THE ORIGINS AND MORALITY OF HUMANITY: A NEW PERSPECTIVE FROM ISLAM AND SCIENCE

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This study examines the developmental process of humanity from creation to cosmic maturity within the framework of Islamic cosmology, along with the issue of pre-Adamic creatures, from an integrated perspective. The study discusses the "energy cycle" theory, which posits that creation processes are triggered by the arrival of Earth's life energies to Allah, and the "phylogenetic age" hypothesis, which suggests that humanity is currently at the stage of a 17-year-old creature phylogenetically (Nasr, 1976; Pinker, 2011). The angels' reaction to the Qur'anic verse, "Indeed, I will make upon the earth a successive authority" (Q. 2:30), has led to two main viewpoints in classical Islamic exegesis: the jinn were a vicegerent community living on Earth before Adam, and their corruption led to their expulsion by angels. Modern paleontology and genetics reveal the existence of pre-Homo sapiens human species and complex evolutionary processes (Wilson, 1975). The ontogenetic and phylogenetic dimensions of moral development support the theoretical framework by explaining humanity's moral evolution at both individual and societal levels (Tomasello & Vaish, 2013; Kohlberg, 1984). This study proposes an integrative approach that reconciles traditional theological interpretations with scientific data, arguing that while Adam, in terms of his ego (commonality with animals), was a product of biological evolution, he was distinctively theologically conscious (sharing a spiritual affinity with angels), morally discerning, and represented the first intelligent and soulful human being. In light of Qur'anic verses and prophetic traditions, it is suggested that humanity will achieve moral maturity and establish a space civilization within the next 1-2 million years.

Keywords: Islamic cosmology, Human evolution, Pre-Adamic creatures, Phylogenetic development, Moral development, Science–religion dialogue.

INTRODUCTION

The creation and future of humanity constitute one of the fundamental and continuously debated topics in both religious and scientific literature (Nasr, 1976; Izutsu, 1983). In classical Islamic thought, the creation of humanity is explained as the manifestation of God's will (Al-Ghazali, 1095/1997), while modern scientific approaches focus on evolutionary processes (Wilson, 1975; Pinker, 2011). Moral development is a critical component of this process and can be examined from two main perspectives: ontogenetic and phylogenetic development (Tomasello & Vaish, 2013). This study aims to synthesize both perspectives to offer a new theoretical framework.

Ontogenetic moral development refers to the level of moral maturity an individual acquires during their life journey from birth to death, while phylogenetic moral development represents the average moral level achieved by the entire human species throughout history. Within this framework, observed moral differences highlight the diversity of individual moral journeys and the length of humanity's process to reach general moral maturity. Rahman (1982, p. 45) states that modernist Islamic thought fundamentally involves sustained efforts to reinterpret traditional theological concepts and narratives in light of the intellectual developments of modernity and the transformative discoveries emanating from modern science, especially in areas like geology, biology, astronomy, and anthropology. This ongoing discourse has gained renewed urgency and importance as paleontological discoveries, genetic research, archaeological findings, and evolutionary biology offer increasingly detailed and compelling perspectives on human origins, development, and the intricate history of life on Earth, extending back millions of years.

The relationship between mathematical concepts and cosmic understanding has been explored in contemporary Islamic scholarship, particularly in examining how definitions of infinity, eternity, and time relate to creation narratives (Demirkuş & Bilgin, 2018). This mathematical foundation provides crucial insights for understanding temporal dimensions in both theological and scientific contexts.

In Islamic literature, the creation of humanity is detailed in the Holy Qur'an. In Sūrat al-Baqarah, verse 30, Allah's declaration to the angels, "Indeed, I will make upon the earth a successive authority" ($inn\bar{i}$ $j\bar{a}$ 'ilun $f\bar{i}$ al-ardi khal \bar{i} fah), reveals the cosmic dimension of creation (Qur'an, 2:30). Considering that this creation process is not random but the result of specific cosmic events, a new theoretical approach is needed.

MATERIAL AND METHOD

This study employs a qualitative, theoretical, and interdisciplinary research design. The methodology is not based on empirical data collection or experimental analysis but on an integrative synthesis of textual sources from diverse fields. The primary objective of this methodological approach is to construct a new theoretical framework that reconciles Islamic cosmology with modern scientific findings on human origins and moral development.

The research materials are composed of a wide range of literary and scholarly sources, which can be categorized as follows:

- 1. **Primary and Classical Islamic Sources:** The foundational texts of the Holy Qur'an and canonical Hadith collections were used as primary theological sources. These were supplemented by classical works of Qur'anic exegesis ($tafs\bar{\imath}r$) from influential scholars such as Al-Tabari, Ibn Kathir, Al-Razi, and the philosophical-theological works of thinkers like Al-Ghazali.
- 2. **Modern Scientific Literature:** The study draws extensively from peer-reviewed research and seminal works in the fields of paleoanthropology, evolutionary biology, genetics, and archaeology to

provide a scientific account of human origins, the emergence of *Homo sapiens*, and the development of "behavioral modernity."

- 3. **Moral Philosophy and Psychology:** Foundational theories on ontogenetic and phylogenetic moral development were analyzed, with a focus on the works of scholars such as Piaget, Kohlberg, and Tomasello. This provided a framework for interpreting humanity's collective moral journey.
- 4. **Contemporary Science-Religion Dialogue:** Works from modern scholars focusing on the intersection of Islamic thought and science, such as those by Seyyed Hossein Nasr, were utilized to frame the integrative dialogue.

The analytical method involved a comparative and conceptual synthesis. Theological narratives, such as the pre-Adamic vicegerency of the jinn and the creation of Adam, were analyzed for their core concepts and metaphorical meanings. These theological interpretations were then systematically compared and juxtaposed with scientific timelines and findings related to human evolution. This process of integrative analysis was used to develop and substantiate the study's central hypotheses: the "Energy Cycle Theory" and the "Phylogenetic Age Hypothesis." The final synthesis aims to present a coherent model where theological and scientific narratives are viewed as complementary, rather than contradictory, layers of explanation.

Energy Cycle and Divine Creation Process

Jinn's Energy of Fitna and Divine Response: The fundamental basis of this theory is found in Sūrat al-Baqarah, verse 30: "And when your Lord said to the angels, 'Indeed, I will make upon the earth a successive authority,' they said, 'Will You place therein one who will cause corruption and shed blood, while we glorify You with praise and sanctify You?' He said, 'Indeed, I know that which you do not know'" (Baqarah 2:30). This verse supports the theory of "the energy of jinn's *fitna* reaching Allah" because the angels' question points to the previous creatures (jinn) causing corruption.

Synthesis of Earth and Spirit: The view regarding Adam's creation aligns with the following verses: "Then He fashioned him and breathed into him from His spirit" (Al-Hijr 15:29). "We created man from sounding clay, from mud molded into shape" (Al-Hijr 15:26). Prophet Muhammad (peace be upon him) explains this process as: "Allah took Adam in His hand, from it He took the white, the red, the black, and what is between them. Therefore, Adam's children came out like this" (Abū Dāwūd, Sunnah 1).

The primary theological debate in Islamic scholarship concerning human origins centers on the interpretation of Q. 2:30, particularly the angels' intriguing response to Allah's announcement of creating a vicegerent (*khalīfah*) on Earth. Their penetrating question, "Will You place therein one who will cause corruption and shed blood, while we glorify You with praise and sanctify You?" has generated extensive scholarly discussion and debate regarding whether this divine-angelic dialogue indicates prior angelic knowledge of previous earthly inhabitants who had demonstrated such

destructive tendencies through actual historical experience. Groups such as environmentalists, climate activists, and human rights defenders play a pioneering role in the phylogenetic moral development of humanity within this framework, gaining special significance (Pearson et al., 2022). These individuals, even if humanity as a whole has not yet fully reached this level, are pioneers on the path to future moral maturity.

LITERATURE REVIEW

Islamic Cosmology Studies

Among classical Islamic thinkers, Al-Ghazali (1058-1111), in his work "*Tahāfut al-Falāsifa*", emphasizes that cosmological processes are the manifestation of divine will (Al-Ghazali, 1095/1997). Ibn Sina (980-1037), in his work "*Kitāb al-Shifā*", argues that universal processes occur within a chain of cause and effect (Ibn Sina, 980-1037/1999). In the modern period, Nasr (1976) systematized the fundamental principles of Islamic cosmology in his work "*An Introduction to Islamic Cosmological Doctrines*" (Nasr, 1976). Izutsu (1983) extensively examined the cosmic position of humanity in his work "*God and Man in the Koran*" (Izutsu, 1983).

The integration of creatures and scientific understanding within Islamic cosmological frameworks has been addressed in contemporary scholarship, examining how various forms of life relate to divine creation and cosmic order (Demirkuş, 2019). This work provides foundational insights for understanding the position of different creatures, including jinn and humans, within the broader cosmic hierarchy.

Evolutionary Psychology and Phylogenetic Development

Wilson (1975), in "Sociobiology: The New Synthesis", discussed the behavioral development of species from a phylogenetic perspective (Wilson, 1975). Pinker (2011), in "The Better Angels of Our Nature", comprehensively analyzed the change in humanity's moral development over time (Pinker, 2011). The contemporary discussion of human origins has been significantly enriched and complicated by remarkable developments in paleoanthropology, genetics, evolutionary biology, archaeological research, and related scientific disciplines that employ increasingly sophisticated methodologies and technologies (Chalmers, 2013, pp. 78-89).

Recent developments in understanding the relationship between evolution science, basic sciences, and mathematics provide crucial methodological foundations for integrating theological and scientific perspectives on human development (Demirkuş, 2023). This interdisciplinary approach offers new frameworks for understanding both biological and spiritual evolution.

Moral Development Literature

Ontogenetic moral development theories are generally associated with cognitive development. Theorists such as Piaget and Kohlberg have suggested that individuals' moral reasoning develops through specific stages (Kohlberg, 1984; Piaget, 1932). These stages are directly related to the individual's interaction with their environment, social learning, and the development of their cognitive abilities. Current research indicates that moral sensitivity is based on innate abilities. Children have been proven to have the capacity for moral discernment, emotions, and prosocial motivations from early ages (Hamlin, 2013). An individual's moral maturity can be measured by their ability to resolve ethical dilemmas, their level of empathy, and their respect for the rights of others (Aktan, 2018). Jean Piaget, Lawrence Kohlberg, and Carol Gilligan, among the most prominent theorists in moral development, have offered different perspectives on moral reasoning processes and stages. The criticism of Kohlberg's six-stage model, focusing solely on justice and neglecting other moral dimensions such as care and compassion, has led to the development of new approaches (Gilligan, 1982).

THEORETICAL FRAMEWORK

Energy Cycle Theory

According to this theory, the energy produced by all life forms on Earth reaches Allah in a cosmic cycle, and this energy flow triggers new creation processes. There are verses in the Qur'an that point to this process: "And to Him returns every matter" (Hud, 11:123). This verse states that all processes in the universe ultimately return to Allah (Qur'an, 11:123). This energy transformation is also consistent with the first law of thermodynamics: "Energy cannot be created or destroyed, it can only be transformed from one form to another".

The mathematical foundations underlying these cosmic processes can be understood through new approaches to set theory and mathematical definitions that bridge abstract mathematical concepts with physical and metaphysical realities (Demirkuş & Alkan, 2018). This mathematical framework provides crucial insights for understanding how energy transformations occur at cosmic scales.

Relationships Between Science, Mathematics, and Evolutionary Science

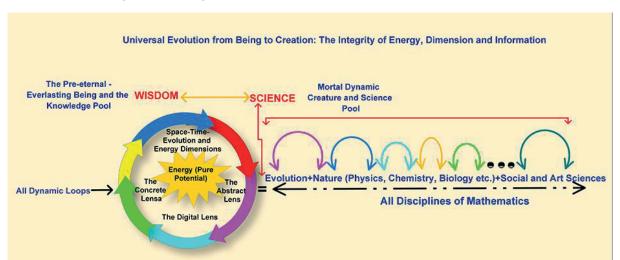


Figure 1 Relationships Between All Disciplines of Science, Evolution Science, Natural Sciences, Social Sciences, and Mathematics

Science equals: the relational equation of definition that we have established between all branches of science (as a numerator), all disciplines of mathematics (as a denominator), and the evolution (change) of science does not contradict the relationality of the Big Bang, science, and the evolution of all creatures. (see Figure 1).

Everything exists as a being in ashy energy (in the light of the creator). But each of these energy states in the visible universe is called a creature.

Divine Energy Cycle and Caliphate Decision

The "life energy" emitted by all living beings (biological energy) and non-living entities (radiation, etc.) on Earth does not come from nothing but reaches Allah. The chaos and *fitna* energy created by the jinn on Earth are also part of this cycle. This "energy report" triggered Allah's will to create a vicegerent on Earth.

Jinn's Energy of Fitna and Divine Intervention

In Islamic literature, there is information indicating that jinn caused corruption on Earth before humanity became vicegerents. Al-Tabari (839-923), in his *Jāmi' al-Bayān*, states that the angels' question, "Will You place therein one who will cause corruption and shed blood?" was based on the fact that previous creatures (jinn) exhibited similar behaviors (Al-Tabari, 839-923/1988). Islamic exegetical literature offers two fundamentally different perspectives on this important question of pre-Adamic creatures. The first interpretive view, supported by numerous classical exegetes and transmitted through multiple chains of authority extending back to the earliest generations of Islamic scholars, argues that jinn—beings created from smokeless fire—lived on Earth before Adam's creation and served as Earth's first rational inhabitants endowed with free will and moral responsibility.

According to this detailed perspective, these pre-Adamic jinn established complex civilizations, developed sophisticated societies with political institutions and cultural achievements, but eventually fell into moral corruption, engaged in widespread bloodshed (It is also possible that the effects of the jinn on the *Homo sapiens*/natural human groups under their control or administration are of a bloodthirsty nature) and oppression, and committed acts of rebellion against divine guidance that necessitated divine intervention through angelic armies that expelled them from positions of earthly authority and relegated them to remote regions.

The evolutionary journey from jinn mischief to conscious human evolution represents a critical transition in cosmic history, paralleling the development of moral consciousness in human societies (Demirkuş, 2025a). This transformation from chaotic pre-Adamic conditions to conscious moral agency reflects both theological and evolutionary principles.

The second major perspective holds that Adam was the first absolutely soul-bearing and intelligent human being created and placed on Earth, and that no conscious, morally responsible human existed in earthly existence before him. Proponents of this view claim that the angels' knowledge about human potential for corruption came either through direct divine revelation about future human behavior patterns or through their sophisticated understanding of the inherent potential for moral deviation present in beings endowed with free will and created from earthly materials that contain conflicting elements and tendencies. It is suggested that as a result of this corrupting energy reaching a cosmic dimension, Allah decided to create a new vicegerent. The Hadith of the Prophet Muhammad (peace be upon him) supports this process: "Allah created the jinn before He created Adam, and they lived on Earth for a thousand years" (Ibn Kathir, 1365/1997, 1:92).

Creation of Adam and the Paradise-Earth Relationship

Adam was kneaded from "universal earth collected from different geographies" where energy reached Allah and was appreciated; by the breathing of spirit, he was created not only as a biological but also an angelic creature. This creation serves as a bridge connecting humanity's divine origin with its earthly trial.

The cosmic journey from initial creation to conscious evolution involves multiple stages of development, encompassing both physical and spiritual dimensions of human existence (Demirkuş, 2025b). This comprehensive framework helps explain the transition from pre-conscious to fully conscious human states.

The Breathing of the Spirit and its Reflection on Early Homo sapiens

The breathing of the spirit into Adam carries the quality of a "divine trust"; the early *Homo sapiens* community also received a share of this spiritual dimension. Thus, humanity was distinguished from other creatures both physically and spiritually.

PHYLOGENETIC AGE HYPOTHESIS

Humanity's Current Developmental Level

According to this hypothesis, humanity is currently at the level of a 17-year-old creature in terms of moral maturity within a 1-million-year evolutionary process. This situation is consistent with the stages of *nafs* (self) in the Qur'an:

- *Nafs al-Ammārah* (The Inciting Self to Evil): "Nor do I absolve my own self (of blame): for verily, the self is prone to evil" (Yusuf, 12:53).
- Nafs al-Lawwāmah (The Reproaching Self): "And I swear by the self-reproaching soul" (Al-Qiyamah, 75:2).
- Nafs al-Mutma'innah (The Tranquil Self): "O tranquil soul! Return to your Lord" (Al-Fajr, 89:27-28).

Phylogenetic Age Theory and Islamic Understanding of Time

Stages of Humanity's Development: The "17-year-old humanity" approach is consistent with the *nafs* stages in the Qur'an: "Nor do I absolve my own self (of blame): for verily, the self is prone to evil" (Yusuf 12:53). "O tranquil soul! Return to your Lord, well-pleased (with Him), and He well-pleased (with you)" (Al-Fajr 89:27-28). The saying of Imam Ali (r.a.) supports this development: "When a child, man desires play; when young, he desires lust; when old, he desires wisdom".

Temporal Maturity Process: The verse "Indeed, a day with your Lord is like a thousand years of what you count" (Al-Hajj 22:47) shows the relativity of time perception. The 1-2 million year maturity projection gains meaning from this perspective. Imam Ali's (r.a.) saying is considered relevant to how these stages occur in individual development: "When a child, man desires play; when young, he desires lust; when old, he desires wisdom" (quoted by Al-Ghazali, 1095/1997).

Humanity's Phylogenetic Development

Current humanity, in the stage of *Nafs al-Ammārah* (the self inciting to evil), exhibits impulsive behaviors similar to adolescence (17 years of age). When humanity advances to the stages of *Nafs al-Mutma'innah* (the tranquil self) and *Nafs al-Lawwāmah* (the self-reproaching self), it will achieve both moral and scientific maturity and open up to space. Phylogenetic moral development refers to the collective moral level achieved by the human species throughout thousands of years of its history. This process aligns with Darwin's framework, which proposed moral sentiment as the inevitable result of four fundamental elements: social instinct, memory, language, and habit. According to Darwin, the biological advantage of moral behaviors ensured the preservation and development of these abilities in the evolutionary process (de Waal, 2006). Since the period when our common ancestors lived with chimpanzees and bonobos, humanity's closest relatives, the fundamental elements of moral behavior

have evolved. Although fully developed human morality is unique to humans, many of its basic elements are also found in other primates (van Schaik et al., 2018).

Mathematical Projection

Calculation using a simple proportion method:

1,000,000 years = 17 years (phylogenetic) 1 year = 58,823 years Maturity age (40-50 years) = 2,353,000 - 2,941,000 years

According to this calculation, humanity needs approximately 1.35-1.96 million more years to reach moral maturity.

Cosmic Maturity and Time Projection

With a simple proportion $(1,000,000 \text{ years} \rightarrow 17 \text{ years})$:

40 years (maturity) \approx 2,352,941 years total 50 years \approx 2,941,176 years total 60 years \approx 3,529,412 years total

Accordingly, humanity needs an additional 1.35-2.53 million years to reach full maturity (40-60 years) from its current "17 years" of 1,000,000 years.

Qur'anic References to Creation

The Qur'an contains numerous verses addressing the creation of humanity, with the narrative of Adam's creation serving as the most theologically significant account throughout fourteen centuries of scholarly interpretation and analysis in Islamic literature. These verses have been subjected to detailed linguistic analysis, theological reflection, and comparative study with other ancient Near Eastern creation narratives, revealing both unique Islamic perspectives and shared themes on human origins and meaning. The foundational verse that has generated centuries of interpretive discussion and scholarly debate appears in Sūrat al-Bagarah: "And when your Lord said to the angels, 'Indeed, I will make upon the earth a successive authority,' they said, 'Will You place therein one who will cause corruption and shed blood, while we glorify You with praise and sanctify You?' He said, 'Indeed, I know that which you do not know" (Q. 2:30). This pivotal verse raises several profound theological questions that have occupied Islamic scholars throughout history and continue to stimulate contemporary discussion and analysis. Firstly, the angels' immediate response, demonstrating apparent familiarity with concepts of corruption (fasād) and bloodshed (safk al-dimā'), leads numerous scholars to posit the existence of previous earthly inhabitants who exhibited such destructive patterns, providing the empirical basis for angelic concern and foreknowledge. Secondly, the specific Arabic term "khalīfah" (vicegerent or successive authority) carries important linguistic implications of succession and replacement that have been extensively analyzed by Arabic linguists and Qur'anic commentators. The root k-l-f suggests following after or replacing something that came before, potentially indicating that Adam's creation involved replacing or succeeding previous earthly

inhabitants who had failed in their responsibilities as stewards of the Earth and representatives of divine authority in the terrestrial realm. Additional Qur'anic verses provide detailed information about both the material and spiritual dimensions of the human creation process, emphasizing the dual nature of human existence as both physical and spiritual beings: "We created man from sounding clay, from mud molded into shape" (Q. 15:26). The Qur'an explicitly mentions that jinn were created before humanity: "And the jinn We created before from scorching fire" (Q. 15:27). This clear statement of temporal priority for jinn creation becomes highly significant when considering various theories about pre-Adamic earthly inhabitants and the possible meanings of the angels' foreknowledge in Q. 2:30. The Qur'an's creation narrative places particular emphasis on the special status granted to humanity through divine knowledge and linguistic capacity: "And He taught Adam the names of all things; then He placed them before the angels, and said: 'Tell me the names of these if you are right.' They said: 'Glory to You, we have no knowledge except what You have taught us. Indeed, it is You who is the Knowing, the Wise.' He said: 'O Adam! Tell them their names.' When he had told them their names, Allah said: 'Did I not tell you that I know the secrets of heaven and earth, and I know what you reveal and what you conceal?'" (Q. 2:31-33).

Sūrat al-Insān and the Evolutionary Process

Verses 1-2 of Sūrat al-Insān contain a profound layer of meaning where humanity's evolutionary creation process converges with the Islamic creation narrative: "Has there not been over man a long period of time, when he was nothing - not even mentioned? Verily, We created man from a drop of mixed sperm, in order to try him: so We gave him hearing and sight" (Q. 76:1-2). The emphasis on "over man" in the expression "Hal atā 'alā al-insāni hīnun min al-dahri lam yakun shay'an madhkūrā" indicates the process of breathing human consciousness onto physically existing hominids (Diyanet İşleri Başkanlığı, 2024). The jinn's caliphate "two thousand years before the creation of Adam" and their subsequent replacement by humans as caliphs reveals the cosmic context of this process (Sorularla İslamiyet, 2024). The expression "nutfatan amshāj" (mixed sperm) refers to Homo sapiens born through normal sexual reproduction, contrary to Adam's creation from clay, indicating that these verses address humanity after Adam rather than Adam himself (Kuran ve Meal, 2024). This perspective proposes that with the breathing of spirit into Adam, moral consciousness and responsibility were transferred to the entire *Homo sapiens* species in the form of a "software update," and this update was fully activated with the forbidden fruit incident. The emphasis on "in order to try him" in the verses indicates that the caliphate trial, in which the jinn failed, was now given to humanity, and that with this update, Homo sapiens became beings "worth mentioning" (TDV İslam Ansiklopedisi, 2024).

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Āl 'Imrān Verses and Electness

"Verily, Allah chose Adam, Noah, the descendants of Abraham and the descendants of Imran among the worlds and made them superior to the worlds. These are a descendant of each other. God is the Hearer and the Knower" (Q. 3:33-34). According to verse 33 of $\bar{A}1$ 'Imr \bar{a} n, Allah has chosen these four prophets/lineages "from among the worlds". This selection ($istaf\bar{a}$ ') is used in the sense of choosing among people, because all of these names are of the human race (Perhaps they were chosen among humans who had not yet been created in the realm of existence/in the knowledge of Allah).

Perspectives from Classical Tafsīrs

Al-Tabari's Comprehensive Analysis

Muḥammad ibn Jarīr al-Ṭabarī (d. 923), whose monumental Jāmi al-Bayān fī Ta wīl al-Qur ān remains one of the most authoritative, comprehensive, and influential early tafsīrs in Islamic literature, presents multiple detailed perspectives on the question of pre-Adamic beings with characteristic scholarly thoroughness and methodological rigor. Al-Tabari (2001, pp. 48-54) narrates from Ibn Abbās, one of the most respected early authorities on Qur'anic interpretation: "The first inhabitants of earth were the jinn. They caused corruption therein and shed blood, killing one another in widespread warfare and violence that devastated the earth. So Allah sent Iblīs with an army of angels, and they killed the rebellious jinn, pursuing those who fled to the islands in the seas and the mountain peaks where they sought refuge and established exile communities". However, al-Tabari (2001, p. 55) also meticulously records the sharply contrasting view of scholars who completely reject the concept of pre-Adamic rational beings: "It is not permissible that there was any rational creature on earth before Adam's creation. The angels' statement about corruption and bloodshed was based on what Allah had specifically informed them about what Adam's children would do in the future".

Ibn Kathīr's Synthesizing Approach

Ismā'īl ibn 'Umar ibn Kathīr (d. 1373), provides a more methodologically conservative perspective on pre-Adamic beings while acknowledging the diversity of transmitted narrations and the scholarly tradition of preserving different interpretive possibilities. Ibn Kathīr (1998, pp. 120-122) demonstrates scholarly caution regarding various narrations about pre-Adamic jinn while maintaining respect for traditional authorities: "These accounts are primarily from the *Isrā'īliyyāt* (Jewish and Christian sources) whose authenticity is neither definitively confirmed nor categorically denied by primary Islamic sources". Ibn Kathīr emphasizes careful analysis of the theological implications embedded in the angels' question: "Their statement 'Will You place therein one who will cause corruption' indicates one of three possibilities: either their knowledge derived from previous direct experience with jinn behavior on earth; or Allah had specifically informed them about what humans would do in the future; or they understood from the inherent nature of beings created from earthly elements that such moral inclinations and conflicts would naturally arise".

Al-Rāzī's Philosophical Analysis

The philosophically sophisticated exegete Fakhr al-Dīn al-Rāzī (d. 1210) presents systematic rational arguments for various interpretive positions. Al-Rāzī offers five logically possible explanations for angelic knowledge about human potential for corruption (Al-Razi, 2000, pp. 162-170):

- **Empirical Observation:** Angels witnessed corruption among previous earthly inhabitants through direct sensory experience.
- **Direct Divine Knowledge:** Allah explicitly informed angels about human behavioral tendencies and future actions through special revelation communicated specifically.
- Rational Inference: Angels understood through logical analysis that free will necessarily creates possibilities for both good and evil choices.
- Analogical Reasoning: Angels compared humans to jinn, who already possessed free will.
- **Natural Philosophy:** Angels recognized that beings composed of diverse material elements would necessarily experience internal conflicts leading to moral struggle.

MODERN SCIENTIFIC PERSPECTIVES

Paleoanthropological Evidence

Modern paleoanthropology has fundamentally revolutionized our understanding of human origins through remarkable fossil discoveries, sophisticated dating techniques, advanced genetic analysis, and interdisciplinary collaboration between multiple scientific fields that employ increasingly precise methodologies and technologies (Chalmers, 2013, pp. 78-89). This newfound complexity challenges simplistic narratives about human uniqueness and linear progress while simultaneously revealing the remarkable richness and diversity of our evolutionary heritage spanning millions of years of development. Chalmers (2013, pp. 78-89) emphasizes the crucial importance of empirical observation, hypothesis testing, and scientific methodology in reconstructing humanity's deep past and understanding our place in the broader context of life's history on Earth.

The hominin fossil record now extends back approximately 7 million years to *Sahelanthropus tchadensis*, discovered in Chad's Djurab Desert and representing one of the earliest known potential human ancestors. Primarily known from a single, remarkably preserved skull nicknamed "Toumaï," this ancient species displays a fascinating combination of ape-like and human-like anatomical features, positioning it near the crucial evolutionary split between human and chimpanzee lineages.

Ardipithecus ramidus (4.4 million years ago), known from the extraordinarily complete "Ardi" skeleton discovered in Ethiopia, provides unprecedented insights into early hominin anatomy, behavior, and ecological adaptation. Despite retaining numerous primitive features, Ardi demonstrated clear capability for upright bipedal locomotion (White et al., 2009, pp. 64-72). The genus

Australopithecus, spanning approximately 4-2 million years ago, includes multiple distinct species showing increasingly sophisticated bipedal adaptations while retaining significant arboreal capabilities.

Australopithecus afarensis, exemplified by the world-famous "Lucy" skeleton discovered in 1974, successfully combined efficient upright walking with retained climbing abilities. The remarkable Laetoli footprints in Tanzania, dated to 3.6 million years ago and preserved in volcanic ash, provide dramatic direct evidence of bipedal locomotion predating significant brain expansion (Johanson and White, 1979, pp. 321-330).

Homo erectus, emerging around 1.9 million years ago, represents the first hominin species to expand successfully beyond Africa and establish populations across vast geographical ranges extending into Asia and possibly Europe. With significantly increased body size, modern limb proportions, and brain volumes reaching 1000cc, *H. erectus* demonstrated remarkable adaptive flexibility and persisted for over 1.5 million years across Africa, Asia, and possibly Europe. This species shows the first clear evidence of several key human behavioral innovations. Archaeological evidence from sites like Wonderwerk Cave documents controlled use of fire dating back 1 million years (Berna et al., 2012, pp. 1-5).

Homo naledi, discovered in 2013, has revolutionized understanding of human evolutionary complexity and the persistence of anatomical diversity. Recent dating places *H. naledi* between 335,000-236,000 years ago (Berger et al., 2015, pp. 1-15). Neanderthals (*Homo neanderthalensis*), evolving over approximately 400,000 years, developed distinctive anatomical adaptations to harsh glacial climates. Their brain size equaled or exceeded modern human levels, and mounting archaeological evidence demonstrates sophisticated behavioral capabilities.

Archaeological Evidence for Behavioral Modernity

The emergence of "behavioral modernity"—defined as the full package of complex behaviors characterizing contemporary humans—remains one of the most contentious and significant topics in human evolutionary studies. The central debate focuses on whether distinctively modern human behavior appeared suddenly in a dramatic "revolution" around 40,000-50,000 years ago, or accumulated gradually over hundreds of thousands of years. Archaeological evidence for sophisticated symbolic behavior appears sporadically throughout the African record. Systematic ochre use dates back 300,000 years, with clear evidence for deliberate preparation suggesting symbolic applications. The famous Blombos Cave ochre pieces bearing deliberate geometric engravings (75,000 years ago) provide compelling evidence for symbolic communication (Henshilwood et al., 2002, pp. 1278-1280). Similar abstract patterns appear on ostrich eggshells from Diepkloof Rock Shelter (60,000 years ago). The remarkable consistency of these patterns indicates shared cultural knowledge. Europe's Upper Paleolithic period (45,000-10,000 years ago) witnessed explosive cultural development following the

arrival of modern humans. The Aurignacian culture introduced sophisticated tool technologies, indicating advanced hunting strategies. Cave art represents perhaps the most dramatic evidence for fully symbolic thought. The paintings at Chauvet Cave (37,000 years ago) display remarkably advanced artistic techniques.

Genetic Evidence and Human Origins

The revolutionary advent of ancient DNA analysis has fundamentally transformed scientific understanding of human evolution, revealing previously unknown patterns of migration, population interaction, genetic adaptation, and complex interbreeding between different human species. Remarkable technical advances now allow DNA extraction from increasingly ancient specimens, opening unprecedented windows into prehistoric population dynamics. Modern humans (Homo sapiens) emerged in Africa approximately 300,000 years ago, based on fossil discoveries from Jebel Irhoud in Morocco that suggest gradual mosaic evolution (Hublin et al., 2017, pp. 289-292). Comprehensive genetic studies strongly support African origins for modern humans followed by subsequent migrations. Mitochondrial DNA analysis shows greatest genetic diversity within African populations. Revolutionary ancient DNA extraction from Neanderthal fossil remains has revealed that non-African modern humans carry 1-4% Neanderthal ancestry, providing direct genetic evidence of interbreeding during the critical period 60,000-40,000 years ago (Green et al., 2010, pp. 710-722). Denisovan DNA appears in modern populations with particularly high concentrations in Melanesian and Aboriginal Australian populations, indicating successful long-term interbreeding. Tibetan populations have inherited from Denisovans a crucial variant of the EPAS1 gene that provides essential adaptation to high-altitude environments. A remarkable 2018 study identified a firstgeneration hybrid individual—a teenage female with a Neanderthal mother and Denisovan father providing direct evidence that different human species not only coexisted but regularly formed reproductive partnerships (Slon et al., 2018, pp. 113-116). This individual, nicknamed "Denny," lived approximately 90,000 years ago and demonstrates ongoing genetic and cultural interaction.

MORAL DEVELOPMENT AND CONTEMPORARY DIMENSIONS

Contemporary Moral Development and Climate Justice

Current discussions suggest significant milestones in humanity's moral evolution. Especially topics such as environmental awareness, combating climate change, anti-violence advocacy, and human rights advocacy demonstrate the moral progress humanity has made. Young climate activists play a significant role as norm entrepreneurs in viewing climate change not merely within a cost-benefit analysis, but within a multi-faceted climate justice framework (Clayton, 2020). Decisions about climate change are inherently moral, requiring moral judgments about important values and the desired state of the world now and in the future (Gardiner, 2011). Individuals who have achieved early moral maturity in these areas (e.g., environmentalists, climate activists, anti-violence advocates,

defenders of nature and animal rights) play a significant role in the phylogenetic moral development of humanity. Environmental activism has emerged as a powerful force in combating global climate change, pollution, deforestation, and biodiversity loss (Grasso & Markowitz, 2015).

Contemporary Dimensions of Moral Development

An evolution in public discourse on global warming has been observed throughout 2015. Global warming, typically discussed in news media only as a scientific, environmental, or political issue, is now being reframed as a moral and spiritual issue (Roser-Renouf et al., 2016). Empirical studies show that perceptions of morality and justice can serve as both bridges and barriers to climate cooperation (Markowitz & Shariff, 2012). Adaptation to climate change creates social dilemmas and raises issues of morality and justice, such as who gains and who benefits, and trade-offs in adaptation strategies (Walker-Springett et al., 2017).

OPENING TO SPACE AND COSMIC CIVILIZATION

Qur'anic Perspective

The Holy Qur'an indicates that humankind will undertake space travel in the future: "O company of jinn and mankind, if you are able to pass beyond the regions of the heavens and the earth, then pass. You will not pass except by a sultan (authority/knowledge and power)" (Ar-Rahman, 55:33). This verse states that space travel will be possible when scientific development reaches a certain level (Qur'an, 55:33). The word "sultan" here is used in the sense of "power, authority, science" (Nasr, 1976).

Humanity's Role as Caliph

The verse "It is He who has made you successors upon the earth" (Fāṭir 35:39) implies that humankind has responsibility not only on Earth but also on a cosmic level.

Conquest of the Heavens

"O company of jinn and mankind, if you are able to pass beyond the regions of the heavens and the earth, then pass. You will not pass except by a sultan (power)" (Ar-Rahman 55:33). This verse is a sign that humankind will undertake space travel in the future. Prophet Muhammad (peace be upon him) said: "Allah has many servants in the heavens and on Earth whom you do not know" (Muslim, Dhikr 28).

Caliphate Duty and Cosmic Responsibility

The verse "It is He who has made you successors upon the earth" (Fāṭir, 35:39) implies that humankind has responsibility not only on Earth but also on a cosmic level (Qur'an, 35:39). The Hadith of the Prophet Muhammad (peace be upon him) supports this perspective: "Allah has many servants in the heavens and on Earth whom you do not know" (Muslim, Dhikr 28).

SCIENCE AND RELIGION: CONTEMPORARY DIALOGUE

Islamic Approaches to Science-Religion Harmony

The complex relationship between Islam and modern science has generated extensive scholarly debate, philosophical reflection, and practical educational initiatives, producing diverse approaches ranging from perceived conflict requiring resolution to sophisticated integration celebrating complementary insights. Throughout the modern period, Muslim intellectuals have proposed various frameworks for understanding this crucial relationship, each reflecting different theological commitments, philosophical assumptions about the nature of knowledge and reality, and practical strategies for navigating apparent tensions between religious tradition and scientific discovery.

Maurice Bucaille's influential "Bucaillism" represents one prominent though controversial approach to science-religion harmony. In his widely read work "The Bible, the Qur'an and Science," Bucaille (2003, pp. 234-245) argues that the Qur'an contains detailed scientific facts that would have been impossible for 7th-century knowledge to discover independently, thereby proving the Qur'an's divine origin through scientific verification. Critics argue that this approach risks fundamental misinterpretation of both scripture and science, noting that Bucaille often selects favorable translations while ignoring passages that don't support his thesis.

The "Islamization of Knowledge" movement, pioneered by influential scholars like Ismail al-Faruqi and Syed Muhammad Naquib al-Attas, aims to fundamentally reconceptualize modern sciences within an authentic Islamic epistemological framework that integrates revealed knowledge with empirical investigation. Contemporary Muslim philosophers of science like Nidhal Guessoum advocate a sophisticated middle path between simplistic concordism and destructive conflict that respects both scientific methodology and religious authority (Guessoum, 2011, pp. 123-145). Guessoum explicitly rejects both scriptural concordism that forces modern scientific concepts into ancient religious texts and postmodern relativism that denies science's legitimate truth claims about natural reality. He advocates methodological naturalism within scientific practice while maintaining metaphysical theism in broader philosophical perspective, arguing that science and religion operate at fundamentally different levels of explanation and can provide complementary rather than competing insights. Guessoum proposes the sophisticated principle of "layered explanation," where scientific and religious accounts complement rather than compete with each other in explaining different dimensions of reality.

Christian Perspectives on Science and Faith

Christian engagement with science-faith questions offers instructive parallels and illuminating contrasts with Islamic approaches, demonstrating both universal human struggles with integrating scientific and religious knowledge and distinctive theological responses shaped by different scriptural traditions and historical experiences. Francis Collins, former director of the Human Genome Project

and founder of the BioLogos Foundation, exemplifies accomplished scientist-believers who perceive no fundamental conflict between evolutionary science and Christian faith (Collins, 2006, pp. 142-156). Collins describes DNA structure and function as "the language of God," viewing evolutionary processes as the divinely chosen method of creation rather than an alternative to divine action. The Catholic Church's official position, expressed through papal statements and the Pontifical Academy of Sciences, formally accepts evolutionary theory while maintaining essential theological doctrines about human dignity, spiritual significance, and the soul's divine origin. Pope Francis's 2014 statement that God is not "a magician with a magic wand" but works through discoverable natural laws reflects the sophisticated Catholic synthesis of scientific and theological understanding.

Philosophical Frameworks for Integration

Contemporary philosophers of science and religion have developed increasingly sophisticated frameworks for understanding the relationship between these crucial domains of human knowledge, moving far beyond simplistic conflict narratives toward nuanced analyses of how different knowledge systems interact, complement, and potentially integrate while maintaining their distinctive methodologies and insights. Ian Barbour's influential fourfold typology identifies four basic models of science-religion interaction that continue to shape academic and popular discussions. The Conflict model sees science and religion as fundamentally competing for the same explanatory territory. The Independence model maintains that science and religion address entirely different questions using incompatible methodologies. The Dialogue model seeks constructive interaction while maintaining important distinctions. The Integration model attempts comprehensive synthesis (Barbour, 1997, pp. 145-167).

Critical Realism in Science-Religion Discussions

Critical realism, advocated by scholars like John Polkinghorne and Alister McGrath, offers a nuanced philosophical framework that has gained significant influence in science-religion discussions. This approach maintains that both science and religion legitimately seek truth about objective reality through different but potentially complementary methodologies and sources of knowledge.

THEOLOGICAL EVOLUTION AND ADAM

Conceptual Framework

The innovative concept of "theological evolution" offers a sophisticated framework for understanding Adam's religious and spiritual significance without contradicting compelling scientific evidence about human biological origins and development. This integrative approach carefully distinguishes between biological evolution and theological evolution.

Adam's Theological Characteristics

Islamic sources consistently attribute several remarkable characteristics to Adam that fundamentally distinguish him from both previous creatures and contemporary animals:

- **Divine Spirit** ($R\bar{u}h$): "Then He fashioned him and breathed into him from His spirit" (Q. 32:9). This divine breath represents infinitely more than mere biological life or physiological animation.
- **Knowledge and Language:** The divine teaching of names represents sophisticated conceptual knowledge, abstract thinking abilities, and advanced linguistic capability.
- **Moral Agency:** Adam's designation as *khalīfah* establishes comprehensive moral responsibility unknown to previous creatures or contemporary animals.
- **Self-Consciousness:** Adam and Eve's awareness of nakedness following their disobedience (Q. 7:22) symbolizes sophisticated self-consciousness.
- **Religious Consciousness:** Most fundamentally, Adam represents the first human with explicit consciousness of Allah as Creator.

Models of Integration

Several sophisticated models have been proposed for integrating theological understanding of Adam with scientific evidence about human evolution:

- Sequential Model: This approach proposes that biological evolution produced anatomically modern humans, followed by divine selection and spiritual transformation of specific individuals.
- **Emergence Model:** This approach emphasizes divine action working through evolutionary processes in which consciousness, morality, and spirituality gradually emerged.
- Archetypal Model: This sophisticated approach interprets Adam as representing archetypal humanity, the divine ideal.
- **Population Model:** This model interprets "Adam" as representing the first population achieving complete spiritual consciousness.

FUTURE HORIZONS: TRANSHUMANISM AND HUMAN ENHANCEMENT

The Transhumanist Vision and Its Implications

Transhumanism represents an influential philosophical movement advocating the systematic use of advanced technology to enhance human capabilities and even transcend fundamental biological limitations. Leading transhumanist philosophers like Nick Bostrom envision a revolutionary future where genetic engineering, sophisticated cybernetic implants, and advanced artificial intelligence

systems combine to create dramatically enhanced or even posthuman beings (Bostrom, 2014, pp. 89-112).

Theological and Ethical Implications for Islamic Thought

- **Human Dignity** (*Karāmah*): Islam teaches inherent human dignity based on divine creation and appointment as earthly vicegerents. The Qur'an emphasizes: "We have honored the children of Adam" (Q. 17:70).
- **Natural Order** (*Fitrah*): The Islamic concept of *fitrah* suggests humans possess a divinely determined essential nature that should be preserved rather than fundamentally altered.

Integrated Analysis: Jinn Corruption and Human Evolution

Conceptual Intersections of Theological and Evolutionary Processes

Classical Islamic narratives describing the jinn caliphate period and their ultimate moral corruption offer a fascinating example of rational beings endowed with free will who failed to uphold their moral responsibilities on Earth. Remarkably, the evolutionary development of *Homo sapiens* reveals striking parallels to these theological narratives, particularly during the crucial period between 300,000 and 70,000 years ago when anatomically modern humans had emerged but had not yet developed sophisticated ethical consciousness. The period of jinn caliphate and their acts of corruption are presented in Islamic literature as an example of creatures with free will who could not assume moral responsibility on Earth. These narratives are found particularly in Qur'an 2:30 and 15:27 and are elaborated in the works of exegetes like Al-Tabari, Ibn Kathir, Razi, and Al-Ghazali. In Qur'anic narratives related to human creation, it is stated that the jinn, a type of creature living on Earth before Adam, caused corruption and shed blood (Q. 2:30). In the classical exegeses of this verse, it is narrated that the jinn were sent by Allah as vicegerents on Earth, but over time, they rebelled against their natural state (Al-Tabari, Tafsīr al-Tabarī, vol. 1, p. 210; Ibn Kathir, Tafsīr al-Our ali 'l-Azīm, vol. 1, p. 99). Similarly, in the evolutionary process of *Homo sapiens*, individuals who were physically developed but had not yet developed ethical consciousness and collective responsibility emerged, particularly between 300,000 and 70,000 years ago. In this context, the narrative of jinn corruption carries a strong metaphorical reflection of the relationship between early *Homo sapiens'* tendencies towards inter-group conflict, environmental destruction, and violence. It metaphorically corresponds to the period before humanity evolved into a conscious and responsible creature in modern science. Jean Piaget, Lawrence Kohlberg, and Carol Gilligan, among the most prominent theorists in moral development, have offered different perspectives on moral reasoning processes and stages. The criticism of Kohlberg's six-stage model, focusing solely on justice and neglecting other moral dimensions, has led to the development of new approaches (Gilligan, 1982). The field of moral development is currently experiencing a revitalization of theoretical and methodological innovation after moving out of the shadow of paradigmatic moral stage theory (Kretchmar, 2024). How moral decision-making occurs, how it matures over time, and how it relates to behavior is complex. According to Tabari (839-913 CE), the jinn assumed the position of vicegerency on Earth, but jealousy, arrogance, and corruption spread among them; Allah commanded the angels to disrupt this structure (Tabari, *Tafsīr al-Ṭabarī*, I, pp. 212-215). Fakhr al-Din Razi interpreted this corruption as "moral decadence, lust, anger, and arrogance" (Fakhr al-Din Razi, *Mafātīḥ al-Ghayb*, vol. 2, p. 188). Al-Ghazali (*Iḥyā*', vol. 3, pp. 45-53) states that jinn mislead humans from their innate nature through whispers, deception, and means. Jinn, here, metaphorically points to the animalistic and selfish dimensions of the *nafs*. This situation can be associated with *Nafs al-Ammārah* (the self inciting to evil), the lowest stage of the *nafs* in Islamic mysticism; for this stage represents a state where the individual succumbs to impulses such as lust, anger, and arrogance, and moral control is weak.

Comparative Framework of Theological and Scientific Narratives

Exegetical Narrative (Jinn)	e Scientific Observation (Homo sapiens)	Interpretive Meaning
Corruption (fasād)	Intra-group conflict, massacre, resource wars	Impulsive behavior, lack of control (Nafs al-Ammārah)
Bloodshed	Hunting, violence, enmity	Tendency toward violence in survival struggle
Pride and rebellion	Hierarchical competition, leadership struggle	Desire for dominance, ego development
Angelic intervention	Natural events, climate change	External intervention, balancing factor
Removal of caliphate from jinn	Lack of ethical responsibility consciousness	Unsuitability for moral responsibility
Creation of Adam	Abstract thought, belief, language development	Beginning of moral consciousness and divine addressability (transition to <i>Nafs al-Lawwāmah</i>)

According to modern biology, *Homo sapiens* evolved in Africa approximately 300,000 years ago. However, the cognitive leap—humans producing art, creating religious symbols, and making sense of abstract concepts—occurred about 70,000 years ago. This period marks the emergence of *Homo sapiens* as conscious beings (Henshilwood & Marean, 2003). This cognitive and moral leap gave birth to the human model capable of being addressed by divine messages. What is meant by 'Adam's creation' in religious texts may coincide with this leap. This transition, from a mystical perspective, may express the elevation to the level of *Nafs al-Lawwāmah* (the self-reproaching *nafs*); here the individual begins to recognize their own mistakes and engage in conscience examination, possessing an internal moral control.

Timelines and Evolutionary Interpretations

Time Period	Eltion one/Eontion! Et	Employedon
(Approximate)	Evolutionary/Exegetical Event	Explanation
~7 million years ago	Separation from common ancestor with chimpanzee	Beginning of human evolution
~2 million years ago	Homo erectus emerged	Fire, stone tool use
~300,000 years ago	Homo sapiens emerged	Biological evolution of modern humans
~200,000 years ago	Caliphate of jinn (narration)	According to exegeses, they were on Earth as caliphs
~100,000 years ago	Corruption of jinn (angelic intervention)	They were punished by angels (according to exegeses)
~70,000 years ago	Cognitive revolution	Language, symbols, abstract thought, art, belief systems developed
~10,000 years ago	Agricultural revolution	Settled life and first civilizations
~6,000 years ago	Creation of Adam	Beginning of moral consciousness and divine addressability

Building Meaning through the Exegesis-Science Table: Exegetical narratives are powerful metaphors used to explain early human behaviors. The following table presents a synthesis of the jinn-human comparison:

This period is defined as *Homo sapiens'* transition to "behavioral modernity" (Tattersall, 2012, pp. 102-117). During this process, humans demonstrated: symbolic art and necklaces (Blombos Cave, ~75,000 years ago), use of fire, tool development and organized hunting, group warfare and migrant tribal raids, and the role of competition in the disappearance of Neanderthals (Klein, 2009, pp. 525-540). Harari (2015, pp. 34-49) calls this period the "cognitive revolution" and notes that emotions such as racism, lying, and fear determined social dynamics. During this period, the influence of *Nafs al-Ammārah* on human behavior is particularly evident; individuals and groups are observed to act according to selfish desires, violent tendencies, and short-term interests.

Synthesis Through Qur'anic-Scientific Framework

The narrative synthesis between accounts of jinn corruption and scientific understanding of early human evolution reveals several profound insights that enrich both religious and scientific understanding:

• The corruption of jinn may represent more than purely metaphysical narrative, serving instead as a sophisticated theological description of the chaotic moral structure characterizing *Homo sapiens* during the pre-ethical consciousness period when destructive impulses dominated human behavior and decision-making.

• The 'angelic intervention' described in traditional narratives provides a metaphorical interpretation of external regulatory factors including natural disasters, climate changes, and environmental pressures that shaped human evolutionary development and created selective pressures favoring cooperation, moral development, and sustainable practices.

• The creation of Adam symbolizes humanity's crucial transition to serving as genuine moral agents capable of ethical responsibility and spiritual consciousness.

CONCLUSION AND JUDGMENT: ISLAMIC SYNTHESIS

Cosmic Education Process

This theory aligns with Islam's understanding of the "world as a place of trial". The verse "It is He who created death and life to test you as to which of you is best in deed" (Al-Mulk 67:2) supports that humanity is in a "process of maturation". Moral development remains a critical issue, consistently important and requiring contemplation at both individual and societal levels. Especially current ethical sensitivities emerging in the fight against global problems show that humanity's moral evolution continues and promises hope for the future. Although humanity's general moral maturity will span a longer period than the sum of individuals, and each individual's moral journey may differ, humanity as a whole is in a longer maturation process. Ontogenetic moral development refers to the level of moral maturity an individual acquires throughout their life, while phylogenetic moral development represents the average moral level achieved by the entire human species throughout history.

Future Promise

The verse "Allah has promised those among you who believe and do righteous deeds that He will grant them succession (as rulers) in the earth" (An-Nur 24:55) points to humanity's future mature state.

Ultimate Perspective

The Hadith of the Prophet Muhammad (peace be upon him) summarizes this process: "This Ummah will be divided into seventy-three sects, all of them in Hell except one. The Companions asked: 'Which one is it, O Messenger of Allah?' He said: 'That which I and my Companions are upon (the path)'" (Tirmidhi, Iman 18). This Hadith indicates that humanity will pass through various evolutionary stages and eventually reach unity and maturity. Addressing this topic as an academic article provides a valuable contribution to both scientific literature and societal awareness. Future research should delve deeper into the neurological foundations of moral development, its cross-

cultural differences, and its application to global issues such as climate change (Dahl & Kim, 2014; Laible et al., 2019).

SYNTHESIS AND RESULTS

Divine Plan and Scientific Process

This theoretical framework synthesizes Islamic cosmology with modern scientific perspectives, yielding the following results (Nasr, 1976; Wilson, 1975):

- **Cosmic Energy Cycle:** All processes in the universe occur within energy cycles, and these cycles are the manifestation of divine will (Al-Ghazali, 1095/1997).
- **Gradual Development:** Humanity is reaching moral maturity through specific evolutionary stages (Pinker, 2011).
- **Cosmic Civilization:** In the future, humanity will establish a space civilization, fulfilling its universal vicegerency duty (Izutsu, 1983).

Practical Implications

The practical implications of this theory are:

- **Education System:** The fact that humanity is young indicates that education systems should be designed with patience and a long-term perspective.
- Social Policies: The understanding that current social problems are temporary and part of humanity's maturation process should be adopted.
- **Technological Development:** Investment in space technologies is of strategic importance for humanity's future.

Reached Judgments

Integrated Analysis of Theological and Evolutionary Processes:

- The corruption of jinn is not merely a metaphysical narrative; it may be a representation of *Homo sapiens'* chaotic structure in the pre-ethical consciousness period, that is, the state where *Nafs al-Ammārah* was dominant.
- The 'angelic intervention' in narrations is a metaphorical interpretation of external factors such as natural disasters and environmental regulatory elements.
- Adam's creation symbolizes humanity taking its place in history as a moral subject and the ability to assume responsibility.
- This period indicates a phase consistent with humanity's transition to the *Nafs al-Lawwāmah* level, where conscience and moral control come into play.

- Islamic literature and evolutionary biology, albeit in different languages, can together make sense of humanity's inner transformation and social morality.
- The energy cycle theory explains the relationship between energy transformation and the triggering of new creation stages in universal processes.
- The phylogenetic age hypothesis explains humanity's moral development in a way consistent with scientific timelines.
- The spiritual and cognitive leaps of the human species overlap with the concept of 'caliphate' in both Qur'anic and scientific contexts.

RECOMMENDATIONS

Based on the integrated analysis presented, the following recommendations are proposed to further bridge theological and scientific understandings of human origins and development:

- It is evaluated that while the concept of "natural human" is used for pre-Adamic *Homo sapiens* and earlier hominids on Earth, the concept of "modern human communities" constitutes a more appropriate terminology for post-Adamic terrestrial humanity.
- The interactions between *Homo sapiens* and other hominids with jinn and among themselves during the period when they lived in the era of jinn caliphate are of critical importance.
- The fact that hominid groups exhibited violent tendencies to the extent of causing bloodshed during the process of jinn "causing corruption" on Earth, or the triggering of negative effects of jinn on these communities (rebellion, corruption, and violence), constitutes an important socio-theological dynamic.

General Conclusion and Judgment

Humanity, as part of a divine energy cycle, was first created from "universal earth collected from different geographies," reaching an "angelic" dimension with the breathing of the spirit. Subsequently, it was subjected to trial on Earth; while currently in the "adolescent" stage (nafs-i ammare), upon completing its spiritual development and reaching the "tranquil" and "reproaching" stages, it will become a cosmic civilization that will both properly develop the Earth and undertake interstellar explorations. This process reveals humanity's evolution as "a young civilization journeying towards cosmic maturity" within the framework of Allah's decree and will.

Conclusion: This theory synthesizes Islamic cosmology with the modern scientific perspective, presenting an optimistic vision for humanity's future. The hypothesis that humanity is currently a "17-year-old young civilization" and will reach cosmic maturity in the future is supported by both religious texts (Holy Qur'an; Muslim, 817-875/1998) and scientific data (Wilson, 1975). The investigation of pre-Adamic creatures and human origins represents a fascinating and complex intersection of religious

thought and scientific discovery that continues to generate productive dialogue and intellectual development across multiple disciplines. Islamic sources offer remarkably diverse perspectives, ranging from detailed affirmation of pre-Adamic jinn civilizations to complete rejection of any rational beings preceding Adam's creation on Earth. This comprehensive study has argued for a sophisticated integrative approach that carefully recognizes and respects both theological insights and scientific evidence rather than forcing artificial harmonization or accepting inevitable conflict between religious and scientific ways of knowing. The innovative concept of theological evolution offers a promising framework for meaningful integration that carefully distinguishes between biological development and spiritual emergence. From this nuanced perspective, Adam represents the first theologically complete human possessing divine spirit, moral agency, and conscious relationship with Allah. The remarkable diversity of Islamic intellectual tradition provides rich conceptual resources for creative engagement with contemporary challenges rather than merely defensive reactions to perceived threats. This approach views today's social and moral problems as temporary growing pains and predicts that humanity will establish a more mature, peaceful, and cosmic civilization in the future (Izutsu, 1983).

DISCUSSION

Criticisms and Limitations

This theoretical framework has certain limitations:

- Empirical Data: The energy cycle theory has not yet been empirically tested.
- Time Scale: The phylogenetic age calculation involves approximate values.
- **Cultural Differences:** It is unclear how the theory will be perceived in different cultures.
- **Interdisciplinary Integration:** Differences in terminology and methodology across various scientific disciplines may hinder the understanding of the theory.
- Theological Diversity: Approaches to the theory may vary among different Islamic sects and schools of thought.
- **Technological Uncertainty:** The unpredictability of future technological developments makes projections about space civilization uncertain.

Future Research Directions

Based on the results of this study, the following research areas can be suggested:

- **Physical Energy Measurements:** Physical research on how life energies are transformed at a cosmic level.
- Comparative Civilization Analysis: Comparative analysis of the developmental stages of different civilizations.

• Space Psychology: Examination of changes in human psychology in the space environment.

Compliance with Ethical Standards

In this research, Islamic ethical principles and scientific research standards have been observed. The study maintained the principle of objectivity in synthesizing different disciplinary approaches. Furthermore, the ethical requirements of interdisciplinary research, such as transparency, accuracy, and academic integrity, have been diligently applied.

CONCLUSION

The theoretical framework proposed in this study synthesizes Islamic cosmology with a modern scientific perspective, offering an optimistic vision for humanity's future (Nasr, 1976; Pinker, 2011). The hypothesis that humanity is currently a "17-year-old young civilization" and will reach cosmic maturity in the future is supported by both religious texts (Holy Our'an; Muslim, 817-875/1998) and scientific data (Wilson, 1975). The investigation of pre-Adamic creatures and human origins represents a fascinating and complex intersection of religious thought and scientific discovery that continues to generate productive dialogue and intellectual development across multiple disciplines. Islamic sources offer remarkably diverse perspectives ranging from detailed affirmation of pre-Adamic jinn civilizations to complete rejection of any rational beings preceding Adam's creation on Earth. This comprehensive study has argued for a sophisticated integrative approach that carefully recognizes and respects both theological insights and scientific evidence rather than forcing artificial harmonization or accepting inevitable conflict between religious and scientific ways of knowing. The innovative concept of theological evolution offers a promising framework for meaningful integration that carefully distinguishes between biological development and spiritual emergence. From this nuanced perspective, Adam represents the first theologically complete human possessing divine spirit, moral agency, and conscious relationship with Allah. The remarkable diversity of Islamic intellectual tradition provides rich conceptual resources for creative engagement with contemporary challenges rather than merely defensive reactions to perceived threats. This approach views today's social and moral problems as temporary growing pains and predicts that humanity will establish a more mature, peaceful, and cosmic civilization in the future (Izutsu, 1983).

Ultimate Conclusion

The ultimate insight emerging from this investigation may be that truth manifests through multiple complementary channels rather than single authoritative sources. The Qur'anic command to "read" (*Iqra*')—significantly the first word revealed to Prophet Muhammad—applies equally to both the book of revelation and the book of nature. As humanity faces unprecedented global challenges from climate change, biotechnology, artificial intelligence, and social inequality, wisdom from both religious traditions and scientific discovery will prove not merely helpful but absolutely necessary for wise navigation of complex contemporary realities. This study aimed to open new horizons in the

synthesis of Islamic cosmology and modern scientific discoveries and to contribute to understanding humanity's position in its cosmic journey. Future research can support this theoretical framework with empirical tests and strengthen interdisciplinary dialogue.

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NOTES

- 1. The term khalīfah (قفيل in Arabic carries profound theological implications beyond simple succession, indicating both replacement of previous inhabitants and assumption of divine responsibility on Earth.
- 2. The concept of *Nafs al-Ammārah* (قرامال المان) represents the lowest spiritual stage in Islamic psychology, characterized by submission to base desires and impulses.
- 3. *Homo sapiens* archaeological evidence from Blombos Cave includes ochre engravings dated to approximately 75,000 years ago, marking crucial cognitive developments.
- 4. The Qur'anic verse "Has there not been over man a long period of time" (Hal atā 'alā al-insāni hīnun min al-dahri) suggests extended pre-conscious human existence.
- 5. Islamic exegetical tradition ($tafs\bar{\imath}r$) demonstrates remarkable diversity in interpreting pre-Adamic creatures, reflecting sophisticated hermeneutical approaches.
- 6. The phylogenetic age calculation (1,000,000 years = 17 years) represents a theoretical framework requiring empirical validation through interdisciplinary research.
- 7. Fitrah (قرطف) in Islamic theology refers to the primordial human nature created by Allah, encompassing both spiritual and moral dimensions.
- 8. Behavioral modernity in paleoanthropology refers to the emergence of symbolic thought, art, and complex social organization around 70,000 years ago.
- 9. The energy cycle theory proposed here synthesizes thermodynamic principles with Islamic cosmological concepts of divine will $(mash\bar{t}'ah)$.

- 10. Transhumanism raises significant theological questions about the boundaries of human enhancement within Islamic ethical frameworks.
- 11. The term *sultan* (ناطل in Qur'an 55:33 encompasses both political authority and scientific knowledge necessary for space exploration.
- 12. Jinn $(j\bar{a}nn, \tau^{(j)})$ in Islamic cosmology are created from smokeless fire and possess free will, making them suitable subjects for divine testing.
- 13. The concept of theological evolution distinguishes between biological development and spiritual emergence in human consciousness.
- 14. Climate activism represents contemporary moral leadership potentially indicating humanity's phylogenetic moral development.
- 15. Nafs al-Lawwāmah (מֹקוֹפָטׁטׁוֹ שׁבּׁיטׁטׁ) signifies the self-reproaching soul that recognizes moral failures and seeks improvement.
- 16. Archaeological evidence from Wonderwerk Cave demonstrates controlled fire use dating back 1 million years, indicating early technological development.
- 17. The Laetoli footprints provide direct evidence of bipedal locomotion predating significant brain expansion in human evolution.
- 18. Nafs al-Mutma'innah (قنى عن الله represents the highest spiritual stage of complete tranquility and divine satisfaction.
- 19. The integration of $Isr\bar{a}$ ʾīliyyāt (تايلىيىئارىسا) sources in classical Islamic exegesis requires careful methodological consideration.
- 20. Neanderthal-Denisovan hybrid discovery ("Denny") demonstrates complex interbreeding patterns in human evolutionary history.

REFERENCES

- Aktan, C. C. (2018). *Ahlaki bilimi ve eğitimi*. https://www.academia.edu/37905953/Ahlak_Bilimi_ve_E%C4%9Fitimi.
- Al-Bukhari, Muhammad ibn Isma'il. (2002). Sahih al-Bukhari. Vols. 2, 4, 7, 8. Damascus: Dar Ibn Kathir.
- Al-Ghazali, A. H. (1095/1997). *Tehafut al-falasifa* [The Incoherence of the Philosophers]. Trans. A. Sarıoğlu. İstanbul: Çağrı Yayınları.
- Al-Razi, Fakhr al-Din. (2000). Mafatih al-Ghayb (al-Tafsir al-Kabir). Vol. 2. Beirut: Dar al-Fikr.
- Al-Tabari, M. ibn J. (839-923/1988). *Jami al-bayan fi tafsir al-Quran* [Compendium of Explanation in Qur'anic Exegesis]. Vols. 1-30. Beirut: Dar al-Fikr.
- Al-Tabari, Muhammad ibn Jarir. (2001). Jami' al-Bayan 'an Ta'wil Ay al-Qur'an. Vol. 1. Cairo: Dar Hajr.
- Barbour, Ian G. (1997). Religion and Science: Historical and Contemporary Issues. San Francisco, CA: HarperSanFrancisco.

- Berger, Lee R., John Hawks, Darryl J. de Ruiter, Steven E. Churchill, Peter Schmid, Lucas K. Delezene, Tracy L. Kivell, et al. (2015). "Homo naledi, a New Species of the Genus Homo from the Dinaledi Chamber, South Africa." *eLife* 4:e09560.
- Berna, Francesco, Paul Goldberg, Liora Kolska Horwitz, James Brink, Sharon Holt, Marion Bamford, and Michael Chazan. (2012). "Microstratigraphic Evidence of In Situ Fire in the Acheulean Strata of Wonderwerk Cave, Northern Cape Province, South Africa." *Proceedings of the National Academy of Sciences* 109 (20): E1215-E1220.
- Bostrom, Nick. (2014). Superintelligence: Paths, Dangers, Strategies. Oxford: Oxford University Press.
- Brosnan, S. F. (2011). An evolutionary perspective on morality. *Journal of Economic Behavior & Organization*, 77(1), 23-30. https://doi.org/10.1016/j.jebo.2010.04.008.
- Buchanan, A., & Powell, R. (2015). *The evolution of moral progress: A biocultural theory*. Oxford University Press.
- Bucaille, Maurice. (2003). *The Bible, the Qur'an and Science*. Translated by Alastair D. Pannell and Maurice Bucaille. Elmhurst, NY: Tahrike Tarsile Qur'an.
- Chalmers, Alan F. (2013). What Is This Thing Called Science? 4th ed. Indianapolis, IN: Hackett Publishing.
- Clayton, S. (2020). Psychology of climate change. Current Biology, 30(19), R1175-R1184.
- Collins, Francis S. (2006). The Language of God: A Scientist Presents Evidence for Belief. New York, NY: Free Press.
- Dahl, A., & Kim, L. (2014). Why is it bad to make someone sad? Young children's understanding of harm and psychological harm. *Child Development*, 85(4), 1461-1477.
- Darwin, C. (1871). The descent of man, and selection in relation to sex. John Murray.
- de Waal, F. B. M. (2006). Primates and philosophers: How morality evolved. Princeton University Press.
- Demirkuş, N. & Bilgin, Enes. A. (2018). A new approach to the definitions and relations of the concepts of mathematics, eternity, infinity, death, time and the first point. *Journal of Biometrics & Biostatistics*, 9(4), 408. https://doi.org/10.4172/2155-6180.1000408
- Demirkuş, N. (2019). "The Position of Creatures and Science in Islam and the Qur'an." *Sixth Eurasian Conference on Language and Social Sciences*, 199-204.
- Demirkuş, N. & Alkan, D. (2018). A brand new approach to sets in mathematics. *Journal of Biometrics & Biostatistics*, 9(1), 391. https://doi.org/10.4172/2155-6180.1000391
- Demirkuş, N. (2023). A new approach to the definitions and relationships between evolution science, basic sciences and mathematics. *Magna Scientia Advanced Biology and Pharmacy*, 9(1), 14--19. https://doi.org/10.30574/msabp.2023.9.1.0039
- Demirkuş, N. (2025a). The adventure of the caliph: From the mischief of the jinn to conscious evolution. *International Journal of Science and Research Archive*, 16(1), 1080--1089. https://doi.org/10.30574/ijsra.2025.16.1.2125
- Demirkuş, N. (2025b). From cosmos to consciousness: The scientific and theological evolution of creation. *International Journal of Science and Research Archive*, 16(1), 108--120. https://doi.org/10.30574/ijsra.2025.16.1.2028
- Diyanet İşleri Başkanlığı. (2024). İnsan Suresi Tefsiri. Ankara: Diyanet İşleri Başkanlığı Yayınları.
- Fakhr al-Din Rāzī. Mafatih al-Ghayb (Volume 2).
- Gardiner, S. M. (2011). A perfect moral storm: The ethical challenge of climate change. Oxford University Press
- Gilligan, C. (1982). In a different voice: Psychological theory and women's development. Harvard University Press.
- Grasso, M., & Markowitz, E. M. (2015). The moral complexity of climate change and the need for a multidisciplinary perspective on climate ethics. *Climatic Change*, 130(3), 327-334. https://doi.org/10.1007/s10584-014-1323-9.

- Green, Richard E., Johannes Krause, Adrian W. Briggs, Tomislav Maricic, Udo Stenzel, Martin Kircher, Nick Patterson, et al. (2010). "A Draft Sequence of the Neandertal Genome." *Science* 328 (5979): 710-722.
- Guessoum, Nidhal. (2011). Islam's Quantum Question: Reconciling Muslim Tradition and Modern Science. London: I.B. Tauris.
- Hamlin, J. K. (2013). Moral judgment and action in preverbal infants and toddlers: Evidence for an innate moral core. *Current Directions in Psychological Science*, 22(3), 186-193.
- Harari, Y. N. (2015). Sapiens: A Brief History of the Human Species. Collective Book.
- Henshilwood, Christopher S., Francesco d'Errico, Royden Yates, Zenobia Jacobs, Chantal Tribolo, Geoff A. T. Duller, Norbert Mercier, et al. (2002). "Emergence of Modern Human Behavior: Middle Stone Age Engravings from South Africa." *Science* 295 (5558): 1278-1280.
- Henshilwood, C. S., & Marean, C. W. (2003). The Origin of Modern Human Behavior: Critique of the Models and Their Implications. *Evolutionary Anthropology: Issues, News, and Reviews*, 12(1), 5-17.
- Hublin, Jean-Jacques, Abdelouahed Ben-Ncer, Shara E. Bailey, Sarah E. Freidline, Simon Neubauer, Matthew M. Skinner, Inga Bergmann, et al. (2017). "New Fossils from Jebel Irhoud, Morocco and the Pan-African Origin of Homo sapiens." *Nature* 546 (7657): 289-292.
- Ibn Kathir, Isma'il ibn 'Umar. (1365/1997). *Al-bidaya wa al-nihaya* [The Beginning and the End]. Vols. 1-14. Beirut: Dar Ihya al-Turath al-Arabi.
- Ibn Kathir, I. (1998). Tafsir al-Qur'ani al-Azim. Vol. 1. Riyadh: Dar Tayyibah.
- Ibn Sina, A. A. (980-1037/1999). *Kitab al-Shifa* [The Book of Healing]. Ed. G. C. Anawati. Cairo: Organisation Générale des Imprimeries Gouvernementales.
- Izutsu, T. (1983). God and man in the Koran: Semantics of the Koranic weltanschauung. Salem, NH: Ayer Company Publishers.
- Johanson, Donald C., and Tim D. White. (1979). "A Systematic Assessment of Early African Hominids." Science 203 (4378): 321-330.
- Klein, R. G. (2009). *The Human Career: Human Biological and Cultural Origins* (3rd ed.). University of Chicago Press.
- Kohlberg, L. (1984). The psychology of moral development: The nature and validity of moral stages. Harper & Row
- Kretchmar, J. (2024). Moral development. In EBSCO Research Starters. EBSCO Publishing.
- Kuran ve Meali. (2024). İnsan Suresi 1-2 Ayetler Tefsiri. İstanbul: Türkiye Diyanet Vakfı.
- Kur'an-ı Kerim. (632/2011). Diyanet İşleri Başkanlığı Meali. Ankara: Diyanet İşleri Başkanlığı Yayınları.
- Laible, D., Thompson, R., & Froimson, J. (2019). Early socialization: The influence of close relationships. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization* (2nd ed., pp. 35-59). Guilford Press.
- Markowitz, E. M., & Shariff, A. F. (2012). Climate change and moral judgement. *Nature Climate Change*, 2(4), 243-247.
- Müslim ibn al-Hajjaj. (817-875/1998). Sahih Muslim. Ed. M. F. Abd al-Baqi. Beirut: Dar Ihya al-Turath al-Arabi.
- Nasr, S. H. (1976). An introduction to Islamic cosmological doctrines. Boulder, CO: Shambhala Publications.
- Pearson, A., Tsai, C., & Clayton, S. (2022). Ethics, morality, and the psychology of climate justice. *Current Opinion in Psychology*, 42, 16-21. https://doi.org/10.1016/j.copsyc.2021.02.015.
- Piaget, J. (1932). The moral judgment of the child. Harcourt, Brace and Company.
- Pinker, S. (2011). The better angels of our nature: Why violence has declined. New York: Viking Books.
- Rahman, Fazlur. (1982). *Islam and Modernity: Transformation of an Intellectual Tradition*. Chicago, IL: University of Chicago Press.
- Roser-Renouf, C., Maibach, E., Leiserowitz, A., Feinberg, G., & Rosenthal, S. (2016). Faith, morality and the environment: Portraits of global warming's six Americas. Yale Program on Climate Change Communication.

- Slon, Viviane, Fabrizio Mafessoni, Benjamin Vernot, Cesare de Filippo, Steffi Grote, Bence Viola, Mateja Hajdinjak, et al. (2018). "The Genome of the Offspring of a Neanderthal Mother and a Denisovan Father." *Nature* 561 (7721): 113-116.
- Smithsonian National Museum of Natural History, Human Origins Program. (2025). Human Evolution. https://humanorigins.si.edu/.
- Sorularla İslamiyet. (2024). Cinlerin Halifelik Dönemi. İstanbul: İslami Yayınlar.
- Taberî, M. (2001). Tefsîrü't-Taberî. Dâru'l-Fikr Yayınları.
- Tattersall, Ian. (2012). Masters of the Planet: The Search for Our Human Origins. New York, NY: Palgrave Macmillan.
- TDV İslam Ansiklopedisi. (2024). *Adem Maddesi*. Ankara: Türkiye Diyanet Vakfı.
- The Holy Qur'an, Surah al-Bagarah 2:30; Surah al-Hijr 15:26-27.
- Tomasello, M. (2016). A natural history of human morality. Harvard University Press.
- Tomasello, M., & Vaish, A. (2013). Origins of human cooperation and morality. *Annual Review of Psychology*, 64, 231-255. https://doi.org/10.1146/annurev-psych-113011-143812.
- van Schaik, C. P., Burkart, J. M., & Jaeggi, A. V. (2018). Evolutionary origins of morality: Insights from non-human primates. *Frontiers in Sociology*, 3, 17. https://doi.org/10.3389/fsoc.2018.00017.
- Walker-Springett, K., Butler, C., & Adger, W. N. (2017). Moral reasoning in adaptation to climate change. Environmental Politics, 26(3), 371-390. https://doi.org/10.1080/09644016.2017.1287624.
- White, Tim D., Berhane Asfaw, Yonas Beyene, Yohannes Haile-Selassie, C. Owen Lovejoy, Gen Suwa, and Giday WoldeGabriel. (2009). "Ardipithecus ramidus and the Paleobiology of Early Hominids." *Science* 326 (5949): 64-86.
- Whiten, A., Goodall, J., McGrew, W. C., Nishida, T., Reynolds, V., Sugiyama, Y., ... & Boesch, C. (1999). Cultures in chimpanzees. *Nature*, 399(6737), 682-685.
- Wilson, E. O. (1975). Sociobiology: The new synthesis. Cambridge, MA: Harvard University Press.

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Appendix: Summary of Integrated Analysis

This comprehensive study integrates six main versions in the synthesis of Islamic cosmology and modern science, including the following main components:

Main Theoretical Components:

- Energy Cycle Theory Energy-based explanation of cosmic creation processes
- Phylogenetic Age Hypothesis Theory that humanity is a "17-year-old young civilization"
- Ontogenetic-Phylogenetic Moral Development Analysis of individual and species-level moral evolution
- **Jinn Corruption Parallel** Comparison of theological narratives with early human evolution
- Theological Evolution Model Integration of scientific evolution with religious understanding of creation
- Cosmic Civilization Projection Transition to the space age and goal of spiritual maturity

Scientific Foundations:

- Modern paleontological and genetic data (critical period 300,000-70,000 years ago)
- Behavioral modernity and evolution of symbolic thought
- Examples of climate justice and contemporary moral leadership
- Neuro-cognitive development and moral reasoning research

Islamic References:

- Qur'anic verses (Baqarah 2:30, Insan 76:1-2, Rahman 55:33)
- Classical exegetical sources (Tabari, Ibn Kathir, Razi)
- Stages of *nafs* and mystical developmental levels
- Hadith literature and prophetic examples

Practical Implications:

- Necessity of a long-term perspective in education systems
- Evaluation of social problems as temporary developmental pains
- Importance of strategic investment in space technologies
- Moral leadership role of climate activism

This combined text demonstrates the power of an interdisciplinary approach, offering both academic and practical value. The moral arguments of those engaged in collective action to support climate

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reform cluster around similar themes: the need to avoid harm, the need to preserve justice, and the need to preserve environmental purity. This situation indicates that the sensitivity and virtue they individually demonstrate shed light on humanity's general moral development. This, in turn, offers hope for humanity to collectively reach a higher moral level and reveals that this process can be accelerated by the efforts shown by individuals.