

Gülen on Religion and Science: A Theological Perspective

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A number of contemporary Muslim thinkers have dealt with the relationship between religion and science.¹ The subject itself is fast gaining popularity among Muslims, not only among scientists but also among other groups of Muslim professionals and intellectuals. Understandably, as Muslims they are primarily interested in discussing and debating the subject from Islamic points of view. We can even say that in many Muslim countries today practically every class of educated Muslim is concerned with some issue pertaining to the relation of religion and science.

Those who have been closely following religious developments in the Muslim world since the beginning of the so-called global Islamic resurgence in the 1970s will not fail to notice that a growing Muslim interest in issues of religion and science in the last several decades is part and parcel of a larger interest in the religion, culture, and civilization of Islam. The fact that the majority of active participants in the emerging Muslim discourse on religion and science have been natural scientists with an interest in religion speaks volumes about the intellectual transformation taking place in the Muslim world.² Sad to say, the volume of literature available on the subject is only a pale reflection of what has actually been happening on the ground. Western scholarship on contemporary Islam tends to focus on its political dimension, eclipsing other modern manifestations of Muslim intellectualism and religiosity, such as in science, which is regarded in the West as perhaps the most secular of all domains.

Also unfortunate is that the increasingly popular Muslim interest in intellectual discourse on religion and science has not been matched by the institutionalization of appropriate academic and research programs. Beneficial programs not currently implemented include the introduction of the subject in the educational curricula of institutions of higher learning and the establishment

of research centers dedicated to the advancement of human understanding of the multi-faceted relationship between religion and science. While in the West there are numerous such centers, academic organizations, and journals devoted to studies in religion and science within the Judeo-Christian worldview, there are few such endeavors in the Muslim world.³

Against this background, this article seeks to make better known the voice of a contemporary Muslim theologian on issues pertaining to religion and science. The religious figure presented here is Fethullah Gülen,⁴ a devout Turkish scholar, educationalist and popular preacher, influential not only in his own country but also in the Turkish-speaking Central Asian republics. Choosing to highlight a Muslim theologian's perspective on religion and science is significant. The significance lies in the fact that contemporary Muslim discourse on the subject has been dominated by Western-educated Muslim scholars and scientists. In the Muslim world today, it is rare that serious thinkers among men of religion reflect on issues in religion and science, regardless of whether they have been educated in a traditional or modern setting. Gülen definitely belongs to this small minority of religious scholars. It is precisely his standing as a widely respected religious scholar intellectually interested and fairly knowledgeable about the relationship between religion and science that makes treatment of his ideas significant. Also significant is the fact that Gülen comes from secular Turkey, where his basically traditional Islamic views on religion and science are philosophically at odds with the official state secularism, if not with its political institutions.⁵

Gülen's Intellectual Orientation

In light of both his educational training and intellectual output, Gülen may best be described as a religious scholar deeply rooted in the traditional religious sciences and at the same time quite familiar with modern Western knowledge. Born in the small village of Korucuk in the Hasankale district of Erzurum province in Turkey, Gülen had an early traditional education in the sciences of the *hadith*, the Qurʾān, and jurisprudence and had a special love for languages and Sufi poetry. Besides having a good command of Arabic and Persian, which he first learned from his father, he also knows French. On his own admission and thanks to his father's spiritual circle, Gülen was very much influenced by the Sufi master and poet Muhammad Lutfi Efendi⁶ (d. 1954), from whom he received spiritual lessons when he was as young as ten years old.

Another influential modern Turkish intellectual and spiritual figure who contributed a great deal to Gülen's spiritual and intellectual formation was Bediuzzaman Said Nursi⁷ (1876–1960), whose commentary on the Qurʾān known as *Risale-i Nur* is widely appreciated in the Muslim world. Gülen was introduced to this work while still in school. The work, written partly

in defense of Islamic beliefs from the assault of modern science, influenced Gülen's formative views on religion and science. Before reaching the age of twenty, Gülen had already been exposed to both traditional Islamic learning and Western literature and philosophical thought.⁸ His intellectual foundation and inclinations were rooted in this early learning.

Gülen has emerged as a scholar well versed in the religious sciences of Islam and with deep academic interests in modern intellectual thought. Some of his writings clearly indicate that he is fairly informed, at least on some periods, of the history of the relations of religion and science in the West. Also, one understands from his numerous publications that Gülen is quite familiar with the principles of modern science and that he possesses some understanding of both its achievements and limitations.

Gülen's Treatment of Religion and Science

Gülen has addressed several issues pertaining to the general theme of the relationship of religion and science. This article, however, will concentrate on just three issues: 1) the relationship between scientific and religious truths; 2) the Islamic view of the modern scientific approach to nature; and 3) the approach of the Qur'ân to science. His views on these issues are based on one of his very few books available in the English language, *The Essentials of Islamic Faith*.⁹ This work and others that we know of reveal the general context in which Gülen approaches religious and scientific issues. His primary interest of course is theological. That is, he is interested in defending the theological positions of Islam with science playing the subordinate role of "handmaiden of theology." In his view, religion and science can never be regarded as equal in Islam. Science's stance against religion will be explained in subsequent sections.

We can discern Gülen's major sources of intellectual influence in his discussion of the relation of religion and science. He makes many references to the Qur'ân itself and to prophetic *hadiths* that support his contentions. His spiritual interpretation of nature clearly reveals traditional Sufi influences, especially the natural theology of Ibn 'Arabi, Sufism's towering figure. In asserting that the universe is "the realm where God's Names are manifested and therefore has some sort of sanctity" and that it is "the Divine Book of Creation," Gülen echoes the views of Ibn 'Arabi and other Sufi sages.¹⁰ His writing clearly demonstrates that his intellectual orientation has been influenced by his acquaintance with modern Western thought. On such issues as the Islamic critique of the nature of modern science, Gülen is known to have referred, for example, to the views of Karl Popper,¹¹ a modern British philosopher of science, and Rene Guenon,¹² a traditional French philosopher of science. However, his references to modern Western thinkers are invariably

brief. In the context of his whole argument, he has a point in so doing. His primary interest is spiritual and theological. His specific citations of the scientific or philosophical views of certain Western thinkers are only meant to illustrate or lend additional support to his theological arguments.

Sufi influence seems to be most dominant in the intellectual framework of Gülen's thoughts on religion and science. Clearly, he is a man of God with a special love for both the intellectual teachings and the spiritual ethics of Sufism, although he is not known to belong to any Sufi order (*tariqah*). His deep intellectual attachment to Sufism can be seen in his popular writings on the concepts and practices of Sufism.¹³ However, the extent of the influence of Sufi doctrine on Gülen's religious philosophy of science is beyond the scope of this paper. But in his exposition of the principles of Sufism, he seems to be convinced that the spiritual dimension of Islam is the real path to the knowledge of the inner meaning of things. Moreover, in his view, it is this inner knowledge of things that deepens and enriches a person's understanding of religious and intellectual truths. In light of such views, we may say that Gülen's perspective on the relationship between religion and science has been primarily shaped by his deep attachment to Sufi intellectualism.

The Nature of Religious and Scientific Truths

Let us first consider Gülen's treatment of the issue of the nature of religious and scientific truths, and the possibility of either a confrontation or a harmonious conceptual relationship between these two types of truth. Before discussing his views on the precise relationship desired between religious and scientific truths, it would be most appropriate to first clarify Gülen's understanding of the word "truth." According to him, "Truth is not something the human mind produces. Truth exists independently of man and man's task is to seek it."¹⁴ Gülen therefore believes that objective truths can be widely asserted by men of religion and philosophy. These truths are unaffected by the limitations of individual human subjective experience, and are only waiting to be discovered by humans.

Gülen divides truths into two types: absolute truths, and relative truths. By absolute truths he means truths that are "unchanging" and that "lie in the realm above the visible world," since these concern immutable and permanent realities.¹⁵ Absolute truths concern the essence of existence, the very domain that science is incapable of knowing by virtue of its methodological limitations. "The modern scientific approach," he asserts "is very far from finding out the truth behind existence and explaining it."¹⁶ For Gülen, truths in the Qur'an and prophetic *hadiths* are absolute in nature.¹⁷ In contrast, relative truths are changing, transient and tentative in nature. He contends scientific truths belong to the category of relative truths. In using the term "scientific truths,"

he is referring to facts or truths discovered or established by science. But then, as he puts it, “sciences are in constant advance and what is regarded today as true may appear tomorrow as wrong or, by contrast, what we see today as wrong, may be proved to be true in the future.”¹⁸ In explaining why scientific truths are necessarily relative, he points to science’s dependence on empirical data and rational interpretations of that data for knowledge of things it seeks to study. The inherent limitations in scientific methodology in the human quest for truths in Gülen’s Islamic critique of the modern scientific approach to the study of nature will be discussed within.

In maintaining that truths in the Qur’ān and prophetic *hadiths* are absolute, and that scientific truths are relative, Gülen provides the philosophical premise for articulating the appropriate kinds of relationships that should exist between religious and scientific truths. One commonly asked question is whether religious and scientific truths are necessarily contradictory, reconcilable, or better still, in harmony. In principle, Gülen’s view is that the two types of truths could never be in contradiction, but we need to clarify what he means by “no contradiction in principle.” According to him, “the universe, the subject-matter of the sciences, is the realm where God’s names are manifested and therefore has some sort of sanctity. Everything in the universe is a letter from God Almighty inviting us to study it to have knowledge of Him. Thus, the universe is the collection of those letters or, as Muslim sages call it, the Divine Book of Creation issuing primarily from the Divine Attributes of Will and Power. The Qur’ān, issuing from the Divine Will of Speech is the counterpart of the universe in verbal form. Just as there can be no conflict between a palace and the paper written to describe it, there can also be no conflict between the universe and the Qur’ān, which are two expressions of the same truth.”¹⁹ The above quotation clearly demonstrates Gülen’s firm conviction that scientific and religious truths cannot be in conflict, since their ultimate source is one and the same, namely, the divine source. Most Muslims readily share this conviction.

When a situation arises where a “scientific truth” seems to be in conflict with established religious truths, then failing all attempts at reconciliation, Gülen wants Muslims to reject the former in favor of the latter. In taking this stand, he is consistent with his ‘philosophical’ belief concerning the ultimate worth of scientific truths. Accordingly, scientific truths are essentially mere theories, for if it were a “truth,” there would be no contradiction between science and religion. It is the absolute truths of revealed religion that have the final say in deciding the fate of scientific truths. A scientific truth that is widely accepted by the scientific community but found to contradict religious truths will sooner or later be disproved by science itself. Gülen is insistent that relative truths must be subservient to absolute truths. That subservient role needs

emphasis since the very status of relative truths as truths finds epistemological legitimacy in light of its affirmation by absolute truths.

It is in light of this relationship between absolute and relative truths that Gülen insists on the role of scientific truths to serve the cause of religious truths. If philosophy was regarded as the handmaiden of theology among classical theologians, then in today's world, Gülen is of the view that such a role ought to be played by science. "Science and the facts it presents can and should be used to expound Islamic facts," he says.²⁰ He goes on to say that "our primary aim when introducing science and scientific facts must be to win the pleasure of God."²¹ He seems to be very critical of the various tendencies toward scientism among contemporary Muslims that seeks "to justify religion or reinforce its credibility by means of modern scientific facts." In response to this regard for science as superior to religion, Gülen has come up with the following strong assertion: "Our position must be clear, and it is this: the Qur'ān and *hadith* are true and absolute. Science and scientific facts are true as long as they are in agreement with the Qur'ān and *hadith*, and are false inasmuch as they differ or lead away from the truth of the Qur'ān and *hadith*. Even the definitely established scientific facts cannot be pillars to uphold the truths of *imān* (faith)."²²

Although scientism is to be found throughout the Muslim world,²³ it is quite obvious that Gülen's criticism of it is primarily directed at his own Turkish society. He wants to address the views of three important groups in that society that he considers erroneous. The first group consists of atheists and secularists who have rejected religion in the name of science. The second group consists of Muslims who believe in both religion and science but tend to subordinate the former to the latter. The third group consists of Muslims who are critical of giving a place to science in support of religious truths. Gülen has rejected all the three views as unacceptable from Islamic viewpoints. Referring to the first group, Gülen describes the attitudes of materialists and anti-religious people toward religion and science in the following terms: they are eager to "exploit science as a means of defying religion and use its prestige to spread their thinking." As a result of their exploitation of science "they have distorted and corrupted the minds of a great number of people."²⁴

In the face of such exploitation, Gülen calls on Muslims to study science and with the same scientific facts confront the group with arguments that support religion. He wants to impress on believers that if certain people interpret scientific findings in such a way as to negate religion then they can use the same scientific materials to show that science and technology are not contradictory to the tenets of Islam. Indeed, science guided by religion can lead people to the right path. Critical of the third group, which shuns such an involvement, Gülen feels there is nothing wrong with it from the point of view

of religion. “On the contrary” he says, “I hold that believers should be well versed in such facts in order to fight back against materialism and atheism.”²⁵ He tries to make it clear that to employ science in the service of religion is different than justifying religion by means of science, as is done by the second group, discussed above. Muslims will not fall into the error of scientism as long as they keep in mind that the truths of religion have proof independent of science and as long as they recognize and maintain the superiority of religious to scientific truths.

The Modern Scientific Approach to Nature

Our second issue pertains to Gülen’s views on religion and science concerning the modern scientific approach to nature. Gülen does not hesitate to accept the validity and legitimacy of the modern scientific method in the study of nature as long as its limitations are duly recognized. For him, empirical methods are the best and the most appropriately employed when dealing with the world perceived by the physical senses. Similarly, rational methods based on inductive, deductive or analytical reasoning, which together with empirical methods, constitute the core of the modern scientific methodology, are valid and effective within their domain of competence. Gülen contends, however, that the modern scientific methodology is simply incapable of penetrating and knowing “the essence of existence.”²⁶ There are simply domains of reality that are beyond its competence. This defect on the part of science to reveal the truth concerning the essence of existence is of utmost importance in Gülen’s mind, especially with regard to the limitations of empirical methods.

The human mind yearns to know with certainty the unchanging truth underlying nature, but in relying on empirical methods, the mind is powerless to know that unchanging truth. For example, the mind is keen to discover the truth about the origins of the existence of things, and in particular, the origin of the universe. But as Gülen sees it, whenever science deals with the issue of origin, “what it does is only to explain how things take place.”²⁷ Science never really answers the question of origin to the satisfaction of the mind. It ultimately “thinks it has got out of the difficulty of explaining the origin of existence by attributing it to ‘nature’ or ‘self-origination’ or such notions or concepts as ‘necessity’ and ‘chance.’”

In Gülen’s view, it is important that science remains true to its nature as a discipline by being honest enough to acknowledge its methodological limitations in the pursuit of knowing the whole of reality and that it concede that the domain of eternal and absolute truths is beyond its epistemological concern and competence. Such a philosophical acknowledgment is certainly important for the sake of preserving legitimacy and harmony in the relationship between religion and science. Moreover, it is in being faithful to its legitimate

role and function as an academic discipline and by not usurping the function of religion that science will be conscious of its real value.²⁸ Clearly, Gülen the theologian has a theological interest in delineating the limitations of the scientific approach to nature in both theory and practice. In light of all that has been said, we can say that Gülen wants to reserve the domain of inquiry that is beyond the scientific for religion. It is the central concern of divine revelations, particularly as manifested in the Qurʾān, to inform and clarify human truths that are beyond the capability of the human mind to discover by itself.

The Qurʾānic Approach to Science

The third and last issue of science and religion to be treated in this article is the Qurʾān's approach to science. In Gülen's view, Muslims would be committing a great mistake if they considered scientific study as a kind of human activity that should be undertaken separately and independently of the Qurʾān. Science needs to be investigated in the light of the epistemological and ethical principles and values enumerated in the Qurʾān. What he means is that the Qurʾān should provide the philosophical framework for the study of nature. He is quite concerned about misunderstandings among Muslims as to the precise role and function of the Qurʾān as a book of knowledge, particularly in relation to science. For that reason, he goes to great lengths to address the question "Does the Qurʾān contain everything?" a question he himself has posed.²⁹ He answers in the affirmative, since the Qurʾān itself has said so. The verse he has quoted is as follows: "With Him are the keys of the unseen. None but He knows them. And He knows what is in the land and the sea. Not a leaf falls but with His knowledge, not a grain amid the darkness of the earth, nothing of wet or dry but (it is noted) in a manifest Book."³⁰

In trying to understand what the Qurʾān means when it says "everything is found in it," Gülen refers to the views of Ibn Masʿūd and Ibn ʿAbbās, two of the most well known early interpreters of the Qurʾān, and the views of Jalāl al-Dīn al-Şuyūṭī, a fifteenth century Egyptian religious scholar.³¹ All three concur that the Qurʾān contains everything within it, with al-Şuyūṭī further explaining that "all sciences or branches of knowledge are to be found in the Qurʾān." As emphasized by Ibn Masʿūd, the problem with each of we human individuals is that "we may not be able to see everything in the Qurʾān," since we can only see what we know. Moreover, things stated in the Qurʾān exist on different levels of reality, thus requiring from us the corresponding levels of consciousness to be able to see them. In other words, for human readers of the divine book, the Qurʾān may be said to "contain everything in principle or in potentiality." As Gülen puts it, the Qurʾān contains all things "in the form of seeds or nuclei or summaries or as principles or signs, and they are found either explicitly or implicitly, or allusively, or vaguely, or suggestively. One or other of these

forms is preferred according to occasion of revelation, in a way fitting for the purposes of the Qurʾān and in connection with the requirements of the context.³² An actualization of that potentiality can be realized through knowledge. The more knowledge one has, the more things one is able to see in the Qurʾān. One function of science then would be to help the reader see more things in the Qurʾān.

The Qurʾān in principle does contain everything. It is relevant to Muslims as a guide in their study and application of science because, as emphasized by al-Şuyūṭī, it contains the principles of all sciences or branches of knowledge, including the sciences of nature. In talking about the role of the Qurʾān in relation to science, Gülen's emphasis is indeed on its guiding capacity to deliver "true science" to humanity. One of the main objectives of the Qurʾān is to inspire love of truth, and "it is the love of truth which gives the true direction to scientific studies."³³ By "the love of truth," Gülen means "approaching existence without any consideration of material advantage and worldly gain." He does not think, save in the case of a small group of scientists, that science today is being pursued as inspired by and for the sake of the love of truth. On the contrary, he sees much of contemporary science as having been developed by "those who are infected with worldly passions, material aspirations and ideological prejudices and fanaticism." In consequence, the legitimate course of scientific studies has been diverted and science has been used as a deadly weapon against the highest potential of humanity.³⁴

Gülen calls on intellectuals, educational institutions, and the mass media to undertake the vital task of helping "to deliver modern scientific studies from the lethally polluted atmosphere of materialistic aspirations and ideological fanaticism, and to direct scientists toward the higher human values." In his view, the Qurʾān insists that men of learning direct their scientific studies toward the higher human values. The pursuit of science, indeed of all branches of human knowledge, should be done within the framework of realizing the Qurʾān's four broad objectives: 1) to prove the existence and unity of God; 2) to prove prophethood; 3) to prove bodily resurrection; and 4) to concentrate on the worship of God and justice.³⁵ For this reason, Gülen's discussion of religion and science in *Understanding and Belief* is preceded by a lengthy treatment of those four objectives of the Qurʾān. His treatment there may be described as conforming to the traditional perspective of a Sunni and Sufi oriented theology.

In Gülen's view, the four fundamental objectives of the Qurʾān will have the effect of producing a science that is at once spiritually enlightened and more promising in serving the real interests of humanity. He calls such a science "true science."³⁶ Gülen believes Islam in the past succeeded in creating such a science. In his words, "the concept of science to which Islam gave rise

was embedded in aspirations for eternity, the ideal of being useful to mankind and responsible in handling things for the sake of earning the pleasure of God Almighty.”³⁷ The resurrection of such a science can help create a world that is richer in its intellectual life, with more wholesome technology and more promising sciences.

Gülen makes reference to the traditional Muslim consciousness that sees harmony between religion and science and unity of spiritual and scientific knowledge. That consciousness has been essentially shaped by the Qurʾān itself, which refuses to separate scientific fact from spiritual wisdom. He writes: “The concept of science as based on divine revelation, which gave impetus to scientific studies in the Muslim world, was represented almost perfectly by the illustrious figures of the time who, intoxicated with the thought of eternity, studied existence tirelessly with the aim of attaining to eternity.”³⁸ The refusal of the Qurʾān to separate scientific fact from spiritual wisdom has inspired Muslim scientists to do the same. Gülen has no problem accepting the idea that the Qurʾān alludes to many scientific facts and developments. But he emphasizes that it does not refer to them “in the manner of science and materialistic or naturalistic philosophy.”³⁹ For example, the Qurʾān does not speak of cosmological and scientific matters in an elaborate manner. When it does make reference to those “facts,” it is with the view of providing “the eternal interpretation of the book of the universe” and a spiritual interpretation of sciences dealing with natural phenomena. God has provided those “facts” because He wants to use them to illustrate spiritual truths like revealing His names and attributes and teaching spiritual lessons to humankind. Accordingly, Gülen urges Muslims to always remember that “while the Qurʾān contains allusions to many scientific truths it is not to be read as a book of science or scientific explanations.”⁴⁰

Because the Qurʾān refers to “scientific facts,” one needs to be careful when reading scientific meaning in its relevant verses. Gülen in fact emphasizes the traditional Islamic position when he says that in interpreting each verse of the Qurʾān, one should always bear in mind its multiple meanings. The verse in question cannot be exhausted in meaning by one interpretation alone. The idea of the Qurʾān having both literal and inner meanings is popular among many interpreters of the holy book. Generally speaking, Sufis have been more inclined than any other intellectual school in Islam toward expositions of the Qurʾān’s inner meanings. Not surprisingly then, as a scholar who has been greatly influenced by Sufi thought, Gülen seems well-versed in dealing with the deeper levels of meaning in this sacred book and believes they are of immense importance to man’s search for spiritual truths. Also, he has sought to relate the inner meanings of the Qurʾān to the inner reality underlying natural phenomena, which is beyond the reach of the modern scientific method. What

he emphasizes then is that the role of revealed religion is to help man discover higher truths about the natural world. What lies beyond scientific truths is not doubt and hopelessness, which lead to the escape routes of materialism, atheism or agnosticism, but rather a domain of spiritual truths that lead to a greater sense of certainty in man's consciousness.

In summarizing Gülen's views, we can say that the primary reason for the Qur'an's interest in the science of nature and other sciences is that God wants to invite man to know Him. If the Qur'an repeatedly calls upon humans to study creation, it is because God wants them to study it for the sake of knowing the Creator. Gülen strongly believes this whole approach of the Qur'an to science needs to be properly understood, because in this spiritual approach lies the real basis for a harmonious and fruitful relationship between religion and science.

Conclusion: The Significance of Gülen's Views

Gülen's views are significant for the contemporary world in a number of respects. First, in insisting that science not be separated from religion, Gülen takes a firm intellectual position against ideological secularism understood in its strictest sense. The idea of the secularization of knowledge pursued to its logical conclusion would be incompatible with Islamic conceptions and theories of knowledge that are rooted in the teachings of the Qur'an. In particular, that idea would go against Gülen's belief that "science should not be studied independently of the Qur'an." The ongoing intellectual discourse on "Islamization of knowledge" in many parts of the Muslim world, Turkey included, can only be fully appreciated if one understands Islam's insistence on harmonious conceptual relations between the science of God and the sciences of the natural and human worlds. The Islamization of knowledge may be seen as a serious attempt by contemporary Muslims to restore the philosophical conceptual link between theology and the sciences that has been severed and the traditional unity of knowledge that was shattered by the modern secularization of knowledge.

Second, Gülen's views on the relations between religion and science are not just his personal views. In all, he represents one of the major interpretations of the Islamic position on the subject, not just in secular Turkey, but in the whole Muslim world. In many of his views he indeed speaks for the larger traditional segment of contemporary Muslim societies worldwide on the meaning of the relation of religion and science and what that understanding signifies in terms of preserving Muslim identity. Third, his position on the relationship between religion and science has a universal significance beyond the Muslim world. His views on the subject are of immediate relevance to similar kinds of discussions going on today within other religions, particularly Christianity.

In recent years, there have been numerous Muslim-Christian dialogues throughout the world on a wide range of issues. Unfortunately, only a few

of these dialogues have been about the important issue of the relationship of religion and science. There is definitely a need to feature this particular issue more prominently in contemporary Muslim-Christian dialogue. Gülen himself has been engaged in dialogue with leaders of Christian communities, including Pope John Paul II and leaders of the Orthodox Church in Turkey.⁴¹ In this regard, it may be of interest to note Gülen's views on what has been regarded by many in the West itself as the conflict between Christianity and science. He says: "Although usually presented as a conflict between Christianity and science, the conflicts in the Renaissance period were mainly between scientists and the Church. Neither Copernicus nor Galileo nor Bacon was anti-religious. It may even be said that it was their religious commitment which ignited in men's souls the love and thought of finding truth."⁴² In Gülen's teachings lie the prospect of a sincere and serious dialogue not only between Islam and Christianity, but also between men of religion and men of science in different societies.

Endnotes

1. The best known and most prolific of them is undoubtedly Seyyed Hossein Nasr, an Iranian-American scholar who currently teaches Islamic Studies at George Washington University, Washington, D.C. The bulk of his influential writings on Islamic thought and civilization deal with issues of religion and science. These include *An Introduction to Islamic Cosmological Doctrines* (Cambridge: Harvard University Press, 1964); *Science and Civilization in Islam* (Cambridge: Harvard University Press, 1968); *The Encounter of Man and Nature: The Spiritual Crisis of Modern Man* (London: Allen and Unwin, 1968); and *Religion and the Order of Nature: The 1994 Cadbury Lectures at the University of Birmingham* (New York-Oxford: Oxford University Press, 1996).

2. This phenomenon is quite the opposite of what we find in the West, where theologians dominate the discourse of religion and science.

3. Of all Muslim countries, Malaysia is perhaps slightly ahead in having academic centers, professional organizations, and academic journals active in popularizing discourses on Islamic perspectives on religion and science. Worthy of mention are the University of Malaya's Department of Science and Technology Studies with its bi-lingual journal *Strategi*, the more internationally known *ISTAC* ("Institute of Islamic Thought and Civilization"), and the *Islamic Academy of Science of Malaysia (ASASI)*, an academic organization of Muslim scientists and technologists, which also publishes a journal.

The latest addition at the international level to the growing list of Muslim journals on religion and science within Islam is *Islam and Science*, published by the *Center for Islam and Science* based in Canada under the leadership of Muzaffar Iqbal, a leading contemporary Muslim scholar in the field of Islam and science.

4. For a brief biography of Gülen, see Ali Ünal and Alphonse Williams (compilers), *Fethullah Gülen, Advocate of Dialogue* (Fairfax: The Fountain, 2000), 1–41. This work is hereafter cited as *Advocate of Dialogue*. On more critical treatments of various aspects of Gülen's life and thought, his worldwide religious community and the significance of his so-called "liberal Turkish Islam," see John L. Esposito and M. Hakan Yavuz, eds., *Turkish Islam and the Secular State: the Gülen Movement* (New York: Oxford University Press, 2003); and Bulent Aras and Omer Caha, "Fethullah Gülen and His Liberal 'Turkish Islam'

Movement,” *Middle East Review of International Affairs Journal (MERIA)*, vol. 4, no. 4 (December 2000).

5. As a matter of fact, at various points in his life, Gülen has been charged with carrying out religious activities detrimental to the Turkish republic. A personality widely known for his preaching on tolerance and progress, Gülen denied charges that he claimed were trumped up by extremist secularist groups suspicious of his religious movement and by others just envious of his popularity. He has been in exile in the United States for the last five years. On Gülen’s recent references to charges against him, see his interview with Nuriye Akman, “High-ranking People Used the Cassette Incident as a Tool for Blackmail,” in <http://en.fGülen.com/a.page/press/interview/interview.to.nuriye.akman.of.zaman.daily/1733.html>.

6. This influential Sufi master who had a *divan* of his own was also known later on as Efe Hazretleri or Alvarli Efe. See *Advocate of Dialogue*, 10.

7. On the biography of this philosopher-theologian, see “The Author of Risale-i Nur: Bediuzzaman Said Nursi,” <http://www.risale-inur.com.tr/rnk/eng/tarihce/bsn.htm>.

8. On Gülen’s familiarity with Western philosophical and literary works, see *Advocate of Dialogue*, 28–30. Among modern Western philosophers and scientists who had attracted his attention are Descartes, Immanuel Kant, Sir James Jeans, and Sir Arthur S. Eddington. In literature he has read widely the works of Shakespeare, Victor Hugo, and Tolstoy.

9. See M. Fethullah Gülen, *Understanding and Belief: The Essentials of Islamic Faith* (Konak-IZMIR: Kaynak Publishing, 1997).

10. For Gülen’s reference to the Sufis’ spiritual vision of the universe, see his *Understanding and Belief*, 318–319.

11. M. Fethullah Gülen, *Ibid.* Gülen has referred to Popper’s view that the theories of Newton and Einstein could not be both true at the same time. Apparently the reference was made with the view of emphasizing his contention that science can only seek approximations to the truth and not arrive at the real truth.

12. Guenon was a leading twentieth century exponent of perennial philosophy and a critic of modern science. Gülen has cited Guenon’s assertion on the inability of science to know the truth concerning the essence of existence, because that would support his main argument why science needs religion. See *Ibid.*, 308.

13. See M. Fethullah Gülen, *Key Concepts in the Practice of Sufism* (Fairfax: The Fountain, 1999).

14. M. F. Gülen, *Understanding and Beliefs*, 309.

15. *Ibid.*, 308.

16. *Ibid.*, 307.

17. *Ibid.*, 335.

18. *Ibid.*, 306.

19. *Ibid.*, 318–319.

20. *Ibid.*, 334.

21. *Ibid.*, 334–335.

22. *Ibid.*, 335.

23. The most popular figure in the contemporary Muslim world to be associated with scientism was the late French-born medical scientist Maurice Bucaille, who was said to have converted to Islam. His works focusing on the issue of scientific predictions in the Qur’ān have been translated into numerous Muslim languages. His most widely read work is without doubt *The Bible, The Qur’ān and Science* (Paris: Seghers, 1978). For various critiques of Bucaille’s “scientism,” see Leif Stenberg, *The Islamization of Science: Four Muslim Positions Developing an Islamic Modernity*, Lund Studies in History of Religions, vol. 6, 1996.

24. M. F. Gülen, *Understanding and Belief*, 333.
 25. *Ibid.*, 334.
 26. *Ibid.*, 308. For more detailed discussions of Islamic critiques of modern scientific methodology, see Osman Bakar, *The History and Philosophy of Science* (Cambridge: Islamic Texts Society, 1999), chapter 2. See also Seyyed Hossein Nasr, "Reflections on Methodology in the Islamic Sciences", *Hamdard Islamicus*, 3:3 (1980), 3–13.
 27. M. F. Gülen, *Understanding and Belief*, 310.
 28. *Ibid.*, 308.
 29. Gülen has addressed this question in *Understanding and Belief*, 301–307.
- On his treatment of the general characteristics of the Qur'ān, see 288–300.
30. *The Qur'ān*, chapter 6, verse 59.
 31. *Ibid.*, 302.
 32. *Ibid.*, 303–304.
 33. *Ibid.*, 313.
 34. *Ibid.*, 313.
 35. *Ibid.*, 303.
 36. For his treatment of "true science," see *ibid.*, 312–315.
 37. *Ibid.*, 313.
 38. *Ibid.*, 312.
 39. *Ibid.*, 323.
 40. *Ibid.*, 333.
 41. On Gülen's interfaith dialogues with various religious leaders of the world, see Ali Ünal and Alphonse Williams, compilers, *Advocate of Dialogue*.
 42. M. F. Gülen, *Understanding and Belief*, 312.