Bahá'í View on Biological Evolution: Exploring Bahá'í Perspectives on the Intersection of Theology and Science

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Introduction

The juxtaposition of the biological evolution of species against the Bahá'í theological positions as delineated within the Bahá'í scripture presents inherent challenges while simultaneously holding the potential to furnish an exceptionally profound and compelling perspective. This article is a sequel to the previously published piece titled, 'Do the Bahá'í Writings on evolution permit species mutation within kingdoms but not across kingdoms?' [1] which sought to grapple with this challenge."

This article aims to enrich the ongoing discourse between science and religion, particularly concentrating on theological principles within the framework of the Bahá'í Faith. In this exploration, we will use a paradigm that attempts to harmonize logical reasoning, epistemological perspectives, and scientific trends consistent with the Bahá'í teachings.

We will expand on the concept of 'Kingdom Essences' as expounded in the Bahá'í Writings and explore how this concept can be integrated into discussions of evolution, an area of discourse that has received relatively little attention. In this framework, we attempt to demonstrate the integration and connection of theological principles, logical reasoning, and current scientific findings.

We will introduce and propose a model that seeks to align with the presented philosophical and theological principles. We will then assess both its theological compatibility and its alignment with scientific principles.

Through this endeavor, we wish to contribute to the ongoing discourse between evolution and Bahá'í theological positions and to foster a deeper understanding of the Bahá'í perspective on evolution.

Honoring the Legacy: Bahá'í Theology's Affirmation of Previous Philosophers and their Contribution to Science

In the Bahá'í writings, ancient philosophers are celebrated as wise thinkers whose ideas have left a lasting impact on human thought. Bahá'u'lláh emphasizes the interconnectedness of philosophical thought with the recognition of divine truths, portraying ancient philosophers as torchbearers of wisdom whose insights continue to guide intellectual and scientific inquiry and recognizing their crucial role in shaping human thinking. [2]

In every land, We have set up a luminary of knowledge, and when the time foreordained is at hand, it will shine resplendent above its horizon, as decreed by God, the All-Knowing, the All-Wise.

In Tablet of Wisdom, He asserts that the essence and fundamentals of philosophy have come from the Prophets themselves, who were the conveyors of divine philosophy and revealers of heavenly mysteries. So, the wisdom shared by the Prophets forms the foundation upon which later philosophical ideas are built. [3]

The sages afore time acquired their knowledge from the Prophets, inasmuch as the latter were the Exponents of divine philosophy and the Revealers of heavenly mysteries .. The essence and the fundamentals of philosophy have emanated from the Prophets. That the people differ concerning the inner meanings and mysteries thereof is to be attributed to the divergence of their views and minds".

Bahá'u'lláh explained that their philosophical endeavors not only influenced but also directly contributed to scientific and artistic achievements. He saw their deep philosophical inquiries as the intellectual bedrock upon which groundbreaking scientific discoveries and artistic innovations were built, highlighting the interplay between thought and creative expression. [3]

"Although it is recognized that the contemporary men of learning are highly qualified in philosophy, arts and crafts, yet were anyone to observe with a discriminating eye, he would readily comprehend that most of this knowledge hath been acquired from the sages of the past."

In the same tablet, He extols Hippocrates, the physician, as one who was "one of the eminent philosophers who believed in God." [4] He praised Aristotle as "the well-known man of knowledge" who "discovered the power of gaseous matter ."

[5] He lauded Murtús, "who was one of the learned. He invented an apparatus which transmitted sound over a distance of sixty miles", and "Others besides him have also discovered things which no one in this age hath beheld." [5]

Regarding Socrates, he relates that "He is who perceived a unique, a tempered, and a pervasive nature in things, bearing the closest likeness to the human spirit, and he discovered this nature to be distinct from the substance of things in their refined form...What a penetrating vision into philosophy this eminent man had! He is the most distinguished of all philosophers. We testify that he is one of the heroes in this field and an outstanding champion dedicated to it." [4]

He sees Plato, a disciple of Socrates, as a deistic philosopher who continued his teacher's legacy, notably by preserving Socrates' "Theory of Forms", which envisions a perfect and unchanging abstract world beyond our imperfect physical reality. Plato's notions of "Forms and Ideas" and "Universal Archetypes" resonate closely with the Bahá'í faith's viewpoint, which sees a spiritual reality infusing life into and upholding the material world, thereby imparting it with order and harmony.

While Plato's concept of "Forms" and other philosophical ideas hold prominent positions in Bahá'í thought, Bahá'í theology includes additional essential elements that distinguish it. In its entirety, Bahá'í theology offers a more comprehensive and distinctive framework, adeptly equipped to confront the complex task of harmonizing the perceived dichotomy between science and religion, specifically as it relates to the evolution of the species.

Contrasting Views of Eastern and Western Philosophies

In nearly every discussion surrounding the development of the universe, the origins, and characteristics of matter, or the concept of biological evolution, 'Abdu'l-Bahá consistently highlights differences between Eastern and Western philosophers. This recurrent theme is prominently featured in his speech delivered in San Francisco: [6]

"Therefore, I have thought it expedient to discourse upon the subject of philosophy, which is alike interesting to the East and the West, enabling us to consider the analogies and differences between the philosophical teachings of the Orient and Occident." `Abdu'l-Bahá's primary intent was to highlight the shortcomings of the Western approach, which heavily relies on sensory perception, and to advocate for a more well-rounded strategy. He also emphasizes the correlation between philosophy and the material world, suggesting that sound philosophical principles can lead to conclusions that accurately describe physical reality.

Epistemology, also known as the philosophy of science, is a branch of philosophy that, among its various aspects, delves into the methodologies for attaining knowledge. Consequently, it is enlightening to examine the historical development of the philosophy of science, both in Eastern and Western traditions, while outlining their respective philosophical frameworks and approaches to knowledge acquisition.

This exploration will aid us in comprehending `Abdu'l-Bahá's approach, critiques, and observations regarding diverse philosophical methodologies.

Philosophy of Science in the West

In Kant's "Critique of Pure Reason", he argued that our understanding of the external world is shaped by the mind's innate categories, a central theme in the philosophy of science. In the nineteenth century, Auguste Comte emphasized empirical observation and the scientific method as primary sources of knowledge, introducing the "three stages of human understanding" from theological to metaphysical to scientific.

John Stuart Mill, a prominent empiricist philosopher of the nineteenth century, explored induction and inductive reasoning and contributed to discussions on experimental methods and causation. William Whewell, a contemporary of Mill, coined the term "scientist" and stressed scientific intuition and creativity.

While traveling in the West, 'Abdu'l-Bahá engaged with philosophers who championed ideas that would eventually crystallize into the philosophical doctrine called 'logical empiricism.'

This doctrine, which rose to prominence in the 1920s, underscores the significance of our senses as the sole data source for comprehending reality. It emphasizes the sole role of empirical evidence and the rigorous application of logical analysis to such evidence in the pursuit of knowledge. This group of philosophers, known as

the "Vienna Circle," notably declared metaphysical statements "meaningless" due to their lack of empirical or logical basis.

Philosophy of Science in the East

From the early Islamic period to the contemporary era, Islamic philosophers have engaged in discussions about the relationship between philosophy, science, and theology.

During the early Islamic period, scholars like Al-Kindi and Al-Farabi sought to harmonize Greek philosophy, particularly the works of Aristotle and Plato, with Islamic theology.

In the Golden Age of Islamic Philosophy, philosophers like Avicenna made notable contributions to medicine, mathematics, and metaphysics, exploring the intersections between philosophy and science. He argued for the compatibility of reason and revelation, highlighting the importance of philosophy in understanding the natural.

In later Islamic philosophy, Averroes played a crucial role by providing commentaries on Aristotle's works, which had a lasting impact on Western medieval thought. He argued for the compatibility of philosophy and religion, emphasizing the importance of reason and intellect in understanding the natural world.

Critique of Western Philosophies by `Abdu'l-Bahá

In his address delivered in San Francisco, 'Abdu'l-Bahá critiques the Western philosophical approach and highlights the differences between Eastern and Western philosophical perspectives. [6]

"The criterion of judgment in the estimation of Western philosophers is sense perception. They consider that which is tangible or perceptible to the senses to be a reality—that there is no doubt of its existence.

"The philosophers of the East consider the perfect criterion to be reason or intellect, and according to that standard, the realities of all objects can be proved; for, they say, the standard of reason and intellect is perfect, and everything provable through reason is veritable." `Abdu'l-Bahá maintains that European philosophers have made errors in their conclusions about human evolution by exclusively relying on sensory observation. He advocated that the quest for knowledge couldn't be confined to rigid, fixed procedures or methodologies that provide an exact description of reality. This stood in stark contrast to the prevailing philosophical trends that eventually led to the formulation of the "logical empiricism" movement.

"During my visit to London and Paris last year I had many talks with the materialistic philosophers of Europe. The basis of all their conclusions is that the acquisition of knowledge of phenomena is according to a fixed, invariable law—a law mathematically exact in its operation through the senses. That is to say, the materialists announce that the criterion and standard of human knowledge is sense perception". [7]

`Abdu'l-Bahá maintained a perspective that recognized the complex nature of acquiring knowledge and rejected the concept of a precise and universally applicable approach. He clarified his stance by acknowledging the imperfection of any single approach and implicitly implying the necessity of striking a balance among sensory perception, reason, religious tradition, and inspiration and that "*All human standards of judgment are faulty, finite.*" [7]

Application of Philosophical Principles by 'Abdu'l-Bahá: Bridging Philosophy and Science

In a noteworthy letter provisionally translated [8], 'Abdu'l-Bahá provides a remarkable linkage from philosophy to science. He employs philosophical principles to offer accurate and forward-thinking descriptions of reality, even though those descriptions did not align with the scientific facts of his time.

"That which hath been in existence had existed before, but not in the form thou seest today." From this blessed verse it is clear and evident that the universe is evolving. In the opinion of the philosophers and the wise this fact of the development and evolution of the world of existence is also established.

"That is to say, the primary matter of contingent beings is the ethereal power, which is invisible and can only established through its effects, such as electricity, heat, and light, which are vibrations of that power. This is established and proven in natural philosophy, and it is called ethereal matter. As for the blessed verse: "Say: Nature in its essence is the embodiment of My Name, the Maker, the Creator," the philosophers of the past and the present maintain that universal nature cannot be sensed or perceived."

In the early 1900s, there was a mistaken belief that ether did not exist, that the universe was static and not in a state of evolution, and that nature was entirely composed of tangible matter. In this letter, `Abdu'l-Bahá, drawing from philosophical principles, arrived at conclusions about reality ahead of the scientific community's consensus.

This serves as a compelling rebuttal to the notion that theological philosophy is purely abstract and disconnected from the realms of science and physical reality.

The question that lingers is how 'Abdu'l-Bahá's theological arguments align with the biological evolution of life forms when compared to actual reality.

A Distinctive Paradigm: Bahá'í Metaphysical Principles and their Consequence in the Physical World

Let us delve into the core tenets of Bahá'í philosophy and its foundational concepts underlying the Bahá'í theological views regarding the origins of matter and the evolution of species. This exploration will reveal how this worldview tackles inquiries concerning the creation of the material universe and the progression of life on Earth.

By exploring and reflecting on these fundamental principles, we are bound to gain a deeper understanding of the interconnected perspectives that underlie Bahá'í thought on these crucial issues. The following outlines different principles that are part of the Bahá'í metaphysical framework.

The Primal Will as an All-Encompassing Reality

Regarding the question of the connection between God and his creatures, Bahá'í theology divides existence into three categories, namely: God, Primal Will, and Creation.

Bahá'u'lláh asserts that God is beyond description, approach, or understanding. Primal Will (also referred to as Command or Word of God) on the other hand, is the agency that is the cause of creation. In regards to Primal Will, Bahá'u'lláh says: [9]

"No tie of direct intercourse can possibly bind Him to His creatures. He standeth exalted beyond and above all separation and union, all proximity and remoteness. No sign can indicate His presence or His absence; in as much as by a word of His command, all that are in heaven and on Earth have come to exist, and by His wish, which is the Primal Will itself, all have stepped out of utter nothingness into the realm of being, the world of the visible."

In Bahá'í metaphysics, the concept of the Primal Will holds a central position. It is portrayed as a comprehensive and overarching reality that serves as the foundation of the entire created universe. Primal Will is depicted as the source of divine creativity, from which all things originate in accordance with their inherent capacities. In essence, the Primal Will represents an intangible and transcendent reality like Plato's Forms, acting as the blueprint upon which all existence is modeled.

Gradual Realization of Archetypes in the Material World

The notion of the gradual unfoldment of forms in the material forms is not new. Plato posited that the archetypal Forms, representing the idealized essence of all things, find expression in the physical world over time.

In Bahá'í philosophy, archetypes or idealized forms emanate from the intangible world, and the latent potentials and realities of beings begin to attain realization. This unfoldment of eternal archetypes is an evolutionary process that starts embryonic forms that develop and mature over time.

While many philosophers have discussed the gradual manifestation of essences in the physical realm, `Abdu'l-Bahá introduces the unique perspective that this progressive realization initiates with an embryonic form and matures gradually over time. Applying this principle regarding the evolution of the universe, `Abdu'l-Bahá says the following. [10]

"Briefly, we have said that from the composition and combination of elements, from their decomposition, from their measure, and from the effect of other beings upon them, resulted forms, endless realities and innumerable beings. But it is clear that this terrestrial globe in its present form did not come into existence all at once, but that this universal existence gradually passed through different phases until it became adorned with its present perfection.

The Two Stages of Realization

It's crucial to emphasize that Bahá'í metaphysics offers additional perspectives that are unique. Its framework explains how these intangible essences manifest themselves in the physical world.

This specific metaphysical principle introduces and integrates a distinct principle related to the realization process within the material realm. From this viewpoint, this realization process unfolds in two distinct stages: the stage of general potentiality and the stage of specialization, specification, and individualization. In some of his writings `Abdu'l-Bahá employed the analogy of ink, where the ink has general potential before manifesting itself into any specific word. [11]

For example, letters and words are composed of two things: The first is the substance which is ink and pencil-lead and is the 'Fashioned' while the second is the forms and features of the letters and words which are the 'Fashioner'... It is clear that, before the existence of this specific form and shape, the ink had an external existence which had no specific form or shape and had the ability and potential to assume the shape of any letter or word and was not restricted or specified to a particular shape or form.

General Potentiality: The journey of realization begins with the stage of general potentiality. At this stage, the underlying potential for a particular reality exists in a generalized and undifferentiated form. This potentiality is akin to paint ready to make an impression on a vast canvas, ready to receive the strokes of specificity and definition. It represents the inherent capacity within the metaphysical realm for various forms and essences to come into being. It's as if the paint and the canvas exist, waiting to be painted with unique patterns.

Specialization and Individualization: The second stage in this process is marked by the specialization and individualization of the general

potentiality. This is where the projection of the intangible essences, which were initially latent and undifferentiated, begin to take on specific forms and attributes. Much like a seed that possesses the potential for a particular type of tree or plant, the general potentiality becomes specified and confined to bounded expressions. It is as if the canvas now receives the brushstrokes that define distinct shapes, colors, and patterns.

`Abdu'l-Bahá elucidates this principle in his explanation of the universe's evolution. He describes the initial stage of creation as the development of elements, where they held the potential to evolve into an infinite number of forms. Over time, these elements combined to give rise to specialized life forms. [12]

"In the beginning, matter was one, and that one matter appeared in different aspects in each element. Thus, various forms were produced, and these various aspects as they were produced became permanent, and each element was specialized. But this permanence was not definite and did not attain realization and perfect existence until after a very long time. Then these elements became composed and organized and combined in infinite forms; or rather from the composition and combination of these elements innumerable beings appeared."

Before the mid-1920s, the prevailing scientific belief was in a static universe and was not evolving. In 1915, Albert Einstein introduced a term in his General Relativity equations to account for a static universe, a decision he later labeled as "my greatest blunder."

This metaphysical principle guided `Abdu'l-Bahá to a forward-looking depiction of reality, showcasing the connection between abstract theological concepts and the tangible material realm, where the intangible explains the concrete.

The Hierarchy of Intangible Realities

The Bahá'í ontological framework comprises the following hierarchy:

Primal Will \rightarrow Kingdom Essence \rightarrow Species Essence \rightarrow Individual Essence.

Bahá'í theology introduces and integrates the notion of "Kingdom Essences" into its ontological hierarchy. The inclusion of this concept establishes a distinctive and unique framework, which is largely absent from contemporary dialogues and philosophical debates. This hierarchy, as implied within Bahá'í metaphysics, is as follows. As mentioned before, at the summit of this metaphysical hierarchy stands the **Primal Will** or Command of God. This all-encompassing reality serves as the ultimate source from which infinite archetypes and essences flow, where the divine plan guides the evolution of the cosmos.

Beneath the Primal Will exists the **Kingdom Essences**, a concept that is less explored but significant within Bahá'í discourse. These Kingdom Essences encompass broad categories such as the animal, vegetable, mineral, and human kingdoms. Within each of these essences, infinite archetypes and potentials exist. These archetypes serve as templates for the species manifesting within each kingdom. As `Abdu'l-Bahá mentions: [13]

"Furthermore, the forms and organisms of phenomenal being and existence in each of the kingdoms of the universe are myriad and numberless. The vegetable plane or Kingdom, for instance, has its infinite variety of types and material structures of plant life, each distinct and different within itself."

Species essences are manifested through kingdom essences and hold a pivotal role in the hierarchy of abstract realities. These essences manifest themselves as distinct categories or collectives of entities, delineating the quintessential traits, shapes, and qualities that define each species.

Lower in the hierarchy, we encounter **individual essences** unique to each species or individual human. Within these essences lie combinations of unique potential variations and expressions. Individual essences within different species contain the capacity for endless variations specific to their respective groups. This hierarchical level mirrors the diversity in the natural world as it evolves over time.

The following statement beautifully illustrates the relationship between these essences described above. Here `Abdu'l-Bahá envisions atoms journeying across various kingdoms, assimilated by plants, animals, and humans *(emphasis added by author)*. [14]

"Therefore, each atom of the innumerable elemental atoms, during its ceaseless motion through the kingdoms of existence as a constituent of organic composition, not only becomes imbued with the powers and virtues of the kingdoms (Mirroring Kingdom Essence) it traverses but also reflects the attributes and qualities of the forms and organisms (Mirroring Species Essence) of those kingdoms. As each of these forms has its individual and particular virtue (Mirroring Individual Essence)."

Impossibility of Transmutation Across Kingdoms

Another metaphysical principle asserts that transmutation between different kingdoms is regarded as impossible. [15]

"mineral, however far it may progress in the mineral kingdom, cannot gain the vegetable power; also in a flower, however far it may progress in the vegetable kingdom, no power of the senses will appear. So this silver mineral cannot gain hearing or sight; it can only improve in its own condition, and become a perfect mineral, but it cannot acquire the power of growth, or the power of sensation, or attain to life; it can only progress in its own condition".

This metaphysical principle effectively aligns with the scientific understanding that, due to their inherently distinct biological structures, plants cannot undergo evolution into animals and vice versa.

Alteration Within Kingdoms

`Abdu'l-Bahá envisioned the potential for transmutation occurring within the mineral kingdom. He accurately predicted the ability of elements to transmute within the mineral kingdom, which stood in contrast to the prevailing beliefs of his time. [16]

"As for the question of the transmutation of copper into gold, this is possible and certain; that is to say, by means of the hidden science, which in this cycle is one of the special bounties of the Blessed Beauty. The materialistic philosophers of modern science believe that the metals are isolated elements incapable of transmutation into one another; in other words, they think that the essential qualities of things cannot become transformed. But in the future, it will become manifest and clear that this is possible".

Considering that the human kingdom is comprised of a single species, it raises a question of what experiences mutation within the realm of humanity. In this context, Bahá'u'lláh, in one of his tablets, presents a comparison between the mineral kingdom and the human kingdom, suggesting a reference to *spiritual transformation* within the human domain that mirrors physical transformation in the mineral domain.

Applying the same principle, one can infer that the Bahá'í theological framework allows for mutation within the animal and plant kingdoms. The following quote provides supporting evidence for this inference. In this quote, He explains the spiritual transformation process governing the development of spiritual archetypes derived from the human kingdom essence and draws parallels to the evolution and development of species within the animal and vegetable kingdoms. [17]

"Through these successive evolutionary steps, spirit develops characters having Divine attributes. The positive, creative aspect of God is reflect in them. Individuality is derived from expression in individual form. Self-consciousness accompanies individualised character, and the being thus endowed has the potentiality of rising to the knowledge of God.

Characters inspired by the universal human spirit continue in lines of specific developing types, as did species in the vegetable and animal kingdoms."

Complexity Within Kingdoms

Another metaphysical principle that is frequently overlooked pertains to the notion of complexity and its relationship to kingdom essences. The hierarchical arrangement of kingdom essences is structured according to their relative potency or status, with the human kingdom occupying the highest position. Below the human kingdom, we find the animal kingdom at a lower level, followed by the vegetable and mineral kingdoms.

Following Bahá'í theology, the material realm exhibits diverse levels of complexity because of the manifestation of kingdom essences, with each level directly tied to its respective kingdom essence. According to this model, humans represent the highest level of physical complexity, succeeded by the animal kingdom, the vegetable kingdom, and the mineral kingdom. `Abdu'l-Bahá illustrates this principle. [18]

"As the perfection of man is entirely due to the composition of the atoms of the elements, to their measure, to the method of their combination." "The more perfect the combination, the nobler is the being. The combination of the elements in the body of man is more perfect than the composition of any other being."

In the case of animals and plants, this metaphysical principle also harmonizes effectively with the scientific understanding that, for instance, as a whole & in a general biological sense, animals are more complex than plants.

The Bahá'í metaphysical principles outlined in the framework above offer valuable insights into the physical world. While these principles may appear purely philosophical and detached from the tangible world, as we have demonstrated, they assert a connection to the material world and carry physical implications.

Exploring `Abdu'l-Bahá's Perspective on Biological Evolution via Metaphysical Principles

In Bahá'í discourse, the notion of "parallel evolution" holds considerable significance. This analogy is drawn between the evolution of the human biological form and the growth and development of a fetus in the womb. It has prompted many to interpret ''Abdu'l-Bahá's views on evolution literally, implying that human development began with specialized biological organisms at the inception of life on Earth.

If the Bahá'í metaphysical framework discussed holds true, it seems that this concept of parallel evolution may contradict those principles. But this is not so; the Bahá'í metaphysical principles presented suggest that the realization of matter, the universe, or life forms follows a two-stage process. First, there's a "general potentiality" stage where elements possess the capacity to combine and give rise to various types of life forms. Second, there's the stage of "specialized potentiality", where evolution occurs from specialized biological structures, akin to how a tree grows from a seed.

Consequently, in this theological framework, the evolution of the human form from specialized structures doesn't commence at the beginning of life on Earth but occurs later during the second stage when specialized biological structures are formed. This point is clarified in the introduction to the latest translation of *Some Answered Questions*.

"A certain reading of some of the passages found in Chapters 46–51 may lead some believers to personal conclusions that contradict modern science. Yet the Universal House of Justice has explained that Bahá'ís strive to reconcile their understanding of the statements of `Abdu'l-Bahá with established scientific perspectives, and therefore it is not necessary to conclude that these passages describe conceptions rejected by science, for example, a kind of "parallel" evolution that proposes a separate line of biological evolution for the human species parallel to the animal kingdom since the beginning of life on Earth."

Convergence Between the Evolution of Plants and Animals and Bahai Theology: A Remarkable Alignment

Let us apply this framework in the context of animals and plants. In the realm of evolutionary biology, as shown below, it is widely accepted that plants and animals embarked on separate evolutionary paths, each starting from specialized structures at distinct points in Earth's history.



Around one and a half billion years ago, the evolution of plants began from specialized structures, representing the ancestors of modern photosynthetic organisms. Over time, these early life forms developed unique features, allowing them to harness sunlight for energy.

Animals also began their evolutionary journey around the same time, starting with specialized structures that evolved into complex multicellular organisms with advanced sensory and locomotor systems, marking their divergence from plants.

From a scientific perspective, the evolution of plants and animals follows different paths due to their distinct biological characteristics. Plants, characterized by cell walls that restrict their mobility, differ significantly from animals, which lack cell walls, granting them greater flexibility. While animals possess sensory organs such as eyes and ears, plants primarily rely on biochemical responses to their environment. Animals exhibit active movement, whereas plants grow in a more passive manner. These anatomical disparities render it implausible for plants to ever evolve into animals and vice versa. This aligns with the metaphysical principle previously discussed regarding the impossibility of crossover between these distinct kingdoms.

Animals typically display higher complexity than plants, stemming from their mobility, sensory abilities, responsiveness to stimuli, and diverse behaviors, all fueled by nervous systems, sensory organs, and intricate anatomical structures.

Comparing Bahá'í metaphysical principles to these scientific facts reveals a remarkable alignment. Bahá'í theology accurately describes the evolution of animals and plants in relation to each other. The concept of separating animal and plant kingdoms based on specialized structures resonates with Bahá'í Theology.

Additionally, the idea of a two-stage realization aligns with the fact that the divergence of animal and plant kingdoms occurred long after the emergence of life on Earth. Moreover, Bahá'í theology's notion that varying levels of complexity in the physical world correspond to hierarchical kingdom essences closely mirrors scientific consensus.

As shown, Bahá'í theology accurately describes the physical evolution of plants and animals, emphasizing their unique roles in the hierarchy of existence. While kingdoms don't transform into one another, they generate diverse species through mutation.

Bridging Science and Theology--Evolutionary Path of Humans

As it was shown, Bahá'í metaphysical principles provided an accurate overall description of the evolutionary paths of animals and plants. The current scientific consensus for the evolutionary path of humans is shown below.



`Abdu'l-Bahá affirms that the existence of animals before humans does not automatically imply human evolution from animals. Furthermore, he draws a parallel, likening the evolution of each kingdom to individual trees in a forest, maturing at different times with varying growth rates and fruit-bearing timelines. [19]

"The first answer to this argument is the fact that the animal having preceded man is not a proof of the evolution, change and alteration of the species, nor that man was raised from the animal world to the human world...So when we examine the vegetable kingdom, we see that the fruits of the different trees do not arrive at maturity at one time; on the contrary, some come first and others afterward. This priority does not prove that the later fruit of one tree was produced from the earlier fruit of another tree."

This theological framework, as seen in the statement above, implies an evolutionary path that each kingdom evolving on a separate tree. The metaphysical framework presented seems to diverge significantly from the current scientific evolutionary model, indicating a potential disconnect between the two paradigms. The complete alignment of Bahá'í theology with evolution and science will be a gradual process. Over time, as we gain more insights into Bahá'í theology, particularly through new translations and the availability of unpublished materials, our understanding of Bahá'í theology will continue to advance.

Scientific knowledge, particularly in the field of biology, is ever-evolving, with new discoveries continually reshaping our

understanding of the physical world. It will take time for the Bahá'í theological paradigm to harmonize fully with these dynamic scientific developments. The proposed model, as illustrated below, serves as a stepping stone in the convergence process.

Utilizing Theological and Scientific Principles in Evaluating a Proposed Model

There's often an assumption that the more a model aligns with literal interpretation of Bahá'í theology, the less it aligns with scientific facts. However, this proposed model seeks to demonstrate a theologically consistent paradigm that doesn't contradict any scientific facts and remains logically sound.

Within this hypothetical paradigm, we examine the concept that humans embarked on their evolutionary journey separately, like animals and plants. Our objective is to establish theological coherence across all domains and evaluate the scientific compatibility with established scientific knowledge.



THOUGHT EXPERIMENT

The proposed model introduces just one singular hypothetical alteration. We postulate that the evolutionary trajectory of humans commenced at the same point in time as that of animals and plants.

This shift in our viewpoint maintains the premise that humans and animals share a common ancestor, but with a significant distinction: that this common ancestor predates the evolution of both animals and humans, evolving in their corresponding paths from specialized structures. Such a perspective resonates with `Abdu'l-Bahá's assertion that the "missing link" will not be found. [20]

To establish the credibility of this proposition and to establish a connection between science and theology within this framework, it is essential to examine its theological and scientific consequences.

Let us first delve deeper into the Bahá'í writings and reflect upon the following.

- `Abdu'l-Bahá primarily directed his attention toward the evolution of kingdoms, particularly concerning the transition between different kingdoms rather than the mutation between species. If he held the view that species-to-species mutation was impossible, why did he discuss inter-kingdom transitions instead of addressing species-to-species crossovers directly?
- The theological discussions largely overlook the concept of 'Kingdom Essences.' Introducing the notion of 'Kingdom Essence' between the 'Primal Will' and 'Species Essence' would enhance theological coherence. According to this perspective, the Primal Will gives rise to the Kingdom Essences, and these Kingdom Essences, in turn, generate various species within their respective essences.
- Several statements delineate the process of realization in two clear stages: general potential and specialized potential. Therefore, the debate regarding the possibility of humans evolving separately from the primordial cell at the inception of life on Earth is rendered irrelevant.
- The analogy that likens kingdoms to trees is given less emphasis compared to the analogy of the growth of a fetus in the womb. Just as a fetus requires the womb, an already existing structure, for its development, trees rely on pre-existing soil for growth. This deduction implies that biological life forms were present before the development of humans commenced from specialized structures.

An up-to-date translation of the provisionally translated quote below can be a valuable addition in this discourse. [21]

"Some of the philosophers of Europe think that evolution takes place from the genus to the species. But the Prophets teach that this theory is in error, Nay, rather progress and development take place within the species itself."

The original Persian word that corresponds to the word *genus* in the quote above also appears in *Some Answered Questions* [22], and in its new translation, this word is translated as "kind.". No hard conclusions can be made from the statement above that `Abdu'l-Bahá until an official translation is available.

With the new translation of *Some Answered Questions*, [23] 'Abdu'l-Bahá specifically alludes to "latent potentiality" and "seed potentiality" regarding human evolution, possibly mirroring general and specialized potentiality discussed previously.

Now, let's consider the following aspects regarding the current scientific evidence and its inherent limitations.

- Humans and animals exhibit distinct capabilities, implying biological differences. Humans can harness abstract thought to accomplish extraordinary feats, such as reaching the moon, discovering scientific truths, and inventing a vast array of devices—an ability beyond the reach of animals.
- The distinguishing factor between humans and animals lies in abstract thought. The scientific exploration of biological markers indicating human abstract thought is in its early stages, and biological markers that describe abstract thought have not been fully identified.
- Because anatomically, humans and some animals are very similar, tracking their evolutionary paths by looking at fossils is difficult and prone to error because "we know that looking alike does not always mean there is an evolutionary relationship between two species." [26]
- The identification of biological markers associated with human abstract thought is still a work in progress. Therefore, establishing the exact evolutionary trajectory of humans in relation to animals remains inconclusive until we can, through genetic analysis, track these markers on fossils back in time.

• It's possible that humans, due to their capacity for abstract thought, display a notably higher level of complexity compared to animals. Such heightened complexity might necessitate a substantially longer period for evolution, a scenario that could be in accordance with Bahá'í theological principles.

In the discourse addressing scientific inconsistencies with concepts like "parallel evolution," valid points are raised that require resolution. [27] Some of the objection may be rendered moot if we assume that species-to-species mutation within kingdoms are allowed, and plant, animal, and human kingdoms started did not start their evolutionary paths at the beginning of life on Earth.

Currently, the constraints imposed by the present state of scientific understanding make it unfeasible to subject this suggested theological model to any scientific scrutiny. Nevertheless, when considering behavioral disparities between humans and animals, it becomes apparent that humans likely possess significantly greater complexity than animals. Consequently, it stands to reason to assume the possibility that humans would require a considerably longer period to evolve, thus challenging the concept that humans evolved from animals in a relatively recent timeframe.

This model demonstrates greater theological consistency, addressing several theological discrepancies while at the same time not being in direct conflict with current scientific consensus.

Shoghi Effendi's Comprehensive and Multifaceted Response to the Question of Evolution

It's instructive to consider Shoghi Effendi's response to a letter from Dr. J. W. Freudenberg. He expresses reservations regarding various statements attributed to `Abdu'l-Bahá. The objections raised in the letter align with those currently voiced by scientists who challenge the literal interpretation of Bahá'í statements on evolution. This reference provides an overview of the letter's content and the full text of Shoghi Effendi's response. [24]

Shoghi Effendi starts his response to the letter with a philosophical statement that "We cannot prove man was always man for this is a fundamental doctrine, but it is based on the assertion that nothing can exceed its own potentialities". He categorizes all physical things in a hierarchy, that everything, a stone, a tree, an

animal and a human being existed in plan, potentially, from the very "beginning" of creation, Followed by this statement. We don't believe man has always had the form of man, but rather that from the outset he <u>was</u> going to evolve into the human form and species and not be a haphazard branch of the ape family. He mentions that our approach should be "that God sends us divinely inspired Educators; what they tell us is fundamentally true". He states that "What science tells us today is true; tomorrow may be entirely changed to better explain a new set of facts" and finally, "These various statements must be taken in conjunction with all the Bahá'í teachings; we cannot get a correct picture by concentrating on just one phrase."

The intricacy and complexity of his response offer valuable lessons. He could have simply asserted that `Abdu'l-Bahá's statements are purely philosophical and not in conflict with scientific discoveries or just that science may change in the future and leave it at that. His response encompassed philosophical reasoning, the categorization of entities into kingdoms, the importance of trust in the manifestations of God, having a holistic approach in contemplating the writings, and the need to remain open to the potential for changes in scientific understanding.

Moral Implications of the Proposed Model

By following Shoghi Effendi's instruction to have a holistic approach to this subject, let us analyze the moral and spiritual implications of the proposed model.

The proposed model for the human evolutionary path, as explored in our thought experiment, carries significant moral implications. If true, this model provides a biological basis for the profound statement made by Bahá'u'lláh, "Ye are all leaves of one tree and the fruits of one branch." In this scenario, there would be no scientific foundation for any group or race to claim superiority, as all humans evolve within the potentialities of the human kingdom, and no race or people can exceed their potentiality and become a superior race. Therefore, from both theological and scientific perspectives, humanity is recognized as a single species.

From a spiritual point of view, this model's diverse '*species*' of humankind are identified by their '*spiritual attributes*.' The evolution and variations in physical attributes among humans are considered non-essential and irrelevant to the overall development of humans.

Consequently, any differences in station among individuals are spiritual in nature. At the individual level, these teachings stress the importance of focusing on spiritual development, with the belief that the responsibility for transformation or elevation to a higher spiritual form is attainable by all individuals, regardless of their race, gender, or national origin.

In this way, the synthesis of Bahá'í theology and a reimagined scientific understanding of human evolution provides the foundation for the elimination of prejudice. It also presents a holistic view of humanity as spiritually and physically as one interconnected tree. As 'Abdu'l-Bahá beautifully reminds us in the following passage, individuals are encouraged to focus their efforts on assisting and regenerating the entire human race rather than perpetuating divisions and prejudices. [25]

The Blessed Beauty said: "All are the fruits of one tree and the leaves of one branch." He likened the world of existence to one tree and all the souls to leaves, blossoms and fruits. Therefore all the branches, leaves, blossoms and fruits must be in the utmost of freshness, and the bringing about of this delicacy and sweetness depends upon union and fellowship... They must purify their sight, and look upon mankind as the leaves, blossoms and fruits of the tree of creation, and must always be thinking of doing good to someone, of love, consideration, affection and assistance to somebody."

Conclusion

Bahá'u'lláh's Tablet of Wisdom highly praises philosophers of the past and particularly extols Greek philosophers, such as Socrates, as " one of the heroes in this field and an outstanding champion dedicated unto it." However, the Bahá'í Writings' engagement and acknowledgment of past philosophers extend beyond mere recognition of these philosophers' virtues and wisdom. He elaborates on their philosophy, emphasizing that it wasn't merely a collection of abstract notions disconnected from the physical world, but rather, how the ideas of these philosophers profoundly influenced the advancement of sciences and arts.

'Abdu'l-Bahá consistently expressed his concerns about the Western philosophical approach, which excessively depended on sensory sources of information. He

advocated for a more balanced perspective that integrated theology with other modes of knowledge acquisition, asserting that this approach was better suited for discussions on evolution. Through our exploration, we have demonstrated how 'Abdu'l-Bahá, drawing from Eastern theological principles, arrived at profound scientific insights that were ahead of its time.

We delved into several Bahai metaphysical principles, with a particular focus on the less recognized notion of "kingdom essences" within the ontological hierarchy and the two-stage process of essence realization in the physical realm. Our examination led to the conclusion that, as a whole, this Bahai theological system when considered alongside other factors, possesses a unique and distinct framework. It elevates Bahai metaphysics beyond being a mere adaptation or alteration of earlier philosophical principles, transforming it into a more comprehensive framework capable of addressing the complex theological questions of today.

We utilized these principles to assess a suggested model that exhibits greater theological consistency. While this model doesn't claim that the human evolutionary journey commenced at the inception of life on Earth, it does propose a distinct evolutionary path for humans, akin to the scientifically recognized separation of paths for animals and plants one and a half billion years ago.

An essential observation was made regarding the Bahá'í writings, which emphasize abstract thought as the distinguishing feature of humans in comparison to animals. However, since the biological structures responsible for abstract thought are largely unspecified, it is presently unfeasible to establish a direct correspondence between any proposed Bahá'í theological model and science.

It was noted that if it turns out that human beings' complexity, due to their abstract thought, significantly exceeds that of animals, it will necessitate a longer period for humans to evolve this complexity. Such an extension of the timeline would bring this theological model into closer alignment with scientific understanding.

Lastly, the ethical ramifications of this proposed model were contemplated. If valid, it would furnish a scientific foundation for the unity of the human species, asserting that no single race can progress to a superior state. The distinguishing factor within the human species would be humans' spiritual attributes, not its physical characteristics.

Notes

[1] Bahman Nadimi: https://bahai-library.com/nadimi_evolution_within_kingdoms

[2] Tablet of Wisdom p 150; Tablets of Bahá'u'lláh Revealed After Kitáb-i-Aqdas

[3] Ibid., p. 144

[4] Ibid., p. 146

[5] Ibid., p. 147

[6] `Abdu'l-Bahá, Promulgation of Universal Peace, p. 355.

[7 Ibid., p. 20

[8] https://bahai-library.com/abdul-baha_three_verses_hikmat Keven Brown

[9] Bahá'u'lláh, Gleanings p 317.

[10] `Abdu'l-Bahá, SAQ, p. 381

[11 Provisional translation by Moojan Momen from 'Abdu'l-Bahá: *Tafsír-i-Kuntu Kanzan Ma<u>kh</u>fíyyan (Bulletin* 26 f).]

[12] Abdu'l-Bahá, SAQ, p. 181

[13] Ibid., p. 285

[14] `Abdu'l-Bahá, Promulgation of Universal Peace, p. 285

[15] `Abdu'l-Bahá, SAQ, p. 230

[16] `Abdu'l-Bahá, Letter 440 Keven Brown Bahá'í World Centre, 12 July 1998.

[17] '*Abbas Effendi, His Life and Teachings*, by Myron H. Phelps, pp. 153-157. https://bahai-library.com/compilations/bahai.scriptures/7.html

[18] Abdu'l-Bahá, SAQ, p. 179

[19] Ibid., p. 192

[20] `Abdu'l-Bahá, Promulgation of Universal Peace, p. 358.

[21] `Abdu'l-Bahá, *Má'idiy-i Ásmání* (The Heavenly Table) (New Delhi: Bahá'í Publishing Trust, 1984; reprint of vols. 2, 5, and 9 formerly published in Tehran), vol. 2, p. 69.

[22] Abdu'l-Bahá, SAQ, p. 129

[23] Abdu'l-Bahá, Revised Edition SAQ, p. 199

[24] Bryon Donaldson, Appendix C On the Originality of Species: The Convergence of Evolutionary Science and Baha'i Teachings

[25] Abdu'l-Bahá, Bahá'í World Faith - Abdu'l-Bahá Section, p. 215

[26] Big Think Journal <u>https://bigthink.com/life/evolutionary-trees-phylogeny-anatomy-geography/</u>

[27] Eberhard Von Kitzing, Brown, Evolution , Bahá'í Belief, p. 232-235