic Studies* 1, no. 1 (2024): 52–73, https://doi.org/10.35335/beztg009.

phenomenon but also a reflection of Allah's infinite wisdom and perfect organization.

However, this relationship also raises a critical question: Are these mathematical patterns truly evidence of divinity, or are they merely human aesthetic interpretations of the text? Some scholars argue that humans tend to search for patterns everywhere as part of their cognitive process. This phenomenon is known as *apophenia*, the tendency to see patterns or meaningful connections in random data. In the case of the Qur'an, the numerical patterns may result from specific analytical methods aimed at discovering order. Therefore, it is important to distinguish between patterns that objectively exist within the text and subjective interpretations derived from particular analytical approaches. Nonetheless, for many believers, these patterns still hold deep spiritual significance, as they form part of the religious experience that strengthens their faith.

Overall, the relationship between mathematical patterns and the concept of divinity in the Qur'an reflects an ongoing dialogue between science, philosophy, and theology. On one hand, these patterns may strengthen the argument for intelligent design in Allah's creation. On the other hand, a critical analysis of these patterns helps maintain objectivity in scientific inquiry, avoiding unsupported claims. This approach demonstrates that science and religion need not be in conflict, but can complement each other in understanding reality. Mathematics, as a universal language, provides tools to uncover the order of the universe, while the Qur'an provides a spiritual and philosophical context for contemplating the meaning behind that order. Therefore, reflection on these patterns enriches scientific understanding and deepens the spiritual significance of human life.

6. Aesthetic Interpretation: Between Beauty and Coincidence

Aesthetic interpretation of patterns in the Qur'an focuses on how the linguistic and structural beauty of the text influences its readers' understanding. The Qur'an is known for its harmonious verse structure, beautiful rhyming, and rhythms that evoke strong emotional effects. This beauty is found in its meaning and the arrangement of words that create spiritual and artistic resonance. For instance, the repetition of phrases like "*Ar-Rahman Ar-Rahim*" serves as a theological emphasis and creates a calming musical effect. This aesthetic is often linked to the literary miracle of the Qur'an (*i'jaz al-lughawi*), which is believed to surpass the capacity of ordinary humans to create similar works. However, the question remains

whether these patterns are purely the result of divine design or simply a natural human response to linguistic beauty. Some scholars argue that this beauty may arise from the classical Arabic language structure, which is inherently rich in rhythm and symmetrical patterns. Therefore, the beauty in the Qur'an can be seen as a combination of divine messages and the universal aesthetics of the language.

On the other hand, a perspective suggests that most of the aesthetic patterns found in the Qur'an may result from the human cognitive tendency to find order in everything. This phenomenon is known as *pareidolia*, where the human brain tends to see patterns, even in what is actually random. For example, the symmetrical structure in some surahs or the balance in the number of certain words could be the result of linguistic coincidence, which is then interpreted as a deliberate pattern. In this context, beauty is not a proof of divinity, but a result of human perception of language. However, for many believers, the presence of such patterns, whether intentional or not, remains a means to contemplate the greatness of Allah. This view indicates that aesthetic interpretation is highly subjective, dependent on one's cultural, religious, and personal background. In other words, what some people see as "divine beauty" might be viewed by others simply as linguistic uniqueness.

Nevertheless, it is important to acknowledge that the Qur'an offers beauty in its structure and language and in the harmony of its moral and spiritual messages. These aesthetic patterns, such as parallelism, antithesis, and narrative symmetry, serve more than just to embellish the text. They help reinforce memory, facilitate memorization, and provide a stronger emotional impact on listeners. This is why the Qur'an is easily memorized by millions of people worldwide, even by those who do not speak Arabic as their mother tongue. Whether intentional or not, the aesthetic effect plays a significant role in preserving the Qur'anic text for centuries. Therefore, the beauty in the Qur'an is not merely an artistic aspect, but an integral part of its function as a sacred text that must be reflected upon and internalized.

Ultimately, the discussion of beauty and coincidence in the Qur'an invites us to consider the relationship between aesthetic subjectivity and scientific objectivity. Are these aesthetic patterns evidence of divine design, or merely a reflection of the human ability to find meaning in linguistic structure? The answer to this question may never be fully definitive, as it involves dimensions of faith and personal interpretation. For some, the beauty itself

is sufficient evidence of divine involvement. For others, beauty is a product of naturally developed linguistic and cultural processes. However, it is clear that the Qur'an has touched the hearts of millions through its linguistic beauty and the depth of its message, transcending mere calculations of numbers or symmetrical patterns.

7. Criticism of the Mathematical Approach to the Qur'an

The mathematical approach to analyzing the Qur'an has attracted considerable attention from researchers, but it has also faced sharp criticism from academics and theologians. Critics argue that numerical analysis of the Qur'an is often subjective and lacks a strong methodological foundation. One of the main criticisms is that the selection of data used to support numerical patterns tends to be selective, ignoring data that does not align with the proposed hypothesis. This leads to confirmation bias, where researchers focus only on evidence that supports their claims, without considering the possibility of coincidence or natural linguistic variation in literary texts. Moreover, some numerical approaches rely on data manipulation, such as changing word spellings, ignoring certain letters, or adjusting calculation rules to fit desired results. This phenomenon raises questions about the validity of these claims, especially in the context of scientific studies that prioritize objectivity and replicability.

This skeptical view is also supported by the argument that numerical patterns in sacred texts are not unique to the Qur'an. Similar studies have been conducted on other classical texts, such as the works of Shakespeare or even fictional novels, producing intriguing numerical patterns, even though they lack theological significance. This suggests that the tendency to find patterns is part of human cognitive nature, always searching for order in random information. In psychology, this phenomenon is known as *apophenia*, the tendency to see patterns or meaningful relationships where none actually exist. Therefore, the claim that numerical patterns in the Qur'an are evidence of divinity is considered weak unless accompanied by deeper theological or historical arguments. Critics argue that the beauty and depth of the Qur'an should not be reduced to mere numerical calculations that could arise by chance.

Furthermore, the mathematical approach to the Qur'an is often seen as risky in that it may divert attention from the moral, spiritual, and ethical messages that are central to Islamic teachings. The Qur'an was revealed as a guide for human life, not as a numerical puzzle to be solved. By overemphasizing

numerical aspects, there is concern that the substantial meaning of the Qur'an's teachings may be overlooked. Some scholars argue that the tendency to search for mathematical patterns could create the impression that the miracle of the Qur'an lies only in its hidden and complex aspects, rather than in the clarity and simplicity of its divine message. This contradicts the fundamental principle of the Qur'an, which states that its guidance has been revealed clearly and is easy to understand for anyone, regardless of intellectual background or mathematical analytical skills.

However, it is important to understand that criticism of the mathematical approach to the Qur'an does not completely reject the value of such studies. Some researchers view numerical analysis as one way to explore the linguistic structure of the Qur'an, as long as it is done with a critical and methodological approach. However, they emphasize that the results should be seen as an additional reflection, not as definitive proof of theological truth. Therefore, this approach should be complemented by studies in tafsir, linguistics, and history to gain a more comprehensive understanding. Ultimately, the Qur'an remains a source of spiritual inspiration that transcends numbers and patterns, inviting humanity to reflect on the greatness of Allah through His signs scattered throughout the universe.

C. Research Methods

The research method used is a qualitative approach with a phenomenological study design¹¹. This approach was chosen because it allows the researcher to explore the meanings contained in the patterns and symmetry in the Qur'an, as well as how mathematics can be interpreted in the context of divinity or aesthetics. The participants in this study are a group of scholars in tafsir (Qur'anic exegesis), religious educators, and mathematicians who have an understanding of the relationship between mathematics and religion, specifically in the context of the Qur'an. According to Djazilan¹², the selection of participants in qualitative research should be based on their ability to provide deep and relevant insights into the phenomenon being studied. A purposive sampling technique will be used to select participants, where participants are chosen based on certain criteria

¹¹ John W. Creswell and J. David Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed. (London: SAGE Publications, 2017).

¹² Syukron Djazilan, "Proses Sosialisasi Dan Internalisasi Nilai-Nilai Ke-Islaman Pada Kelas Menengah Muslim Di Surabaya," *Education and Human Development Journal* 4, no. 1 (2019): 34–49, https://doi.org/10.33086/ehdj.v4i1.1082.

relevant to the research objective, namely, an understanding of the patterns and symmetry in the Qur'anic texts.

The instruments used in this study are in-depth interviews and document analysis. Interviews will be conducted with participants to explore their views on the patterns and symmetry in the Qur'an, as well as the role of mathematics in these interpretations. As stated by Solichin and Alim¹³, in-depth interviews are an effective technique for understanding participants' perspectives on a particular phenomenon. Another instrument is the textual analysis of the Qur'an using a tafsir approach to map the patterns and symmetry found in certain verses¹⁴. Interviews will be conducted using open-ended interview guidelines, allowing participants to freely express their views.

The research procedure begins with the selection of participants who meet the criteria, followed by in-depth interviews to collect data on their views regarding mathematics in the Qur'an. As suggested by Assafari¹⁵, data obtained through interviews should be analyzed carefully to uncover the meanings contained in the participants' statements. After the interviews, the data will be analyzed using thematic analysis techniques, which identify emerging themes from the interviews and the texts being analyzed. The data will be analyzed inductively to find patterns and meanings in the texts and the participants' views. The results of the analysis will be used to understand whether mathematics in the Qur'an is viewed as evidence of divinity or merely as an aesthetic interpretation.

D. Findings

The results of this study show that the interpretation of patterns and symmetry in the Qur'an can be understood through two main perspectives: first, as evidence of divinity, demonstrating Allah's greatness through the order of the universe reflected in the structure of the Qur'anic text; and second, as an aesthetic interpretation that portrays beauty and harmony in life. These findings are based on interviews with tafsir experts, mathematicians, and religious educators who have differing views on the relationship between mathematics and religion.

¹³ Mohammad Muchlis Solichin and Achmad Muhlis, "Correlation between Religiosity and Student Achievement Motivation in Islamic Education Science Students," *International Journal of Innovation, Creativity and Change* 11, no. 10 (2020): 406–20.

¹⁴ Nurhikmah Nurhikmah, "Character Education Islam From the Views of Imam Al-Ghazali," *Jurnal Al Burhan* 4, no. 1 (2024): 53–66, https://doi.org/10.58988/jab.v4i1.300.

¹⁵ Rika, Hasbi, and Amir Faqihuddin Assafari, "Urgensi Pembinaan Moral Dalam Pembentukan Karakter Siswa Di SMP Negeri 3 Palopo," *Indonesian Journal of Islamic Educational Review* 1, no. 1 (2024): 1–6, https://doi.org/10.58230/ijier.v1i1.45.

1. Interpreting Mathematics as Evidence of Divinity

Some participants argued that the patterns and symmetry in the Qur'an, particularly in the arrangement of verses and letters, reflect the order and harmony of Allah's creation. As one tafsir expert stated,

"The patterns found in the verses of the Qur'an show that the universe was created with precision, and mathematics is one way for us to understand that precision."

This view is supported by a mathematician who believes that the symmetry in the Qur'an indicates a connection between mathematics and divinity.

On the other hand, there is also the view that the patterns and symmetry in the Qur'an function more as aesthetic elements that reflect beauty and harmony within the text. For example, a religious educator stated,

"Symmetry in the Qur'an can be seen as a way Allah reveals His beauty through a language structure that maintains balance."

This perspective emphasizes that the patterns and symmetry are not solely evidence of divinity but rather a means to convey profound spiritual messages through the beauty of language and the structure of the text.

2. The Relationship Between Mathematics and Spiritual Meaning

The majority of participants acknowledged the connection between mathematical patterns and spiritual meaning in the Qur'an. They argued that while mathematics has a logical and scientific dimension, it can also enrich our understanding of verses that contain symbolism and deep meanings. As one mathematician expressed,

"The mathematical patterns in the Qur'an not only reveal scientific truth but also carry a spiritual dimension that helps Muslims draw closer to Allah."

E. Discussion

This section of the research delves deeper into the interpretation of patterns and symmetry in the Qur'an, examining how the two perspectives viewing them as evidence of divinity and as aesthetic interpretation emerge in the views of the participants. The interview evidence cited supports the argument about the profound meanings embedded in the patterns and symmetry of the Qur'an.

1. Patterns and Symmetry in the Qur'an as Evidence of Divinity

The perspective that links patterns and symmetry in the Qur'an to divine proof is based on the belief that the order and mathematical structure found within the Qur'an reflect the greatness and power of Allah. As one scholar explained, the Our'an contains certain patterns not found in any other texts in the world. This suggests that the creation of the Qur'an is a highly structured and wise act of Allah. According to this view, these patterns may include the arrangement of verses that have mathematical relationships, such as the number of letters, words, and the structure of verses that correlate with certain mathematical principles¹⁶. For example, the number of words in specific surahs can be found to follow a highly regular pattern, which, according to scholars, serves as evidence of an order that can only be explained by Allah's power. Mathematics is a means to view the beauty of His creation, and the Qur'an itself is a tangible manifestation of this order¹⁷. Furthermore, some mathematicians see the relationship between mathematics and the Qur'an as a way to understand the order of the universe reflected in the Our'anic text. As one mathematician stated, "The Our'an introduces concepts that are highly complex and ordered, and I believe this could not happen without the order created by a greater power¹⁸.

2. Patterns and Symmetry in the Qur'an as Aesthetic Interpretation

On the other hand, there is a view that the patterns and symmetry in the Quran are more of an aesthetic element reflecting the beauty of the text's structure. As explained by a religious educator, Symmetry in the Qur'an emphasizes the beauty of language and balance in the message conveyed¹⁹.

¹⁶ Izzam Izzul Islami, "Falsifikasi Nalar Tafsir Al-Qur'an : Studi Kritis al-Dakhīl Fī al-Tafsīr" (Thesis, Universitas Islam Negeri Walisongo Semarang, 2020).

¹⁷ Sainee Tamphu et al., "Building Bridges to the Future of Learning: Exploring Artificial Intelligence Research Using R-Studio Assisted Bibliometrics," *Cogent Education* 11, no. 1 (2024), https://doi.org/10.1080/2331186x.2024.2417623.

¹⁸ Helmi Al Hafid Fauzi et al., "Work Stress Levels At Madrasah Tsanawiyah Arrukhshatul'ulum: The Challenges of Digitalization in Developing Islamic Educational Institutions," *Mudir: Jurnal Manajemen Pendidikan* 7, no. 1 (2025): 19–27, https://doi.org/https://doi.org/10.55352/mudir.v7i1.1469.

¹⁹ Sabilla Qurratu Aini and Kharis Nugroho, "Zauj and Imara'ah in The Qur'an, Says Mutaradif (A Pre-Emptive Study of the Quran's Semantic Interpretation by Toshihiko Izutsu)," *Proceeding ISETH (International Summit on Science, Technology, and Humanity)*, 2024, 1346–57, https://doi.org/10.23917/iseth.4283; Azlisham Abdul Aziz et al., "Analysis Of Literature Review On Spiritual Concepts According To The Perspectives Of The Al-Quran, Hadith And Islamic Scholars," *Turkish Journal of Computer and Mathematics Education (TURCOMAT)* 12, no. 9 (2021): 3152–59; Nur Laela, Baso Syafaruddin, and Muhammad Hamsah, "Teacher's Duties in

This view focuses not only on mathematics but also on how Allah conveys His revelations in a highly beautiful way. From this perspective, symmetry is seen as an aesthetic aspect that enriches the spiritual meaning within the Qur'an. An interview with the religious educator revealed that these patterns and symmetries provide a harmonious impression when understanding the moral and spiritual messages in the text. "The beauty in the Qur'anic text structure brings peace to the heart and deepens our understanding of Allah's messages," they added²⁰.

While there are two different viewpoints, the majority of participants indicated that the patterns and symmetry in the Qur'an are not limited to either the scientific or aesthetic dimension but also possess a deeply spiritual dimension. One mathematician stated, "Mathematics in the Qur'an is not just about numbers and patterns, but also about understanding the relationship between the creation and the Creator." This view suggests that the patterns and symmetry in the Qur'an can serve as a means to draw closer to Allah. For instance, Dr. Rahmat added that symmetry in the Qur'an reminds us that everything in life is ordered and has a purpose, and this is evidence of Allah's greatness. This perspective illustrates that although we can observe mathematical patterns in the Qur'an, the true essence of these patterns is to strengthen the faith and spiritual understanding of Muslims towards Allah's revelation.

The patterns and symmetry in the Qur'an can be understood both as evidence of divinity that demonstrates Allah's order and greatness, as well as an aesthetic interpretation that reflects the beauty and balance of the Qur'anic messages. These two perspectives do not contradict each other but complement one another, with mathematics serving as a way to understand the order of the universe, while simultaneously creating a deeper

the Al-Quran Perspective, Tafsir Surah Al-Baqarah Verse 151," *Al-Afkar, Journal For Islamic Studies* 7, no. 1 (2024): 829–40, https://doi.org/10.31943/afkarjournal.v7i1.882; Asmawati Muhamad, Abdul Halim Syihab, and Meguellati Achour, "Quranic Messages on Environmental Sustainability: An Expository Study of Its Relevance," *Al-Bayān – Journal of Qur `ān and Ḥadīth Studies* 17, no. 1 (2019): 38–59, https://doi.org/10.1163/22321969-12340069; Asliyah and Ananda, "The Effect of Memorizing the Quran on Students' Mathematical Logical Intelligence." ²⁰ Agustina Rahayu, Fitri Raudah, and Syaufika Widianingrum Ekaputri, "Integrasi Nilai-Nilai Islam Dalam Pembelajaran Matematika," *Religion : Jurnal Agama, Sosial, Dan Budaya* 5, no. 1 (2024): 3680–90, https://doi.org/10.54373/imeij.v5i3.1367.

understanding of the beauty of His revelation²¹. The patterns and symmetry in the Qur'an also highlight the connection between science and spirituality, where both serve as ways to draw closer to God and understand His creation. Thus, the meaning of the patterns and symmetry in the Qur'an is not limited to the mathematical or aesthetic dimensions but also extends to a profound spiritual dimension.

F. Concluding Remarks

This research successfully explored the interpretation of patterns and symmetry in the Qur'an, as well as the role of mathematics in the contexts of divinity and aesthetics. Based on the findings, it can be concluded that the patterns and symmetry in the Qur'an not only function as aesthetic elements but also as representations of the order of God's creation. The majority of participants believed that this order reflects God's power, who created the universe with laws that can be understood through mathematical principles.

However, the research also revealed another perspective that views the patterns and symmetry in the Qur'an more as an aesthetic interpretation. These patterns are seen as a means to enrich Muslims' spiritual experience by beautifying the divine messages contained in the Qur'anic texts. In this view, although mathematics is used to understand these patterns, the primary goal is to deepen spiritual awareness and enhance devotion during worship.

Overall, this research opens up possibilities for integrating the understanding of patterns and symmetry in the Qur'an with mathematics education, allowing students to see the connection between science and religion. Therefore, the results of this study contribute to the development of educational approaches that combine spiritual depth with scientific order in understanding God's creation, as well as enriching our understanding of mathematics in the context of religion.

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²¹ Mahdalena and Nurlaila, "Quranic-Based Basic Mathematics Course for Students in Islamic Universities"; Meraj Ahmad, "Literary Miracle of the Quran," *Ar-Raniry: International Journal of Islamic Studies* 3, no. 1 (2020): 205–20, https://doi.org/10.22373/jar.v3i1.7490.

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