

NIDHAL GUESSOUM'S METHOD OF SCIENTIFIC INTERPRETATION: AN ANALYTICAL STUDY ON *AL-AYAH AL-KAUNIYYAH* AND ITS RELEVANCE TO THE CONTEMPORARY URBAN MUSLIM SOCIETY

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Received: 22/07/2025	Revised: 20/10/2025	Approved: 31/12/2025
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DOI: [10.32332/akademika.v30i2.11299](https://doi.org/10.32332/akademika.v30i2.11299)



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Abstract

The scientific interpretation of the Qur'an seeks to reconcile revelation with modern science through a rational and contextual approach. Within this field, Nidhal Guessoum, an astrophysicist and philosopher, emerges as a central figure who challenges the *i'jāz 'ilmi* paradigm and literalist readings by proposing a multi-layered hermeneutic grounded in theology, language, and ethics. This study addresses the ongoing academic debate between *i'jāz 'ilmi* advocates and critical contextualists, identifying the lack of systematic criteria for evaluating scientific interpretation as its primary research gap. The novelty of this research lies in operationalizing Guessoum's method into a structured analytical framework applicable to contemporary studies. using a qualitative library-based method, the analysis employs close reading and thematic coding across theological, linguistic, and ethical dimensions, followed by a comparative appraisal to trace convergence and divergence between the two frameworks. The findings reveal, first, that Guessoum's model balances scientific rationality with theological integrity through contextual interpretation; second, it redefines *tafsīr 'ilmi* as an ethical engagement rather than empirical validation; and third, it provides an interpretive model adaptable to urban Muslim contexts navigating faith and modernity. However, Guessoum's method offers a critical yet constructive bridge between revelation and scientific inquiry. It contributes theoretically by refining evaluative tools for Qur'anic science discourse and practically by providing implications for educators and urban Muslim institutions to integrate scientific literacy with faith-based education.

Keywords: Qur'an and Science; Nidhal Guessoum; Scientific Interpretation; *I'jaz 'Ilmi* Debate; Urban Muslim Society

A. Introduction

The Qur'an, as the sacred scripture of Islam, was not revealed in a cultural vacuum but emerged as a divine dialogue with the social, political, and intellectual realities of its time. Its message remains continuously relevant due to its universality and adaptability across changing contexts (Manna' Al-Qathan, n.d.). As understood, *tafsīr* or exegesis represents the intellectual product of human engagement with revelation, reflecting the development of thought and civilization throughout history. Consequently, Qur'anic interpretation evolves alongside the dynamics of human knowledge and culture. In the modern era, the Qur'an can be approached dialogically in relation to science, provided that appropriate interpretive and epistemological criteria are established (Akbar dan Saeed, 2018).

Within this phase of intellectual and scientific modernity, various methods of *tafsīr* have emerged. Among them is *tafsīr 'ilmi*, a method that utilizes findings in the field of science to demonstrate the truth of scientific facts alluded to in the Qur'an (Jalaluddin Al-Suyuti, 2008). Within this dynamic field, Nidhal Guessoum, a contemporary Muslim astrophysicist and philosopher, proposes an innovative framework that redefines how Muslims can interpret the Qur'an in light of modern scientific knowledge (Guessoum dan Bigliardi, 2023). As one of the central figures in modern scientific interpretation, Guessoum develops a distinctive hermeneutic by integrating theology, ethics, and philosophy. His framework is rooted in the concept of God as the ultimate foundation of both revelation and scientific inquiry. This synthesis seeks to establish a constructive dialogue between Islam and modern science, viewing them as complementary rather than contradictory domains (Guessoum, 2011a).

Rejecting the *i'jāz 'ilmi*, Guessoum promotes a multi-level reading of the Qur'an, especially for *āyāt kauniyyah*. This approach emphasizes a layered interpretation that moves from linguistic and theological meaning toward ethical understanding, while engaging modern scientific theories such as cosmology, evolution, and quantum mechanics. Guessoum's model reflects an effort to maintain the balance between scriptural fidelity and scientific rationality, positioning the Qur'an as a living text that invites reflection through the intellectual instruments of every age. His thought draws inspiration from Ibn Rushd's philosophical legacy, affirming that religion, philosophy, and science ultimately converge in their pursuit of truth and coherence (Guessoum, 2011b).

Before the rise of *tafsīr 'ilmi*, many Qur'anic verses related to natural phenomena were interpreted metaphorically or limited by the scientific understanding of earlier periods (Salama, 2018). With the progress of modern science, these verses have been reexamined, offering new interpretative possibilities that enrich both scientific and theological discourse (Rosa, 2021). Such developments demonstrate that Islamic scholarship is not static but dynamic and responsive to the evolving realities of human civilization (Zulfis, 2019). Guessoum's approach thus represents a significant attempt to reconcile faith and reason within this evolving discourse, offering a paradigm that speaks directly to the intellectual and existential challenges of Muslims living in technologically advanced and plural societies.

Divergent perspectives characterize the ongoing debate surrounding the Qur'an and science. On one side, *i'jāz 'ilmi* advocates that the Qur'an contains scientific miracles that prefigure modern discoveries, emphasizing the text's empirical validation. On the other side, critical contextualists argue that such readings risk anachronism and instead call for an interpretation rooted in the Qur'an's moral, linguistic, and historical dimensions. Between these poles lies Guessoum's multi-level method, which integrates theological meaning with scientific reasoning while

maintaining the Qur'anic ethical core. However, despite the growing attention to Guessoum's program, scholarly discussions have yet to operationalize clear criteria for evaluating layered interpretation across theological, linguistic, and ethical domains. Moreover, few studies have systematically mapped his position within the broader typology of Scientific Interpretation, ranging from literalism to multi-level contextualism (Guessoum, 2012).

This study seeks to fill that gap by examining Nidhal Guessoum's method as a middle path in the contemporary debate between *i'jāz 'ilmi* and contextualist approaches. The research focuses on how Guessoum's interpretative model operates methodologically and epistemologically and how it can be assessed through theological, linguistic, and ethical lenses. The central aim is to develop conceptual and ethical principles that can serve as evaluative tools for understanding layered Interpretation within the framework of science and religion. Conceptually, this study contributes by situating Guessoum's framework within the broader discourse on Qur'anic interpretation and modern scientific rationality. Methodologically, it offers an analytical model that identifies and codes interpretive claims through three dimensions: theological, linguistic, and ethical, thus providing an operational scheme for future hermeneutical studies. Practically, it provides insight for Muslim educators, scholars, and intellectuals who seek integrative interpretive models that reconcile faith and scientific understanding in the context of contemporary urban life. Through this synthesis, the research aims to demonstrate how the Qur'an can continue to inspire an intellectually vibrant, ethically grounded, and scientifically engaged Islamic worldview in the modern age.

B. Methods

This study employed a *library research* method, as all data were obtained from secondary sources, including books, journal articles, dissertations, and other scholarly publications (Rahmadi, 2011). The researcher applied this method to analyze data relevant to the study's theme, ensuring coherence between the theoretical framework and the research objectives (Nasution, 2003). The research adopted a *descriptive analytical* approach, which systematically collects, organizes, and interprets data to explain and evaluate the selected phenomena. This approach allows for an in-depth and comprehensive understanding of the topic (Siyoto, 2015).

The primary corpus of this study consisted of Guessoum's major works, including his monographs, articles, and related scholarly essays that articulate his integrative approach to science and religion. To establish a critical counterbalance, the study also examined Zaghlul An-Najjar's writings, which represent an opposing framework to Guessoum's rational scientific interpretation of *Al-āyah Al-kauniyyah*.

To operationalize the analysis, the study employed three interpretive lenses: the theological, linguistic, and ethical dimensions. The theological lens examined Guessoum's Qur'anic interpretations, while the linguistic lens analyzed his hermeneutical method in engaging the Qur'anic text, and the last ethical lens explores his normative assumptions about the moral implications of scientific interpretation. During coding, we examined the claims and opposing points in the works of Guessoum and An-Najjar, classify them according to the three analytical categories, and track how their perspectives align or diverge.

C. Findings and Discussion

1. Findings

Nidhal Guessoum is a leading modern Islamic intellectual with expertise in astrophysics. On 6 September 1960, Nidhal Guessoum was born in Algeria, precisely in the North African region (Guessoum, 2011b). Guessoum was born into a privileged family, with both parents being outstanding academics. In addition, Guessoum grew up in a socio-cultural environment that was strict in practicing Islam and highly valued science. Therefore, since childhood, Guessoum has been accustomed to the atmosphere of life in an intellectual environment (Guessoum, 2011b). Guessoum's father was a professor of philosophy and a *Hafidz* of the Qur'an. He also holds two Doctorates in Philosophy from two leading Universities: Sorbonne University in Paris and Cairo University in Egypt. He also served as Dean of the Faculty of Religious Studies at the University of Algeria. Meanwhile, his mother is an expert in literature with a Master's degree in Arabic Literature (Guessoum, 2011b).

Not only did his parents' achievements and position make Guessoum feel fortunate, but his family's extraordinary conditions and environment also made him feel fortunate. His home had a private library rich in books and references related to philosophy, religion, and literature. Guessoum's parents seem to have spoiled him and his four siblings with books and scholarly references (Nidhal Guessoum, 2011b). Since childhood, Guessoum and his siblings have been taught to study rationalist philosophy, apply the methodology of modern science, appreciate the beauty of art and literature, and understand the worldview of the Islamic perspective. This has helped them become capable of thinking logically and methodically without losing their identity as Muslims (Guessoum, 2011c).

Guessoum earned his PhD (and MSc) from the University of California at San Diego (USA) and spent two years as a post-doctoral researcher at NASA's Goddard Space Flight Center. He also has a long, ongoing collaboration with various institutions, especially in France, which results in him having many papers, especially in gamma-ray astrophysics. He is currently a Professor and Interim Head of Physics at the American University of Sharjah, UAE. In addition to having numerous papers, Prof. Guessoum has published numerous articles on issues related to science, education, the Arab world, and Islam, and authored several books, including *Islam's Quantum Question-reconciling Muslim tradition and Modern Science* (Nidhal Guessoum, 2011b).

Nidhal Guessoum's Method in Interpreting *Al-Āyah al-Kauniyyah*

Nidhal Guessoum's contribution to contemporary Qur'anic interpretation lies in his proposal of a layered interpretation approach that accommodates literal, metaphorical, and contextual readings of *al-ayah al-Kauniyyah* (Nidhal Guessoum, 2010a). Through this framework, Guessoum challenges these positivist tendencies of *I'jaz 'ilmi* advocates such as Zaghul Al-Najjar, who tend to equate Qur'anic truth with empirical discoveries while aligning more closely with critical modernist thinkers like Muhammad Asad, Hasan Hanafi, and Muhammad Syahrour, who emphasize interpretive plurality and contextual meaning (Nidhal Guessoum, 2011b).

According to Guessoum, Qur'anic verses should be read at multiple levels of understanding, acknowledging that each reader operates with different degrees of reasoning and knowledge. This notion of multilevel reading is primarily theological and hermeneutical, rooted in the belief that divine revelation speaks to various layers of human cognition. Such a method prevents the Qur'an from being reduced to a static

or scientific manual and instead upholds its dynamic and universal nature (Guessoum, 2008). Guessoum further insists that scientific knowledge and its philosophy must be fully comprehended before attempting to interpret verses that appear related to science. This principle demonstrates his epistemological discipline; interpretation must be grounded in validated scientific understanding rather than speculative analogies. By doing so, he seeks to protect the Qur'an from being confined to temporary or unstable scientific theories (Guessoum & Bigliardi, 2018).

In this respect, Guessoum departs from literalist and apologetic tendencies by advocating a hermeneutic approach when scientific findings seem to contradict literal interpretations of scripture. For instance, on issues such as biological evolution, he suggests that the text should be interpreted symbolically or allegorically, reflecting the Qur'an's purpose as moral guidance rather than a scientific encyclopedia (Guessoum 2014). This position marks a clear break from the *'ijaz* paradigm that treats modern discoveries as confirmations of Qur'anic miracles. Instead, Guessoum presents revelation as a source of spiritual meaning that coexists with empirical inquiry without being subsumed by it.

A significant strength of Guessoum's interpretative model is his consistent inclusion of ethical considerations in the reading of scientific verses. He contends that ethics must always precede the application of scientific knowledge, ensuring that technological advancements do not violate moral and religious boundaries (Guessoum, 2012). While Guessoum's hermeneutical structure demonstrates remarkable coherence and intellectual openness, it is not free from critique. His insistence on methodological naturalism, treating scientific reasoning as autonomous from divine causality, has led some scholars, notably Zaghul Al-Najjar, to argue that Guessoum's model risks secularizing revelation by prioritizing human rationality over divine intentionality. However, this tension also reveals the creative balance Guessoum attempts to maintain between faith and reason: his approach neither dissolves revelation into science nor isolates it from scientific discourse. Rather, it embodies what may be called a contextual rational hermeneutic, a middle path that allows for intellectual pluralism while safeguarding theological integrity (Al-Najjar, 214M).

His reading of certain Qur'anic examples, such as the (Q.S. al-Anbiyā' [21]:32), illustrates this interpretive flexibility. Earlier generations understood this verse as divine protection from evil forces, while modern readers associate it with the Earth's atmosphere or magnetosphere (Guessoum, 2011a). However, Guessoum does not confine the meaning to either a literal or scientific explanation; rather, he proposes that such verses carry multiple valid meanings corresponding to the intellectual horizons of different readers. This approach encourages epistemic humility and interpretive openness, qualities crucial in the cosmopolitan settings of today's Muslim communities, where believers encounter competing paradigms of truth and knowledge (Guessoum, 2010a).

Guessoum also quoted the opinion of Zaghul Al-Najjar, who quoted QS Al-Hadid, verses 25. Al-Najjar explained that iron was created in the Star. It was at this time that the iron was revealed. Further, Al-Najjar said that the information about the star's evolution that was only known 50 years ago was *I'jaz*. However, according to Nidhal Guessoum, such creation also occurs in almost all elements of the universe. Meteors in ancient times were often found in deserts or sometimes seen falling from the sky. They are known to contain a lot of iron or other metal elements. According to Guessoum, some people may prefer this interpretation of Al-Najjar, which may seem conservative in multilevel readings. Guessoum argues regarding the verse that the interpretation of iron as a meteor, according to him, has no element of *I'jaz* (Guessoum,

2011b)

According to Guessoum, multi-level reading goes beyond the metaphorical approach. This relates to another principle about how the Qur'an responds to different types of people with varied abilities in understanding various ideas, especially about the cosmic, spiritual, and social aspects (Guessoum, 2011a). That is why the Qur'an must accommodate these different thoughts, intelligences, learning styles, and times. Furthermore, Guessoum explained that the various interpretations are not necessarily all correct because the purpose of interpretation is not to achieve perfect accuracy but to convince readers or listeners (Guessoum, 2012).

In the fast-paced context of contemporary urban Muslim society, characterized by technological advancements, diverse educational backgrounds, and exposure to modern scientific paradigms, integrating religious principles with contemporary knowledge poses a unique challenge (Guessoum, 2016). Nidhal Guessoum's multi-layered interpretive method provides a flexible framework for urban Muslims to engage with the Qur'an while respecting its sacredness and adapting to the evolving scientific landscape. By addressing theological, linguistic, and ethical dimensions, this approach facilitates a harmonious relationship between faith and modern complexities, fostering a well-informed and dynamic religiosity that resonates with the cosmopolitan realities of urban life.

To meet these challenges, urban Muslim society should adopt a balanced and forward-thinking strategy that integrates faith with contemporary knowledge through education, critical inquiry, and ethical reflection. A culture of continuous learning can enhance understanding of Islamic principles while engaging with scientific and technological advancements. Communities and institutions should actively promote discussions that bridge religious and scientific perspectives, encouraging interpretations of sacred texts that uphold theological integrity while embracing modern insights. Ethical considerations must remain a priority in adopting technological innovations, ensuring alignment with Islamic values and contributing positively to societal well-being. This comprehensive approach empowers urban Muslims to navigate the complexities of modernity with confidence while preserving a resilient and adaptable Islamic identity.

2. Discussion

Nidhal Guessoum's Criticism of the Interpretation of *Al-Āyah al-Kauniyyah*

The idea developed in the 20th century that the encyclopedic principles of the Quran should be applied in modern knowledge and science, so that anything can be found in the Quran while it is appropriately explored. This view has resulted in two schools of interpretation, namely *tafsir' ilmi* (scientific interpretation) and the school of scientific miracles of the Qur'an (*'ijaz*) (Nidhal Guessoum, 2008).

In this case, Nidhal Guessoum criticized the use of scientific miracles, especially in interpreting *kauniyyah* verses. Guessoum accepted the view that the verses of the Qur'an indicated and explained many natural phenomena, but he did not agree or oppose the scientific interpretation of the Qur'an. Guessoum laments the simplification of the discourse of Islam and science, which is so rich and vast that it is only related to the scientific miracle of the Qur'an (Guessoum, 2012).

According to Guessoum, this theory is dangerous because it claims to be able to identify scientific facts and compare them with explicit statements in the Qur'an that show a misunderstanding of the nature of science. This theory also causes young Muslims to misunderstand science, believing that all science should be directed to the

Qur'an (Guessoum, 2010b). This tendency for Guessoum is closely related to the tendency of "religious literalism". This tendency can be interpreted as understanding religious texts directly from the lexical meaning of their words. In its most extreme form, literalism will insist not only on taking the most immediate meaning from a statement but also on denying the possibility of connotations that may exist beneath the surface of the text (Guessoum, 2010a).

The scientific miracle of the Qur'an, faced with the freedom of methods and scientific results, both have weaknesses. First, one should not look for references in the Qur'an for scientific discovery because scientific discovery is limited and temporal, while the truth of the Qur'an is eternal and absolute. Second, one cannot find the definitive truth with science, even though the definitive truth can only be seen in the Qur'an (Nidhal Guessoum, 2011a).

For Guessoum, *tafsir 'ilmi* and *'ijaz 'ilmi* are very different. *Tafsir 'ilmi* seeks to use scientific theories to produce new understandings or interpretations of nature-related verses. Meanwhile, *'ijaz 'ilmi* claims that some verses of the Qur'an contain clear scientific facts and are only being discovered now. For Guessoum, *I'jaz ilmi* is a theoretically and practically utopian idea and program (Nidhal Guessoum, 2011b). According to Guessoum, *I'jaz al-'ilm* is an idea that the Qur'anic verses, if read and interpreted scientifically, will explicitly reveal some scientific truths because the Qur'an contains all kinds of knowledge from the ancients and the moderns. This idea is partly justified by the verse, "We have not left out anything in the Qur'an" (Q.S. Al-An'am [6]: 38). In addition, Nidhal Guessoum considers the *I'jaz* approach, which claims that one can deduce scientific facts and compare them with clear statements in the Qur'an that show a clear misunderstanding of the nature of science (Stefano Bigliardi, 2018).

In the case of cosmology and astronomy, Mansour Hassan Elnaby wrote an article entitled "A New Astronomical Qur'anic method for the determination of the greatest speed C ", as quoted by Guessoum, based on a verse Q.S Al-Sajadah:5. It should be noted that the day referred to in this verse is the day of judgment, not ordinary days. The paper's authors then artificially combined this verse with several astronomical and geometric quantities to obtain a value of c (speed of light) close to the experimental result (i.e., 299,792.46km/s) (Nidhal Guessoum, 2011b).

Guessoum highlights Hassan Elnaby for significant conceptual and methodological errors in his critique. First, the verse only discusses time and does not mention distance. Therefore, calculating the speed of light based on that verse is invalid. Second, Elnaby manipulated physical quantities to get precise results, sometimes "setting" the equations by including the artificial cosine of an angle or the mean value of a given number (e.g., the moon-earth distance that varies throughout the year and even all the time). Third, the Qur'an mentions a thousand years according to your reckoning, which means synodic months, not sidereal months, as Elnaby used. Fourth, which should be very clear, Elnaby saturates the reader with various technical terms and physical concepts, including misinterpreting the particular theory of relativity. If this method were that powerful, it should be explained as simply and clearly as possible (Guessoum, 2011b).

Through all these scientific principles, Guessoum rejected the *i'jaz* approach and instead advocated what he called "multilevel reading." According to Guessoum, the Qur'an should not be a source of reference or verification of truth to test scientific theories. The interpretation of science is still considered problematic. These efforts tend to be uncreative because they wait for scientific findings and then find justification through Qur'anic verses.

Guessoum's critique is profoundly relevant for urban Muslim communities as they navigate the intersection of modern scientific advancements and traditional Islamic values. The concept of *ijaz al-'ilmi*, which seeks to align faith with contemporary scientific discoveries, often appeals to urban Muslims searching for validation of their religious beliefs in a world increasingly influenced by secular ideologies. However, Guessoum warns against the dangers of oversimplification and literalism, which can result in a superficial grasp of both science and religion. For urban Muslim scholars and educators, embracing Guessoum's nuanced and critical approach is essential to cultivating a worldview that balances the rigor of scientific exploration with the foundational principles of Islamic epistemology.

Contemporary urban Muslim societies should then foster a balanced approach to integrating science and religion, emphasizing the importance of critical thinking, intellectual humility, and genuine understanding. This entails creating educational programs that provide individuals with a strong grounding in both Islamic knowledge and modern scientific methodologies, enabling them to engage thoughtfully with both areas. Community leaders, educators, and scholars must advocate for meaningful dialogues that move beyond superficial attempts at harmonization, focusing instead on building a comprehensive worldview that respects both faith and reason. By addressing the complexities of scientific and religious engagement with depth and avoiding reductionist interpretations, urban Muslim communities can cultivate a resilient intellectual framework capable of meeting the challenges of contemporary life while remaining rooted in Islamic traditions.

Criticism of Nidhal Guessoum's Interpretation of *Al-Āyah al-Kauniyyah*

This discussion criticizes Guessoum's thoughts on rejecting *I'jaz ilmi* in interpreting the *kauniyyah* verse. In some of the statements of Guessoum, especially regarding *I'jaz ilmi*, Guessoum considers that this theory is a product of a sense of confusion that initially emerged gradually but is now globalized. That is the confusion between the legitimate attempt to combine the interpretation of the text with the newfound human knowledge and the principle that results, laws, and scientific discoveries can be found in the Qur'an and even in the *hadith* if the scientific research of these verses is carried out scientifically (Stefano Bigliardi, 2018). According to Guessoum, *I'jaz* is full of inaccurate statements built on a flawed and chaotic methodology (Guessoum, 2011b).

Nidhal Guessoum emphasized the significant influence of the Qur'an on the lives and thoughts of Muslims. This emphasis explains why discourses on science and religion among Muslims often refer to the Qur'an. According to Guessoum, this shows that logical arguments in the dialogue between science and Islam tend to be accepted by the public, both from ordinary people and the elite. With its peculiarities, the Qur'an can accommodate a wide range of ideas, although it is not always entirely in line with science. Guessoum argues that this interconnectedness can be achieved through a hermeneutic approach, which has become integral to the Islamic tradition (Guessoum, 2018).

According to Guessoum's view, most proponents of this principle are gradually shifting from using scientific knowledge to interpreting Qur'anic verses that are claimed to discuss space exploration, relativity, black holes, and the speed of light (Guessoum, 2012). On the other hand, one of the most striking ideas in Islamic literature is the claim that the Qur'an contains all kinds of knowledge, sometimes supplemented by statements from ancient to modern times. Guessoum quoted QS. Al-Hadid: 25. Guessoum explains the verse by stating that meteorites, often found or

sometimes seen falling from the sky in ancient times, contained many other iron or metal elements, the primary material for making swords. Iron can be easily understood as the element contained in meteorites. Guessoum chose to interpret iron as a meteor, which, according to him, has no element of *I'jaz* (Guessoum, 2011b).

In essence, Zaghlul Al-Najjar explains in this verse that iron is created in the Star. This statement is true. However, such creation also occurs in almost all elements of the universe other than the four or five elements in the periodic table. He also said that the information about the evolution of the star that was only known 50 years ago was *I'jaz*. Through this verse, Najjar argues that there is evidence that the Qur'an preceded modern science in facts about the cosmos, or the existence of Qur'anic explanations of natural phenomena centuries before the discovery of science (Zaghlul Al-Najjar, 2003).

On the other hand, Al-Najjar explained that what is often missed in the study of scientific miracles is the relationship between *Tafsir Ilmi* and *I'jaz Ilmi* (Scientific Miracles). Even though it should not be possible for a scientific miracle to stand alone without a scientific commentary, because the proof of a modern discovery that is hinted at or sounded by the Qur'an, which is a condensation of a scientific miracle, it must be built on a tafsir that contains an explanation and understanding of the true meaning of the verse, so that there is a correlation between the meaning meant by the verse and the discovery of modern science that is being proven, the emphasis on this is quite important because attempts to match without clear definitions and signs will lead to fatal errors. After all, the verse of the Qur'an is final, while the discoveries of modern science may not be final but can be changed and corrected (Al-Najjar, 2003).

However, Guessoum's method emphasizes the understanding of meaning depending on the level of education and the development of a person's life (Guessoum, 2011a). Guessoum should also know that scientific miracles are the best way to refute erroneous thinking by adhering to the standards that must be applied when interacting with Scientific Miracles in the Qur'an and the Sunnah of the Prophet Muhammad SAW. Therefore, not everyone can interpret the verses of the Qur'an and the Sunnah, which contain scientific cues at will and according to their lust (Al-Najjar, 2007b).

Tantawi Jauhari also gives an example in interpreting the verse about the creation of the earth and the sky (QS. Yunus:3). In giving rationality to the interpretation of this verse, Tantawi Jauhari did not follow his personal will. It is based on verses of the Qur'an that encourage *ijtihad*. This ensures that there are no errors in interpretation for readers, including the layman. The purpose of religion is to make doubt the basis for research and discussion, producing wisdom and philosophy, and giving birth to intelligent people (Tantawi Jauhari, 1930).

However, in verse Qaf:6, Allah SWT encourages humans to reflect and think about how the incident occurred. First, by using the *tafsir' ilmi* approach, discoveries can affirm the miracles contained in the Qur'an. Second, Allah SWT will fill a person's soul with faith in His majesty when he interprets certain verses of the Qur'an and describes delicate creatures through existing knowledge (Fahd ibn Abdurrahman Al-Rumi, 1999).

In interpreting the *Kauniyyah* Verse, the reader or interpreter must master various disciplines to understand it properly and correctly, especially in understanding the scientific cues in the Qur'an. They must strengthen themselves with the knowledge of the Arabic language and literature, the science of hadith, jurisprudence, theology, and early Arab history, as well as the knowledge of *Asbabun Nuzul*, the history of tafsir, and the Sirah of the Prophet Muhammad SAW. By fulfilling these conditions, they can explain verses related to the scientific aspects so that it becomes clear to mankind the miraculous aspects of the Qur'an that may have been difficult to understand before this

modern era of knowledge (Al-Najjar, 2007a).

In his commentary, Ibn Katsir explained that Allah SWT regulates the maintenance and guardianship of the Qur'an. Allah has preserved the Qur'an's authenticity from those who intend to destroy it. The proof is that the Qur'an will always be able to show its miracles to every human being on earth (Ibnu Katsir, 2002). In addition, interpreting verses related to the cosmos based on data from experimental science is not a reason to criticize the Qur'an with the knowledge obtained or to favor the Qur'an with such knowledge. The Qur'an is higher than all that. Interpretation based on modern scientific data remains a human attempt to understand in terms previously unavailable to them (Al-Najjar, 2007b).

Therefore, Guessoum's method tends to approach the Qur'an from a modern scientific perspective, potentially reducing the meaning of verses to mere physical or scientific phenomena. This approach can ignore these verses' broader metaphysical, spiritual, and wisdom dimensions. Kauniyyah verses describe natural phenomena and call for contemplation and strengthening faith.

From this discussion, it is evident that Nidhal Guessoum's integrative approach, which aligns Qur'anic interpretation with modern scientific principles, provides urban Muslim societies with a balanced framework to harmonize faith with scientific advancements, emphasizing intellectual rigor and historical context. In contrast, Zaghlul Al-Najjar's *I'jaz Ilmi* perspective aims to highlight the Qur'an's miraculous nature through modern scientific discoveries, advocating for a comprehensive understanding of both traditional Islamic sciences and contemporary science. Both approaches address the intellectual and spiritual needs of urban Muslims, with Guessoum advocating for a critical and balanced worldview, while Al-Najjar seeks to validate Islamic beliefs through their alignment with scientific findings in a secular world.

The tension between Guessoum's critique of *I'jaz Ilmi* and Al-Najjar's defense represents a broader debate within urban Muslim societies regarding the reconciliation of science and faith. Guessoum argues that *I'jaz Ilmi* risks reducing Qur'anic verses to scientific theories, potentially diminishing their spiritual significance, while Al-Najjar defends the Qur'an's miraculous nature, emphasizing its eternal wisdom and its capacity to inspire faith. This debate highlights the need for urban Muslims to adopt an approach that values scientific inquiry without diminishing the Qur'an's metaphysical and spiritual aspects. Both perspectives contribute to the intellectual discourse, with Guessoum fostering modern, critical engagement and Al-Najjar encouraging awe and faith, offering a holistic view that integrates faith with reason for urban Muslim educators and intellectuals.

D. Conclusion

This study has examined Nidhal Guessoum's scientific interpretation of *al-āyah al-kauniyyah* as a dialogical model between revelation and modern science. The findings show that Guessoum's multi-layered hermeneutic integrating theological, linguistic, and ethical dimensions offers an alternative to the literalist and apologetic tendencies of *i'jāz 'ilmi*. His approach affirms that the Qur'an speaks across intellectual levels, inviting rational engagement without reducing divine revelation to scientific theory. Compared to Zaghlul An-Najjar's empirical orientation, Guessoum's method provides a balanced framework that sustains theological integrity while engaging the epistemic rigor of science, thus resonating strongly with the intellectual and existential needs of contemporary urban Muslim societies.

However, this study is limited by the scope of its corpus, which focuses primarily

on Guessoum's monographs and selected writings without empirical audience data to assess their reception among urban Muslims. Furthermore, language constraints restrict direct engagement with Arabic and French materials that might deepen the analysis of Guessoum's sources and interlocutors. Despite these limitations, the study contributes conceptually by mapping Guessoum's layered interpretation within the broader typology of Qur'an science discourse and by highlighting its methodological distinctiveness.

Practically, these findings hold implications for educators, preachers, and urban Muslim institutions seeking to integrate scientific literacy with faith-based education. Guessoum's interpretive framework can inform curricula that foster critical reflection, ethical awareness, and intellectual openness toward scientific inquiry. Academically, this study encourages scholars of Qur'an and science to develop evaluative models that account for multi-dimensional interpretation, balancing rational and revelatory epistemologies. Future research should extend this analysis through empirical and pedagogical studies such as classroom interventions that test the application of layered interpretation, or comparative inquiries across cultural contexts, to explore how Guessoum's hermeneutics can cultivate an intellectually vibrant and ethically grounded engagement with science among Muslim audiences

E. Acknowledgements

The original manuscript is based on an undergraduate thesis for the Department of Qur'anic and Tafsir Science (IQT) at the University of Darussalam Gontor, Ponorogo, Indonesia. The research was conducted over a period of seven months, encompassing topic selection, data collection, data analysis, and the formulation of conclusions. This study was fully self-funded by the author, with no external influences or interests, ensuring its sole purpose is the advancement of knowledge.

F. Author Contributions Statement

In this study, each author made a significant contribution according to their respective roles. (MF) acted as the main supervisor, providing direction, supervision, and essential input related to the research concept and methodology. As the lead author, (HY), a student at University of Darussalam Gontor, and (MU) student at Istanbul Sabahattin Zaim University, are responsible for writing the manuscript, collecting data, analyzing, and interpreting the results. All authors also actively collaborated during the revision process until the manuscript reached a final form suitable for publication.

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