

Reconciliation of Islamic Science in Tafsir Al-Misbah: M. Quraish Shihab's Integrative Paradigm on Kauniyah Verses

Rekonsiliasi Ilmu Islam dalam Tafsir Al-Misbah: Paradigma Integratif M. Quraish Shihab tentang Ayat-ayat Kauniyah

Muhammad Rifqi

Affiliasi

UIN K. H. Abdurrahman Wahid Pekalongan

Corresponding Author

Email : muhammad.rifqi25018@mhs.uingusdur.ac.id

Abstract

Research Background: *The relationship between Islam and modern science represents one of the most contested frontiers in contemporary Qur'anic studies, particularly regarding the interpretation of verses concerning natural phenomena (ayat kauniyah). While scientific exegesis (al-tafsir al-'ilmi) has expanded considerably, existing research has predominantly focused on verifying correspondences between Qur'anic texts and scientific discoveries—a tendency that obscures the deeper epistemological architecture underlying such interpretive practices. This study addresses this lacuna by analyzing the integrative-reconciliatory paradigm embedded within M. Quraish Shihab's Tafsir Al-Misbah, moving beyond descriptive accounts of scientific interpretation to examine how Shihab systematically reconstructs the relationship between revelation, reason, and science.*

Methods: *Through qualitative content analysis and thematic analysis of Shihab's interpretations of cosmological, embryological, and environmental verses,*

Key Findings: *This study demonstrates that Shihab's approach transcends conventional scientific exegesis by constructing a three-dimensional integrative framework: (1) epistemological integration that positions revelation and empirical observation as complementary rather than competing sources of knowledge; (2) methodological integration that employs multidisciplinary tools while maintaining the Qur'an's hermeneutical autonomy; and (3) axiological integration that orientates scientific knowledge toward ethical responsibility and human welfare.*

Contribution: *The study's primary contribution lies in identifying and formalizing Shihab's "Integrative-Reconciliatory Paradigm" as a distinctive epistemological model that differs from both the conflict thesis and the subordination approach prevalent in science-religion discourse.*

Article History

Submission: 08-06-2026

Revision: 24-07-2026

Accepted: 27-07-2026

Published: 28-08-2026

Available: 28-08-2026

Copyright @ 2026 by
Muhammad Rifqi

DOI:
10.62446/averroes.v3i03.229.01



Conclusion: *This paradigm offers a theoretically grounded alternative for contemporary Qur'anic studies, one that preserves the transcendent authority of revelation while embracing the explanatory power of modern science within an ethically oriented framework.*

Keywords: *Ayat Kauniyah; Islamic Science; Integrative Epistemology.*

A. INTRODUCTION

The rapid advancement of science and technology in the twenty-first century has intensified debates concerning the relationship between religion and science, transforming them from abstract theological discussions into fundamental questions about the epistemological orientation of contemporary Islamic scholarship. Within Islamic intellectual discourse, these debates have generated three dominant approaches, namely the integration of religious and scientific knowledge (*integrasi ilmu*), the Islamization of science (*Islamisasi ilmu*), and the reconstruction of Islamic epistemology as an indigenous knowledge system (Hakim, Tobroni, and Faridi 2025:201–213; Irawan 2016:124–149; Nurcholis 2021:118–121; Saripuddin, Syukri, and Badarussyamsi 2022:142–147). Indonesian Islamic universities have largely responded by adopting knowledge integration as an institutional paradigm intended to overcome the dichotomy between religious and secular sciences (Abdullah 2014:175–203; Amin 2020:15; Aulia and Rossidy 2026). Nevertheless, these institutional initiatives raise a deeper epistemological question regarding how the Qur'an, as Islam's primary source of knowledge, can engage contemporary scientific developments without losing its hermeneutical authority or being reduced to a scientific manual. This issue becomes particularly significant in interpreting *ayat kauniyah*, whose discussion of cosmology, human creation, and natural phenomena has long provided the principal meeting point between revelation and empirical science (Anwar 2019:196–201).

Existing literature has acknowledged the importance of M. Quraish Shihab's *Tafsir Al-Misbah* in bridging Qur'anic interpretation and scientific knowledge, yet the discussion remains fragmented and largely descriptive. One group of studies focuses on Shihab's exegetical methodology by highlighting his linguistic, contextual, and socio-cultural approaches without examining their epistemological implications (Aisyah 2021:43–65; Iqbal 2010; Wartini 2014). A second group analyzes specific scientific themes, including evolution, environmental issues, and cosmological interpretation, primarily to demonstrate the compatibility between Qur'anic verses and scientific discoveries

(Awaluddin, Zuhri, and Rambe 2023; Hendra and Rezi 2021; Mahmud 2021:218–231). A third body of scholarship discusses broader philosophical models of science-religion integration through the integrative-interconnective paradigm and Islamic philosophy of science, emphasizing conceptual reconciliation rather than exegetical practice (Abdullah 2014:175–203; Amin 2020:87; Bakar 1999; Golshani 2004; Nasr 2008). Although these studies contribute substantially to understanding Islamic science and Qur'anic interpretation, they have not adequately explained the epistemological framework that enables Shihab to integrate scientific knowledge while maintaining the Qur'an's interpretive autonomy. Consequently, the relationship between philosophical theories of integration and their realization within actual Qur'anic exegesis remains insufficiently explored.

To address these limitations, this study investigates the epistemological foundations underlying Shihab's interpretation of selected *ayat kauniyah* in *Tafsir Al-Misbah*. Rather than assessing whether Qur'anic interpretations correspond with modern scientific findings, the study seeks to explain how scientific knowledge functions within Shihab's interpretive framework and what methodological, epistemological, and axiological principles govern this interaction. The analysis focuses on five representative verses covering three major scientific domains: cosmological origins (QS. Al-Anbiya' [21]:30; QS. Fussilat [41]:11), human creation (QS. Al-Mu'minun [23]:12–14), and environmental phenomena (QS. Az-Zumar [39]:21; QS. Ar-Rum [30]:48). These passages were selected because they represent the most prominent categories of *ayat kauniyah* that have generated sustained dialogue between Qur'anic interpretation and scientific inquiry, thereby providing a suitable basis for examining how Shihab operationalizes knowledge integration across different scientific contexts (Shihab 2002; Shihab 2007:53–56; Shihab 2013).

This study argues that Shihab's interpretation of *ayat kauniyah* represents not merely a form of scientific exegesis but the practical manifestation of an Integrative-Reconciliatory Paradigm that offers a distinctive contribution to contemporary Islamic epistemology. This paradigm differs from prevailing models in three important respects. First, it rejects both the conflict thesis and the subordination of either revelation or science by positioning the two as complementary sources of knowledge. Second, it preserves the hermeneutical autonomy of the Qur'an while employing scientific knowledge as an interpretive instrument rather than an epistemological authority. Third, it directs the integration of religion and science toward ethical responsibility and human welfare, extending beyond the cognitive orientation that characterizes much of

conventional scientific exegesis. Therefore, this study proposes that Shihab's epistemological framework provides an alternative model for understanding the relationship between revelation and science that is simultaneously integrative, context-sensitive, and normatively grounded, thereby enriching contemporary discussions on Islamic knowledge integration and Qur'anic hermeneutics.

This study adopts a qualitative research design grounded in a systematic literature review and textual analysis to investigate the epistemological framework underlying M. Quraish Shihab's interpretation of *ayat kauniyah* in *Tafsir Al-Misbah*. A qualitative approach was selected because the unit of analysis is not empirical behavior but textual meaning, interpretive reasoning, and epistemological propositions embedded within Qur'anic exegesis, making it appropriate for exploring conceptual relationships between revelation and scientific knowledge (Zed 2018). The primary source consists of *Tafsir Al-Misbah: Pesan, Kesan, dan Keserasian Al-Qur'an* (Shihab 2002), while additional works by Shihab—including *Wawasan Al-Qur'an* (Shihab 1996), *Membumikan Al-Qur'an* (Shihab 2007), *Kaidah Tafsir* (Shihab 2013), and *Logika Agama* (Shihab 2019)—were used to clarify his broader epistemological perspective. These primary texts were complemented by secondary literature on Qur'anic hermeneutics, Islamic epistemology, and science–religion studies to provide theoretical and contextual support. Data were collected through systematic documentation by identifying, selecting, and extracting Shihab's interpretations of five selected *ayat kauniyah*, thereby establishing a comprehensive corpus for subsequent analysis (Sugiyono 2022:329–333). Consequently, the documentation technique ensured that the analysis remained grounded in authoritative textual evidence directly relevant to the research objectives.

The analytical process combined content analysis and thematic analysis to explain how Shihab constructs the relationship between revelation, reason, and scientific knowledge within his exegetical discourse. Content analysis was employed to identify semantic structures, interpretive arguments, and epistemological assumptions expressed throughout the selected texts (Krippendorff 2018), whereas thematic analysis was used to classify recurring conceptual patterns concerning the functions of revelation, science, and human reasoning in Qur'anic interpretation (Braun and Clarke 2006:78–79). Rather than applying predetermined theoretical categories, the analytical framework was developed inductively through iterative coding of Shihab's explicit discussions on science–religion relations, the use of scientific concepts, and evaluative statements

regarding the role of science in interpretation. These initial codes were subsequently organized into three interrelated dimensions—epistemological, methodological, and axiological—which were then synthesized through abductive reasoning into the conceptual model referred to as the Integrative-Reconciliatory Paradigm. This analytical procedure enabled the theoretical formulation to emerge directly from the textual evidence while maintaining coherence with broader discussions of Islamic epistemology and science–religion integration.

B. DISCUSSION

1. Quraish Shihab's Epistemological Foundations

The foundational premise of Shihab's approach to science-religion relations is the epistemological complementarity of revelation (wahyu) and reason ('aql). Unlike positions that posit an inherent tension between divine revelation and human rationality, Shihab maintains that the Qur'an consistently positions reason as an instrument for comprehending both textual and natural signs of divine creativity. This complementarity rests on a theological premise: because both revelation and nature originate from the same divine source, they cannot fundamentally contradict one another. As Shihab articulates in his interpretation of QS. Ali Imran [3]:190-191—verses encouraging reflection on the creation of heavens and earth—natural phenomena are not merely physical objects but "signs" (ayat) directing human consciousness toward divine transcendence (Shihab 2002).

This position carries significant epistemological implications. Shihab identifies repeated Qur'anic imperatives to intellectual activity—*afalā ta'qilūn*, *afalā tatafakkarūn*, *afalā yanzurūn*—as evidence that Islam inherently validates empirical observation and rational inquiry. Indeed, he suggests that the historical decline of Muslim civilizations correlates with the weakening of this intellectual tradition, which the Qur'an actively promotes (Shihab 2007; Zahrul Athriah and Handrianto 2025: 44-57). This historical argument serves an epistemological function: it establishes that the integration of reason and revelation is not a modern accommodation but a recovery of classical Islamic intellectual authenticity.

However, Shihab's complementarity is asymmetrical. While reason possesses substantial capacity for understanding empirical reality, it cannot independently access metaphysical truths without revelatory guidance (Shihab 2019). This asymmetry prevents the reduction of revelation to rational demonstration while simultaneously preventing reason from operating in a value-vacuum. The relationship is therefore not competitive but hierarchical in function though not in dignity: reason interprets and

extends knowledge within domains accessible to empirical inquiry, while revelation provides orienting values and boundaries for knowledge application.

This framework differs markedly from Amin Abdullah's integrative-interconnective paradigm, which emphasizes horizontal dialogue between disciplines without clear hierarchical ordering (Amin 2020). Shihab's position preserves a stronger sense of revelatory authority while nonetheless granting reason significant operational autonomy within its proper sphere. It also differs from the Islamization of science approach associated with figures like Seyyed Hossein Nasr (2008) and Osman Bakar (1999), which subjects scientific methodology to metaphysical critique from Islamic principles. Shihab does not critique modern science's methodological naturalism; rather, he accepts its empirical findings while contesting any metaphysical extrapolations that would deny divine creativity.

Shihab's integrative stance emerges most clearly in his critique of the modern educational dichotomy between religious and general sciences. This dichotomy, inherited from colonial educational structures and perpetuated in contemporary Indonesian Islamic universities, creates what Shihab regards as an artificial separation between two modes of engaging divine creativity: through textual study (*qauliyah* verses) and through natural observation (*kauniyah* verses) (Shihab 1996). The separation generates what Amin Abdullah terms an "*epistemological disconnect*" (Amin 2020; Kartanegara 2005) that hampers the development of integrated Islamic knowledge.

Shihab's historical argument reinforces this critique. He notes that the golden age of Islamic civilization featured no rigid separation between religious scholars and natural scientists—Ibn Sina, Al-Biruni, Al-Khwarizmi, and Ibn al-Haytham pursued empirical research within a framework of religious commitment (Shihab 2007). The subsequent decline coincided with the institutional separation of rational sciences from religious tradition. This historical narrative serves a strategic function: it naturalizes the integration of science and religion by presenting it as the restoration of classical Islamic intellectual practice rather than a modern innovation.

From the perspective of Islamic philosophy of science, Shihab's critique aligns with Osman Bakar's observation that pre-modern Islamic science developed within a *tawhidi* framework connecting all knowledge to divine understanding (Bakar 1999). However, Shihab's formulation is less metaphysically ambitious than Bakar's or Nasr's (2008) critiques of modern secular science. He does not propose to reconstruct scientific

methodology on Islamic metaphysical foundations; rather, he seeks to create interpretive space where scientific findings can inform Qur'anic understanding without subordinating revelation to scientific authority.

2. Scientific Interpretation of Kauniyah Verses: An Analytical Examination

The preceding epistemological framework becomes operative in Shihab's actual interpretive practice. Rather than presenting a catalogue of correspondences between Qur'anic verses and scientific theories, this section analyzes how Shihab deploys scientific knowledge interpretively and what this deployment reveals about his underlying paradigm.

QS. Al-Anbiya' [21]:30 states that heavens and earth were originally "one united thing" (*ratq*) before being "separated" (*fataqnāhumā*). Shihab's interpretation exemplifies what this study terms "hermeneutical caution"—a principled refusal to identify Qur'anic language exclusively with any particular scientific theory while remaining open to productive dialogue between textual and scientific discourses.

Shihab notes that *ratq* denotes a state of unity or cohesion, while *fataqnāhumā* indicates separation of previously united elements (Shihab 2002). He then observes that some modern scientists understand this verse as referencing the universe's initial dense state prior to expansion—the conceptual framework underlying Big Bang cosmology. Crucially, however, Shihab does not equate the verse with Big Bang theory. Instead, he presents the correspondence as a "possibility" (*kemungkinan*) of dialogue between revealed text and scientific findings, while emphasizing that the Qur'an's meaning exceeds any specific scientific theory's boundaries (Shihab 2013).

This interpretive move is analytically significant. It demonstrates that for Shihab, scientific theories function as hermeneutical possibilities rather than epistemological standards. The verse maintains semantic autonomy; scientific theories illuminate potential dimensions of meaning without determining meaning exhaustively. This position navigates between two extremes: the concordist approach that forces Qur'anic language into scientific frameworks, and the isolationist approach that denies any meaningful connection between revelation and empirical knowledge.

A similar pattern appears in Shihab's treatment of QS. Fussilat [41]:11, which describes the early heaven as "smoke" (*dukhan*). Shihab explains *dukhan* linguistically as gaseous matter not yet fully formed, then connects this to scientific accounts of cosmic gas condensation in stellar and galactic formation (Shihab 2002). Again, the scientific reference serves an illustrative rather than determinative function: it demonstrates that Qur'anic language accommodates scientific descriptions of gradual cosmic development

without being reducible to them.

The epistemological principle underlying these interpretations might be termed "non-exclusive correspondence": scientific theories may correspond to Qur'anic descriptions, but such correspondence neither proves the Qur'an's truth nor exhausts its meaning. This principle preserves what this study identifies as the hermeneutical autonomy of revelation—the insistence that Qur'anic meaning transcends any particular scientific conceptualization while remaining open to scientific illumination.

QS. Al-Mu'minun [23]:12-14 describes human creation through stages: from earthly essence to nuthfah (reproductive fluid), 'alaqah (clinging substance), mudghah (chewed-like flesh), then bones clothed with flesh, culminating in "another creation." Shihab's interpretation of these verses demonstrates what this study terms "methodological integration"—the deployment of multidisciplinary knowledge in service of textual understanding.

Shihab engages in detailed semantic analysis: nuthfah refers to a drop of reproductive fluid; 'alaqah describes something adhering to the uterine wall; mudghah denotes flesh resembling chewed meat (Shihab 2002). He then observes that these terms correspond to recognized stages in contemporary embryology—fertilization, implantation, and organogenesis. However, he immediately qualifies this observation: the Qur'an's purpose is not to provide an embryological textbook but to remind humans of their created origin as an antidote to arrogance.

This qualification reveals the axiological dimension of Shihab's approach. Scientific knowledge serves interpretive clarification, but the ultimate goal is not cognitive mastery of biological processes but ethical-spiritual formation. The integration of embryological science is therefore instrumental and subordinate to the verse's theological-ethical purpose. This differs from approaches that treat scientific verification as the primary goal of interpreting such verses.

Shihab's interpretations of environmental verses most clearly demonstrate the axiological dimension of his paradigm—the orientation of scientific knowledge toward ethical responsibility and human welfare. QS. Az-Zumar [39]:21 describes water descending from sky, flowing into earth's springs. Shihab explains this as depicting the water cycle essential for terrestrial life (Shihab 2002). He connects this to modern hydrological science—evaporation, condensation, precipitation, infiltration—while emphasizing that this scientific understanding should generate awareness of divine

wisdom in creating balanced natural systems. The verse thus contains both scientific information and moral imperatives regarding water resource preservation.

Similarly, QS. Ar-Rum [30]:48 describes wind driving clouds and rain formation according to divine law. Shihab connects this to meteorological science while framing atmospheric regularity as evidence of *sunnatullah*—consistent divine governance of natural processes (Shihab 2002). He extends this scientific-theological observation into an ecological ethics: climate crisis and environmental degradation result from human disregard for the balance established by divine law, making understanding of such verses ethically consequential.

These interpretations reveal that for Shihab, scientific knowledge reaches its interpretive fulfillment not in cognitive achievement but in ethical transformation (Mahmud 2021). The knowledge of water cycles and atmospheric processes should generate what this study terms "ecological *khilafah* consciousness"—the awareness of human responsibility as earth's stewards. This axiological orientation distinguishes Shihab's approach from purely cognitive or apologetic uses of science in Qur'anic interpretation.

3. Toward an Integrative-Reconciliatory Paradigm

The preceding analysis of Shihab's interpretive practice across cosmological, embryological, and environmental domains permits the identification of a coherent paradigm that this study terms the "Integrative-Reconciliatory Paradigm." This paradigm is not explicitly formulated by Shihab as a formal theory; rather, it is reconstructed through systematic analysis of his interpretive methodology and its underlying assumptions. The paradigm operates across three integrated dimensions.

At the epistemological level, Shihab's paradigm rests on the principle of *tawhidic* unity: because revelation and nature share a single divine origin, they cannot fundamentally contradict. This principle does not entail that human interpretations of revelation or scientific data are infallible; rather, it establishes a regulative ideal that guides interpretive practice. When apparent contradictions emerge, the paradigm directs critical attention toward human understanding rather than assuming inherent conflict between revelation and science (Shihab 2007).

This epistemological integration differs from what might be termed "epistemological subordination"—the approach that makes scientific theories the standard for evaluating Qur'anic truth claims. Shihab explicitly rejects this subordination, maintaining that scientific theories remain provisional and revisable while the Qur'an possesses permanent validity (Shihab 2013). Yet he equally rejects

"epistemological isolation"—the stance that denies any meaningful relationship between revealed text and empirical knowledge. The integrative position acknowledges science's authority within its proper domain (empirical explanation) while maintaining revelation's authority in its domain (value orientation and metaphysical grounding).

Methodologically, Shihab's paradigm employs what this study terms "multidisciplinary hermeneutics"—the strategic deployment of linguistic analysis, classical exegesis, historical contextualization, social scientific insight, and natural scientific knowledge in the interpretive process. This multidisciplinaryity is not eclecticism but a principled approach where different knowledge forms serve distinct hermeneutical functions.

Linguistic and classical sources establish the semantic range and traditional understanding of verses. Historical and contextual analysis situates verses within their revelatory circumstances and contemporary relevance. Scientific knowledge extends the horizon of possible meanings by connecting Qur'anic language to empirical descriptions of natural processes. However, scientific data functions as interpretive instrument rather than epistemological foundation—the Qur'an's meaning is not determined by scientific theories, but scientific theories may illuminate dimensions of meaning that linguistic analysis alone might not reveal.

This methodological integration can be distinguished from Amin Abdullah's integrative-interconnective paradigm, which emphasizes interdisciplinary dialogue at the level of knowledge production (Amin 2020). Shihab's integration occurs primarily at the level of textual interpretation—he is not proposing a new interdisciplinary methodology for science, but a hermeneutical approach that selectively incorporates scientific insights into Qur'anic exegesis.

The third dimension—axiological integration—represents perhaps the most distinctive feature of Shihab's paradigm. While epistemological integration addresses knowledge sources and methodological integration addresses interpretive techniques, axiological integration addresses the ultimate purpose of knowledge. For Shihab, all knowledge must be oriented toward *kemaslahatan* (human welfare) and the strengthening of divine values (Shihab 2019).

This axiological orientation has two important consequences. First, it prevents the reduction of Qur'anic interpretation to scientific demonstration. The goal of interpreting *kauniyah* verses is not to prove the Qur'an's scientific accuracy but to cultivate awareness

of divine creativity and human responsibility. Second, it establishes ethical criteria for scientific application. Science is not value-neutral in Shihab's framework; it must be directed toward justice, prosperity, and environmental sustainability.

The environmental interpretations analyzed above exemplify this axiological integration most clearly. Scientific knowledge of hydrological and atmospheric processes reaches its interpretive fulfillment when it generates ethical commitment to environmental stewardship. This differs from approaches that treat scientific exegesis as an end in itself—an intellectual exercise in demonstrating the Qur'an's scientific credibility.

This table 1 reveals that integration in Tafsir Al-Misbah is not uniform but domain-sensitive. Cosmological verses primarily engage epistemological questions about the relationship between revelation and scientific theory. Embryological verses demonstrate methodological integration through precise semantic-scientific coordination. Environmental verses most clearly manifest axiological integration, orienting scientific knowledge toward ethical responsibility. This variation suggests that Shihab's paradigm is not a rigid template but a flexible framework adapted to the specific interpretive demands of different verse types.

Verse	Domain	Primary Integration	Key Characteristic
Q.S al-Anbiya: 30	Cosmology	Epistemology	Non-Exclusive Correspondence: hermeneutical autonomy
Q.S Fussilat: 11	Cosmology	Epistemology	Dialog openness without theoretical identification
Q.S al-Mu'minun: 12-14	Embriology	Methodological	Multidisciplinary precision; instrumental use of science
QS Az Zumar: 21	Environment	Axiological	Ecological ethics; resource stewardship
Q.S al-Rūm: 48	Environment	Axiological	Climate Conciouness

Table 1. Dimensions of Integration in Tafsir Al-Misbah

The Integrative-Reconciliatory Paradigm identified in this study offers several theoretical contributions that distinguish it from existing frameworks in both Qur'anic studies and science-religion discourse. The primary novelty of this study lies not in identifying that Shihab integrates science and religion—previous studies have noted

this—but in formalizing the specific epistemological architecture underlying this integration. Previous research has categorized Tafsir Al-Misbah as "scientific exegesis" (*al-tafsīr al-'ilmī*) or "contextual interpretation," categories that describe its surface features without explaining its deeper structure.

This study demonstrates that Shihab's approach cannot be adequately captured by existing categories. It is not merely scientific exegesis, because Shihab explicitly rejects making scientific proof the goal of interpretation. It is not simply contextual interpretation, because the integration of science serves not merely contemporary relevance but a systematic epistemological vision. The Integrative-Reconciliatory Paradigm represents a distinct category that synthesizes elements of scientific exegesis, contextual hermeneutics, and ethical theology into a coherent framework. This paradigm differs from three prominent existing models:

First, it differs from the "Islamization of knowledge" approach associated with the International Institute of Islamic Thought and scholars like Seyyed Hossein Nasr (2008), which subjects modern scientific methodology to critique and reconstruction based on Islamic metaphysical principles. Shihab does not critique scientific methodology; he accepts its empirical findings while maintaining revelatory autonomy. *Second*, it differs from Amin Abdullah's integrative-interconnective paradigm (Amin 2020), which operates at the level of interdisciplinary knowledge production. Shihab's integration occurs at the level of textual interpretation—he is not proposing a new way of doing science, but a new way of reading the Qur'an in light of scientific knowledge. *Third*, it differs from the "dialogical model" of science-religion relations associated with scholars like Ian Barbour (1990), which treats science and religion as independent but dialogically related domains. Shihab's paradigm maintains a stronger sense of revelatory authority and metaphysical grounding than typical dialogical approaches, while nonetheless granting science significant interpretive space.

The identification of the Integrative-Reconciliatory Paradigm has several implications for contemporary Qur'anic studies. First, it suggests that the evaluation of scientific exegesis should move beyond verificationist questions ("*Does this interpretation match scientific facts?*") toward epistemological questions ("*What framework enables and constrains this interpretation?*"). This shift from verification to epistemology opens new avenues for analyzing the diversity of scientific interpretations in contemporary Islamic thought.

Second, the paradigm offers a theoretical vocabulary for describing positions that fall between concordism and isolationism. Much existing literature frames science-religion relations in Islam as a binary choice between proving the Qur'an through science or rejecting science's relevance entirely. The Integrative-Reconciliatory Paradigm represents a middle path that has been undertheorized in existing scholarship.

Third, the axiological dimension of Shihab's paradigm suggests that Qur'anic studies should attend not only to cognitive dimensions of interpretation but to ethical formation. The interpretation of kauniyah verses serves not merely to generate knowledge about natural processes but to cultivate what this study has termed "ecological khilafah consciousness"—a form of ethical subjectivity oriented toward environmental responsibility.

This study is limited by its focus on a single exegetical work and a selected set of verses. Future research might productively compare Shihab's paradigm with the approaches of other contemporary Indonesian mufasssirun, such as Hamka (Tafsir Al-Azhar) or Muhammad Abdul Mannan, to identify the specificity of Shihab's framework within Indonesian exegetical tradition. Additionally, comparative studies with Arab and South Asian scientific exegesis would illuminate whether the Integrative-Reconciliatory Paradigm represents a distinctive Indonesian contribution or part of broader trends in contemporary Islamic thought.

C. CONCLUSION

This study has demonstrated that M. Quraish Shihab's interpretation of kauniyah verses in Tafsir Al-Misbah embodies a distinctive Integrative-Reconciliatory Paradigm that transcends conventional categories of scientific exegesis. Through analysis of cosmological, embryological, and environmental verses, this study has identified three integrated dimensions of this paradigm: epistemological integration that establishes complementarity between revelation and science without subordination; methodological integration that deploys multidisciplinary knowledge in service of textual understanding; and axiological integration that orients scientific knowledge toward ethical responsibility and human welfare.

The study's primary contribution lies in shifting analytical focus from the verification of scientific correspondences to the examination of epistemological frameworks underlying such correspondences. The Integrative-Reconciliatory Paradigm offers a theoretically grounded alternative to both concordist and isolationist approaches, preserving revelatory hermeneutical autonomy while embracing scientific knowledge as a legitimate interpretive resource.

This paradigm is particularly relevant for contemporary Indonesian Islamic higher education, where the integration of religious and scientific knowledge remains an urgent institutional and intellectual challenge. By demonstrating that such integration can occur without reducing the Qur'an to a scientific textbook or science to a mere handmaiden of theology, Shihab's approach offers a model for navigating science-religion relations that honors the integrity of both knowledge forms while directing them toward shared ethical goals.

Author's Statement:

Artificial Intelligence: In the preparation of this article, the author made limited use of artificial intelligence (AI) to assist with language editing, grammatical corrections and editorial refinement. All ideas, analyses, interpretations, use of sources, and academic responsibility for the content of the article rest entirely with the author.

Author's Contribution: I, Muhammad Rifqi, take full responsibility for the entire research process, including the formulation of the research question, the determination of the research methods, the collection and retrieval of sources, data analysis, the interpretation of the verses on natural phenomena in Tafsir Al-Misbah, the drafting of the manuscript, revisions, and the finalisation of the article.

Funding Statement: The research and preparation of this article did not receive funding from any government or private institutions, nor from any other funding sources.

Conflict of Interest: The authors declare that there are no conflicts of interest, whether financial or non-financial, relating to the research and publication of this article.

Ethical Approval: This research did not require ethical approval as it constitutes library research utilising written sources and did not involve humans or animals as research subjects.

REFERENCES

- Abdullah, M. A. 2014. "Religion, Science and Culture: An Integrated, Interconnected Paradigm of Science." *Al-Jami'ah* 52(1):175–203.
<https://doi.org/10.14421/ajis.2014.521.175-203>.

- Aisyah. 2021. "Menelaah Mahakarya Muhammad Quraish Shihab: Kajian Metodologis dan Penafsirannya dalam Tafsir Al-Misbah." *Ulumul Qur'an: Jurnal Kajian Ilmu Al-Qur'an dan Tafsir* 1(1):43–65. <https://doi.org/10.58404/uq.v1i1.12>.
- Amin, A. 2020. *Multidisiplin, Interdisiplin, dan Transdisiplin: Metode Studi Agama dan Studi Islam di Era Kontemporer*. Yogyakarta: IB Pustaka.
- Anwar, R. 2019. *Pengantar Ulum Al-Qur'an*. Bandung: Pustaka Setia.
- Aulia, R., and I. Rossidy. 2026. "Integrasi Ilmu dalam Islam Perspektif Quraish Shihab dan Relevansinya dengan Pengembangan Kurikulum Pendidikan Islam." *Tarbiyatuna: Kajian Pendidikan Islam* 10(1). <https://doi.org/10.69552/ys7cd603>.
- Awaluddin, R. Z. S., A. Zuhri, and U. K. Rambe. 2023. "Interelasi Teori Evolusi Manusia dan Tafsir Al-Mishbah: Pemahaman Mendalam tentang Penciptaan Manusia." *AL QUDS: Jurnal Studi Alquran dan Hadis* 7(3):549–560. <https://doi.org/10.29240/alquds.v7i3.6559>.
- Bakar, Osman. 1999. *The History and Philosophy of Islamic Science*. Cambridge: Islamic Texts Society.
- Barbour, Ian G. 1990. *Religion in an Age of Science: The Gifford Lectures, 1989–1991*. San Francisco, CA: Harper & Row.
- Braun, Virginia, and Victoria Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3(2):77–101. <https://doi.org/10.1191/1478088706qp063oa>.
- Golshani, Mehdi. 2004. *Sacred Science and Secular Science*. Kuala Lumpur: Global Scholarly Publications.
- Hakim, A., Tobroni, and Faridi. 2025. "Integrasi Ilmu dan Agama: Perspektif Islam dalam Ontologi, Epistemologi, dan Aksiologi Ilmu Pengetahuan." *Pendas: Jurnal Ilmiah Pendidikan Dasar* 10(1):197–216. <https://doi.org/10.23969/jp.v10i01.22392>.
- Has, M. H. 2018. "Kontribusi Tafsir Nusantara untuk Dunia (Analisis Metodologi Tafsir Al-Misbah Karya M. Quraish Shihab)." *Al-Munzir* 9(1):69–79. <https://doi.org/10.31332/am.v9i1.778>.
- Hendra, M., and M. Rezi. 2021. "Konsep Penciptaan Bumi dalam Al-Qur'an (Studi terhadap QS. Al-Anbiyā' [21]:30) Menurut Hamka dalam Tafsir Al-Azhar." *Jurnal Tafser* 9(1):92–121. <https://doi.org/10.24252/jt.v9i1.30988>.
- HS, M. A., M. Arsyad, and M. Akmal. 2020. "Gerakan Membumikan Tafsir Al-Qur'an di Indonesia: Studi M. Quraish Shihab atas Tafsir Al-Misbah." *Jurnal At-Tibyan: Jurnal Ilmu Alquran dan Tafsir* 5(1):90–103. <https://doi.org/10.32505/tibyan.v5i1.1320>.
- Indonesia, Kementerian Agama Republik. 2019. *Al-Qur'an dan Terjemahannya Edisi Penyempurnaan 2019*. Jakarta: Lajnah Pentashihan Mushaf Al-Qur'an, Badan Litbang dan Diklat Kementerian Agama RI.
- Iqbal, M. 2010. "Metode Penafsiran Al-Qur'an M. Quraish Shihab." *Tsaqafah* 6(2):248–270.
- Irawan. 2016. "Integrasi Sains dan Agama: Suatu Tinjauan Epistemologi." *Tawshiyah: Jurnal Sosial Keagamaan dan Pendidikan Islam* 11(1):124–149. <https://doi.org/10.32923/taw.v11i1.554>.

- Kartanegara, Mulyadhi. 2005. *Integrasi Ilmu: Sebuah Rekonstruksi Holistik*. Bandung: Arasy.
- Krippendorff, Klaus. 2018. *Content Analysis: An Introduction to Its Methodology*. 4th ed. Thousand Oaks, CA: SAGE Publications.
- Mahmud, U. B. A. 2021. "Keseimbangan Ekologis dalam Tafsir Al-Misbah (Studi Analitik Peran Manusia terhadap Lingkungan)." *Suhuf* 33(2):218–231. <https://doi.org/10.23917/suhuf.v33i2.16587>.
- Nasr, Seyyed Hossein. 2008. *Islamic Science: An Illustrated Study*. Bloomington, IN: World Wisdom.
- Nurcholis, M. 2021. "Integrasi Islam dan Sains: Sebuah Telaah Epistemologi." *FALASIFA: Jurnal Studi Keislaman* 12(1):116–134. <https://doi.org/10.36835/falasifa.v12i1.461>.
- Saripuddin, S., A. Syukri, and Badarussyamsi. 2022. "Islam dan Sains: Antara Islamisasi Ilmu, Pengilmuan Islam, dan Transintegrasi Ilmu." *Refleksi: Jurnal Filsafat dan Pemikiran Islam* 21(2):140–157. <https://doi.org/10.14421/ref.2021.2102-01>.
- Shihab, M. Q. 1996. *Wawasan Al-Qur'an: Tafsir Maudhu'i atas Pelbagai Persoalan Umat*. Bandung: Mizan.
- Shihab, M. Q. 2002. *Tafsir Al-Misbah: Pesan, Kesan, dan Keserasian Al-Qur'an*. Jakarta: Lentera Hati.
- Shihab, M. Q. 2007. *Membumikan Al-Qur'an: Fungsi dan Peran Wahyu dalam Kehidupan Masyarakat*. Bandung: Mizan.
- Shihab, M. Q. 2013. *Kaidah Tafsir: Syarat, Ketentuan, dan Aturan yang Patut Anda Ketahui dalam Memahami Al-Qur'an*. Jakarta: Lentera Hati.
- Shihab, M. Q. 2019. *Logika Agama: Kedudukan Wahyu dan Batas-Batas Akal dalam Islam*. Jakarta: Lentera Hati.
- Sugiyono. 2022. *Metode Penelitian Kualitatif*. Bandung: Alfabeta.
- Wartini, A. 2014. "Corak Penafsiran M. Quraish Shihab dalam Tafsir Al-Misbah." *Hunafa: Jurnal Studia Islamika* 11(1):109–126. <https://doi.org/10.24239/jsi.v11i1.343.109-126>.
- Zahrul Athriah and B. Handrianto. 2025. "Epistemologi Islam: Kajian tentang Sumber Pengetahuan." *Jurnal Ilmiah* 35(2):44–57. <https://doi.org/10.52030/attadbir.v35i2.363>.
- Zed, Mestika. 2018. *Metode Penelitian Kepustakaan*. Jakarta: Yayasan Obor Indonesia.