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NATURE PHILOSOPHY: BRIDGING QUR'ANIC AND PHILOSOPHICAL PERSPECTIVES ON UNDERSTANDING THE UNIVERSE

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ABSTRACT

This study examines the philosophical and Qur'anic perspectives on the nature of the universe and its underlying principles. Through a qualitative literature review approach, we analyze how both philosophical traditions particularly pre-Socratic philosophers such as Thales, Anaximandros, Anaximenes, and Heraklitos and the Qur'anic framework conceptualize the cosmos. While philosophy emphasizes rational inquiry and empirical observation to understand the fundamental elements composing nature, the Qur'an presents nature as a divinely created sign (ayah) reflecting God's omnipotence and wisdom. Despite their different epistemological foundations philosophy grounded in reason and the Qur'an rooted in revelation both perspectives acknowledge the regularity and order inherent in the natural world. The Qur'anic conception of nature operates under three cardinal principles: certainty (qat'iyyah), immutability (thubut), and objectivity (mawdu'iyyah), aligning with sunnatullah (divine law). By synthesizing these complementary viewpoints, we propose an integrative framework that harmonizes rational inquiry with spiritual understanding, offering a more holistic approach to comprehending the universe and humanity's role within it. This integration enriches our understanding of nature beyond mere empirical observation, fostering both intellectual rigor and spiritual consciousness.

Keywords: *Philosophy of nature, Qur'anic perspectives, cosmology, natural philosophy, divine law (sunnatullah), epistemology.*

INTRODUCTION

Philosophy, as an intellectual discipline, extends beyond examining human existence, ethics, and logic to encompass profound inquiries into the nature of the universe and cosmos. Natural philosophy (philosophia naturalis) constitutes one of the most significant branches within philosophical inquiry, seeking to understand the essential nature of the universe, its fundamental structure, and the governing principles that organize it. The emergence of natural philosophy stems from humanity's inherent curiosity regarding the surrounding environment questions concerning how nature formed, what constitutes its basic elements, and how its regularity can be explained through rational thought.

The universe, created by Allah, provides immense benefits to all creatures, particularly humans. Nature encompasses not merely the empirical realm (the visible universe) but also the non-empiric domain ('alam al-ghaib), the realm beyond direct sensory perception. The vastness of this cosmos demands extensive contemplation and investigation before humanity can uncover the countless mysteries contained within it.

The Qur'an, as the sacred scripture of Islam, similarly accords considerable attention to nature. Numerous Qur'anic verses invite human reflection upon God's creation as manifestations of divine power and wisdom. From an Islamic perspective, nature functions not solely as the habitat for human existence but also as a medium through which to recognize and understand the Creator. Understanding nature through the Qur'anic lens represents a crucial spiritual and theological approach within Islam. The philosophical and Qur'anic perspectives on nature present compelling points of convergence: both frameworks encourage humans to think critically, contemplate deeply, and bear responsibility toward the natural world. However, their foundational approaches differ significantly. Philosophy emphasizes reason and rationality, while the Qur'an is grounded in divine revelation. The integration of these two approaches offers the potential for a more comprehensive and profound understanding of nature, while simultaneously cultivating human consciousness regarding humanity's existence and function within the cosmos.

METHODOLOGY

This research employs a qualitative literature review methodology, synthesizing academic sources from multiple disciplines. Data collection involved comprehensive analysis of philosophical texts, Qur'anic exegesis (tafsir), and contemporary scholarly articles examining the intersection of natural philosophy and Islamic theology. Primary sources include classical philosophical works and Qur'anic verses, while secondary sources comprise peer-reviewed journals, academic publications, and scholarly monographs published between 2020 and 2025. The analysis follows a comparative framework, identifying convergences and divergences in how philosophy and the Qur'an conceptualize nature, its origins, and governing principles. Thematic analysis was employed to extract and organize key concepts, with particular attention to the fundamental premises underlying each perspective. The study adheres to academic standards of citation and reference, ensuring rigorous documentation of sources.

DISCUSSION

A. Undestanding Nature: Conceptual Foundations

1. Nature as a Linguistic and Philosophical Concept

The term "nature" encompasses all entities existing in the heavens and on earth. In English, nature is defined as "The Universe; World; Condition, State of Being," signifying

the cosmos, world, and the condition of existence. The Arabic word 'alam derives from roots shared with 'ilm (knowledge) and 'alamah (sign), suggesting that nature constitutes evidence of the existence of the Unique Creator. In Greek philosophy, the term cosmos indicates orderliness and harmony, as nature was understood to possess a harmonious structure following particular laws. Within Islamic tradition, all phenomena perceptible through the senses, excluding God, are termed 'alam al-shahadah (the visible realm), while imperceptible realities beyond sensory reach constitute 'alam al-ghaib (the unseen realm).

Nature is comprehended as an integrated totality encompassing celestial and terrestrial phenomena, including stars, the moon, vegetation, and other environmental elements. Nature is conceived as a unified system possessing force, intellect, and energy that influences and regulates the continuation of all earthly phenomena. In broader terms, nature comprises the universe itself—our solar system, which represents a minute fraction of an immeasurably vast galaxy filled with countless celestial bodies and forms of energy. The universe regulates the existence of Earth and its solar system.

The universe can be understood as an aggregate of substance consisting of matter (maddah) and form (shurah), distinguished between observable manifestations (shahadah) and imperceptible realities (ghaib). Nature further classifies into various categories: inanimate objects (jamadat), vegetation (nabatat), animals (hayawanat), and humans. Within Islamic tradition, particularly Sufi thought, additional classifications exist, such as 'alam al-arwah (realm of spirits), 'alam al-khalq (realm of current existence), 'alam al-baqi (realm of eternity), 'alam al-'azamah (realm of paradise), and 'alam al-ma'qul (realm understood through reason).

According to the Indonesian Language Dictionary (KBBI), nature signifies all that exists in the heavens and on earth, including the earth itself, stars, and the forces contained within them. Nature also denotes the environment of habitation or all entities forming an integrated whole. This multifaceted understanding indicates that nature comprises all existence in heaven and earth except God, and it was created in such a manner that humans could utilize it for survival. Nature requires not only preservation and conservation but also investigation, for it contains numerous mysteries and lessons awaiting discovery through scientific inquiry.

2. Nature in the Philosophical Tradition

In philosophical discourse, the term "natural philosophy" refers to philosophical thinking focused on nature. Originating from the Latin term philosophia naturalis, this denotes inquiry into nature and the physical world, an approach that predominated before the emergence of modern science. Natural philosophy represented the intellectual mainstream endeavor to comprehend the cosmos, functioning as the dominant framework prior to the development of contemporary scientific methodology.

Natural philosophy seeks to answer fundamental questions concerning the essential characteristics of nature, the origins of the universe, the laws governing natural phenomena, and the relationship between humanity and nature. Early philosophers remained unsatisfied with mythological explanations of natural phenomena. They maintained the conviction that events such as day-night cycles, precipitation, and temperature variations were not arbitrary occurrences but possessed rational causes susceptible to understanding. The identification of natural philosophy's essence becomes apparent through examining its relationship to the natural sciences, which reveals the interconnection between philosophical thinking and empirical reality. Natural philosophy is regarded as the precursor to modern scientific disciplines including physics, chemistry, biology, anthropology, and related natural sciences. Consequently, natural philosophy represents the endeavor to comprehend the universe comprehensively, through both conceptual and empirical approaches, and continues to occupy significant prominence in contemporary philosophical discourse.

Pre-Socratic Philosophers and Cosmological Inquiry

Thales (624-546 BCE): In Thales's conception, nature encompasses all contents of the heavens and earth. Early philosophers such as Thales endeavored to explain various natural phenomena utilizing logic and rational thought, distinguishing themselves from subsequent philosophers like Socrates, who concentrated on human philosophy. This distinction becomes evident from the abundance of pre-Socratic investigations into natural phenomena conducted by figures such as Thales, Archimedes, and Empedocles. Ionian philosophers of antiquity pursued answers to fundamental questions: "What primordial, unchanging substance constitutes the foundation of all transformation in the universe?" This inquiry emerged from their astonishment at the regularity manifest in nature.

Thales and early thinkers rejected explanations founded on mythology, folklore, or irrational belief systems, regarding such explanations as incapable of logical verification. They maintained faith in humanity's rational capacity to discover reasonable and logical explanations for natural phenomena. Within ancient Greek thought, concepts regarding the formation of nature remained relatively elementary and heavily influenced by mythological elements. Early philosophers attempted to explain the universe's origins using fundamental elements. Thales, for instance, posited water as the essential element constituting the universe. He held this conviction after observing that all living organisms humans, animals, and plants depend fundamentally on water for survival. This perspective drew inspiration from Egyptian civilization, whose existence was profoundly dependent upon the Nile River. For Thales, water represented the fundamental principle underlying all existence. He believed water possessed the capacity to transform its shape, flow, and adapt, thereby warranting classification as the essential constituent element of nature.

Furthermore, Thales maintained that all natural entities, including inanimate objects, possess souls. This perspective emerged from his observations of magnetic properties that attract iron, which he interpreted as demonstrating inherent "life force" or attractive power within seemingly inert matter. By rejecting mythological explanations while emphasizing reason and observation, Thales achieved recognition from Aristotle as a pioneering figure in natural philosophy.

Anaximandros (610-546 BCE): Although Anaximandros was a student of Thales, he gained prominence precisely through his critique of his mentor's views. As a philosopher, he surpassed his teacher in intellectual sophistication. Anaximandros contended that if water constituted the fundamental principle of all things, then all substances must contain water and no substance could be fundamentally opposed to it. However, in reality, water and fire are fundamentally opposed elements, undermining the proposition that water constitutes a universal principle. Consequently, Anaximandros concluded that the fundamental principle cannot be identified from empirically observable substances.

Anaximandros proposed apeiron as the fundamental principle. Derived from Greek roots "a" (not) and "eras" (boundary), apeiron denotes an unbounded, unlimited substance incapable of definition and possessing no equivalent in any known entity. All observable and sensible phenomena constitute entities possessing boundaries and limitations. Therefore, the primal, unlimited principle cannot constitute any finite entity. From apeiron emerged all universe contents as opposing elements: hot and cold, light and dark, dry and wet, and similar dichotomies. In his cosmological model, Anaximandros envisioned celestial bodies the sun, moon, and stars orbiting the earth, which he conceptualized as cylindrical, maintaining proportional distance equilibrium with other cosmic entities. He advocated cosmic equilibrium as essential for universal preservation, subsequently inspiring concepts of gravitational forces. Anaximandros further explained oceanic origins: the earth was originally encased in humid atmosphere and rotation, eventually desiccating and leaving oceans on its surface, as he believed primordial life originated from water and humans descended from aquatic organisms resembling fish. According to his perspective, humans could not have emerged in their current form.

Anaximenes (585-524 BCE): Anaximenes, a student of Anaximander, developed distinctive cosmological perspectives. He maintained that all phenomena originate from air. According to his theory, air movement produces density variations resulting in diverse material forms. Rarefied air generates fire; conversely, compressed air produces wind and clouds. Continued air compression generates rainfall, and subsequently water solidifies into earth, which with further densification becomes stone. Anaximenes's perspective differed from his mentor Thales's conviction that all phenomena derive from water. He contended that earth, water, and fire constitute life forms all originating from air. Water, in his conception, represents compressed air transforming into precipitation,

while fire constitutes rarefied air. Consequently, air comprises the fundamental element underlying all life forms.

As a natural philosopher, Anaximenes grounded his perspective on observations and knowledge that air envelops the entire world and constitutes the life force. Without air, no diversity of organisms and objects would exist. He advanced several justifications for his position: (a) air exists ubiquitously, unlimited and inexhaustible; (b) air perpetually moves and functions as crucial to various transformations in nature; and (c) air represents an essential element for life, as without it nothing can function or survive.

Heraklitos (540-480 BCE): Heraklitos, known as Heraclitus in Latin, was a pre-Socratic philosopher inhabiting approximately the sixth to fifth centuries BCE in Ephesus, an ancient Greek territory now constituting part of modern Turkey. He maintained that the universe's fundamental element was not matter itself but rather the force generating it: fire. According to his conception, fire represented the most essential element due to its capacity to transform substances, exemplified through hardening bread dough and softening ice. Therefore, fire functioned as the symbol of transformation within the cosmos.

Parmenides (515-440 BCE): Parmenides constitutes one of the most influential pre-Socratic philosophers in Western philosophical history. He originated from Elea, a small coastal city in southwestern Italy, now known as Velia. Parmenides achieved recognition through his profound philosophical inquiries into the universe and reality's essential nature. His perspective markedly diverged from prevailing contemporary thinking and retains relevance for modern philosophical discourse. According to Parmenides, reality constitutes an eternal, unchanging, indivisible unity. He rejected the proposition that the universe possessed an origin, as this would necessitate something emerging from nothingness, which he deemed impossible. Instead, he believed reality possessed neither beginning nor end.

B. Nature in the Qur'anic Framework

1. Qur'anic Terminology and Conceptualization of Nature

The term "nature" in this context references the universe or cosmos (in English terminology: universe). In Arabic, this term translates to 'alam. However, Qur'anic usage of 'alam does not directly denote the universe. Rather, the term more accurately describes the aggregate of rational creatures of God. This understanding derives from various Qur'anic verses employing this terminology.

To specifically characterize the universe, the Qur'an employs the phrase al-samawat wa al-ardh wa ma bainahuma, signifying the heavens, earth, and all entities existing between them. This expression implies that the universe comprises multiple dimensions or layers. The Qur'an indicates that Allah created the universe, encompassing the heavens, earth, and their contents, within six days or six periods. Verses addressing this phenomenon appear in Surah al-A'raf [7]:54, Yunus [10]:3, Hud [11]:7, al-Furqan [25]:59,

al-Sajdah [32]:4, Qaf [50]:38, and al-Hadid [57]:4. Nevertheless, these verses do not explicitly clarify whether the six days follow human temporal measurement or divine temporal reckoning.

2. Qur'anic Accounts of Creation

The Creation of Heaven and Earth

The Qur'an describes the process of creating the heavens and earth through six principal verses, demonstrating the magnitude of Allah's power and wisdom in establishing the universe with precision, beauty, and order. This creation process closely correlates with scientific phenomena such as the Big Bang theory, which postulates that the universe originated from a unified mass subsequently explosively expanding to form diverse cosmic elements. Key verses addressing universal creation include:

Surah Al-Anbiya' [21]:30 states: "And do the disbelievers not see that the heavens and the earth were joined together as one unified mass, which We then separated? And from water We have made every living thing. Will they not then believe?"

Surah Fushshilat [41]:11 declares: "Then He turned toward the creation of the heaven while it was smoke. Then He said to it and to the earth, 'Come [both of you] willingly or by compulsion.' They said, 'We have come willingly.'"

Surah Al-Anbiya' [21]:104 states: "On the Day when We will fold up the heavens like the folding up of the pages of a book. As We began the first creation, so shall We repeat it a promise incumbent upon Us. Indeed, We shall do it."

These verses illustrate a sophisticated cosmological understanding articulated fifteen centuries prior to modern astronomical validation.

Celestial Mechanics and Orbital Dynamics

The Qur'an demonstrates particular attention to the movement and orbits of celestial bodies, recognizing that from orbital mechanics humans comprehend extraordinary cosmic systems. Orbits mark not merely the position of celestial bodies but also denote temporal progression, cosmic age, and universal development. Humans do not observe stars directly but rather perceive their light traversed across orbital trajectories.

Surah Al-Waqi'ah [56]:75-76 states: "So I swear by the positions of the stars. And indeed, that is surely a great oath, if only you knew."

This orbital movement constitutes scientific verification of Qur'anic miraculous content, recognized centuries prior to contemporary astronomical technology enabling such demonstration.

Universal Expansion

The Qur'an provides guidance regarding the expansion or development process of the universe, known in scientific terminology as the Big Bang theory. Initially, the universe comprised dense, high-energy matter subsequently detonating into smoke, from which heavenly bodies subsequently formed.

Surah Adz-Dzariyat [51]:47 proclaims: "And the heaven We constructed with strength, and indeed, We are [its] expander."

Surah Fushshilat [41]:11 states: "Then He turned toward the creation of the heaven while it was smoke."

This demonstrates that the Qur'an explained cosmic genesis with remarkable scientific precision approximately fourteen centuries ago.

Cosmic Darkness

The Qur'an references darkness permeating the heavens, subsequently confirmed by modern science as cosmic darkness, encompassing both the universe's primordial darkness and localized darkness following stellar formation.

Surah Al-An'am [6]:1 declares: "All praise belongs to Allah, who has created the heavens and the earth and made darkness and light. Yet the disbelievers set up equals with their Lord."

Surah Yasin [36]:37 states: "And a sign for them is the night; We remove from it the day, thereupon they are in darkness."

Celestial Bodies Moving in Curved Paths

The movement of celestial bodies such as planets and stars does not follow straight trajectories but rather curved pathways due to gravitational and counter-gravitational influences. This phenomenon correlates with the Qur'anic term al-uruj (ascension/rising).

Surah Saba' [34]:2 states: "He knows what penetrates into the earth and what emerges from it, what descends from the heaven and what ascends to it."

Surah As-Sajdah [32]:5 declares: "He administers [all] affairs from the heaven to the earth. Then they will ascend to Him on a Day the length of which is a thousand years of those which you count."

Surah Al-Ma'arij [70]:4 states: "The angels and the Spirit ascend to Him during a Day the length of which is fifty thousand years."

Celestial Gateways

Entry and departure of celestial or terrestrial objects through the atmosphere must traverse specific pathways analogous to the "gates of heaven" mentioned in the Qur'an. These trajectories remain essential to prevent celestial or spacecraft objects from combusting or deviating from orbital trajectories.

Surah Al-Hijr [15]:14-15 declares: "And if We opened for them a gate from the heaven and they continued ascending therein, they would surely say, 'Our sights have been intoxicated rather, we are indeed a people bewitched.'"

3. Characteristics of Nature Under Divine Law (Sunnatullah)

Allah did not create humanity and subsequently abandon it. Rather, He established the earth as an appropriate habitation enabling human existence, development, and life continuation. Furthermore, the entire universe was created to facilitate human survival requirements. The Qur'an provides guidance concerning universal creation concepts. All

of Allah's creation, encompassing both celestial and terrestrial phenomena, functions within a just system constituting part of Sunnatullah (divine law and divine will), establishing regularity and equilibrium within the cosmos.

Certainty (Qat'iyyah)

Nature's initial characteristic involves certainty, implying that all phenomena possess stable, predictable attributes. Fire characteristically produces combustion, generates heat, and transforms substances into carbon. Water flows from elevated to lower elevations, freezes at 0°C, boils at 100°C, and vaporizes at 200°C. Air perpetually moves from high-pressure to low-pressure regions, thereby generating wind. Oil remains immiscible with water and invariably remains on the surface due to lower density than water. All such attributes represent divine determinations from Allah, as referenced in Qur'an Surah al-Qamar [54]:49:

"Indeed, all things We created with predetermination."

Further exemplification appears in the water cycle. Approximately sixteen million tons of water evaporate from the earth per second, while equivalent rainfall volume returns to the earth. This pattern demonstrates guaranteed and ordered equilibrium within the natural system. Surah Az-Zukhruf [43]:11 states:

"And it is He who sends down rain in due measure, and We revive therewith a dead land. Similarly shall you be brought forth [from the dead]."

This verse emphasizes Allah's precise regulation of rainfall volume for reviving arid territories. The verse simultaneously alludes to human resurrection on the final day.

Owing to this certainty, scientists successfully identified various formulae and scientific theories including the law of energy conservation, law of gravitation, Newton's laws, and related theories grounded in observations of natural phenomena.

Immutability (Thubut)

Nature's secondary characteristic involves consistency or non-transformation. Given the stability of natural attributes, celestial and terrestrial entities perpetually maintain their inherent characteristics from ancient times through the present. All submission follows Allah's laws (sunnatullah) organizing all phenomena with balance and precision. This phenomenon signifies universal obedience to the Creator's will.

Examples manifest in celestial mechanics, where galaxies, stars, the sun, earth, moon, and other planets move according to their respective orbits without collision, demonstrating cosmic regularity and harmony. This balance and order shall persist indefinitely except when Allah decides termination at the final day. This regularity also appears in reciprocal relationships within nature. The sun functions not merely as a diurnal light source but also as an energy foundation enabling seasonal variations, inter-regional temperature differentials, and climate system influence. All such phenomena constitute a system permitting biological diversity including flora and fauna across various

geographical regions. Additional equilibrium appears in day-night alternation and planetary presence maintaining rotational stability relative to the sun.

Remarkably, seemingly insignificant entities simultaneously possess systematic roles. Decomposing vegetation and animal waste function as natural fertilizer enriching soil for agricultural production. The comprehensive system encompasses both macrocosmic (the vast universe) and microcosmic (specific, localized) domains, all functioning within networks of causality established by Allah with exceptional precision and perfection.

Objectivity (Mawdu'iyyah)

Nature's third characteristic involves objectivity, signifying that nature favors no particular individual. Whoever interacts with nature while disregarding operative laws (sunnatullah) experiences corresponding consequences, regardless of intent or purpose. As explained by Immadudin Abdul Rahim, when a structure incorporates lightning rods, the builder demonstrates comprehension and compliance with natural laws. Without such provisions, the structure remains vulnerable to lightning strike, despite beneficial intentions such as religious use or altruistic donation.

Conversely, structures serving harmful purposes like illegal establishments yet designed according to scientific principles and natural laws remain protected from hazards. This phenomenon demonstrates nature's neutrality and complete submission to Allah's system of determination, disregarding human moral considerations. Although nature operates through fixed, impartial laws, Allah occasionally manifests extraordinary phenomena as signs of divine power, functioning as instruction and warning for humanity.

C. Comparative Analysis: Philosophical and Qur'anic Perspectives on Nature

Before discussing similarities and differences between philosophical and Qur'anic perspectives on nature, understanding that both frameworks conceptualize nature distinctively, grounded in divergent foundational premises, remains essential. Philosophy perceives nature through reason, logic, and experience. Philosophers endeavor to ascertain how nature formed, what constitutes its foundation, and how nature functions with regularity. They contemplate the universe's origins and attempt explaining it through rational thought without dependence on religious conviction. Conversely, the Qur'an describes nature as Allah's creation. Nature functions not merely as human habitation but as a demonstration of divine grandeur and power. In Qur'anic discourse, nature frequently appears characterized as ayat (signs), inviting human contemplation and strengthening conviction regarding the Creator's existence.

Despite differing perspectives, both philosophy and the Qur'an similarly encourage humans to contemplate and reflect upon nature's existence. Both emphasize nature's importance as an organized system containing valuable instruction. Therefore, comparing how these perspectives perceive nature enables enhanced comprehension of nature's

significance and universal purpose. The following section articulates similarities and distinctions between philosophical and Qur'anic viewpoints regarding nature.

1. **Key Differences Between Philosophical and Qur'anic Perspectives**

Epistemic Foundation

Philosophy is grounded in reason, logic, observation, and empirical methodology, while the Qur'an is grounded in revelation and faith. The philosophical approach emphasizes systematic rational inquiry into natural phenomena, whereas the Qur'anic approach directs understanding toward divine agency and wisdom.

Purpose of Nature Study

Philosophy seeks to identify fundamental reality principles and the nature of existence through naturalistic explanations. The Qur'an invites humans to recognize Allah's grandeur and strengthen faith through contemplation of divine creation. Philosophy aims toward metaphysical understanding, while the Qur'an aims toward spiritual recognition of the Creator.

Universe Origins

Philosophers debated various explanations including water (Thales), air (Anaximenes), apeiron (Anaximandros), and fire (Heraklitos) as fundamental elements. The Qur'an presents creation as originating from Allah's divine will, progressively accomplished within six periods. Philosophical explanations remain naturalistic and material, while Qur'anic explanation involves divine agency.

Nature's Significance

Philosophy perceives nature as an object of study and independent philosophical inquiry worthy of rational investigation and explanation. The Qur'an perceives nature as divine creation embodying divine wisdom and power, functioning as signs (ayat) inviting human recognition of the Creator.

Natural Change

Philosophy explains natural transformations as occurring according to causal laws and natural processes. The Qur'an describes natural change as regulated by Sunnatullah (divine law), though miracles remain possible through divine intervention.

Methodological Approach

Philosophy employs rational, speculative, and occasionally metaphysical approaches to understanding nature. The Qur'an employs theological, spiritual, and scientific approaches, integrating revelation with empirical observation.

2. **Key Similarities Between Philosophical and Qur'anic Perspectives**

Recognition of Natural Regularity

Both philosophy and the Qur'an acknowledge natural patterns and constants. Philosophy comprehends nature as possessing constant laws (exemplified by Thales and Anaximenes). The Qur'an affirms that nature submits to sunnatullah constituting guaranteed, immutable constants, as stated in Qur'an 54:49.

Encouragement of Human Reflection and Contemplation

Both traditions encourage human engagement with natural phenomena. Philosophy emphasizes reason and rationality for comprehending natural phenomena through systematic inquiry. The Qur'an invites human contemplation (tafakkur) and reflection (tadabbur) regarding divine creation, as exemplified in Qur'an 21:30. Both approaches recognize that nature invites intellectual engagement and promotes human understanding.

Recognition of Natural System and Structure

Both perspectives acknowledge nature's fundamental organization and harmony. Philosophy recognizes nature as representing cosmic regularity (kosmos), operating according to intelligible principles. The Qur'an affirms that the heavens and earth were created within balanced, stratified systems, demonstrating divine wisdom in creation.

Nature as Gateway to Higher Understanding

Both frameworks present nature as a means toward understanding transcendent realities. Certain philosophers regarded nature as methodology for comprehending reality's fundamental principles (apeiron, air, water, fire), viewing nature as a path toward metaphysical understanding. The Qur'an presents nature as functioning as signs (ayat) facilitating recognition of divine power and wisdom, serving as a medium through which humans recognize and understand the Creator.

D. Epistemological Convergences and Divergences

The philosophical and Qur'anic perspectives on nature represent distinct epistemological frameworks that, while differing fundamentally in their foundational assumptions, demonstrate remarkable convergence regarding nature's operational characteristics. Greek natural philosophers, particularly pre-Socratic thinkers, approached nature through systematic rational inquiry, rejecting mythological explanations in favor of logical causation. This represents a critical epistemological shift toward empiricism and rationalism. Similarly, the Qur'an encourages rational reflection upon creation (tadabbur), employing linguistic constructions that invite contemplation of natural phenomena as manifestations of divine order and wisdom.

However, the fundamental distinction lies in the ultimate reference point. Philosophical inquiry terminates in identifying fundamental material or immaterial principles water for Thales, apeiron for Anaximandros, air for Anaximenes functioning as self-sufficient explanatory frameworks. Conversely, Qur'anic natural philosophy consistently directs inquiry toward divine agency and wisdom, presenting nature as the created manifestation of divine will rather than as an autonomous, self-explanatory system.

Contemporary scholarship increasingly recognizes that these epistemological approaches need not remain mutually exclusive. Modern scientific methodology, while grounded in empiricism and rationality, operates within implicit metaphysical assumptions

regarding nature's intelligibility and orderedness. Islamic scholars have progressively argued that the scientific method and revelation present complementary rather than contradictory pathways to understanding creation.

E. The Integration of Rational and Spiritual Understanding

Recent developments in Islamic science and philosophy have emphasized the productive integration of rational scientific inquiry with theological and spiritual understanding. The Qur'anic encouragement toward reflection (tadabbur) and contemplation (tafakkur) represents an invitation toward scientific investigation coupled with spiritual awareness. Contemporary discourse has witnessed increasing recognition that purely materialist scientific perspectives, while operationally effective for empirical investigation, remain insufficient for comprehensive human understanding encompassing meaning, value, and ultimate purpose.

The three characteristics of nature under Sunnatullah—certainty, immutability, and objectivity provide a framework through which scientific understanding and theological comprehension become integrated. The certainty of natural laws enables scientific prediction and technological application; immutability establishes the reliability necessary for knowledge accumulation; objectivity ensures that natural laws operate impersonally according to divine prescription rather than human desire or moral status. This framework permits simultaneous engagement with scientific methodology and theological reflection, transcending the dichotomy between reason and faith that has dominated Western intellectual history since the Enlightenment.

F. Implications for Environmental Ethics and Stewardship

Both philosophical and Qur'anic perspectives carry profound implications for human environmental responsibility and stewardship. Pre-Socratic philosophers, despite their diverse cosmological theories, consistently recognized nature as an intelligible, ordered system worthy of sustained intellectual engagement and respect. The Qur'anic perspective adds a crucial theological dimension: nature, as divine creation bearing witness to divine wisdom and power, demands responsible stewardship as a form of worship and obedience to divine mandate.

Contemporary environmental crises demand precisely this integrative understanding. Pure empirical analysis of environmental degradation, while identifying causal mechanisms and technical solutions, often fails to motivate sustained behavioral change absent accompanying spiritual motivation and ethical framework. Conversely, spiritual environmental ethics lacking grounding in scientific understanding of ecological systems remains ineffective for implementing practical solutions. The synthesis of philosophical rationalism with Qur'anic theological perspective offers a holistic environmental ethic grounding technical knowledge in ultimate meaning and moral obligation.

G. Methodological Implications for Contemporary Islamic Science

The comparison of philosophical and Qur'anic perspectives on nature illuminates ongoing discussions within Islamic science regarding appropriate methodologies and foundational assumptions. Rather than viewing Western scientific methodology as inherently secular or incompatible with Islamic principles, contemporary Islamic scholarship increasingly recognizes that integrating revealed knowledge with rational investigation produces more nuanced and comprehensive understanding.

The pre-Socratic philosophers' willingness to modify theories in light of contradictory evidence exemplified by Anaximandros's critique of his mentor Thales suggests that Greek natural philosophy operated with implicit commitment to empirical verification and rational consistency. This intellectual ethos aligns with Islamic emphasis on verification, reflection, and knowledge-seeking. Modern Islamic scientists and philosophers argue persuasively that contemporary scientific methodology, properly understood, represents continuation of intellectual traditions encouraged within Islamic sources rather than importation of foreign philosophical frameworks.

differences are not to be opposed but to be explored and studied, to create more complete understanding of human existence itself.

CONCLUSION

Nature encompasses all entities existing in the heavens and earth, encompassing both observable phenomena (empirical realm) and imperceptible realities (ghaib). Etymologically, the Arabic term 'alam derives from 'alamah (sign), indicating that nature constitutes evidence of divine existence and power. In general comprehension, nature comprises all creation except Allah, possessing inherent regularity and laws amenable to systematic investigation.

Within philosophical frameworks, particularly pre-Socratic traditions, nature represents an intelligible domain accessible to rational investigation. Philosophers including Thales, Anaximandros, and Heraklitos attempted explaining universal origins and fundamental constituent elements through logical reasoning. These philosophers maintained conviction that nature resulted not from chance but from structured, causal relationships susceptible to rational understanding. Philosophy encourages critical thinking and truth-seeking through cosmic investigation.

The Qur'an, conversely, presents nature as divine creation suffused with meaning and significance. Beyond functioning as human habitation, nature constitutes evidence of divine power requiring contemplation and reflection. Although fundamentally differing in approach, both philosophical and Qur'anic perspectives similarly invite human reflection and comprehension regarding nature. The divergence between them centers on the epistemological foundation philosophy grounding understanding in human reason, and the Qur'an grounding understanding in divine revelation. The integration of these two

approaches facilitates more comprehensive understanding, uniting logical rigor with spiritual consciousness. This synthesis offers contemporary humanity a richer, more nuanced approach to understanding the cosmos and humanity's place within it.

REFERENCES

Buchanan, M. (2023). The mysterious science of why new ideas work. *Scientific American*, 328(4), 45-51.

Daulat, Ira Wahyuni Tarigan, Elida Saragih, Haidar Putra Daulay, & Mohammad Al Farabi. (2024). Hakikat alam dalam perspektif filsafat pendidikan Islam. *Journal of Social Science Research*, 4(3), 112-128.

Ellis, G. F. (2021). Does the multiverse really exist? *Scientific American*, 324(8), 38-43.

El-Karimah, M. F. (2020). Hubungan manusia dan alam perspektif Al-Qur'an. *Jurnal Al Ashriyyah*, 6(2), 95-110.

Hassan, M. K. (2023). Islamic epistemology and modern science: Towards an integrated framework. *Islamic Studies Quarterly*, 32(1), 78-95.

Krauss, L. M. (2022). The greatest story ever told—So far: Why are we here? *Basic Books*.

Lindberg, D. C. (2007). The beginnings of Western science: The European scientific tradition in philosophical, religious, and institutional context (2nd ed.). *University of Chicago Press*.

Nagata, J. (2020). Refiguring Islam and modernity in Southeast Asia. *Southeast Asian Studies*, 8(2), 156-173.

Napitupulu, D. S. (2017). Esensi alam semesta perspektif filsafat pendidikan Islam. *Jurnal Pendidikan Islam*, 6(1), 1-18.

Neolaka, A., Grameinie, G. M., & M. Biomed. (2022). *Ilmu pendidikan lingkungan mendidik dengan hati dan senyuman, mengubah sikap perilaku pembelajaran lingkungan*. Kencana.

Noor, F. A. M. (2019). *Surat dari Yunani: Sebuah filsafat dari era Yunani kuno hingga modern*. Jariah Publishing Intermedia.

Rochim, A. S., Zubair, L., & Rossidy, I. (2025). Perspektif Al-Qur'an terhadap pemikiran filsafat Yunani mengenai permulaan semesta alam. *Jurnal Ilmiah Pendidikan Dasar*, 10(1), 220-235.

Sada, H. J. (2016). Alam semesta dalam perspektif Alquran dan Hadits. *Jurnal Pendidikan Islam*, 7, 258-275.

Sklar, L. (2020). Philosophy and the physicists. *Dover Publications*.

Smolin, L. (2019). Einstein's unfinished revolution: The search for what lies beyond the edge of space and time. *Penguin Press*.

Sugiharto, H. (2020). Thales: Air sebagai pembentuk alam. *ResearchGate*. Retrieved from https://www.researchgate.net/publication/341481052.