

ISLAM AND THE PROBLEM OF MODERN SCIENCE
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Nearly two centuries ago certain regions of the Islamic world (such as Egypt and Muslim India, soon followed by Iran) came face to face with the theories as well as applications of modern Western science, while in Ottoman Turkey the introduction of Western science and certain forms of technology goes back to an even earlier period. Ever since that encounter Western science and technology have penetrated to an ever greater degree into the various parts of the Islamic world and also the various facets of the life and thought of the Islamic peoples, whether they be Moroccan or Malay, from Xinjiang or Mali, and all the Muslim lands in between. The extent of the penetration of Western science and technology may differ from one area to another, but there is no doubt that Western science and its applications in the form of modern technology have affected in one way or another nearly the whole of the Islamic world and pose a challenge of monumental dimensions for the Islamic worldview and what remains of the culture and civilization of Islam, not to speak of the challenge of this science and its *Weltanschauung* to the Islamic religion itself. The problem and challenges posed by modern science are not the same as those posed by modern technology, although they have become interrelated since the middle of the 13th/19th century. In this essay, therefore, we shall confine our attention to the problem of science, touching upon technology only incidentally, leaving the full discussion of technology to a separate treatment.

Since the introduction of Western science into the heartland of the Islamic world in the 13th/19th century, the attitude of most of the modernists and

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other sectors of the educated Muslim intelligentsia which came to know something of this science was more or less what was stated succinctly by such figures as Jamāl al-Dīn al-Afghānī. According to this view modern science in the West was nothing other than the further expansion and growth of the science which Muslims had developed from the 2nd/8th to the 8th/14th centuries and which was transmitted to a large extent through Spain and Sicily to Europe. If this science had caused havoc from a religious and ethical point of view in the West, it was the fault of Christianity and not this science. Once the Muslims took this science back into their own fold, they would be able to expand and develop it farther without any of the negative effects which the spread of a secular science and the Industrial Revolution have had upon the West socially, morally and spiritually.

This view became held so widely that soon apologetics for Islam sought to defend the grandeur of Islam itself on the basis of its being “scientific” and quotations from European writers such as Briffault and Sarton have continued to appear in a certain type of Islamic apologetic literature to this day. The espousal of the writings of M. Bucaille in many Muslim circles in recent years is only a late chapter in the history of this type of thinking which either knowingly or unknowingly bases itself upon a scientism and positivism whose philosophical roots are of necessity highly anti-religious, whether the religion in question be Islam or Christianity.

This way of thinking about science among a certain type of Muslim thinker going back to al-Afghānī and those like him has been characterized by a complete and uncritical espousal of modern science without an in depth study of the philosophy and methodologies of this science. This movement helped introduce modern science into the Islamic world but did little to enable Muslims to master with any profundity the historical and social origins, philosophical assumptions, and intellectual background of modern science, or to develop a critical attitude toward this science on the basis of the Islamic scientific tradition which continued to be seen even by Muslims themselves mostly through the eyes of such positivist Western historians of science as Sarton.¹ In fact as a result of the domination of this attitude and also a certain amount of laxity on behalf of Muslim scholars, during this whole period extending from the introduction of Western science into the Islamic world to our own generation, Muslim scholars have made few contributions to the history of Islamic science which has not been simply based upon the work of Western historians of science and which do not follow their usually positivistic philosophy and

1. Although a great scholar with remarkable knowledge of the history of Islamic science, George Sarton was a thorough going positivist when it came to the evaluation of the meaning of Islamic science and had little sympathy for what such Islamic scientists as Ibn Sinā or Quṭb al-Dīn Shīrāzī considered to be the meaning of science.

outlook.²

As for the traditional Muslim scholars, during this period of the introduction of Western science into the Islamic world, they remained by and large aloof and distant from this science and refused to study it. When they did criticize it, the criticism appealed to the tenet of the faith but was not supported by intellectual arguments. The traditional ‘ulamā’ did not carry out the kind of intellectual debate in which their ancestors had participated in Basra, Baghdad and other centers of learning a thousand years before them and which allowed Islamic science to develop not simply by an uncritical consumption of the Graeco-Hellenistic, Persian and Indian sciences, but by a critical examination of these sciences with criteria drawn from the tenets of the Islamic revelation and the intellectual tradition which grew in light of that revelation.

The traditional class of Muslim scholars, therefore, preserved the faith against many of the onslaughts of Western thought, but was not able to provide a critical examination of modern science on the basis of Islamic criteria. There were of course a few exceptions³ but by and large the abdication of the ‘ulamā’ from this important task allowed the ever greater spread of Western science under the banner of a “religiously” colored positivism into the Islamic world without an effective Islamic response which would allow the Islamic world to digest this science and make it part of its own organism through assimilation as well as rejection rather than through the wholesale uncritical swallowing of Western science and technology. This shortcoming could not in turn but result in the malaise that has become ever more noticeable during the past generation as the introduction of Western science and technology into the Islamic world has become accelerated.

After the Second World War, as the number of Muslims who went to the West or to Muslim universities to study modern science increased and as the crisis brought about by modern science and technology in the West itself became manifest to an ever greater degree, a new awareness began to develop

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2. See the introduction to S.H. Nasr, *Science and Civilization in Islam* (Cambridge, Mass.: Harvard University Press, 1964), and reprinted several times, the last edition being London: Islamic Texts Society, 2003).
 3. In Iran such figures as Mullā ‘Alī Zunūzī during the 13th/19th century and Sayyid Muḥammad Kāzim ‘Aṣṣār, ‘Allāmah Ṭabāṭabā’ī and Murtaḍā Muṭahharī in recent decades dealt with certain implications of modern science from the Islamic point of view and provided an in-depth criticism of some features of the modern scientific outlook. There were also a few figures like them in India, Egypt and elsewhere. But even in such cases the knowledge of Western science and its philosophy remained fairly shallow because of the lack of access to the real sources of Western scientific thought. The case of ‘Aṣṣār was truly exceptional in that he studied mathematics in Paris before becoming one of the leading ‘ulamā’.

among a number of Muslim thinkers concerning the nature of modern science and its challenges to Islam. While the majority among the Muslim intelligentsia continued to follow one of the two positions outlined above, a group which was at once devoted to the Islamic worldview and had an in-depth knowledge of modern science began to become concerned with the secularizing effect of the spread of this science and the negative influence of its quantitative and un-spiritual nature upon Muslims, not to speak of the dislocations brought about by rapid industrialization and the blind employment of whatever Western technology had to offer in the name of progress.

This awareness has had several consequences for the Islamic world. On the practical level it has led to the attempt in several countries to revive indigenous and “alternative” technologies and even certain of the traditional sciences such as medicine and pharmacology. On the theoretical level, it has led to a greater interest to discover the philosophy of modern science and the limitations of its methodologies parallel with a re-discovery and re-formulation of the Islamic philosophy of science.⁴

This awareness has also led to greater scrutiny in the teaching of modern science and attempts to Islamicize science along with other branches of knowledge.⁵ Although there is a great deal of difference in the views of those who wish to Islamicize knowledge, the very presence of the debate and its widespread attraction demonstrate the degree of awareness that has been created within the Islamic world concerning the fact that there *is* a problem vis-à-vis modern science, the fact that this science needs to be critically appraised and scrutinized and that it cannot be innocently accepted from the Islamic point of view—as if it were simply the *‘ilm* which the Prophet extolled and commanded Muslims to seek ‘even if it be in China’!⁶ Of special interest is the fact that this

4. See Seyyed Hossein Nasr (ed.), *Philosophy, Literature, and Fine Arts* (Hodder and Stoughton, 1982). See also Seyyed Hossein Nasr in Conversation with Muzaffar Iqbal, *Islam, Science, Muslims, and Technology* (Al-Qalam Publishing, 2007).

5. In several of our works written in the 1960s, we alluded to the central task of Islamicizing the knowledge that Muslims had encountered in the modern world. This call was later taken up and discussed by Naquib al-Attas and during the last few years became central to the concern of the late Isma‘il al-Faruqi and a number of other Muslim scholars who, however, envisaged the process of the Islamization of knowledge in a manner very different from what we had in mind. That is why we do not usually refer to the term “Islamization of knowledge.”

6. Ziauddin Sardar in several of his works has brought out the significance of this issue in the contemporary Islamic world. See his *Arguments for Islamic Science* (Aligarh, 1985); “Islamic Science or Science in Islamic Polity,” *Pakistan Studies* 2 (1984) 3, 3-16; and *Islamic Futures: The Shape of Ideas to Come* (Mansell, 1985).

desire to confront the problem of modern science and to realize that there does exist a problem is seen not only among Muslim scholars but also among a number of Muslim scientists trained in the modern sciences.⁷

But what of the future? What must the Islamic world do in light of the ever greater challenges of modern science, which, far from being simply theoretical knowledge, is also wed to power and will therefore affect in a thousand and one ways the life of the Islamic world now and in the years to come? The situation today is in one sense similar to the one the early Islamic community faced vis-à-vis the Graeco-Alexandrian, Persian and Indian sciences. And there is much that the present generation of Muslims can learn from the manner in which their forefathers faced that challenge and how they were able to create a science which, while making use of the heritage of antiquity, was profoundly Islamic, a science which must also of necessity serve as the basis for the future development of science among Muslims if this science is to be veritably Islamic and not simply a foreign intrusion.

But the present situation also differs from the one faced during the 2nd/8th and 3rd/9th centuries by Muslim thinkers in two fundamental ways. The first is related to power. There were no armies nor ever-threatening technologies standing behind either the *Physics* of Aristotle, the *Zij-i shahriy'r* of the Persians or the *Sindhind* of the Indians. The sciences which the Muslims confronted offered a major intellectual challenge to Islam but not a military, political or economic one—in total contrast to modern science whose challenge is not only in its theoretical framework and intellectual perspective but also in its relation to power of both a military and economic nature, a power which threatens the integrity and wholeness of the Islamic world in numerous ways.

The second major difference is related to the ever changing nature of modern science. The sciences of antiquity which Islam confronted, absorbed and finally made its own were a body of knowledge which did not change during the very process of its criticism and assimilation. Euclidean geometry when studied by an al-Uqlīdūsī or an al-Bīrūnī was essentially the geometry of Euclid, and the Aristotelian physics criticized partly by Ibn Sīnā was essentially the physics of the Stagirite as commented upon and developed by his Alexandrian commentators and occasionally criticized by such Christian writers as John Philoponos. In contrast to this situation, the geometry developed in the 19th and 20th centuries are not those used even by the founders of modern science such as Galileo nor is the particle physics of today the same as what was taught even a generation ago. The Islamic world is, therefore, faced with a

7. See, for example, the works of S. Wagar Ahmad Husaini such as *Islamic Science and Public Policies: Lessons from History of Science* (Kuala Lumpur, 1986); and *Islamic Environmental Systems Engineering* (London, 1980), which deals with technology as well as science. See also the works of Osman Bakar and Muzaffar Iqbal.

problem more difficult than what was confronted by the early Muslim generations. The present generation must face a science that is at once ever-changing and tied to power while present day Muslims must draw from the teachings of the Islamic intellectual tradition from which they are for the most part much more removed than their ancestors.

In such a situation Muslims must obviously first of all master the modern sciences in depth including their philosophical suppositions and not just in their applied form. There must be scientists with an Islamic intellectual framework, a strong faith and intellectual as well as emotional attachment to the Islamic worldview, men and women who will know, as a collectivity all the branches of modern science, whether it be mathematics, astronomy and physics, or geology, chemistry, biology, botany, zoology, medicine, etc. as well as all the newly created fields which are related to these older disciplines. They must have not only derivative and secondary knowledge of these fields but also be able to reach the frontiers of these disciplines where alone can a new step in the direction of a science developed according to an Islamic paradigm be taken. Muslim thinkers must be able to speak with an authoritative voice in the modern sciences before being able to criticize these sciences and to transform them in accordance with the Islamic perspective.

There must also be Muslim thinkers who will be able to master in depth the philosophy and methodologies of modern science by going to the roots, at once historical, philosophical and sociological, of modern science. Such scholars must be veritable Occidentalists who know the Western intellectual tradition deeply⁸ and who are able to understand the nature of modern science to the same extent as do the Western critics of this science with whose works Muslims thinkers must also become well acquainted. Such scholars must also be deeply steeped in the Islamic intellectual tradition and know Western intellectual history as *Islamic* thinkers, not as second rate Western thinkers without their own distinct intellectual framework.

Those who wish to create a paradigm within which to develop a veritably Islamic science and not simply a secondhand imitation and continuation of Western science must know the various schools of the Islamic intellectual tradition well. They must know the epistemology which is rooted in the Noble Qurʾān and which has been developed in great amplitude and depth by many generations of Muslim thinkers and in numerous schools ranging from those of jurisprudence to those of philosophy and science. They must know the Islamic concept of nature described so majestically in the Qurʾān and the Islamic philosophy of science as elaborated by numerous masters of traditional

8. It is amazing how few Muslim scholars have been trained in these fields, how few know Latin and Greek, or Christian theology and philosophy or even Medieval, Renaissance, 17th century or for that matter, later European intellectual history.

Islamic thought.

It is no longer possible for the Islamic world to simply continue to follow the first two attitudes toward science described at the beginning of this essay. The dislocation caused by the spread of the teaching of a science of nature without reference to God is so extensive that one cannot in all honesty simply claim that there is no problem, whether by claiming modern science to be the *'ilm* which Islam encourages or by ignoring modern science as if it did not exist. The ecological crisis, the danger of nuclear war, the rapid spread of secularism in the wake of the spread of a "scientific" worldview pose such dangers that the course taken by the Islamic world toward modern science since al-Afghānī and others wrote about this subject from the 13th/19th century onward can no longer be followed any more than can the total neglect of the modern sciences by traditional Islamic scholars.

If the Islamic world is to survive while guarding its authenticity, it must master modern science, criticize it in the light of Islamic teachings, create a paradigm drawn from Islamic sources, and develop a new chapter in the history of Islamic science based upon the earlier Islamic scientific tradition whose history and philosophy must be fully resuscitated. No amount of obscurantism can remove the problem at hand. Modern science must be taught and known well for what it is without raising it to the status of an idol of the mind or forgetting its essentially agnostic and secularist nature. Yet, while it is being taught and studied and parallel with the attempt at mastering it, the Islamic world must use all the intellectual energy available to it to know this science in depth and in its relation to religion, philosophy and social forces, to criticize the premises and conclusions of this science in light of the teachings of Islam, and finally to create an Islamic science which ideally would integrate all that is positive in the modern sciences into the Islamic worldview. The result would be a science which, while incorporating all the factual discoveries of modern science, would relate these facts to higher principles and would remain aware of the ultimate cause of all things which is God, a science which would affirm rather than neglect Unity or *tawhīd* and the purposefulness of all creation, for, as the Qur'ān asserts, "Thou hast not created this in vain" (*Āl 'Imrān* 191).

The Islamization of science cannot but be the integration based upon criticism, assimilation and rejection of various elements of the existing sciences into the Islamic intellectual universe and therefore another framework than the existing modern scientific paradigm, a framework in which *tawhīd* reigns supreme and where every atom of the universe is seen to be created for a purpose and in accordance with the wisdom and plan of the Creator. The withering effect of the secularism of modern science can only be averted when this science is transmuted into a body of knowledge in an intellectual universe where knowledge is never divorced from the sacred, where every form

of knowing participates to some degree in the sacred character of knowledge whose supreme form is the knowledge of Allah *subḥānahu wa taʿālā* as summarized in the *shahādah*, *Lā ilāha illaʾllāh*.

It must not be forgotten that in this process of the Islamization of science and the criticism of the secularism inherent in modern science, the achievements of Muslims in the domain of modern science itself during the past century must not be forgotten or simply brushed aside despite the total subservience of most Muslim scientists during this period to Western science. In such countries as Egypt, Iran, Turkey, Pakistan and Muslim India modern science has been cultivated by several generations of Muslims. Some of the early pioneers sought to graft this newly discovered science from the West upon the body of traditional Islamic science, and in certain fields such as medicine and pharmacology there has been some success in such countries as India and Pakistan.

Moreover, a great deal of effort has been spent during this period to create a scientific vocabulary in Arabic and Persian as well as Turkish, Urdu and other languages of the Islamic peoples so as not to have to remain a slave of European languages in the field of the sciences. This effort is most precious and must be taken into account in the Islamization of science, for this latter process involves not only the Islamization of the content of the sciences but also the language in which they are expressed. The secularization of thought is always reflected in that of language and the use of Islamic languages for the expression of scientific ideas is an important element in absorbing these science into the Islamic intellectual universe. If a truly Islamic science is to be created, therefore, not only is there a need of mastering the modern sciences and their philosophy and in resuscitating Islamic sciences and the philosophy of nature and epistemologies upon which they depend, but also in reappraising and benefitting to the extent possible from works produced in various Islamic languages during this transitional period of scientific activity in the Islamic world, stretching from the beginning of Muslim participation in the study and practice of modern science to the present day.

The rejection of the totalitarian claim of modern science as the only science of nature and the desire to develop a veritable Islamic science should not mean a blind and fanatical opposition to what Muslim scientists have done during the past century. Rather, it means going beyond the simple emulation of Western science, which has been the case during this period, while making full use of the experience of the several generations of Muslim scientists stretching from the 13th/19th century to the present. It also means allowing open and full debate between these scientists and those who wish to create a veritable Islamic science. The revival of the Islamic intellectual tradition cannot itself take place except in an atmosphere where intellectual debate can

be carried out in the way that it took place between an al-Bīrūnī and an Ibn Sīnā.⁹ And in such a context, debate between proponents of modern science and those who wish to create an Islamic science cannot but take place and should in fact take place with the encouragement of governments and educational institutions whose policies and attitudes toward science, scientific research and science education will be the overriding factor in determining the manner in which the problem of science will be encountered and solved in the future.

The interest of governments in the Islamic world in science is, however, usually in technology rather than in science itself. It is therefore necessary to mention that although in one respect science and technology are closely related, in another respect they constitute independent problems and must not be treated together as if they were the same. Obviously from the social, economic and military points of view, the cultivation of various forms of Western technology and attempts at their adaptation in different Muslim countries is of central importance to governments. Moreover, the assimilation and use of technology is seen by them as being related to science and its development. Science is usually overshadowed by technology in discussions of national policy because of the immediacy of the problems connected with technology, in contrast to what is envisaged as the theoretical nature and distant effect of pure science. Electrical power may be an immediate problem for a particular government but electromagnetic theory seems often more the responsibility of a university physics department with which governments do not have to be concerned in their everyday decisions, including allocating budgets.

The questions of technology, its uses and misuses, the possibility or impossibility of its transfer to a particular ambience, the dangers of much of modern technology to both the natural and the human environment and the possibility of alternative technologies are all of momentous importance but cannot be dealt with here, especially as another paper in this conference will be dealing with technology. Here, however, it is important to deal with the relation between science and technology in light of the problem of science and the need of state support for the solution to the problems at hand.

It is essential for Muslims to understand the nature of modern technology in its relation to modern science. The two were not always as closely related as they are today. Western technology comes from a different historical background than modern science and many of the most famous Western inventors, even as late as Thomas Edison, were not even fully aware of the physics of their day. It was not until the middle of the 13th/19th century that modern

9. See the questions and answers exchanged between them in *al-As'ilah wal-ajwibah*, ed. S.H. Nasr and M. Mohaghegh (International Institute of Islamic Thought and Civilization, 1995). For complete English translation, see *Islam & Science* Vols. 1-6.

technology and science began to become inter-related in the West, first in the field of chemistry and then physics and biology. Still to this day, however, they have remained somewhat distinct and are not simply the same thing. It is possible to emulate and import Western technology in the short run and for the foreseeable future without paying much attention to modern science. And it is possible to cultivate modern science without interest in or expansion of technology throughout the whole of society.

In facing the problem of science within the Islamic world, it is essential to be aware of the nexus but also the distinction between science and technology. Attention to immediate technological problems will not solve the problem of science. In the same way that in the West a great deal of financial resources of each country is spent on “pure science” independent of its immediate practical “benefits”, the Islamic world needs to allot some of its rather considerable resources to the cultivation of the modern sciences in their pure and not applied form, to the mastery of the philosophy of science, to the revival of the Islamic scientific tradition and to intellectual endeavors to create a new chapter in the Islamic scientific tradition. In certain fields such as pharmacology and medicine where traditional Islamic sciences have already been revived in certain centers, it is necessary to expand and derive lessons from such successes, lessons which can be applied to other fields and also other areas of the Islamic world.

It must be remembered that the failure to solve the problem of modern science, independent of that of modern technology, cannot but result in the greatest cultural and religious crisis for the Islamic world, adding to the confusion and turmoil that already reigns in this and other intellectual domains. As more and more Muslims become educated in either Western oriented universities within the Islamic world or in the West, the philosophical and religious impact of a science based on the forgetfulness of God cannot but increase within Islamic society. A particular scientist may remain pious, but the effect of a secularized science so blatantly opposed to the Qur’ānic vision of the created order cannot but be felt by society at large. One cannot forget such basic problems which at first might appear to be more theoretical and less immediate on the pretext that society has more immediate needs. The experience of the last decades has shown how cultural and social dislocation in an Islamic country caused by the advent of modernism and/or externally determined events can rapidly affect in a negative manner decades of activity even in the adaptation and mastery of Western science and also technology.

If the necessary awareness is created in the Islamic world concerning the problem of science and as a result support is given by both governments and private institutions to not only the cultivation of modern science in its theoretical and pure form and at its frontiers but also to the task of criticizing and

transforming this science with the goal of creating a truly Islamic science, then there is no reason why Muslims cannot create a science in conformity with their own worldview and linked to the ethical principles of Islam.

Today modern science continues to claim its exclusive right to the knowledge of the natural world despite fissures in the walls of its theoretical structure and abominable consequences of its applications which threaten to end all human life on earth. If the claim of 'independence' by Muslims is to be more than a slogan, this independence must also include freedom from the monopolistic and totalitarian pretensions of modern science, without of course forgetting the fact that modern science is a particular science of nature, valid within the limitations imposed upon it by its very premises and methodologies. Muslims must first of all assert their own philosophy of nature¹⁰ as stated so beautifully and forcefully in nearly every page of the Qur'ān, and in light of this philosophy of nature provide the necessary criticism of modern science, never confusing the theoretical limitations of this science with its unethical applications or divorced from ethical considerations. Then Muslims must seek to create their own science by incorporating what is positive in modern science into a worldview where God reigns supreme, where one is aware of the purposefulness of His creation, where all causes are ultimately related to Him, where there is no realm of secularity independent of His laws and presence, where every phenomenon reflects the wisdom of the Creator and is a sign or *āyah* of the Bestower of all existence.

As already mentioned, the Islamic intellectual tradition possesses all the intellectual and philosophical tools necessary to carry out this task. The experiments being now carried out in the field of the Islamization of knowledge, the creation of science curricula for schools, reactions to modern science and even careful steps to create an Islamic science must all be encouraged and permitted to continue in an open atmosphere of debate and honest discussion. There are some who reduce the problem to only its ethical dimension and believe that if only modern science were to be studied and developed in a society where the *Shari'ah* is applied fully, there would be no problem at all. Others wish to apply the juridical methods of the *Shari'ah* to the study of science. Yet others speak of *tawhīd* in a rationalistic manner which would embrace the existing scientific view of the universe. And still others search within the traditional Qur'ānic commentaries and the whole Islamic scientific tradition, whose worldview is rooted in the Qur'ān, for an alternative paradigm

10. On the significance of the philosophy of nature in relation to the development of science see Seyyed Hossein Nasr, *Man and Nature* (ABC International Group, 1997); and Nasr, *Religion and the Order of Nature* (Oxford University Press, 1996). On the Islamic philosophy of nature see Nasr, *An Introduction to Islamic Cosmological Doctrines* (The State University of New York, 1993).

and intellectual tools with which to criticize the philosophical foundations of modern science. All of these groups as well as others must be allowed to debate and discuss the momentous issues at hand. This is a field where the saying of the Prophet “The difference between the scholars of my *ummah* is a mercy for the world” applies perfectly. The intellectual endeavors which are authentically Islamic and in conformity with the nature of the problem at hand cannot but finally win the day. There is need for lucidity, objectivity, perseverance and magnanimity in an intellectual *jihād* upon whose outcome depends the welfare of the whole of the Islamic world.

As the final religion in the history of present humanity, Islam is like a bastion created by God to defend the message of Unity (*al-tawḥīd*) to the end of time. It is also endowed by virtue of the same power inherent in it to create unity in the realm of knowledge and to integrate all forms of knowledge which are in conformity with the principle of Unity. If Muslims make use of the full possibilities of the Islamic intellectual tradition, there is no reason why they cannot integrate modern science into their own worldview despite the element of power and the strong secularizing spirit associated with this science. They have in fact no choice but to attempt to do so and in doing so to save not only Islam and its civilization but also the world of nature which like the true Muslim is surrendered to the Will of God.

To shun this responsibility is to court disaster for future Muslim generations, for one can neither ignore this science as if it did not exist nor cultivate it as if it were not based on the forgetfulness of God and His ever-present power and wisdom within His creation. This science is there and must therefore be known and mastered. But it must also be criticized and transformed in conformity with the mission of Islam which has come to the world to remind man that “*Verily we belong to God and to Him is our return*” (*al-Baqarah*: 46) and that “*He is the First and the Last, the Outward and the Inward*” (*al-Ḥadīd*: 3). Only a science aware of these realities has the right of entry into the citadel of Islam which is also the abode of peace (*dār al-salām*). A science blind to these truths cannot but be an element of contention and discord in that citadel. Let us hope that the thinkers of the Islamic world will be able to face this great challenge and be able to transform modern sciences from being a partial knowledge of aspects of nature parading as exclusive and exhaustive sciences of nature considered as a totally independent order of reality, into sciences which, while providing knowledge of the created order, will also remind man constantly that “*Wherever ye turn there is the Face of Allah*” (*al-Baqarah*: 115).