

# Man Is Man

## 'Abdul-Bahá on Human Evolution

Ramin Neshati

### Overview

The essential harmony of science and religion is an underpinning belief of the Bahá'í Faith.<sup>1</sup> Indeed, few are the established world religions whose sacred literature and teachings so vigorously promote unbiased and unfettered scientific inquiry as does the Bahá'í Faith. For Bahá'ís, the absence of this foundational principle reduces religion to a mere set of superstitions, bankrupt beliefs and ruinous rituals. Bahá'í teachings laud science and reason as indispensable complements to faith and spirituality, and Bahá'ís believe that religion must at all times conform to science and reason.<sup>2</sup> Intelligence and erudition gained through scientific pursuits cannot, therefore, be discordant with mystical proclivity and the pursuit of spirituality. 'Abdul-Bahá, the eldest son and appointed successor of Bahá'u'lláh, the prophet-founder of the Bahá'í religion, elucidated the central importance of the principle of the harmony of science and religion in talks and speeches delivered to diverse Western audiences a century ago.<sup>3</sup>

The premise of the essential harmony of science and religion gives rise to a plethora of thought-provoking and troubling uncertainties for many scientists. The notion that science and religion can somehow be harmonized is not universally accepted by the scientific community, primarily since abstract notions such as spirituality do not lend themselves to the scientific method of inquiry.<sup>4</sup> For centuries scientists have investigated and debated vexing questions such as the manner and timing of the formation of the cosmos and the origin of mankind. The existence, or not, of an omniscient, transcendent entity called God has always been at the center of these debates. In fact, throughout history, many a renowned scientist, philosopher and soothsayer has given life and limb in these quests but today the same incommensurable questions

remain the subject of heated arguments among scientists and religionists of all persuasions, from the occident to the orient. Most modern scientists leave no room for a divinely-inspired creative force nor do they see a need for anything but chance or accident as sufficient rationalization for the universe and all living beings therein. While the scientific community has progressively converged around Evolution and the Big Bang theories to explain the origins of mankind and the formation of the cosmos, respectively, the Bahá'í teachings (as well as those of other religions) unequivocally affirm and attribute these events to divine will. Importantly, Bahá'í teachings accommodate intra-species evolution as a matter of growth and refinement, yet the notion that mankind somehow evolved from some other species, such as the ape life form, is spurned.

Bahá'ís deem humanity as having been inimitably created by God as “the most noble” of all species. Further, the human species has been uniquely endowed with spiritual susceptibilities and intellectual faculties. In the *Hidden Words*, Bahá'u'lláh affirms “... I have created thee rich,” or “... noble have I created thee,” or “... I knew my love for thee; therefore I created thee,” this notion is referred to throughout the Writings.<sup>5</sup> The Bahá'í viewpoint maintains that the divinely endowed gifts of spirituality and intellect elevate humankind above all other creation and equip him to solve complex and confounding conundrums. Through these gifts alone mankind is able to discern and discover the world of existence and to unlock its inscrutable wonders. Advocating creationism—the belief in a deity as the creator of the earth, imminently involved and ready to intervene when necessary—is not unique to the Bahá'í religion.<sup>6</sup> This belief has been upheld by many schools of philosophy, various secular and spiritual movements as well as the Semitic religious traditions of Judaism, Christianity and Islam, which hold in common the belief in monotheism, the reality of a hereafter and the interminable tension between good and evil in earthly existence. Nonetheless, it cannot escape our attention that belief in creationism has been seriously strained by the scientific community's reliance on the post-Darwinian concepts of natural selection and inter-species transmutation as the inexorable explanations for the origin of the human life form on earth. While Bahá'í teachings roundly reject the notion that mankind evolved from some other species, the scientific community assiduously supports and substantiates Darwinian evolutionary theories in its quest to unravel this ultimate conundrum.<sup>7</sup>

What can be made of this seeming dogmatic dichotomy between science and religion? Were we inimitably created through “intelligent design” in the image of God or did we randomly and through chance alone evolve from the ape life form? Are creatures and species purposeless in their existence or is there an immutable divine plan at work, lending function and purpose to life? Such inquiries are yet to be conclusively assuaged and reconciled despite momentous advances in scientific knowledge and philosophical wisdom since the mid-nineteenth century when the British scientist Charles Darwin (1809-1882) first published his theories and explanations on human origin and evolution.<sup>8</sup> Here, we will review some of the salient statements of ‘Abdul-Bahá on the necessity of the agreement between science and religion and examine their significance as they pertain to the disentanglement of the mystery surrounding the origin of mankind. Many of the explanations ‘Abdul-Bahá provided on this and related topics can be found in the collection of semi-private talks he gave to Laura Clifford Barney in Akka, Palestine during 1904-1906. The notes from these eclectic talks were authenticated by ‘Abdul-Bahá himself and subsequently translated and published by Barney circa 1908 in London under the title *Some Answered Questions*. In the foreword to the 1981 edition of this collection, the publisher comments on ‘Abdul-Bahá’s style of discourse as “treading the mystical path with practical feet” and affirms ‘Abdul-Bahá’s explanations of the origin, development and purpose for human existence as substantiation of the Bahá’í principle of the harmony of science and religion. (SAQ) This paper, whose aim is to induce more questions than conclusions, is dedicated to the centenary commemoration of this notable publication, and is offered as an enticement for further study by interested students and scholars of the Bahá’í Faith.

## Religion, Science and Darwinian Evolutionary Thought

Scientists subject conjectures, hypotheses and theories to observable, empirical, measurable and persistent proofs. This is the essence of the scientific method and it brooks no deviation from absolute objectivity in observation, measurement and analysis. But how are such proofs to be tendered for faith-based convictions? Can a religious code of beliefs lend itself to dispassionate scientific inquiry? One of the intractable realities that inevitably crops up in a discourse

on science and religion is the inherently distinct spheres, respectively, of human cognition and human emotion, to which they appeal. Religion has a close affinity with the realm of authority and power, while science is closely aligned with the realms of logic and reason.<sup>9</sup> Can these seemingly incongruent realms be reconciled or harmonized? Bahá'í teachings endeavor to bridge the gulf between scientific analysis and religious belief by underscoring the complementarity and the interdependence of these distinct realms. For a Bahá'í there is not a choice between science or religion; rather, they seek a blend of both. This is a crucial point to bear in mind as we explore the tension between science and religion over the hotly debated topic of the origin of mankind. This issue also lies at the heart of the as-yet unsettled difference of opinion between scientific and faith-based communities over the reality of an omniscient, transcendent creator.

For a fuller understanding of Charles Darwin's theory of evolution, which itself has evolved over time, it is instructive to examine the essence of his initial observations and inferences. In his seminal and ground-breaking work *On the Origin of Species*, published in 1859 to great acclaim, he attempts to document the manner in which living organisms grow and adapt to their environments through a process called natural selection.<sup>10</sup> This is the process wherein genetic inheritances vary through successive generations to facilitate the survival and flourishing of the species in their natural habitats. The innate competition for survival is at the root of Darwin's theory of evolution. Food, climate, habitat and social forces such as alliances or wars are some of the key determinants of survival. Each generation survives the challenges imposed by these forces through adoption of or adaptation to its new-found ecosystem. Furthermore, environmental conditions can also engender the appearance or the disappearance of physical behaviors, bodily organs or other acclimatization necessary for the survival of the species. Darwin deemed the process of natural selection to be random and uncoordinated, yet the result appears to be anything but haphazard, remarkably efficient and in step with the exigencies of survival. Darwin went to great lengths to explain the origin and transformations of various living organisms such as plants, insects and birds. He deduced that continued self-fertilization was not conducive to survival since organisms could not retain sufficient genetic variability to survive sudden or harsh environmental alterations. He posited that the

current forms and conditions of many species had traversed through the process of natural selection via several stages of transmutations from only a few common ancestors. Through observation, meticulous record keeping and field work, Darwin concluded that beneficial gene variants survived randomly by means of, and perhaps because of, environmental exigencies. As a consequence, useful genetic information survived and was passed down through the generations resulting in inter-relatedness of various organisms and species, all of which was dictated by the notion of the survival of the fittest.<sup>11</sup> He concluded that adaptation to changing environmental conditions result in the variations seen in different species. One of Darwin's significant findings, and later confirmed by functionalist evolutionary biologists such as Dawkins, is that evolution is a slow and gradual process. It requires the passage of decades, if not centuries, for an evolved state to take hold, reach equilibrium with its environment and become noticeable.<sup>12</sup> This important concept will be explored more fully later in the paper.

While he was not the first scientist to put forward such claims, the scale and the consequences of Darwin's inferences, especially his hypotheses on the evolution of the human species, published in 1871 in *The Descent of Man*, reverberated through the sanctuaries of science and the hallowed halls of established religions.<sup>13</sup> Darwin's publications sent trembles through the world of science and his swelling coterie of supporters shattered age-old conviction in creationism and essentialist biology that had heretofore held sway over much of human civilization, philosophy and scientific inquiry. His intimation that homo sapiens transmuted from the pre-existing ape life form was particularly controversial in his lifetime and continues to be so to the present. Why is his theory on the origin of the human species pregnant with such controversy? Most people of faith find the acquiescence to Darwinian evolutionary thought to be untenable precisely because this theory obviates the need for a divine and transcendent creator. The role of God, if this abstract concept can be accommodated in Darwinian thought at all, is relegated to that of a remote, disinterested, disempowered entity. This is anathema to most religionists. Darwin left no room for divine intervention in the world of existence. Neither did he allow for any special purpose for creation. He famously was "... inclined to looking at everything as resulting from designed laws, with the details, whether good or bad, left to the working out of what we may

call chance.”<sup>14</sup> Being at first bound for the comfortable life of a priest, Darwin was marginally content with the idea of a creative God, his later agnosticism notwithstanding. It is the trust, however tenuous, in “designed laws” that will be explored further in this paper for potential congruence to Bahá’í beliefs. Over time, the influence exerted by Darwinian evolutionary thinking has progressively permeated nearly all branches of science.

## Evolution or Revolution?

A brief chronological review of a select sampling of scientific and philosophical excogitations and accomplishments in the decades leading up to Darwin may prove instructive in better appreciating the magnitude of his contributions to the world of science. For brevity, we will confine our cursory survey to influential Western thinkers.

The 16<sup>th</sup>-century physicist, philosopher and father of modern science, Galileo Galilei (1564-1642), audaciously set forth scientific inquiry to explain the nature of the universe despite severe oppression and forced recantation imposed on him by the Catholic Church. His support of the Copernican notion of the heliocentricity of the universe was abhorrent to the Pope and the society of his time, which were deeply ingrained in the Aristotelian belief in geocentricism. Yet, Galileo’s contributions to astronomy, physics and mathematics paved the way for many important findings and discoveries both during and after his lifetime.<sup>15</sup> Galileo’s scientific findings were as ground-breaking and world-shattering as those proposed by Darwin. Following on Galileo’s heels, consider Gottfried Leibniz (1646-1716), philosopher, mathematician, inventor of calculus and the binary system, and perhaps one of the greatest rationalists and a superlative intellect of his time. It is said that Leibniz wrote a proof for the existence of God and shared it with Baruch Spinoza (1632-1677), his contemporary philosopher and proponent of epistemology.<sup>16</sup> Leibniz’ philosophy comprehended a pre-established harmony which he attributed to a perfect being. Spinoza, widely acknowledged as having ushered in the dawn of the Enlightenment in Europe that set off a revolution resulting in many advancements in the arts and sciences, was largely in agreement with Leibniz. However, Spinoza was inclined to equate God with nature and believed that humans were emanations of that natural essence.<sup>17</sup> Although Spinoza was

derided as an atheist and a heretic for his views, yet the power of his influence survived and grew long after his death. As with Darwin, the thinking advanced by the likes of Leibniz and Spinoza were radical departures from conventional wisdom and stimulated a great deal of intellectual pursuits. Another contemporary of Leibniz, Sir Isaac Newton (1643-1727), the physicist, mathematician and theologian, imparted to posterity many scientific contributions such as gravity, optics, the laws of motion and numerous other important findings.<sup>18</sup> Arguably, Newton can be considered as the most prolific scientist of all time. Being a deeply religious man, he was quick to point out that while gravity explained planetary motion it could not explain how the planets were set in motion in the first place. Newton believed in the existence of a supernatural being from whose will the universe had come into existence. Newton's revolutionary discoveries created the bedrock for future scientific pursuits and inventions in the same manner that Darwin's theories paved the way for modern-day advances in biology and genetics research.

Following Newton, the 18<sup>th</sup>-century philosopher and logician Immanuel Kant (1724-1804) eloquently argued for the existence of God, freedom and immortality as the necessities of human life. Kant proposed that scientific reasoning was limited, and thus one could not firmly prove or disprove the existence of God. Such an "intelligible unity" could only be proved with practical intent, as if there be a God.<sup>19</sup> Kant is considered to be one of the giants in the world of philosophy and is said to have greatly influenced later philosophers such as Hegel, Schopenhauer and others. Finally, Kant's contemporary astronomer and mathematician, Pierre-Simon Laplace (1749-1827), rose to become one of the greatest scientists of all time. Laplace is considered to be the father of probability theory, statistics and of Scientific Determinism – a set of precise laws that explain the evolution of the universe.<sup>20</sup> While Laplace could convincingly argue and establish the evolution of the universe, yet he found himself at a loss to explain its initial state; reminiscent of Newton, he could not explicate how the laws that governed the universe were chosen and instead attributed them to an unknowable God.<sup>21</sup> As with Darwin, Laplace introduced revolutionary thinking within the world of science but was unable to fully explain all of his findings and thinking.

The common thread through this survey is clear: most of the influential scientists and philosophers that pre-dated Darwin,

while not in full agreement over the details, still promoted or allowed the notion of a creative force to whose will or action they attributed earthly existence. It remains unclear to what extent they directly influenced Darwin's own beliefs and thinking. Yet, the upshot of Darwinian theories pertaining to evolution and the origin of the human species has been nothing short of a monumental scientific achievement, despite its radical denial of a creative force. Although largely accepted, Darwin's revolutionary contributions to the world of science remain controversial to the present.

## The Limits of Science

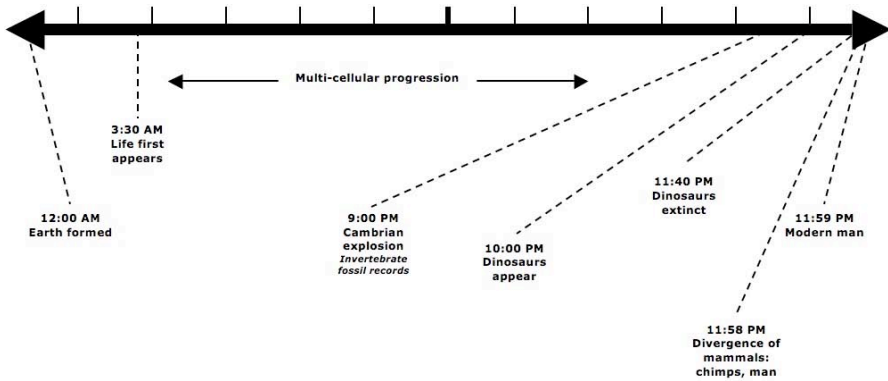
The modern practice of science has been reduced to the formulation of mathematical models and the administration of empirical experiments. The process of arriving at these models and experiments is iterative and prone to errors and false assumptions along the way. Future generations of scientists routinely prove their preceding peers wrong. Consider for instance Pythagoras, the Greek philosopher, mystic and mathematician. According to Russell, no other man "...has been as influential as he was in the sphere of thought," yet in recent times he is found wanting in the "... intimate blending of religion and reasoning, of moral aspiration with logical admiration of what is timeless..."<sup>22</sup> This is an ironic observation that we will contend with later in this paper.

Is scientific thinking limiting, as Kant and others have suggested? The scientific method is dependent on our ability to precisely measure phenomena in a predictable and repeatable manner. But we know from Heisenberg's uncertainty principle that no scientific experiment or measurement is accurate owing to the imprecision of measuring techniques and tools. In like manner, we know from Gödel's incompleteness theorem that a consistent set of axioms to prove all of mathematics is virtually impossible.<sup>23</sup> These examples of the limits of science militate for caution when either scientists or religionists advance triumphalist and absolutist claims in the effort to prove their point or to disprove those of their opponents. Moreover, one might legitimately ask: what animates scientific models and mathematical equations? Indeed, why should there be a universe for science to discover or for religion to describe in the first place? In the words of the pre-eminent contemporary physicist, Stephen Hawking, "... why does the universe bother to exist?"<sup>24</sup> The answers to these questions are



anything but clear or conclusive when viewed exclusively through the lens of science or of religion. Scientific methods and laws address material existence but do not admit the existence, or accommodate the analysis, of metaphysical abstractions. Religion can fulfill a complementary role by providing an explanation for phenomenon that have yet to be explained by any branch of science. Ultimately, the Bahá'í principle of the harmony of science and religion maintains that scientific truths must be complemented by belief in a transcendent creator, whose will is the impetus for the existence of the cosmos, of human life and of all other living forms in nature.

Earlier we mentioned that evolutionary scientists insist on randomness and chance as the inexorable explanation for human evolution. The existence of a creative force or a plan that could potentially regulate the cosmos and earthly life, if not rejected outright, is seen as doubtful by many scientists.<sup>25</sup> Human existence can be understood as the result of transmutation from an earlier life form, most likely the ape species. Further, Darwinism has been embraced as “liberation from the delusion that its [human] destiny is controlled by a power higher than itself.”<sup>26</sup> Judging by the rigorous requirements of the scientific method, are there incontrovertible proofs to these assertions? While science is on the march to uncover these claims, more recently some scientists have suggested that the extent of genetic change through natural selection is too narrow a concept to be scientifically useful since there has not been a sufficient passage of time to conclusively establish the evolution of complex species from single cells.<sup>27</sup> Even so, there is a growing body of evidence that seeks to substantiate the evolution of multi-cellular organisms by tracking changes in proteins and enzymes through time, and to map the formation of these organisms from the fusion of single cells.<sup>28</sup> Interestingly, Collins has compressed 4.5 billion years of evolutionary life into a 24-hour span of time to drive home the need for temporal perspective in better understanding cellular evolution. From the diagram below, adapted from Collins, we can get an appreciation of our collective proximity to the proverbial trees (and in our inability to clearly see the forest):<sup>29</sup>



In this diagram, the earth was formed at midnight, the first emanations of life forms appeared sometime around 3:30 past midnight, and the Cambrian explosion occurred at 9:00 in the evening, suggesting a relatively long passage of time for the progression of multi-cellular organisms. Following the appearance and extinction of dinosaurs, mammals began to diverge into different life forms sometime around 11:58 at night. Modern man appeared a minute before midnight. Notice that in relative terms only a minute has transpired from the inception of human life to today. Recall also that most scientists are agreed that the Darwinian concept of natural selection is a gradual phenomenon and can be subject to many divergent outcomes through time. Given that in relative terms we have not yet witnessed a sufficient passage of time to draw definitive conclusions about the evolution of the species, especially the human life form, is it plausible to only rely on scientific explanation for the origin of mankind or the manner of the formation of the cosmos? Can theology provide complementary, not contradictory, clarifications? It is precisely in this context that the Bahá'í belief in the harmony of science and religion seeks to unify scientific truth with religious certainty to arrive at a more nuanced and sophisticated resolution to some of these as-yet unsolved mysteries. Let us consider 'Abdul-Bahá's elucidations.

## 'Abdul-Bahá on Human Evolution

'Abdul-Bahá endorsed the concept of human evolution. He, of course, spoke of intra-species refinement and growth, not inter-species transmutation. (SAQ)<sup>30</sup> Human evolution is not only accepted but seen as necessary. The earth presents a dynamic habitat, constantly prone to gradual or sudden

changes. To survive in frequently changing environments, species must adapt and evolve. Moreover, for any species to reach its full potential, it must go through various stages of development and growth. At each stage, organisms evolve by maturing physically, mentally, emotionally, socially, and so on. To establish this point, 'Abdul-Bahá cited the example of the acorn. Its potential is to one day be an oak tree. It cannot take on any other form of life. To reach its destiny, it must sprout, be nourished and survive the hazards of growth to one day reach its full form: an oak tree. In like manner, a human zygote necessarily evolves to an embryo and later into a fetus until it is born as a human child. Even after birth, humans evolve as they pass through various phases of physical, mental and spiritual growth. Consider the following passage which speaks to the uniqueness of the human life form:

*But from the beginning of man's existence he is a distinct species. In the same way, the embryo of man in the womb of the mother was at first in a strange form; then this body passes from shape to shape, from state to state, from form to form, until it appears in utmost beauty and perfection. But even when in the womb of the mother and in this strange form, entirely different from his present form and figure, he is the embryo of the superior species, and not of the animal; his species and essence undergo no change. (SAQ)*

According to 'Abdul-Bahá, nothing in this world attains perfection at once; evolution is a necessary condition for any species to reach its pre-ordained destiny. He explained that humanity and human civilization continually evolve. Culture, industry and technology are ready testaments to human evolution, refinement and growth. Yet, 'Abdul-Bahá insisted that man is a unique species and that the human essence is unshared by any other life form. He affirmed that God's greatest gift to man is the intellect through which he can understand and conquer nature, all other creatures being bereft of this gift and thus captives of nature. He found the suggestion that many life forms roamed the planet before humans, the so-called pre-existence contention, as a weak and unsustainable argument to rationalize or prove the transmutation of the human life form from another species. Consider the following passage that speaks to this point:

*...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. For while the individual appearance of these different beings is certain, it is possible that man came into existence after the animal. 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. (SAQ)*

In recent times, scientists have shown that certain animals possess the rudiments of intelligence such as the acquisition and use of language or equivalent modes of communication, the development and application of tools, the establishment of social order and so on. Nonetheless the human intellect is, by orders of magnitude, greater than all other animals. Dividing the world of creation into the realms of the human, the animal, the vegetable and the mineral, 'Abdul-Bahá stated that humans embody the combined attributes of animals, vegetables and minerals. Still, while all created beings may be endowed with spirit only humans possess the rational spirit, or soul. Human intellect is an emanation of the soul and scientific accomplishments are outcomes of the human intellect. Praising science as "most noble and praiseworthy," 'Abdul-Bahá affirmed that of all creation only humans could master nature through science. Consider the following passage which illuminates man's primacy over nature:

*All creation, preceding Man, is bound by the stern law of Nature. The great sun, the multitudes of stars, the oceans and seas, the mountains, the rivers, the trees, and all animals, great or small – none is able to evade obedience to nature's law. (SAQ)*

He asserted that man was the sum of all perfections and that "... in him there is an ideal power surpassing nature." (SAQ) Thus, humankind is elevated above all other creation. To further differentiate between humans and other living organisms, 'Abdul-Bahá envisioned two distinct pathways for existence: material and spiritual. The former He termed as the realm of the animal, devoid of intelligence and incapable of knowing God, while the latter He deemed as destined for mankind, a source of ethics and enlightenment and capable of bestowing the knowledge of God. (SAQ) In treading the spiritual path and perfecting his nature, mankind can

approach God by exhibiting divine attributes such as justice, mercy, love, truthfulness and kindness. But when the development of his spiritual nature is neglected or subordinated to the pursuit of material progress, he is apt to plunge into waywardness. ‘Abdul-Bahá cautioned against the prevailing impulse in society of denying the inner spiritual powers innate in human beings. This tendency, He lamented, would lead mankind to dismiss his destiny and to consent to the realm of the animal, thereby becoming a captive of nature. Consider the following passage:

*One of the strangest things witnessed is that the materialists of today are proud of their natural instincts and bondage. They state that nothing is entitled to belief and acceptance except that which is sensible or tangible. By their own statements they are captives of nature ... If this be a virtue, the animal has attained it to a superlative degree, for the animal is absolutely ignorant of the realm of spirit and out of touch with the inner world of conscious realization. The animal would agree with the materialist in denying the existence of that which transcends the senses. If we admit that being limited to the plane of the senses is a virtue, the animal is indeed more virtuous than man, for it is entirely bereft of that which lies beyond, absolutely oblivious of the Kingdom of God and its traces, whereas God has deposited within the human creature an illimitable power by which he can rule the world of nature. (PUP)*

For Bahá’ís, therefore, the development of mankind’s material temperament must transpire in tandem with the development of its spiritual disposition. This balance is crucial as it alone can facilitate the realization of man’s true potential and the fulfillment of his purpose for being created. Addressing the inevitable question that arises from a consideration of creationism, ‘Abdul-Bahá deduced that a creator without a creation was impossible. He argued that since the universe was created, there therefore had to be a creator. He further argued that the order inherent in the universe was neither accidental nor necessary. Rather, it was voluntary and willful. He explains:

*The first thing to emanate from God is that universal reality which the philosophers of the past termed the First Intellect, and which the people of Bahá call the Primal Will. (SAQ)*

'Abdul-Bahá unambiguously held that a transcendent creator willed the universe and all of creation into being. He explained that the universe was, and will ever be, governed by eternal laws bequeathed by God. In sharp contrast to Darwinian evolutionary thought, 'Abdul-Bahá taught that the human life form was original and unique, that it had a pre-ordained purpose and that it was not a mere outcome of accident or chance. Since the universe was created by a perfect creator, creation itself had to be perfect and complete. As mentioned earlier, 'Abdul-Bahá upheld intra-species evolution as incontrovertible and necessary for the human species to achieve its pre-ordained destiny. This passage sums up his vision on the origin and form of human beings:

*To recapitulate: as man in the womb of the mother passes from form to form, from shape to shape, changes and develops, and is still the human species from the beginning of the embryonic period—in the same way man, from the beginning of his existence in the matrix of the world, is also a distinct species—that is, man—and has gradually evolved from one form to another. Therefore, this change of appearance, this evolution of members, this development and growth, even though we admit the reality of growth and progress, does not prevent the species from being original. Man from the beginning was in this perfect form and composition, and possessed capacity and aptitude for acquiring material and spiritual perfections, ... He has only become more pleasing, more beautiful and more graceful. Civilization has brought him out of his wild state, just as the wild fruits which are cultivated by a gardener become finer, sweeter and acquire more freshness and delicacy. (SAQ)*

## Conclusion

The Bahá'í principle of the harmony of science and religion intends to find common ground between the domains of science and religion. Bahá'í teachings hold that human beings belong to a pre-ordained, unique life form that trumps all others and which interacts with an organic universe in accordance with a divine plan. Evolution is not only accepted but seen as a necessity for humans and other species to reach their full and destined potential. Human evolution is within the species, however, and does not derive from or span to other

forms of life. ‘Abdul-Bahá maintained that the notions of creation and evolution were complementary, not mutually exclusive. This belief lies at the root of the Bahá’í principle of the harmony of science and religion.

It should be noted that ‘Abdul-Bahá’s teachings were tendered as philosophical viewpoints and not as scientific verities.<sup>31</sup> Thus, they cannot be evaluated with the prevailing standards of science. His teachings and explanations, perhaps, can be best understood and internalized as articles of faith. Since faith requires the suspension of disbelief and the unquestioned acceptance of scientifically improvable metaphysical abstractions such as a transcendent divinity or the human soul, these concepts will continue to remain chasms to bridge for most scientifically trained minds. The religious teaching that man is more than a mere physical being, that he is essentially spiritual in nature, does not permit the unequivocal acceptance of Darwinian evolutionary hypotheses as they are understood today. The implications of an ad-hoc universe without a creator and a divine plan that animates and gives purpose to life are untenable to most people of faith, Bahá’ís included. So, how can science and spirituality truly be reconciled? Is it possible in the absence of faith and reason? Many such questions are yet to be assuaged and although we may not have satisfactory answers to these queries, one thing we do know: human evolution and the transmutation of species will likely remain a hotly debated topic for some time to come.

---

## NOTES

<sup>1</sup> Smith, P. (2000), *A Concise Encyclopedia of the Bahá’í Faith*, Oxford, Oneworld.

<sup>2</sup> Hatcher, W. S. (1990), “Science and the Bahá’í Faith,” *Logic and Logos*, Oxford, George Ronald.

<sup>3</sup> For a cogent history of the Bahá’í religion and its leadership succession see Smith, P. (1987), *The Bábí and Bahá’í Religions*, Cambridge, University Press.

<sup>4</sup> For a recent essay on this topic, see Cohen, E. (2006), “The Ends of Science,” *First Things: A Monthly Journal of Religion & Public Life*, 167:27-33. See also Dawkins, R. (2006), *The God Delusion*, New York, Houghton Mifflin.

<sup>5</sup> Bahá’u’lláh (1994), *The Hidden Words*, Victoria, Century Press. For an annotated scholarly treatment in Persian, see Nafahát-i-Fadl, Number 4, Institute for Bahá’í Studies in Persian, Dundas, 1994.

- 
- <sup>6</sup> National Academy of Sciences Institute of Medicine (2008), *Science, Evolution and Creationism*, National Academies Press. For more on the philosophy of creationism, see [plato.stanford.edu/entries/creationism](http://plato.stanford.edu/entries/creationism).
- <sup>7</sup> Angier, N. (2007), *The Canon: A Whirligig Tour of the Beautiful Basics of Science*, New York, Houghton Mifflin.
- <sup>8</sup> Appleman, P., ed. (1979), *Darwin*, New York, W. W. Norton & Company.
- <sup>9</sup> Russell, B. (2007), *A History of Western Philosophy*, NY, Simon & Schuster.
- <sup>10</sup> Appleman, *Darwin*, op. cit.
- <sup>11</sup> See [evolution.berkeley.edu/](http://evolution.berkeley.edu/) for a scholarly collection of essays and explanations on Darwinian evolutionary theories. I am indebted to Dr. David Zamora for providing this reference.
- <sup>12</sup> Dawkins, R. (2006), *The Selfish Gene*, Oxford, University Press.
- <sup>13</sup> Appleman, *Darwin*, op. cit.
- <sup>14</sup> *ibid.*
- <sup>15</sup> Hawking, S. (1998), *A Brief History of Time*, New York, Bantam Books.
- <sup>16</sup> Russell, *History*, op. cit.
- <sup>17</sup> *ibid.*
- <sup>18</sup> Hawking, *Brief History*, op. cit.
- <sup>19</sup> Russell, *History*, op. cit.
- <sup>20</sup> *ibid.*
- <sup>21</sup> Hawking, *Brief History*, op. cit.
- <sup>22</sup> *ibid.*
- <sup>23</sup> *ibid.*
- <sup>24</sup> *ibid.*
- <sup>25</sup> Dawkins, *God Delusion*, op. cit.
- <sup>26</sup> *ibid.*
- <sup>27</sup> Collins, F. (2006), *The Language of God*, New York, Free Press.
- <sup>28</sup> For protein evolution, see [www.eb.tuebingen.mpg.de/departments/1-protein-evolution/protein-evolution](http://www.eb.tuebingen.mpg.de/departments/1-protein-evolution/protein-evolution). I am indebted to Dr. David Zamora for providing this reference.
- <sup>29</sup> Collins, *Language*, op. cit.
- <sup>30</sup> For a scholarly treatment of ‘Abdul-Bahá explanations on this topic, see Brown, K., ed. (2001), *Evolution and Bahá’í Belief*, Los Angeles, Kalimát Press. For a shorter essay on the mutation of species and Bahá’í beliefs see Nadimi, B. (n.d.), “Do the Bahá’í Writings on evolution allow for mutation of species within kingdoms but not across kingdoms?” available at [bahai-library.com/?file=nadimi\\_evolution\\_within\\_kingdoms](http://bahai-library.com/?file=nadimi_evolution_within_kingdoms)
- <sup>31</sup> Brown, K. ed., *Evolution and Bahá’í Belief*, op. cit.