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The Relationship Between Islam and Science in Understanding Human Origins: A Comparative Study between the Qur'anic Narrative and Evolutionary Theory

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Abstract

Discourse concerning the origin of humanity has consistently become both a meeting point and a point of tension between theological narratives and scientific findings. On the one hand, the Qur'an provides a narrative regarding the creation of Adam as the first human being. On the other hand, evolutionary theory offers a materialistic explanation for the origin of Homo sapiens through the mechanisms of natural selection and common ancestry. This study aims to critically analyze the relationship between these two paradigms and to explore the possibility of an integrative dialogue between them. Using a library research method with a qualitative-analytical approach, primary data were derived from Qur'anic verses concerning creation, as well as scientific literature and contemporary Islamic studies. The analysis was conducted through comparative techniques and critical discourse analysis. The findings indicate that there are three models of relationship developed within academic discourse: conflictual, independent, and dialogical-integrative. This study finds that the dialogical-integrative model offers the most prospective middle path, wherein science is acknowledged for its capacity to explain biological processes (how), while the Qur'an remains the authority in explaining metaphysical origins and the existential purpose of humanity (why). The concept of Adamic exceptionalism developed by contemporary Muslim thinkers becomes one of the theological instruments that enables such reconciliation. This study concludes that the relationship between Islam and science in understanding human origins should not necessarily be positioned within a dichotomous framework, but rather can be understood as two epistemic domains that complement one another in the effort to understand the human phenomenon more comprehensively.

Keywords: *Islam and Science, Human Origins, Evolutionary Theory, Adamic Exceptionalism, Scientific Exegesis*

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1. Introduction

The question of where human beings come from is one of the fundamental questions that has long echoed throughout the history of human civilization. In religious traditions, particularly Islam, the answer to this question refers to the narrative of creation derived from sacred texts. The Qur'an, in various chapters such as Q.S. Al-Hijr: 28–29, Q.S. Al-Mu'minun: 12–14, and Q.S. Al-Baqarah: 30–34, narrates the creation of Adam from clay (*turab*), through stages of formation, until the Divine spirit was breathed into him. Meanwhile, since the publication of *On the Origin of Species* by Charles Darwin in 1859, modern science has offered a radically different explanatory framework. Evolutionary theory, through the mechanism of natural selection, states that modern humans (*Homo sapiens*) are not the result of direct creation (*de novo*), but rather the temporary culmination of a long evolutionary chain involving ancestral hominid species such as *Homo habilis*, *Homo erectus*, and *Homo neandertalensis* (Malik, 2021; Malik, 2023).

The encounter between these two grand narratives often provokes tension. In the Muslim world, reactions toward evolutionary theory vary, ranging from total rejection, attempts at reconciliation, to selective acceptance. The debate has not only occurred at the popular level but has also expanded into more serious academic discussions. Over the last two decades, the discourse on Islam and evolution has become one of the most dynamic topics in the field of Islam and Science studies, producing important publications by scholars such as Shoaib Ahmed Malik and David Solomon Jalajel (Malik, 2023; Malik & Jalajel, 2024).

Previous studies in this field have demonstrated a diversity of approaches. Santosa (2020), for example, examined the existence of *Homo Neandertal* and *Homo sapiens* from the perspectives of science and the Qur'an by highlighting the existence of biological continuity that is not accommodated by a literal Qur'anic narrative. Meanwhile, studies concerning the integration of science and religion through modern genetics approaches have also been conducted, showing how the concept of DNA can be brought into dialogue with the phases of human creation in the Qur'an ("The Relevance of Modern Genetic Concepts to the Al-Qur'an," 2023). At the international level, the publication *New Frontiers in Islam and Evolution* demonstrates how this discourse has developed by involving Sunni and Shi'i perspectives, as well as responses from Indonesia, Iran, and France (Malik & Jalajel, 2024). The concept of *Adamic exceptionalism* proposed by Malik (2021) has become one of the most significant theological proposals, asserting that Adam is the first human in a spiritual and genealogical sense while allowing the existence of human-like creatures before Adam as products of evolution.

Although literature on Islam and evolution has developed rapidly, there remains a research gap regarding the systematic mapping of possible relational models and their epistemological implications. Many studies tend to become trapped in defending certain theological positions or, conversely, neglect the complexity of sacred text hermeneutics. The novelty of this study lies in its effort to systematize the framework of Islam-science relations into a more integrated typology, as well as to conduct a critical synthesis between contemporary *tafsir ilmi* approaches, the concept of *Adamic exceptionalism*, and epistemological analyses regarding the limits of scientific and religious claims (Malik, 2021; Muhamad, 2024). Specifically, this study poses the following question: how can paradigms of Islam and science relations bridge the contradiction between religious texts and evolutionary theory concerning human origins, and what model of integration is theologically and epistemologically most adequate? The purpose of this study is to critically analyze the various existing relational models and to formulate a synthesis capable of accommodating the validity of scientific findings without sacrificing the authority of sacred texts.

2. Research Method

This study is qualitative research employing the library research method. The approach used is philosophical and hermeneutical, enabling researchers not merely to describe texts, but also to explore the meanings and underlying assumptions behind them.

a. **Data Sources**

1) **Primary Sources:** The Qur'an and its translations, particularly verses discussing human creation (Q.S. Al-Mu'minun: 12–14, Q.S. Al-Hijr: 28–29, Q.S. Al-Baqarah: 30–34, Q.S. As-Sajdah: 7–9). In addition, the primary works of contemporary Muslim thinkers on evolution, especially *Islam and Evolution: Al-Ghazālī and the Modern Evolutionary Paradigm* by Shoaib Ahmed Malik (2021).
2) **Secondary Sources:** Reputable international journal articles indexed in databases such as Scopus and Web of Science, especially those published in the journal *Theology and Science*, the book *New Frontiers in Islam and Evolution* (Malik & Jalajel, 2024), as well as relevant articles by other researchers such as Jivanjee (2025) on homologous structures, Ubaidillah et al. (2025) on the analysis of human origins, and Muhamad (2024) regarding the concept of *'aql* and *Adamic exceptionalism*.

b. Data Collection Techniques

Data were collected through documentation techniques, namely by tracing, identifying, and inventorying the main literatures relevant to the research theme.

c. Data Analysis Techniques

The data were analyzed using content analysis techniques and comparative analysis. Content analysis was used to gain a deep understanding of the theological and scientific messages from the texts studied. Comparative analysis was used to compare the paradigms, arguments, and conclusions from various sources, in order to find significant patterns, similarities, and differences.

3. Results and Discussion

3.1. Scientific Narratives on Human Origins: Evolution and Fossil Evidence

Evolutionary theory, within the neo-Darwinian framework, explains biodiversity, including humans, as the result of mechanisms of genetic variation and natural selection over extremely long periods of time (Malik, 2021). In the context of human origins, paleoanthropological evidence demonstrates a sequence of hominid species representing evolutionary stages leading toward *Homo sapiens* (Santosa, 2020).

One of the significant discoveries is the existence of *Homo neandertalensis*, which lived in Europe and Western Asia between 400,000 and 40,000 years ago. Research shows that Neanderthals possessed large cranial capacities, were capable of making tools, and even demonstrated symbolic behaviors indicating forms of complex cognition (Santosa, 2020). However, mitochondrial DNA

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analyses reveal genetic discontinuity between Neanderthals and modern European humans, indicating that Neanderthals were most likely not the direct ancestors of *Homo sapiens*, but rather an extinct "cousin" species. *Homo sapiens* themselves are estimated to have emerged in Africa around 300,000 years ago, later migrating to various regions of the world and interacting with other hominid populations, including Neanderthals and Denisovans, with evidence of limited interbreeding leaving DNA traces in modern non-African humans (Ubaidillah et al., 2025).

Furthermore, the concept of homologous structures in comparative biology demonstrates morphological similarities among organs in different species, such as the arm bone structures of humans, bats, and whales. In evolutionary biology, this phenomenon is interpreted as evidence of common ancestry. Humans, therefore, are not entirely unique biological beings, but rather part of an interconnected web of life linked through evolutionary history (Jivanjee, 2025).

3.2. Islamic Narratives on Human Creation: Diverse Interpretive Approaches and Hermeneutical Controversies

The Qur'an does not present the narrative of human creation in the form of a detailed historical chronicle, but rather through *kauniyah* verses (signs of God's greatness in nature) that invite reflection. The verse most frequently referred to in this discourse is Q.S. Al-Mu'minun [23]: 12–14:

> ***"And indeed, We created man from an extract of clay. Then We placed him as a drop of sperm in a firm lodging. Then We made the sperm into a clinging clot ('alaqah), then We made the clot into a lump of flesh (mudghah), then We made the lump into bones ('idzam), and We clothed the bones with flesh. Then We produced him as another creation. So blessed is Allah, the best of creators."***

However, understandings of these verses vary greatly among Qur'anic exegetes, and this diversity itself becomes the key to opening dialogue with evolutionary theory.

a. The Scientific Exegesis (*Tafsir Ilmi*) Approach: Between Harmonization and Forced Interpretation

Contemporary exegetes, particularly those employing the *tafsir ilmi* approach, attempt to demonstrate correspondence between the phases mentioned in the verses and findings of modern embryology. The terms *nutfah* (a drop of fluid), *'alaqah* (something attached like a leech), and *mudghah* (a lump of flesh) are considered analogous to the stages of zygote formation, implantation, and the development of somites in the human embryo ("Harmonisasi Agama dan Sains," 2025). The Indonesian Ministry of Religious Affairs, through its scientific exegesis, along with scientists such as Dr. Keith Moore, acknowledged this remarkable correspondence as evidence of the Qur'an's scientific miraculousness ("The Relevance of Modern Genetic Concepts to the Al-Qur'an," 2023). Achmad Baiquni, for example, interpreted the term *turab* (soil) more radically. According to him, *turab* does not merely mean dust, but through scientific developments can also be understood as "cell." He proposed the hypothesis that Adam came into existence on earth through natural processes like other creatures, an interpretation which, in his view, actually demonstrates the truth of the Qur'an (Ghozali, 2016).

b. Criticism of Scientific Exegesis: Scientific Anthropomorphism and Reduction of Meaning

Although intriguing, the *tafsir ilmi* approach is not without serious criticism. Critics, including several contemporary scholars, highlight a number of fundamental weaknesses. First, this approach often falls into "scientific anthropomorphism," namely the attempt to force sacred texts into conformity with scientific theories that are temporary and tentative in nature. Fakhruddin al-Razi, for instance, in *Mafatih al-Ghaib*, although employing a philosophical approach, did not directly equate the stages of *'alaqah* and *mudghah* with modern embryological terminology in a literal sense. Rather, he emphasized the philosophical dimensions behind each stage of creation (Lestari Putri, 2023). This criticism becomes increasingly relevant as science continuously develops and old theories are replaced by new ones; if the Qur'an is regarded as "confirming" an old theory, what happens when that theory is later disproven?

Second, a comparative study between *Tafsir Nemūneh* (Makārim Shīrāzī) and *Tafsir al-Jawāhir* (Ṭanṭāwī Jauharī) demonstrates that scientific approaches are highly vulnerable to the personal biases of exegetes ("A Comparative Study of the 'Stages of Human Creation,'" 2025). While Ṭanṭāwī tended to "force" scientific theories into the Qur'an (*extracting science from Quran*), Makārim Shīrāzī was more cautious by using established science merely to "understand" the Qur'an (*applying science to understand Quran*). The study concludes that Ṭanṭāwī's method—which was highly open toward evolution—actually risks obscuring the primary message of the Qur'an because of its excessive incorporation of scientific details that may not be permanent ("A Comparative Study of the 'Stages of Human Creation,'" 2025).

c. Philosophical and Sufistic Approaches: Discovering Meaning Beyond Materiality

Beyond the debate between literal and scientific interpretations, exegetes employing philosophical and Sufistic approaches offer more substantial perspectives. Al-Razi, as examined by Lestari Putri (2023), distinguished between the creation of Adam and that of his descendants. He utilized philosophy to explain that humans consist of two elements: prebiotic and organic components originating from the earth. For al-Razi, the verses do not primarily explain biological mechanisms, but rather the existential origin of humanity from lowly material (*turab*), which is then ennobled through the Divine spirit. Similarly, Ismail Haqqi in *Tafsir Ruh al-Bayan* emphasized the spiritual dimension: Adam was created directly by the hands of Allah and infused with His spirit without intermediary. The purpose of creating humans from clay was to cultivate humility (*tawadhu'*) and extinguish greed within the human soul (Agustina, 2018). This approach does not directly intersect with evolutionary theory because it speaks at the level of existential meaning (*the why*), rather than physical mechanisms (*the how*).

d. Polemics Surrounding the "First Human" and the Possibility of Pre-Adamic Creatures

The principal challenge posed by evolutionary theory does not lie in Q.S. Al-Mu'minun: 12–14, which discusses embryological development, but rather in the narrative of Adam's creation as the first human being *de novo* (Q.S. Al-Hijr: 29; Q.S. Al-Baqarah: 30–34). It is at this point that sharp differences emerge among exegetes. Most classical exegetes such as al-Razi, al-Qurtubi, and Ismail Haqqi agreed that Adam was the absolute first human, both

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physically and spiritually (Agustina, 2018). However, several contemporary interpreters attempt to identify interpretive space for alternative understandings.

Research conducted by Abida Fikriyah Nita (2019) on Ṭanṭāwī Jauharī reveals an interesting perspective. Ṭanṭāwī distinguished between two forms of creation: the creation of Adam, which was direct and exceptional, and the creation of Adam's descendants, which occurred through biological processes, including the possibility of evolutionary mechanisms from chemical to biological development. The implication is that Ṭanṭāwī did not fully support the concept of common ancestry, yet he accepted the idea that changes and developments occurred within species after Adam (Nita, 2019). This interpretation opens the door for the concept of *Adamic exceptionalism*, namely the belief that hominid populations such as Neanderthals may have existed biologically prior to Adam, but Adam was the first human in the spiritual sense—the first being to receive the Divine spirit and the mandate of vicegerency (*khilafah*) (Malik, 2021).

e. Modern-Contemporary Exegetical Perspectives on Human Origins

Within the Indonesian context, two highly influential modern exegetes relevant to the discourse on human origins are M. Quraish Shihab through *Tafsir al-Mishbah* and Hamka through *Tafsir al-Azhar*. Both attempted to present interpretations of creation verses that are communicative with modern realities, making them important examples of how contemporary exegetes respond to the encounter between Qur'anic narratives and science, including evolutionary theory (Prasela, 2022; Comariah, 2022).

Among the contemporary exegetes frequently referenced in discussions of human origins is M. Quraish Shihab through works such as *Tafsir al-Mishbah* and various popular religious dialogues. Quraish Shihab emphasized that the Qur'an explicitly states that humans are "children of Adam" and that Adam was created from clay; therefore, this cannot simply be replaced by the narrative that humans "descended from apes," as commonly vulgarized in some readings of Darwinian theory (Awaluddin et al., 2023). At the same time, he distinguished between the "first origin of humanity" (Adam) and the "process of the creation of subsequent human descendants," which the Qur'an describes through the phases of *nutfah*, *'alaqah*, and *mudghah*. In *al-Mishbah*, Quraish Shihab interpreted the creation of Adam from clay as emphasizing that the basic physical elements of humanity originate from earthly matter—soil, water, and natural chemical elements—while Adam's descendants are created from the essence of semen, which itself derives from food growing from the earth. This framework opens space for understanding biological continuity at the material level without negating Adam's uniqueness as the first human to receive the spirit and Divine mandate (Prasela, 2022).

In the discourse on evolution, several studies analyzing *al-Mishbah* indicate that Quraish Shihab tended to adopt a middle position: he rejected the claim that the Qur'an directly affirms Darwinian evolution regarding human descent from apes, yet he did not entirely dismiss the possibility of gradual development and transformation among living beings so long as such views did not contradict fundamental Islamic beliefs concerning the oneness of God and Adam's special status (Awaluddin et al., 2023). In other words, the aspect he most strongly emphasized was the ontological distinction between the "physical origin" and the "spiritual origin" of humanity. Scientific theories may discuss biological processes, while the Qur'an affirms Adam's position as the beginning of moral and revelational humanity. Such a hermeneutical approach places Quraish Shihab close to the dialogical-integrative model: science is appreciated within the domain of *how*, while sacred texts retain authority in the domains of *who* and *why*, similar to the spirit of *Adamic exceptionalism* discussed previously (Malik, 2021).

Hamka, as another modern exegete in *Tafsir al-Azhar*, also made an important contribution to discussions concerning human origins, although he did not discuss evolutionary theory in technical detail (Dahlia, 2018). In his interpretation of the verses on creation, Hamka emphasized that the phase of *turab* (soil) refers not only to Adam as the first human but also to all humanity, who fundamentally originate from the earth. He explained that the food consumed by humans—rice, wheat, fruits, and various agricultural products—all grow from the soil, are processed within the human body into blood, and eventually become the raw material for semen formation. Thus, the statement "We created you from soil" can be understood metaphorically through the chain: soil → plants/food → semen → embryo → human. Within this perspective, Hamka emphasized the ethical and spiritual dimensions: awareness that humans originate from lowly material (*soil*) should cultivate humility and prevent arrogance, rather than serve as grounds for denying human dignity (Dahlia, 2018; Comariah, 2022).

When viewed within the framework of Islam-science relations, Hamka did not directly engage in technical debates concerning evolution. Nevertheless, the nature of his interpretation opens space for readings compatible with the idea that human existence unfolded through long natural stages without diminishing the belief that Allah is the Almighty Creator (Prasela, 2022). This approach differs from *tafsir ilmi*, which explicitly attempts to "match" Qur'anic verses with scientific theories, yet it remains aligned with models that regard science as a means for understanding the wisdom behind *ayat kauniyah* rather than as the ultimate standard of revealed truth. In this regard, both Quraish Shihab and Hamka maintained the uniqueness of Adam and humanity while simultaneously allowing room for dialogue with modern knowledge (Awaluddin et al., 2023; Comariah, 2022).

In addition to Quraish Shihab and Hamka, several other contemporary thinkers and exegetes have also offered interpretations relevant to the issue of human origins. Muhammad Syahrur, for instance, interpreted verses concerning *nafs wahidah* and the human pair in a non-classical manner, proposing that such terms point to broader patterns of creation rather than merely the historical figures of Adam and Eve, thereby opening the possibility of variations in human populations or "human-like beings" throughout natural history (Maya, 2025). Meanwhile, modern literature discussing "human evolution in the Qur'an" records that some contemporary exegetes tend to accept paleontological and genetic evidence concerning ancient hominids while still affirming that the status of *insan* in the Qur'anic sense was only fully realized in the figure of Adam, who received the Divine spirit and revelation (Malik & Jalajel, 2024). This spectrum of views demonstrates that contemporary exegetical discourse has shifted from total rejection of evolution toward various models of reconciliation, ranging from symbolic and metaphorical interpretations to approaches closely resembling the concept of *Adamic (Lineal) Exceptionalism* discussed within the broader context of global Muslim thinkers (Safdari & Meghji, 2024).

3.3. Dialogue, Conflict, or Integration? Mapping the Relationship

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Referring to Ian Barbour's typology of the relationship between science and religion—conflict, independence, dialogue, and integration—Muslim intellectual responses to evolution can similarly be mapped within this framework (Malik, 2023).

First, the conflict model is represented by groups that reject evolutionary theory entirely because it is considered contradictory to Islamic creed. They argue that evolution is a product of materialism and atheism that must be rejected outright. Within this perspective, the Qur'anic narrative concerning Adam's creation is regarded as the sole truth, while paleoanthropological findings must either be reinterpreted or dismissed as biased science (Ubaidillah et al., 2025).

Second, the independence model attempts to separate the domains of science and religion. Science explains how nature works, while religion explains why nature exists and what meaning it possesses. In the context of human origins, this model asserts that science has the authority to explain the biological origins of the human body, whereas religion explains the spiritual origin of the human soul. Both proceed on separate paths without necessarily conflicting with one another. Philosophically, this model appears elegant; however, it is often criticized for its inability to explain overlapping claims, especially when science attempts to address aspects previously considered the exclusive domain of religion (Malik, 2021).

Third, the dialogue and integration model constitutes the most productive domain within contemporary discourse. This model seeks points of convergence and synthesis. Jivanjee (2025), for example, in his analysis of homologous structures, argued that science and faith do not necessarily have to conflict. Homologous structures, which evolutionary biology interprets as evidence of common ancestry, can instead be understood within an Islamic framework as evidence of Divine unity (*Divine unity*). Allah created the universe through recurring patterns as signs of His power and wisdom. Thus, the same scientific data can be interpreted differently without necessarily negating one another (Jivanjee, 2025).

3.4. A Proposed Synthesis: Adamic Exceptionalism as a Middle Path

One of the most systematic integrative proposals comes from Shoaib Ahmed Malik through the concept of *Adamic exceptionalism*. Malik, grounding his analysis in Ash'arite theology and the works of al-Ghazali, argues that a Muslim can accept the validity of evolutionary theory for most living beings, including the biological aspects of pre-Adamic human bodies, without abandoning belief in Adam's special status (Malik, 2021).

The essence of this argument lies in the distinction between pre-Adamic hominid populations and Adam together with his descendants. Within this scenario, Allah created the universe through evolutionary mechanisms operating consistently according to divine laws. Through these mechanisms, populations of biologically modern *Homo sapiens* emerged on earth. However, from among these populations, Allah specifically selected a pair—Adam and Eve—upon whom He "breathed the spirit" and bestowed the status of true *insān*, beings possessing spiritual potential, intellect (*'aql*), and moral responsibility (Malik, 2021; Muhamad, 2024).

This concept is further reinforced by Muhamad's (2024) analysis regarding the concept of *'aql* (reason) within the Islamic worldview. Muhamad distinguished between "rationality" in the anthropological-modern sense, which is instrumental in nature, and *'aql* in the Islamic sense, which is spiritual and metaphysical. Pre-Adamic beings may have possessed cognitive capacities sufficient for survival, tool-making, and even simple forms of culture. However, such capacities do not necessarily equate them with *insān* in the Qur'anic sense, which is defined by the ability to know Allah, receive divine trust (*amanah*), and distinguish morally between right and wrong in a transcendent sense (Muhamad, 2024). Thus, claims that pre-Adamic hominids possessed "rationality" do not imply that they possessed the same human status as Adam and his descendants.

This model is also elaborated from a Shi'i perspective by Safdari and Meghji (2024), who proposed the concept of *Adamic Lineal Exceptionalism*. They emphasized that although biological continuity may exist, spiritually and genealogically Adam remains the starting point of humanity that received revelation and the responsibility of vicegerency (*khilafah*).

This approach does not claim that the Qur'an predicted evolutionary theory. Rather, it argues that sacred texts possess sufficient "interpretive space" to accommodate established scientific findings, provided that they do not contradict the foundational principles of Islamic creed (Malik & Jalajel, 2024). As expressed in studies concerning Christian-Muslim dialogue, differences in sacred text hermeneutics play a key role in determining theologians' responses toward science. Muslims, with their rich and diverse exegetical tradition—from the philosophical approach of al-Razi, the legalistic orientation of al-Qurtubi, to the scientific tendencies of Ṭanṭāwī—possess adequate theological resources to respond constructively to the challenges posed by evolution (Malik, 2023).

4. Conclusion

Based on the analysis presented above, this study concludes that the relationship between Islam and science in understanding human origins should not necessarily be understood within a framework of unavoidable conflict. The dialogical-integrative model, represented by the concept of *Adamic exceptionalism*, offers an elegant solution to the dichotomous deadlock. This model enables Muslims to accept the methodological and empirical validity of evolutionary theory in explaining the biological origins of the human body while simultaneously maintaining theological belief in Adam's exceptional status as the first *insān* who received the Divine spirit and the mandate of vicegerency (*khilafah*) (Malik, 2021; Muhamad, 2024).

This approach acknowledges the existence of two different yet complementary levels of explanation: science explains material processes (*the how*), while sacred texts explain metaphysical origins and existential purposes (*the why*). Both answer different questions concerning the same human reality. Such a synthesis is not only intellectually satisfying, but also opens pathways for more productive dialogue between Muslim scientists and theologians in the future (Malik & Jalajel, 2024).

This study has limitations regarding the scope of sources, which have not yet covered all variants of contemporary Islamic thought, particularly from non-Arab and non-English-speaking regions such as Latin America or Sub-Saharan Africa. Therefore, further studies are recommended to explore more deeply how Muslim communities across different parts of the world sociologically respond to and articulate such syntheses in their everyday religious lives, as well as how they respond to epistemological critiques of

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tafsir ilmi from Muslim scholars themselves (Malik, 2023; Turmudzi et al., 2025).

References

1. *A Comparative Study of the "Stages of Human Creation" in Scientific Exegeses: A Case Study of Tafsīr Nemūneh and Tafsīr al-Jawāhir.* (2025). *Comparative Studies of the Quran, 1*(1).
2. Afrizal, F. (2025). *Eksklusivisme dalam tafsir abad ketujuh dan kedelapan hijriah (Studi relasi Muslim dan nonmuslim serta implikasinya terhadap formulasi fikih jihad Abu Abdillah al-Muhâjir).* Universitas PTIQ Jakarta.
3. Agustina, L. (2018). *Asal usul penciptaan manusia (Studi komparatif Tafsir Ruh al-Bayan dan Tafsir Mafatih al-Ghaib)* [Undergraduate thesis, Institut Ilmu Al-Qur'an Jakarta].
4. Awaluddin, R. Z. S., Zuhri, A., & Rambe, U. K. (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.
5. Comariah, A. N. (2022). *Penciptaan manusia perspektif ulama nusantara (Kajian Tafsir An-Nur, Tafsir Al-Azhar, dan Tafsir Al-Mishbah).*
6. Dahlia, S. R. (2018). *Penciptaan Nabi Adam AS sebagai khalifah dalam Tafsir Al-Azhar: Studi tafsir Hamka* [Undergraduate thesis, UIN Sunan Ampel Surabaya].
7. Ghozali, A. (2016). Proses asal kejadian Adam dalam pandangan Achmad Baiquni: Sebuah pendekatan tafsir ilmi. *Ushuluna.*
8. *Harmonisasi agama dan sains: Embriologi membuktikan kebenaran Al-Quran.* (2025). *Tebuireng Online.*
9. Jivanjee, H. (2025). Homologous structures: A reappraisal of evolutionary interpretation. *International Journal of Research and Innovation in Social Science, 9*(10), 8637–8642.
10. Lestari Putri, W. (2023). *Proses penciptaan manusia dalam QS. Al-Mu'minūn ayat 12–14 (Studi komparatif penafsiran Ar-Rāzi dan Hamka)* [Undergraduate thesis, UIN Mataram].
11. Malik, S. A. (2021). *Islam and evolution: Al-Ghazālī and the modern evolutionary paradigm.* Routledge.
12. Malik, S. A. (2023). A historical introduction to Islam, science, and evolution: The book symposium on *Islam and Evolution: Al-Ghazālī and the Modern Evolutionary Paradigm*. *Theology and Science, 21*(4).
13. Malik, S. A., & Jalajel, D. S. (Eds.). (2024). *New frontiers in Islam and evolution: Scriptures, scholars, and societies.* Routledge.
14. Maya, G. (2025). *Pandangan Muhammad Syahrur terhadap subordinasi perempuan dalam Al-Qur'an (Studi analisis al-Kitāb wa al-Qur'ān: Qirā'ah Muʿāṣirah).* UIN Datokarama Palu.
15. Muhamad, S. (2024). Was there ʿaql before Adam? On rationality and Adamic exceptionalism. *TAFHIM: IKIM Journal of Islam and the Contemporary World, 17*(1), 91–114.
16. Nita, A. F. (2019). *Penafsiran Tantawi Jauhari dalam QS Al-Mu'minun (23): 12–14 dan implikasi terhadap teori evolusi Darwin* [Undergraduate thesis, UIN Sunan Ampel Surabaya].
17. Prasela, I. A. (2022). *Penafsiran ayat-ayat tentang penciptaan manusia menurut Quraish Shihab dan Hamka.* UIN Fatmawati Sukarno Bengkulu.
18. Safdari, A., & Meghji, F. (2024). Adamic lineal exceptionalism: A Twelver-Shīʿī perspective on human evolution. In S. A. Malik & D. S. Jalajel (Eds.), *New frontiers in Islam and evolution.* Routledge.
19. Santosa, T. A. (2020). Eksistensi *Homo Neandertal* dan *Homo sapiens sapiens* dalam perspektif sains dan Al-Qur'an. *Prosiding Konferensi Integrasi Interkoneksi Islam dan Sains, 2*, 175–180.
20. *The relevance of modern genetic concepts to the Al-Qur'an: DNA analysis and human creation according to the Ministry of Religion's scientific interpretation.* (2023). *Prophy Science.*
21. Turmudzi, A., Amirulloh, A., Arda, A. M., Latifah, I., Budiyanto, N. A., & Rosa, A. (2025). Sains dan wahyu dalam penciptaan manusia: Telaah tafsir ilmi dan ilmu genetika. *Hamalatul Qur'an: Jurnal Ilmu Ilmu Alqur'an, 6*(2), 67–76.
22. Ubaidillah, M. A., Daffah, A. M. A., & Karima, T. L. N. (2025). The story of Prophet Adam and the creation of humanity: An analysis of human origins. *Proceedings of International Conference on Islamic Civilization and Humanities*, 1217–1234.

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