Religion and Science

uring the last one century or so there has been an excessive fascination with science and scientific rationalism among educated Muslims in the entire Islamic world. And this has been to such an extent that even some sincere and well-meaning Muslims reformers made science the touchstone for religion and paved the way to a "naturalist" interpretation of religious beliefs. Their response to the scientific and educational backwardness of Muslim countries, a condition which they share with most of countries in the third world – have varied from bitter elegies of the present situation to proud epics about the almost forgotten achievements of the past. Speculations as to why the Muslims fell behind have differed, and the problem will remain one of the most interesting of its kind in the history of science and comparative history of cultures. The problems of the interrelationship and interface of science and religion are complex and multi-dimensional and it is not possible to delineate all of them within the short compass of an editorial. But nevertheless we shall attempt to expound the more important axiomatic principles underlying science and scientific thought from the Qur'anic perspective.

Science as the totality of human knowledge regarding natural phenomena is as old as the ancient peoples of China, India, Egypt, and Greece. Motivated by the experimental and inductive spirit of the Qur'an, Muslims developed various sciences during the Dark Ages of the medieval Europe and many a noted luminaries studied sciences in the universities of Muslim Spain. However, it is a fact that as an organized body of systematic knowledge based quite consciously on certain well-defined principles, science is a phenomenon of modern era in European history starting from Kepler, Galileo, Copernicus, and Descartes. From then on, nature was taken as a self-contained system for the working and explanation of which the principle of theistic belief was not to be invoked, and it was thought that natural processes exhibited universal laws of uniform behavior. It is not an irony of history that most founders of

modern Western science should be believing Christians and Jews, while their cumulative science and scientific thought should be based on an explicit, nay, aggressive rejection of the notion of God? It is a well-known fact that by and large they denied the relevance of Godhead with respect to Nature and natural phenomena and thus supported the canon of atheism.

In the Christian West the history of the relation of religion and scientific innovation is often described in terms of "opposition", "conflict", and "warfare", and accounts abound which give convincing evidence of the fury with which the battle was waged between the two. In this arena, we find a two-fold theme. First, there is the spectacle of religion defending itself against the encroachment of science, and second, there is the spectacle of science hampered and even persecuted by religious organizations. The most well-known example of religious interference with science is perhaps the humiliation of Galileo. Modern views about the position of the earth is the Solar System, about sun-spots, about comets and about meteorology were all arrived at only in the face of bitter religious opposition. In the 19th century the propagation of enlightened theories about the geological history of the earth and about the evolution of biological species was greatly hampered because of the animosity of the churches. Perhaps it was a reaction of this persecution and hostility that science in the West during the last four centuries became Godless and anti-religious. Emerging as it did in Christian milieu, the science had to turn a stiff back on theology represented by Christian dogma. Thus theology became a symbol of scientific subterfuge.

The Muslims world, on the other hand, has never witnessed any comparable tension and conflict between religious faith and scientific pursuits throughout its history. For the Islamic scientist, the Holy Qur'an is the source of his world-view and also of his primary axioms on which his theories are based. The outlook of the Qur'an about man, his culture, his history, his origin, and his ultimate destiny, is the foundation on which the Islamic natural and human social sciences are based. It offers all the necessary background for a scientist to possess before he can approach his subject matter. It may not state all the facts, which the scientist must discover for himself, but gives clear guidelines, and what is more important, an honestly

articulated set of axioms on which to base his theories and study of facts.

Admittedly, the Holy Qur'an is neither a text-book of science nor of philosophy. It would be foolish to contend or to claim that the Holy Book propounds the theory of relatively or quantum mechanics or theory of evolution in all their variegated shades and details, or that this, that or the other fact recently discovered has already been recorded in the Qur'an. Scholars of various persuasions who try to justify or buttress Islamic beliefs with latest scientific theories either run the risk of misinterpreting the Qur'anic verses, or quite often their views are based on a grave travesty of the intended meaning. As a matter of fact, the meanings of quite a few Qur'anic verses, in particular those pertaining to creation, physical phenomena, cosmology, etc., etc., are so to say, open-textured and multi-layered in significance. And quite sensibly there can be difference of opinion in their interpretation and understanding. In other words, they do not convey the meaning in a direct, simple, and univocal manner. For example the verse 51:47 reads

Which a learned author whose article we read some time ago translates as "the Heaven We have built with power, verily We are expanding it", and goes on to claim that the modern scientific theory that the universe is expanding is in the Qur'an and quoted this verse. Now the fact is that this theory is disputed by many astrophysicists and some hold the view that the universe is alternately expanding and contracting. One wonders how the learned author would explain the latter theory in case it is supported by a greater number of leading astrophysicists. Nevertheless, we agree that the idea presented by the learned author is thought-provoking and merits consideration particularly when we see that his rendering of the verse has indeed the support of Richard Bell (The Qur'an, reprint, Edinburgh, 1960, vol. 2, p. 533): "The heaven – We had built it with hands, verily we are making it wide", and A. J. Arberry (The Qur'an Interpreted, London 1955, vol. 2, p. 219): "And heaven – We built it with might, and We extend it wide." Both assume that Musi'un is to be attributed to Al-Sama (the heaven), but other translators, for example Abdullah

Yousuf Ali renders it as "With power and skill we construct the firmament, for it is We who create the vastness of space." And Maulana Ashraf Ali Thanvi renders the verse as "We built the heavens with our power and we are great in power" (translation of his Urdu). These translators take Musi'un as a general attribute of God and not as restricted merely to Al-Sama. We have cited this example to show that many Qur'anic verses relating to physical phenomena are amenable to a wide variety of meanings and interpretations and some may corroborate the newly discovered theories of scientists. Indeed, as staunchly believing in the Qur'an as the word of Allah (SWT) we asseverate that no discovery of science can contradict any of its verses. New theories and discoveries of science will only add to our appreciation of new dimensions and depth of meanings of the Qur'anic verses - meanings hitherto unperceived due to lack of scientific knowledge. Quite naturally Muslim exegetes of, say a millennium ago, could not understand the real import of many Qur'anic verses pertaining to cosmology and other physical phenomena due to scant scientific knowledge available in their times. For Muslims the Qur'an is literally the word of God, and in its holistic guidance it covers all aspects of human endeavor, both theoretical and practical. Far from containing the outmoded cosmological, geological, biological, and historical speculations of pre-scientific man, in very subtle ways it always shows compatibility with latest empirical theories and scientific views. Thus the Qur'an says:

> We shall show them our signs in the outer worlds and in themselves, till it is clear to them that it is the Truth (Ha Meem Al-Sajda 41:53)

In this verse God promises revelation of His signs, both in the external universe and the inner denizens of human selves, to mankind in future so as to make them convinced that it (the Qur'an) is indeed absolutely the Truth. The Qur'an as we have submitted above, is not a text-book of either science or philosophy. It is not even a book in the ordinary sense of the world, nor it is meant to be kissed,

embraced, and put on the mantelpiece to gather dust; rather it is for all humanity to read, cogitate, and contemplate about its contents and derive guidance for life's journey both in its individual and collective aspects:

...that they may meditate on its signs, and that men of understanding may remember. (Saad 38:29)

This verse and scores of other such verses emphasize the importance of contemplation in the Qur'an and the understanding and interpretation of its verses, although not an interpretation based on personal caprice and bias, but a just, truthful, and balanced interpretation free of all traces of selfish interests and bias. The Qur'an is not a book that has been sent for a specific age and time. Had it been so, all the secrets of the Qur'an would have been discovered in the past; this heavenly Book would not have preserved its charm, freshness, and vitality. But we see that the possibility of contemplation, reflection, and discovery of new dimensions is inexhaustible in the case of this Holy Book. It is not static or monotonous. The Prophet (SAW) is reported to have said that outwardly the Qur'an is beautiful and inwardly it is deep and unfathomable. As the time passes and the more deeply it is pondered over, the Qur'an increases in its novelty and freshness day by day.

In the history of Islamic civilization, science and religion have indeed throughout been allies and in perfect harmony. As a matter of well-established fact, acclaimed even by European historians of science, Muslim scholars laid the foundations of several sciences and generally cultivated a "cordial union" between the two. Islamic ethos, based on the Holy Qur'an and the Sunnah of the Prophet, endowed the scientific enterprise with positive value and the overall picture was radically different from the corresponding Euro-Christian scenario which presented them as mortal enemies. The Holy Qur'an invites mankind to study the system and scheme of creation, the wonders of nature, the causes and effects of all things that exist, the conditions of living organisms, developmental stages of the human fetus, in short all the signs of Allah (SWT) discernible in the external universe and in the inner depths of the human soul. It enjoins

thought and meditation on all aspects of creation and requires human beings to apply their reason and perceptual faculties for the discovery of the secrets of nature. Translation of a few of these verses we shall quote here.

What, have they not beheld the heaven above them, how We have built it, and decked it fair, and it has no cracks? And the earth – We stretched it forth, and cast on it firm mountains, and We caused to grow therein of various joyous kind for an insight and a reminder for every penitent servant. (Qaaf 50:6-8)

What, do they not consider how the camel was created, how heaven was lifted up, how the mountains were hoisted, how the earth was outstretched? (Al-Ghashia 88: 17-20)

Say: Journey in the land, then behold how He originated creation; then Allah causes second growth; Allah is powerful over everything. (Al-Ankabut 29: 20)

Surely in the creation of the heavens and the earth and in the alternation of the night and the day there are signs for men possessed of minds who remember Allah, standing and sitting, and on their sides, and reflect on the creation of the heaven and the earth; "O Lord, thou hast not created this in vain. Glory be to Thee! Guard us against the chastisement of the Fire." (Aal-e-Imran 3: 190-191)

It means that the greater and deeper human knowledge is in understanding God's creation, the more His Greatness and Majesty will become obvious to men. According to the Qur'an, the study of the book of nature reveals to man its secrets and manifests its underlying coherence, consistency, and order. In other words, it clearly supports a type of physico-theology on which, among others, Allama Muhammad Igbal too bases his reconstruction of religious thoughts. It is often said nowadays even by Western thinkers that the conflict between religion and science is a thing of the past. Science is said to have become less materialistic and hence more favorable to theology, whereas theology has allegedly become (particularly in new and liberal versions of Christianity which do not defend the literal truth of Biblical stories) more sophisticated and thus less vulnerable to attacks by science. As is well known, scientists like Arthur Eddington and J. H. Jeans have tried to use the theories of modern physics to support a spiritual interpretation of the universe.

The Holy Qur'an tells us that besides natural causation, there is another, more ultimate causation, bestowing upon natural processes in their entirety a significance and an intelligibility that natural processes viewed in themselves do not yield. In the words of Dr. Fazlur Rahman, this higher causation is not a duplicate of, nor is it in addition to, natural causation. It works within it, or is rather identical with it – when viewed at a different level and invested with the proper meaning. The Qur'an uses both natural causation language or Divine causation or religious language, in different contexts and clearly with different purposes in view. The disbelivers belittle or ignore or even rebel against God, because they view the processes of nature as having self-sufficient causes, normally regarded

by them as ultimate. They do not realize that the universe is a sign pointing to something "beyond" itself, something without which the universe, with all its natural causes, would be and could be nothing. The view it presents is essentially that God is the sole cause of whatever has ever happened or will happen, from the creation of the universe to its ultimate doom, in the sense that God's will is the underlying cause of everything, including the apparent causal efficacy of the phenomenal things. Thus in the ultimate analysis only God's will is active and is active everywhere; but in all phenomenal matters there are phenomenal causes of phenomenal effects. God's will has bestowed causal efficacy to created things, and as God's ways are unalterable (Al-Ahzab 33: 62, Al-Fatir 35: 43, Al-Fath 48: 23), it follows that there should be uniformity in natural processes. In the world of phenomena we have a causal nexus between events, and in its unalterability, imparts uniformity to the processes of nature.

Like the scholars and scientists of the early centuries of Islam, Muslims today should acquire the knowledge of all useful sciences from where ever it is available. We should liberate scientific knowledge from its attendant materialistic interpretation and rehabilitate it in the context of Qur'anic world-view and ideology. It is the momentous responsibility of Islamic thinkers to devote their energies and scholarship to the stupendous task of Islamizing both social and natural sciences if they want to present Islam as a viable alternative to contemporary atheistic views and work for its ascendancy. In this context an important task is that of detailed and in-depth Islamic critique of Western knowledge – a critique that will separate its mythological and atheistic content from its scientific ingredients, thus purging what is harmful and salvaging the true and useful.

It is against this backdrop that we are including in the present issue of *The Qur'anic Horizons* an immensely thought-provoking and researched article of Dr. Ahmad Afzaal on *Qur'an and Human Evolution*. There is a consensus among scholars that Allama Iqbal also subscribed to the idea of evolution, though of course not to all the details of Darwinism. At a very early phase in his intellectual development he moved to the concept of ecological struggle and evolutionary thinking and he was aided in this by the ideas of Maulana Rumi, Mujaddid Alf-e-Thani, Shah Waliyullah Delhvi, and

also more significantly by Darwin and the European ecologist, Ernest Heackel (the German biologist who, in *History of Creation*, first used the term Ecology in 1868) and their followers. In 1904, a year before he went to Europe, Iqbal demonstrated an acute awareness of the ecological struggle. We would, however, not suggest that Iqbal's system of philosophy was basically Darwinian; although he was influenced by the concept of the ecological struggle, it was only one of the strands of thought which helped him formulate his own philosophical system. Two of his articles titled *Qaumi Zindagi* published in *Makhzan* (Lahore, 1904 & 1905) and an article included in *Maqalat-e-Iqbal* (edited by Sayyid Abdul Wahid Mn'ini), bear ample witness to this.

There has been a long and chequered history of the debate and controversy between Creationism and Evolution in the West, particularly in the Western Europe and America, as a result of which many institutes were established to study scientifically the phenomena of creation, for example "Creation-Science Research Center" (CSRC), and "Institute of Creation Research" (ICR). Dr. Ahmad Afzaal's brilliant and substantial article, essentially concurring and amplifying the ideas and insights of Dr. Israr Ahmad as it does, cuts new grounds in this area by bridging the gulf between the theory of Special Creation and Natural biological evolution. In recent years, in defending Creation as a scientific alternative to evolution, Creationists rely less on Francis Bacon and his conception of science and more on two new philosopher-heroes, Karl Popper and Thomas Kuhn. Popper required all scientific theories to be falsifiable; since evolution could not be falsified, reason the Creationists, it is by definition not science. Kuhn describes scientific progress in term of competing models or paradigms rather than the accumulation of objective knowledge. Thus Creationists see no reason that their Flood Geology model should not be allowed to compete on an equal scientific basis with the evolutionary model. Dr. Afzaal's essay goes much beyond such facile and glib arguments and makes a convincing synthesis between biological evolution of human body (of course under the overarching Divine causality) and the creation of the human souls, the combination of which resulted in the appearance of Adam, the first ensouled man on earth. Being himself trained in biological and medical sciences, he is more than qualified to write on this issue. Simultaneously, however, he is also fully aware of the

"fringes", "edges", "boundaries", and "frontiers" of science. Today, the boundaries between physics and metaphysics have become blurred. Questions that would have been considered metaphysical in another age enter into the discussions of the universe, and physicists speak of the anthropic principle – entailing "cosmic narcissism" – which sometimes seem to be more philosophical than scientific. Meanwhile, some all-embracing theories are proposed that yield unverifiable conclusions, and appear similar to the metaphysical systems constantly proposed by nineteenth century philosophers. Indeed, some prominent physicists have found this situation alarming. They have felt that physics was drifting away from its experimental base, and was being transformed into something other than science.

We do hope that Dr. Ahmad Afzaal's article will be well received and read critically by our thoughtful readers. Perhaps the spirit of debate and inquiry that his thinking will generate is what he wants; it is the first step to the path to knowledge.

Absar Ahmad

According to a tradition narrated by Imam Ahmad (RA) on the authority of Miqdad Ibn Aswad (RAA), Prophet Muhammad (SAW) is reported to have said: "There shall be no house on the entire earth, neither of bricks nor one made of camel's skin, but God will cause the world of Islam to enter it, either with the honor of the one who deserves honor, or with the subjugation of the one who is defeated. That is to say, God will confer honor on some and they will embrace Islam, and He will cause the others to give up fighting and they will surrender before the rule of Islam."