

THE QUR'AN

Flawless Bridge Between 'Science' and 'Religion'

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One of the greatest philosophical conflicts in the dynamic vistas of human dialectical thought is that of the perceived incompatibility between science and religion. In the last few decades, a spate of books, articles and television documentaries have arisen, dealing with this issue as circumscribed by the Judeo-Christian tradition. Yet it appears strikingly odd and intriguingly compelling, that the general debate on such a universal theme has turned overwhelmingly into an exclusive debate between science and the Biblical account of the creation of the universe and its multifarious processes. This has no doubt contributed to highlighting the existing variances between scientific facts and the Bible, in turn leading many people to dismiss religion in general, whilst concomitantly fostering the growth of atheism and agnosticism. It seems even more odd, that such a discussion, by default, usually excludes all religions except the Judeo-Christian tradition. Yet, once this tradition is conclusively shown to be incommensurate with science,¹ all

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religions, including the initially excluded ones, are brought back into the fold of discussion and summarily tainted with the stain of scientific incompatibility.² This is indeed a most bizarre state of affairs, especially when it emanates from those who advocate the scientific method of discovery — the very group that claims to value accuracy and objectivity.

One of these often excluded worldviews is that of Islam, and its claimed revelatory foundation — the Qur'an. Muslims, however, claim that no dichotomy or chasm exists between science and the Qur'anic belief in monotheism. In fact, Muslims acknowledge that any book that claims to describe the creation of the universe ought to accurately reflect the essence of the universe in both principles and processes. It would therefore be most intriguing for the interested and contending parties to examine whether the Qur'anic model casts some light or indeed fresh new insights into this ongoing epistemological divide. Yet in the West, it is felt that Islam, far from being compatible with modern science, must be the underlying reason that has directly had something to do with fomenting retrogressiveness, intolerance and 'fundamentalism'. In fact, in this discourse on science and religion, Islam seems to have become unfairly excluded, since it has been misperceived to be an exclusive religion of the Arabs, emanating from a primitive and outmoded culture. However, it is not generally known that the word *Islam* is absolutely non-exclusive, universal and timeless, since, unlike most religions, it is not tied to a culture, nationality, race, region, personality or somebody's personal belief; rather, it is a description of a state of mind and action, linguistically denoting voluntary peaceful submission to the singular Creator, where one flows in concordance with the universal natural order of cosmic scheme (22:18). A Muslim is anyone, anywhere, at any time, who chooses to follow such ubiquitous natural laws in the realm of existence.

Yet despite this misunderstanding, evolving incipiently, side by side with the resultant inordinate rejection of Islam, is an ever-growing realization among many Muslims, as well as some non-Muslim academics, that the Qur'an appears to be addressing

this age and the coming 21st Century and beyond, over and above the contents and approach found in many other scriptures.

Scientific Correlations

In the 20th Century, perhaps the greatest realization or discovery has been that the universe has evolved from a 'singularity' — commonly referred to as the Big Bang. Indeed, it has been admitted by leading atheists, such as philosopher Antony Flew, that this point has become their nemesis.³ This is because an origin implies that there was once 'no thing' — whatever that may mean — and that such a rude beginning borders on the now taboo or embarrassing question of 'God' or a Creator. This is not to say that many scientists have not tried to escape the dreaded 'beginning' by postulating an accidental universe; however, their 'solutions' themselves have been highly problematic, unprovable or wildly speculative, such as: imaginary time, quantum fluctuation, multiple-universes, infinitely cyclical universes, etc. In fact, it appears that all the purported solutions to escape the singularity problem are haunted by the growing awareness that there appears to be intelligence embedded within the processes of the universe. This line of thought, under the right conditions, would naturally lead to the logical question as to whether there is some connected *overall* purpose to the universe and, concomitantly, a species such as the human being.

The verifiable fact about the Qur'an, in this whole debate on origins, is that unlike other scriptures, in the Qur'an — during the depths of the Dark Ages, 1,400 years ago — it has been unequivocally recounted that the whole universe and the earth therein, were once, one piece and that the Creator ripped them apart and made every living thing from water (Qur'an: chapter 21, verse 30), that the Creator is continuously expanding the universe (Arabic word used for expanding is *musiuna*, 51:47), and that the universe has evolved to form celestial systems and the earth, from the coalescence of dust and gas (41:11). These concepts were not realized until the 20th century, particularly after the discovery of galactic recession by red shift by Edwin Hubble in 1925.

Yet another branch of knowledge, among a myriad, where the Qur'an's correlation with science has been startling, is in the area of embryology. Although it was linguistically clear as to what was being said in the Qur'an, about human development before birth, by Arabic linguists, many of the verses on embryology were *unconceptualizable* to them, owing to a lack of specialized education in the subject. One of these intriguing verses which was queried, stated: "Read in the name of your Sustainer and Lord, who created the human from a thing which clings ('*alaqa*)" (96:1-2). The "clinging thing" '*alaqa* is also the root word for the derivative meaning of '*alaqa* which is "a leech-like structure". This is a pristinely accurate visual-cum-structural description of the embryo from day 7 to 24 when the zygote clings to the endometrium of the uterus much like a leech clinging to the skin. The University of Toronto embryologist, Professor Keith Moore, who was approached by linguists on these verses, explained, in the 1980s, that just as the leech sucks blood from its host, so too does the human embryo withdraw blood from the pregnant endometrium. By the 23rd to 24th day, the embryo has a strong physical and functional resemblance to a leech. The root meaning of the word for clinging is "'*alaqa*", which, unfortunately, has been mistranslated into English incorrectly, as "blood clot", in many translations of Qur'an.

Yet another verse states that: There is a stage [before birth] when the human being is like a "chewed lump" (*mudghah*, verse: 23:14). The "chewed lump" verse was explained dramatically by Moore as follows: He made a plasticine shape resembling the 28-day-old embryo and then had it bitten into. When juxtaposed, the resemblance between the special plasticine model and the actual *microscopically enhanced* picture of the 28 day old embryo, is strikingly similar, for one can observe that the structures on the embryo are the somites, which are the early stages of vertebrae; they do indeed resemble bead-like teeth marks imprinted on the plasticine model and hence the appropriate description of this stage as resembling that of a "chewed lump" — the *mudghah*.⁴ The staging of pre-natal human development was first described in 1941 by Streeter, and a more accurate system was proposed by O'Rahilly in 1972.

Another area that the Qur'an covers, most accurately, is geology. As geologist Z. R. El-Naggar points out concisely, "... the Qur'an consistently describes mountains as stabilizers for the Earth, that hold its outer surface firmly lest it should shake with us, and as pickets (or pegs) which hold that surface downwardly as a means of fixation. So simply stated, the Qur'an describes the outward protrusion of mountains from the earth's surface, and emphasizes their downward extensions within the Earth's lithosphere, as well as their exact role as stabilizers and as a means of fixation for such a lithosphere."⁵ Some of the verses pertaining to these geological phenomena are: 78:6-7; 15:19; 16:15. The notion of mountains having roots was first hypothesized in the later half of the nineteenth century, and their role in connection with providing stability to the dynamics of the lithosphere, through plate tectonics, has only begun to be comprehended since the late 1960s.

Nature of Belief in the Qur'an

Given these considerations, one might be led to question how these verses ended up appearing in the Qur'an. Historically, it must be pointed out that the undeveloped paganistic Arabic society in the 6th Century had no 20th Century notions of the Big Bang, the expanding universe, plate tectonics and embryology, for the Qur'an was revealed to an illiterate Muhammad (SAW) by God in the Dark Ages, and that the inductive aspect of the scientific method sprung up *after* the Qur'anic period. Several centuries prior to the advent of the Qur'an, superstitions, mysticism and a non-scientific way of explaining nature had gained a hold in most societies on earth. In this abysmal atmosphere, the Qur'an led untutored desert nomads and the people they came into contact with, to look into the nature of the universe in order to fathom things, which led to a scientific revolution that helped foster the Renaissance and the Enlightenment periods in Europe. Indeed, the Muslims had learned and then further developed the thought heritages of the Ancients, and in so doing, evolved the conduction of science to new and novel heights. As medieval historian Thomas Goldstein has remarked in his book, *The Dawn of Modern Science: From*

the Arabs to Leonardo Da Vinci: “Every single specialized science in the West owes its origins to the Islamic impulse — or at least its direction from that time onwards.”⁶

Methodologically and inspirationally, it was the Qur’an itself that led to the “Islamic impulse” that Goldstein refers to. To understand exactly why, we need to delve deeper into an analysis of the Qur’an itself. The Arabic word Qur’an literally means a book “to be read”. It claims to be the complete and absolutely unaltered communication from the single intelligence that has originated and developed the entire universe. The Muslims’ claim is that if this assertion is true, then the Qur’an must be able to withstand, at least, the following tests: Firstly, there should be no internal inconsistencies and contradictions within its contents. Secondly, it should not contain statements that are contrary to known facts, regarding for example, the structure and function of the universe. Thirdly, it must be linguistically clear, unambiguous, and precise. All these tests are necessary so that its contents can be objectively confirmed or refuted. Passing these tests, successfully, would indeed establish the credibility of the Qur’anic claim of its ‘divine’ origin. On the other hand, if inconsistencies and ambiguities do indeed exist, then the book in question is either entirely man-made, or might have originated from the Originator, but was subsequently corrupted by human beings. In a nutshell, this would mean that the book is not credible.

The analysis of any book, which claims to be a revelation, ought to include the most important resource accessible to us — the human intellect. It is only through the human intellect that we can confirm or negate the presence of contradictions and thereby substantiate or invalidate claims. Surprisingly, the Qur’an itself emphasizes that the reader subject its contents to rigorous analytical scrutiny with an objective and honest intent, in order to ascertain if there are indeed any internal or external inconsistencies (4:82). In this way, the Qur’an, boldly and confidently challenges its readers not to take its claim of divine origin at face value, but to examine the book and always remain alert for any kind of inaccuracy, a challenge which is

unequivocally open to all skeptics and those with a keen interest in scientific investigation, particularly in the area of the compatibility or incompatibility between science and religion. The claim of the challenge, even after 1400 years, has still not been deposed, even by those who are no friends of the Muslims. More interestingly, from a scientific perspective, the Qur'anic proposition to find internal or external incongruity within its contents, as a way to dismiss its claim, is tantamount to a truly scientific method of falsifying invalid ideas and concepts.

In general, the aforementioned criteria may be used to test any claimed revelation. Contemporary Islamic thinkers point out that if the information contained in this book was unknown 1,400 years ago, one would perhaps be led to question its presence in so ancient a document. They ask: Does the Qur'an indeed withstand the tests of precision, consistency and non-contradiction? And if so, is the structurer of the Qur'an also the structurer of the universe?

One certainly needs to question, where such 'scientific' verses came from? However, one thing is certain: If Muhammad (SAW) did indeed write the Qur'an, expositing his own ideas and mindset, he would have had to have gained 20th Century knowledge regarding: embryology, cosmology, geology, ecology, archaeology, biology, sociology, anthropology, history, atmospheric sciences and cognitive sciences, whilst being deprived of libraries, laptop computers, telescopes, microscopes, universities, the internet and sophisticated databases. Even if they were somehow miraculously available, of what use would they be to an illiterate man. However, be that as it may, the central question remains: Whether one believes that Muhammad (SAW) procured his knowledge from earthly or possible extraterrestrial sources, as opposed to from a Creator who is independent of our space and time conceptions, what exactly is the thrust and the message of this widely possessed, though seldom analytically studied book?

To fully understand the Qur'anically inspired re-generation of knowledge in the Dark Ages, its multiplier-effects over the ages and the import of the Qur'anic view of science, we must

understand that the Qur'an unequivocally rejects belief based upon blind faith. However, many people tend to look upon the Qur'an from a Eurocentric perspective on the nature of religion, and tend to thereby color Islam as just another dogmatic belief system. For example, even the word for 'belief' in Arabic does not mean 'belief' construed as 'blind faith', as it has evolved to mean in Christianity and many other belief systems. In fact, this blind-faith notion is echoed in the authoritative proclamation of St. Augustine: "*Credo quia abserdum est*" "I believe, because it is incredible". In stark contradistinction, the word for 'belief' or 'faith' that is used in the Qur'an, is *iman*, which has, at its root *amana*. This word means to confirm or verify things. Therefore a real Muslim is one who confirms ideas and statements, and is not given to accepting ideas without proof and evidence. There is no room for a leap of faith at any stage. The fact that many profess to adhere to Islam, but do not in fact follow its pristinely laid out Qur'anic methodology, in no way diminishes Islam's pre-eminent position towards evidence and proof (e.g. see 2:44; 3:190,191; 16:90; 8:22; 28:49; 23:17; 67:10). It was, after all, the Qur'an, which wrought a revolution in science by its emphasis on intellection. Through the influence of the Muslim philosopher Ibn Rushd's (Averroes') writings and that of others, the European Averroists in the Middle Ages set the trend for rationally criticizing authority based on mystical doctrines. Since the Qur'an fostered such a transformation of the West itself, it is in reality, a neglected part of the Western legacy, and is a document that is vitally worthy of scrutiny. This is because the Qur'an invites self-examination and proof at the crux of its fundamental framework.

The Qur'anic approach is proof-seeking and teleological, that is, it is purpose, intention and design based, being identical in many respects with Unitarian beliefs, which had many well-known adherents such as Voltaire, Newton, John Locke, Milton and Joseph Priestly? The message of the Qur'an is that of Unitarianism, albeit an advanced and completed version of it, as the sample verses on embryology, geology and evolutionary cosmology illustrate. If one recollects, these Unitarians within Christendom, like the true Muslims, denounced mysticism,

believed in rationality, and did not regard Jesus as divine or semi-divine.

Socio-Environmental Implications

Given the consistent rational stance of Islam, the laws of nature are seen to collectively form the primary revelation. The exposition of splendid artistry and remarkable engineering contrivance in divine creation overflows on almost every page of the Qur'an. Indeed, the quintessence of the Qur'anic outlook, is that by reflecting on the universe, and the diversity of life forms within it, we certainly observe a panoramic display of remarkable order and consistency. Such harmonious order is maintained throughout, by the structure of the extremely delicate dynamic balances in the physical universe.⁸ The Qur'anic outlook emphasizes that nature's equilibrium is itself comprised of interlocking and interdependent structures and processes. These processes by their very design have particular functions and boundaries that are not arbitrary or ad hoc. Therefore, the usage of the elements of nature, whether in the ecological or social spheres, have their usufruct limited to ensuring that they are not used in a manner in which their structure or function causes instability and disequilibrium, internally or in the wider domain. This parameter of universal utility is discernable by examining structure and function and the context in which structure and function are embedded or operate.⁹ In other words, human-made designs extracted from natural designs must be part of the balance that gives rise to absolute social and environmental principles based on not upsetting absolute cause and effect relationships, which maintain the dynamic equilibrium. In this discernment of nature, social and ecological rights are not ethnocentrically conventionalized or man-made synthetic constructs; therefore they cannot possibly be relative or biased. Such absolute rights encapsulated by the full recognition of reality are to be upheld under the auspices of a beneficent Creator, who is the ultimate Owner and Inheritor of the universe, and to whom all creation will eventually return (22:64 and 67:15). Indeed, all dominion belongs to the Creator, and not Man, who oftentimes attempts to be the arrogant opportunistic

usurper. Man must maintain the balance dynamically inherent in natural order (55:7-9), and be ultimately accountable to the peerless God, for every action, large or small in the socio-ecological realm.

Perfect 'Convergence'

In the globally united vision expounded by the Qur'an, non-contradiction and teleology are intricately interconnected, as much as dominant present day indeterminacy and relativism are inextricably intertwined with the notion of a blind chance-based universe. These two roads — one of intelligence, the other of chance — tend to lead individual thought and socio-environmental structuring into diametrically opposite destinations.

Taking the route of intelligence, rather than that of chance, if humanity realizes that the Qur'an is nature's precise reflector, to be used as a prescriptive guide and motivator to prevent or cure our mounting socio-environmental problems, there would be an eventual dissolution of the artificial boundary between the sacred and the profane, science and divinity, through a natural rapprochement based on the correlation between causality in nature and pristine revelation. Inevitably, such a rapprochement would further set the stage for transforming human thought towards a unitary understanding of the whole purpose of creation and man's role within the vastness of cosmic order. In fact, anyone imbued with such an outlook would not be searching for a pristine revelation to act as a bridge between science and religion. That which is one needs not to be bridged. Indeed, in this vein of reality, it can certainly be proclaimed that **science is truly religion and religion truly science.**

If these ideas of verifiable unity are eventually realized, then the whole of humanity would indubitably reap the benefits of a perfectly complementary relation between the usage of scientific reasoning and the usage of revelation, where each one symbiotically reinforces the value of the other, for the enhancement of both humanity and the rest of nature, whilst simultaneously pointing to the very same ultimate providence.

ENDNOTES

- 1 Maurice Bucaille, *The Bible, The Qur'an and Science*. American Trust Publication, Indianapolis, 1979.
- 2 See the cover story written by Wertheim, Margaret. "The Odd Couple: Can science and religion live together without driving each other crazy?" *The Sciences*, Volume 39, No. 2 (March/April) 1999.
- 3 Henry Margenau and Roy Abraham Varghese, *Cosmos, Bios, Theos: Scientists Reflect on Science, God and the Origins of Life and Homo Sapiens*. Open Court, La Salle, Illinois, 1992, p. 9.
- 4 Keith L. Moore, *The Developing Human*, 3rd edition. Saunders Co., Philadelphia, 1992.
- 5 Z. R. El-Naggar, *Sources of Scientific Knowledge: The Geological Concept of Mountains in the Qur'an*. International Institute of Islamic Thought, Herndon, 1991, p. 47.
- 6 Thomas Goldstein, *Dawn of Modern Science: From the Arabs to Leonardo da Vinci*. Houghton Mifflin Co., Boston, 1980, p. 99.
- 7 John Hedley Brooke, *Science and Religion: Some Historical Perspectives*. Cambridge University Press, Cambridge, 1991.
Ata-ur-Rahim, *Jesus, Prophet of Islam*. Tahrike Tarsile Qur'an, Inc., New York, 1990.
- 8 Michael J. Denton, *Nature's Destiny: How the Laws of Biology Reveal Purpose in the Universe*. The Free Press, London, 1998.
P. C. W. Davies, *The Accidental Universe*. Cambridge University Press, Cambridge, 1982.
- 9 Mehran Banaei and Nadeem Haque, *From Facts to Values: Certainty, Order, Balance and their Universal Implications*. Optagon Publications Limited, Toronto, 1995.
B. A. Masri, Nadeem Haque, and Mehran Banaei, *Nature in Islam: Socio-Environmental Concern for the 21st Century and Beyond*. Unpublished manuscript.