

INTEGRATING ISLAMIC AND MODERN KNOWLEDGE— PHILOSOPHICAL CONCEPTS AND THEIR PRACTICAL APPLICATIONS

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A. Concept of Knowledge in Islam

As the Islamic religion encompasses all aspects of human life here and in the hereafter, all types of knowledge pertaining to human life comes under the purview of religion. The fact that the same word, *'ilm* is used for knowledge for both acquired knowledge and revealed knowledge shows that there is an organic relationship between the two. This interconnection among all types of knowledge is provided by the concept of *tawhīd* that is, Islamic monotheism or the concept of unity that seamlessly binds all types of knowledge into a unified whole and connects it to the One who is the source of Knowledge. The word *'ilm* in the Qur'ān is used in a broad sense and includes a broad spectrum of knowledge, that is the knowledge of both the visible and the invisible worlds and God is the Knower of both (*'ālim al-ghayb wa al-shahādah*). Although *'ilm* signifies all types of knowledge, not all of them are of the same status. To acquire the knowledge of the Qur'ān is not of the same status as the knowledge of painting, for example, even though the acquisition of the latter may be useful. A branch of religious science that deals with the knowledge of God (*ma'rifatullāh*) is of a higher status than the knowledge of say weaving even though this is undoubtedly a useful skill. The acquisition of the former is loftier than the acquisition of the latter, because the more the importance of the object, the higher the status of its knowledge. It would be wrong to say that there is no difference between the status of specifically religious sciences (such as the Qur'ān and Hadīth) and that of the natural sciences even if the knowledge of the latter might be used for beneficial purposes.

Prophet Muhammad (p.b.u.h.) said, “Seeking knowledge is an obligation upon every Muslim.”¹ The knowledge that is obligatory for all of us is the knowledge of the obligatory acts and worship (*ibādah*). Certainly not all forms of knowledge are obligatory and hence not of the same spiritual status. It is not without reason that classical Muslim scholars who worked on the classification of knowledge recognised a hierarchy in the domain of knowledge showing the varying importance of different types of knowledge.

The Qur’ān contains numerous references to the study and contemplation of the universe, considered as worship (*ibādah*), such as:

اللَّهُ الَّذِي رَفَعَ السَّمَوَاتِ بِغَيْرِ عَمَدٍ تَرَوْنَهَا ثُمَّ أَسْتَوَىٰ عَلَى الْعَرْشِ وَسَخَّرَ
 الشَّمْسَ وَالْقَمَرَ كُلٌّ يَجْرِي لِأَجَلٍ مُّسَمًّى يُدَبِّرُ الْأُمْرَ يُفَصِّلُ الْآيَاتِ
 لَعَلَّكُمْ بِلِقَاءِ رَبِّكُمْ تُوقِنُونَ ﴿٢﴾

It is Allah who erected the heavens without pillars that you [can] see; then He established Himself above the Throne and made subject the sun and the moon, each running [its course] for a specified term. He arranges [each] matter; He details the signs that you may, of the meeting with your Lord, be certain. (Qur’ān 13:2)

The study of nature by itself will not lead to God no matter how deeply one delves into the world of matter. The heart of the observer must be responsive to the ‘wonders of God’ so that nature does not present itself as facts to be cast into neat mathematical formulas or just inspire awe and appreciation with no further elevation of the soul. Knowledge of the natural world reinforces evidence for the existence of the almighty Creator and strengthens the belief in meeting with Him (*bi liqā’ rabbihim yūqinūn*) for those who have opened their hearts to receive the eternal message contained in each speck of the universe. Doing more science will not make Muslims better morally or spiritually unless these values are actively sought and inculcated in their personal lives. Moral and spiritual training is an essential part of education and this training should be built into science education as well. Studying natural phenomena will lead to the knowledge of Allah (*ma’rifatullāh*) only if they are recognized as the signs of Allah (*āyātullāh*).

We live in a ‘modern’ world where disciplines such as natural sciences, social sciences and information and communication technology are highly valued and enthusiastically taught at all levels of our education systems. The fundamental question is how schools can equip the students with ‘modern knowledge’ while remaining faithful to their religious traditions. Is it possible for Muslim schools, colleges and universities to assert their religious heritage while acquiring modern knowledge? To absorb ‘modern’ knowledge within their Islamic worldviews is a great challenge facing the *ummah* today. In Islam there is no conflict between science and religion as science is part of religion in a broad sense of the term. But the modern, purely materialistic approach to scientific and technological advancement has taken away the spiritual meaning of life and the very purpose of our existence although it has granted human beings some physical comfort and control over nature. In Islam knowledge should be gained within a value system that integrates spiritual and material aspects of human being.

As modern education is based on rational autonomy, critical openness and subjectivism it generates in the learner confusion and doubt, produces proliferation of theories, strengthens misunderstandings and ignorance, *vis-à-vis* every aspect of our lives. This, combined with the obsession with *dunya* (this world), has led to the erosion of faith and understanding of religion. Modern education does not accept revelation as the source of truth, and therefore negates the very foundation of religion. That the real knowledge is that of *tawhīd* (God’s Unity), *risālah* (prophethood) and *ākhirah* (hereafter) is not taught in the modern curriculum.

B. Islamic Vs. Secular Concepts of Education

Education in the modern world has increasingly come to be “formulated in non-religious terms and primarily as the development of rational autonomy.” It encourages a critical approach to all areas of human experience and all “beliefs and practices are passed on as questionable and revisable.”² The rational approach denies any legitimate role to religious considerations. It does not accept the validity of any claim to knowledge that is of metaphysical, supernatural or religious nature. What I said some fifteen years ago still seems to be apt:

The utilitarian and humanistic education that we have in the West, and which has been adopted by Muslim countries for worldly progress, has insidiously robbed people of their religious sensibilities—people have been brainwashed into believing in the ‘goodness’ of secular ideology which so often poses as a ‘redeemer’ in an age full of confusion and restlessness. It has, in fact, taken away from its supporters the purpose and meaning of existence and replaced it by a loss direction and certainty. But, unless the purpose of human existence is kept in view, education will lead to a loss of balance and harmony and to eventual disruption of the human self and society.³

A proper understanding of the concepts of Islamic education rests ultimately upon a correct interpretation of the Qur’ān. Without this it is impossible to understand the subtlety with which modern educational philosophy presents itself. One foundational concept of modern education has been expressed by Meijer when she says:

Education should promote independent thought and judgement in the new generation, enabling future adults to determine their position, e.g. their own world view, consciously and responsibly...Education then is only the beginning of a life-long process of ‘self-formation’: constantly, reflexively and responsibly, redetermining one’s own position in a historically and culturally ever changing context.”⁴

This is starkly contrasted with the Islamic position where independent thought and judgement are allowed, and even encouraged, only in so far as they do not contradict the fundamental principles of religion enshrined in the Qur’ān and Hadith. With this caveat all kinds of creativity, innovation and experimentation are encouraged for the benefit of humanity. Islamic worldview does not emanate from philosophical speculations or changing paradigms or personal choices. It is based on a comprehensive objective view of reality—informed by the Qur’ān and Hadith—that determines our position in the universe and our relationship with God, human beings and nature, thereby forming our conception of reality. Modern education, as Meijer states, aims at ‘self-formation’ as one determines and redetermines one’s own position (or worldview) in a historically and culturally ever-changing context. One wonders where is the sense of permanence amidst change? Truly speaking, ‘self-formation’ cannot be realized without adhering to some fundamental principles whose immutability liberalists deny. Meijer rejects both “the affirmative educational aim of establishing certain deep-rooted religious convictions in new generation” and “affirmative educational aim of bringing the new generation to enlightenment in the sense of renouncing all religious convictions.”⁵ This is a clear indication of a loss of direction and focus in life. In contrast to this, Islamic

education seeks to promote certainty (*yaqīn*) in God and His message revealed through the Prophet. If religious convictions are not generated, renouncing religious convictions—some or all—cannot be prevented. Not to inculcate faith in children is in clear contradiction to the aims and objectives of Islamic education as defined in the First World Conference on Muslim Education and reiterated by Muslim scholars ever since. Well known Muslim theologians and jurists themselves have always debated educational matters, being fully aware that their understandings were susceptible to change and quite often being able to see the truth in the claims of their opponents, but their hermeneutics always worked within the higher hermeneutics called *usul al-tafsīr* (principles of Qur’ānic exegesis) that has provided the interpreters with the tools to derive meanings from the Qur’ānic text, who have accomplished the task with deep reverence and consciousness of the One who has revealed the text.

Secular humanism as a worldview shapes school’s value systems and the philosophical framework from which all the disciplines are taught. And this philosophy finds expression in a wide variety of narrower perspectives on knowledge and its acquisition in all modern institutions of learning. As a result of this dialogue between humanities and sciences do not take place in the school curriculum. This lack of interconnection or artificial compartmentalisation and false sense independence of various branches of knowledge is an important characteristic of modern education.

Knowledge in modern education has been externalised. The Qur’ān says, “They know but the outer (things) in the life of this world: but of the End of things they are heedless.”⁶ Externalization of knowledge is its trivialization:

This sad situation has resulted in the dehumanization of knowledge, and the separation of the disciplines of knowledge. The sciences are compartmentalized from each other, and the humanities and sciences hardly have a dialogue and no longer work together. Worst of all, modern knowledge has lost the very meaning of being human and the goal of life itself.⁷

Unless the most profound human nature as manifested through God’s revelation is taken into account, the concretization of any educational techniques will ultimately dehumanize our children by depriving them of their spiritual right. If Divine Principles are not transmitted to our children through our education system, it will be tantamount to a great loss to humanity. True education—education based on the revealed truth—reaches the heart, not just the head, but in today’s world traditional education is

fastforgotten in favour of new theories concerned with the transmission of knowledge but not the training of the whole being.

C. Integration as a Characteristic Islamic Education

Integration of various subjects has always happened in the history of Muslim education. During the time of Prophet, Muslims used to learn the Qur'ān and Hadith as well as science of recitation (*tajwīd*) and jurisprudence (*fiqh*). As shown by Hamidullah, the Prophet used to give instructions in shooting arrows, swimming, the rudiments of medicine, astronomy and genealogy.⁸ Although the teaching of the Qur'ān, Hadith and other Islamic sciences were most important, other subjects and skills were taught for the development of the individual and society. During the time of the Prophet the mosque was the main centre of learning. The tradition of mosque-based learning initiated by the Prophet has continued throughout the history of Islamic education until today. During Abbasid period institutions of higher learning were established on their own.⁹ Later, when the Muslim world expanded and their life became more complicated, Muslims came into contact with other nations, and felt the need to develop their own systems of art, architecture, politics, economics and education.

In this process of the evolution of Islamic civilisation Muslims were not reluctant to gain experience and knowledge from others but they always retained their own basic values. Islamic principles derived from the Qur'ān and Hadith provided the norm for judging any foreign knowledge that sought to enter the Muslim world. The famous centres of learning such as Al-Azhar in Egypt and Madrasah Nizamiyyah in Baghdad flourished in the tenth and eleventh centuries respectively. The curriculum at Nizamiyyah initially focused on religious studies, Islamic law, Arabic literature, and arithmetic, and later extended to history, mathematics, the physical sciences, and music. These institutions of learning stood as beacons of light for many educational institutions over centuries. If any branch of knowledge was considered useful for the development of the individual or society it was absorbed into the curriculum, and if not, it was rejected. These institutions are examples of what true Islamic educational institutions are like. In the pre-colonial period dichotomy or duality in education was absent. A unified system of education that integrated religious and secular knowledge was to be

found throughout the Muslim world. It was not just the integration of certain disciplines but the whole institutional ethos was Islamic. In Muslim Spain, for example, in the large official gatherings of universities ceremonial customs were infused with the spirit of Islam, as can be seen in the writing of Syed Ameer Ali:

It was customary in the Spanish Arabia university to hold annual commemoration and periodical meetings to which the people were invited. On these occasions poems were recited and orations delivered by the most eminent persons in the universities. Every college had the following lines inscribed over its gate. "The world is supported by four things only: the learning of the wise and the justice of the great, the prayer of the good and the valour of the brave."¹⁰

This motto is a clear demonstration of the fact that in the medieval period the Islamic worldview integrated all facets of education in a unified system where learning was not dissociated from prayer or its application from justice and bravery. This kind of integration is missing from our education system today.

It is well known that Islam inherited sciences from the great civilizations of antiquity but any idea or doctrine that could not be integrated into the total worldview of Islam was sooner or later dispelled from the intellectual arena of Islam or relegated to a peripheral existence. When Muslims were confronted with Greek knowledge, they had to find philosophical justification for Islamic principles for all branches of knowledge for which they had to assimilate Greek logic and metaphysics and use them to produce a philosophical response to the challenge of their opponents on the one hand and help Muslims gain confidence in their own faith on the other. Imam Ghazzali's successful assault on Greek philosophy paved the way for the preservation of the intellectual heritage of Muslims and the purity of their faith.

The spiritual power of Islam transmuted all knowledge that came into contact with it and made it its own. That was when Muslims were at the peak of their glorious achievement in all branches of knowledge. Today Muslims are inundated with all kinds of knowledge but they are bewildered as to how to embrace it within the fold Islam as most them are not equipped with the intellectual tools that their predecessors possessed to analyse, accept or reject the knowledge that is 'alien' to Islam. They are presented with all types of knowledge and in their attempt to modernize their education systems and other social institutions, and carve out a niche for themselves in the world of competition they are seeking to imbibe modern knowledge indiscriminately with little

consideration for its compatibility with the Islamic norm of values or its impact on their spiritual development.

Education today has largely descended into acquisition of information and its processing in myriads of analytical ways with ever increasing subtleties, but in this process the inculcation of essential human function that is, establishing our relation with God is utterly missing. The spiritual root of Islamic education is receiving less and less emphasis as education in Muslim countries is coming more and more under the influence of secular ideas.¹¹ The secularists also accept the concept of spirituality but they explain it solely in non-religious terms involving deeply personal subjective experiences. From a secular perspective spirituality can be just a sense of awe at the wonders of nature or subjective reflection in quest of a deeper meaning of life. Non-religious spirituality that has been incorporated into the vocabulary of the secularist is a kind of spirituality that is cut off from the Spirit.¹² In Islam, spirituality stands for the essence of religion for which there is no single word in classical Arabic. In modern Arabic it is translated as *rūḥiyyah*, *rūḥāniyyah* and *ma'nawiyyah*. These terms do not capture the comprehensive Islamic meaning of the term 'spirituality' for which a number of other terms such as *taqwā* (God consciousness), *iḥsān* (excellence) and *taqarrub* (nearness to God) have been employed. Islamic "Spiritual regeneration is an inner process which involves a continuous remembrance of God, constant watchfulness of one's own actions, thoughts and passions, to bring about inner illumination leading to a vision of spirituality with increased love for God and the Prophet Muhammad (p.b.u.h.)."¹³ The ultimate purpose of Islamic education is to inculcate spirituality in the learner.

Recently there have been many attempts to integrate modern and Islamic sciences in universities in the Muslim world especially since the First World Conference on Muslim Education. Some schools, colleges and universities have been more successful than others but the overall progress in this area has been minimal. Sadly, the concept of integration has been misunderstood by many. First of all let me ask, "What do we mean by integration?" If it is a question of teaching Islamic subjects along with other secular subjects such as natural sciences or social sciences, then we can include some compulsory papers on Islamic studies and teach them along with other subjects such as

biology, psychology and economics in the undergraduate curriculum. Adding Islamic courses to the existing curriculum is not achieving integration, as this will impart Islamic knowledge to students independent of what they learn in other subjects. They will thus be gaining two types of knowledge originating from two different worldviews, and their minds will continue to be assailed by doubts and confusion on matters of deepest import in life. If on the other hand the aim is to conduct high level research in Islamic studies or to offer specialised courses in Islamic studies, that can be done by establishing more institutes of Islamic studies independently or as centres attached to existing universities. Such centres already exist in many western universities as well as universities in Muslim countries but they do not have influence on the teaching of other subjects.¹⁴

In the First World Conference on Muslim Education none of the above two aims were accepted to be the purpose of integration of knowledge as they do not conform to the aim of Islamic education in the true sense of the term. Instead they maintain the duality in education that Muslim educationalists are trying to eradicate. The purpose of an Islamic university where such integration is expected to take place, is not merely to train people for higher learning or higher jobs or higher professions but to produce people with higher knowledge and noble character who will be able to uphold moral and spiritual values for the betterment of their own selves and of society. The character of an Islamic university has been vividly described by Bilgrami and Ashraf in the following way:

An Islamic university, therefore, has to produce scholars of Islamic learning devoted to the dissemination of knowledge to the modern mind. It has also to produce men of learning in all possible and conceivable branches of knowledge—technical and professional, social and cultural, natural and scientific—all masters in their own fields, but presenting the same truth through their differing studies, living righteously themselves and leading others to the same path of happiness and blessings which is known as *sirāt al-mustaqīm*, the straight path. The university will aim to bring its students to a common level of peace and faith, uniting them on the basic principles of *tawhīd*, *risālah* and *ākhirah* (One God, Prophethood and the Last Day of Judgement) and making them realize their own destiny in this world through hard work and honest living.

An Islamic university is based on the foundation of knowledge and spirituality producing people who are virtuous. This is the result of true integration. An education without a spiritual base will produce graduates with rational mind devoid of spirituality

who will question even the very foundation of their faith as they will seek answers to everything on the rational plane alone. When the universities in the West succeeded to come out of the control of the Church they started to become secularised. In the medieval period Western universities borrowed many features from Islamic universities from architectural design to educational curricula, while maintaining their Christian heritage, but with the rise modernism they have almost lost the spiritual base of education. Now many modern universities are mostly producing professionals such as scientists, doctors, engineers, accountants, managers, and all types of technocrats. Muslim countries are not only not immune from this tendency but some of them are even worse, as under-resourced universities have mushroomed everywhere mostly offering finance-oriented courses leading to such degrees as BBA, MBA, ACCA, CA and the likes of those. Such an approach has damaged the very concept of a university which is traditionally a centre for gaining higher knowledge and producing men of noble qualities.

D. Integration of Modern Science and Islam

Both the Qur'ān and the Hadith stress the importance of acquiring knowledge, being critical about the nature of knowledge but never denigrating the source of knowledge. Such sayings of the Prophet as “Wisdom is the lost property of the believer, so wherever he finds it then he has a right to it” never dissuaded Muslims from learning from others. History bears testimony to the exchange of knowledge between Muslims and others during the entire existence of Islam. That is why the scholars who participated the First World Conference on Muslim Education unhesitatingly accepted that a Muslim can accept all the findings of modern science and general laws derived from his experimental data so long as they do not contradict the dictates of the Qur'ān,¹⁵ but they stressed that all scientific knowledge is of partial reality, and that there are other ways of studying nature in addition to the ways of empirical science.

There is no conflict between the modern attitude towards the acquisition of knowledge of the natural world and the Qur'ānic instruction to study it. Problems arise when a modern scientist makes generalizations based on his partial knowledge when his hypotheses can be based on wrong assumptions, and his mode of observation and means

of acquiring knowledge do not provide him with a scientific reason to understand the relation that exists between the Will of God and the phenomena of nature. Matter reveals to him its secret as mere facts, which he tries to explain through material causes that ultimately reduce all physical phenomena to interplay of particles in the microscopic world. Because of this reductionism, he does not want to link his scientific findings with any metaphysical consideration or causes belonging to higher realms; he believes that causes must be verifiable by scientific experiment and must be sought on the material plane alone.

Religious teachings do not negate the truth of material causes, as they are also a valid explanation of physical phenomena, however tentative they may be, but require one to link all phenomena to their Creator. In order to integrate sciences we must accept the principle that any human science of the relative order cannot “provide complete and absolute knowledge of any part of that order.”¹⁶ Any picture of the world is partial and relative and there is more than one “true picture of the world” as the multiplicity of cosmological sciences pertaining to the same domain of physical reality exemplify. Each of these pictures is true at its own level, but problems occur when a given picture claims exclusivity.

The advancement of science has caused many to cast doubt on many aspects of religious beliefs, as they tend to apply the same methodology of science to test the validity of religious concepts. The truth of science is based on experiment and observation here and now, whereas the fundamentals of religion dealing with the spiritual realm and the next world are not susceptible to strict rational enquiry or experimental verification. With ever expanding frontiers of science man has been able to gain control and mastery over nature to an unprecedented degree, and does not see God’s hands at play. This mode of thinking is an obstacle to any attempt at integration of secular and religious knowledge. There is a view prevalent among some Muslim scholars that scientific knowledge is universal and culturally neutral, so it cannot be religionized. For example, Hoodbhoy, who seems to ignore the social and ethical aspects of science, has laboured hard to show in his book that faith and science are unrelated and vehemently criticises the Islamisation of science programme as a whole.¹⁷ Abdus Salam, a Nobel laureate in Physics, in his ‘Foreword’ to this book has expressed

similar views about the international and universal character of science. Such views, however, cannot be defended as has been shown by philosophers and historians of science.^{18, 19}

Integration of sciences should be done not only at schools and universities but in religious seminaries as well. Madrasahs in many parts of the world have undertaken the task of incorporating modern subjects, such as science, information technology, and social studies in their curriculum. In almost all cases these secular subjects are juxtaposed with religious subjects in the name of modernizing their syllabus. This leads to two major problems. Firstly, introduction of secular subjects has expelled many religious subjects and has shortened religious courses beyond recognition, as has happened in the Alia madrasah system of Bangladesh. Secondly, grafting secular subjects onto a traditional curriculum has contributed to the dichotomy and division in the education system, a phenomenon that Muslim scholars are so keen to avoid.

E. Integration of the Theory of Evolution?

In his book entitled *Islam's Quantum Question: Reconciling Muslim Tradition and Modern Science* Nidhal Guessoum says, "...evolution is highly important in the science-religion/Islam debates, for it is there that one sees the clear difference between those who adopt a simplistic, literalistic reading of the scriptures (in all areas of life and thought) and those who accept the application of hermeneutics and the principle of multiple, multilayered reading of the Texts."²⁰

This is a very serious statement. For Guessoum Muslim approach to science will largely depend on their approach to the theory of evolution *vis-à-vis* the Qur'ān as that will determine the mind-set for scientific activities. Here he seems to be advocating a new hermeneutics—a new *uṣūl al-tafsīr*—where one would go beyond a 'simplistic, literalistic' reading of the Qur'ān not only in the area of creation but 'in all areas of life and thought' by applying the principle of multi-layered reading of the Qur'ānic texts. But throughout his book, far from seeking multi-layered Qur'ānic exegesis he is promoting one single view—that of modern evolutionary biology as the principle of *tafsīr* (exegesis) of certain Qur'ānic verses. It is natural for an author to promote certain views to which they subscribe but scholarship demands that a controversial subject such

as evolution should have been given a fair hearing from all sides, but his book is virtually silent on the writings of those renowned scientists who do not support neo-Darwinian theory of evolution but have other explanations for the myriad forms of life from unicellular organisms to most complex of all creatures, human beings, that we witness today. It would be wrong to assume that these anti-evolutionary scientists were guided by their religious beliefs to formulate their theories, as many of these scientists are atheists. It was not their religious or supernatural belief that prompted them to look for explanation, interpretation and inferences outside the world of evolution but it was their sheer commitment to scientific truth which led them to turn away from evolution and explain the natural world in other ways. A truly multiple, multi-layered understanding of nature requires that we seriously consider all the explanations that have been put forward by great scientists, philosophers and theologians and do not advocate or rather impose one particular type of interpretation on our children in the name of science education. This is far from integrating Islam with modern science. The evolutionist fundamentalist will resist the inclusion of any such idea in the school curriculum.

There is a huge difference between the theory of evolution and other theories of science. The theory of evolution is not just a scientific theory; it is also an ideology. The whole edifice of modern science revolves around it. If it falls, the edifice of modern science will collapse. If a university professor does not believe in a particular theory, say the wave theory of matter, he is unlikely to lose his job but that is not the case with the theory of evolution.²¹ In the Western world which is known for its open-mindedness and objectivity, if a person in a responsible academic position entertains such a view, he almost certainly runs risk of losing his job or promotion which happened to Professor Michael Reiss, the Royal Society's director of education, for saying that "creationism is best seen by a science teacher not as a misconception but as a worldview."^{22, 23} What is surprising is that Phil Willis, chairman of the Commons Innovation, Universities, Science and Skills Committee, said: "It's the right decision and it's clearly one the Royal Society needed to come to itself. You cannot have a senior educational figure in the world's most prestigious scientific society giving credence to creationism alongside Darwinism in the school curriculum. By allowing creationism to have a part in the

science curriculum alongside Darwinism, it gives them equal merit.”²⁴ In an academic setting if you are not allowed to debate an issue, if you allow only one view of to be promoted, is it not indoctrination?

There are Muslim scholars who are slowly accepting biological evolution at a time when a number of renowned scientists in the West have either rejected the theory of evolution or proposed alternative theories.²⁵ In order to support their arguments they claim that Muslim evolutionary views predate Darwin. Mehdi Golshani, a leading Muslim scientist and philosopher says, “The belief in an evolutionary mechanism for the emergence of species does not negate the idea of Divine creation”²⁶ for which he enlists support from the twentieth century Muslim scholar from Iran, Abu'l-Majd Muhammad Rida al-Najafi al-Isfahani. What did classical Muslim thinkers actually say about the concept of evolution? We know that in the ancient times philosophers such as Aristotle talked about Great Chain of Being according to which there was a hierarchical structure of among non-living and living things which start from rocks, then go through the sequence of plants, animals, man, angels and finally God. There were also hierarchies among these things at a particular level. For example, rocks and minerals were arranged in their ascending qualities, with gold being at the highest level. The beings at a particular level possessed certain attributes as well as the attributes of the beings below them. Thus rocks have the attribute of existence and plants possess the attributes of both existence and life. Such concepts inspired Muslim philosophers and scientists to come up with an understanding of the natural world. Some Muslim philosophers were surely influenced by this Greek idea of the Great Chain of Being but their writings have been misinterpreted by some modern-day Muslims to mean that they supported the view of evolution of species in the neo-Darwinian sense. It has been claimed that Muslim scholars from the 8th to the 14th centuries supported evolution of species.^{27, 28} This conclusion is based on a wrong understanding of their texts. This arises because, firstly, many modern Muslims depend on the available translations of their writings, and consequently the mistakes in the translation are carried into their interpretation. Secondly, wrong inferences are drawn from their writings. Thirdly, with the exception of a few such as Ibn Rushd and Mawlana Jalal al-Din Rumi, these classical scholars were primarily philosophers and not theologians (*'ulamā'*). They were

deeply influenced by Greek philosophy and especially Neo-Platonism. Fourthly, none of the classical Qur'ānic commentators explain those verses that deal with creation as promoting a view of transformation of species. Sheikh Yusuf al-Qaradawi made a very cautious statement in this respect. He says, "If Darwin's theory is proven, we can find Qur'anic verses that will fit with it..."²⁹ Whether Darwin's theory has been proven or not is the crux of the matter. All we know is that scientists have been debating the concept of evolution for the last 150 years without reaching a conclusion as yet.

Let me look briefly at the writings of Ibn Khaldun and Mawlana Jalal al-Din Rumi on the concept of evolution who have been quoted by Muslim theistic evolutionists in their support. According to Franz Rosenthal's translation of *Muqaddimah* Ibn Khaldun says,

One should then take a look at the world of creation. It started out from the minerals and progressed, in an ingenious, gradual manner, to plants and animals. The last stage of minerals is connected with the first stage of plants, such as herbs and seedless plants. The last stage of plants, such as palms and vines, is connected with the first stage of animals, such as snails and shellfish which have only the power of touch. The word 'connection' with regard to these created things means that the last stage of each group is fully prepared to become the first stage of the newest group. The animal world then widens, its species become numerous, and, in a gradual process of creation, it finally leads to man, who is able to think and reflect. The higher stage of man is reached from the world of monkeys, in which both sagacity and perception are found, but which has not reached the stage of actual reflection and thinking. At this point we come to the first stage of man. This is as far as our (physical) observation extends.³⁰

The original Arabic text is:

ثم انظر إلى عالم التكوين كيف ابتداء من المعادن ثم النباتات ثم الحيوان على هيئة بدیعة من التدریج آخر أفق المعادن متصل بأول أفق النباتات مثل الحشائش وما لا بذر له وآخر أفق النباتات مثل النخل والكرم متصل بأول أفق الحيوان مثل الحلزون والصدف ولم يوجد لهما إلا قوة اللمس فقط ومعنى الاتصال في هذه المكونات أن آخر أفق منها مستعد بالاستعداد الغريب [١] لأن يصير أول أفق الذي بعده واتسع عالم الحيوان وتعددت أنواعه وانتهى في تدریج التكوين إلى الإنسان صاحب الفكر والرؤية ترتفع إليه من عالم القردة [٢] الذي اجتمع فيه الحس والإدراك ولم ينته إلى الرؤية والفكر بالفعل وكان ذلك أول أفق من الإنسان بعده وهذا غاية شهودنا
(مقدمة تاريخ ابن خلدون، دار الفكر بيروت، ١٩٨٨)

[١] وفي بعض النسخ: القريب وليس لهما أي معنى هنا. والمرجح أنها محرفة عن كلمة غريزي.

[٢] كذا في نسخة لجنة البيان العربي: القردة وهي منسجمة مع سياق معنا العبارة هنا. وفي بعض النسخ:
القدرة

The Arabic text of Muqaddimah, *kayfa ibtada'a min al-ma'ādin thumma al-nabāt thumma al-ḥayawān 'alā hay'ah badī'ah min al-tadrīj* has been translated as “It started out from the minerals and progressed, in an ingenious, gradual manner, to plants and animals.” A misunderstanding about Ibn Khaldun’s position on the appearance of life forms starts from the translation by Rosenthal of the phrase *min al-tadrīj*. According to Lane’s *Arabic-English Lexicon* this means ‘by degrees’, ‘by little and little’ which means either continuous gradual changes, or changes that take place by steps. Also, the phrase ‘and progressed’ does not exist in the Arabic text. Whether change is gradual or not, Ibn Khaldun has not mentioned its modality. The words ‘progressed’ and ‘gradual’ might convey to the suspecting reader a sense of evolutionary processes working in the living world but there is no compelling reason to read the text in that way.

The same problem occurs in the first sentence of the second paragraph: “The animal world then widens, its species become numerous, and, in a gradual process of creation, it finally leads to man...” where the phrase *tadrīj al-takwīn* has been translated by Rosenthal as ‘in a gradual process of creation’, which might again connote some kind of evolutionary transformation. The Arabic text, *ittasa'a 'ālam al-ḥayawān wa ta'addadat anwā'uh wa intahā fī tadrīj al-takwīn ilā al-insān*, can be translated as “The animal world then widens, its species become numerous, and, in a gradation of forms, it finally leads to man.” A ‘gradation of forms’ or ‘gradation of formation’ is close to the classical concept of the Great Chain of Being.

Ibn Khaldun says that minerals are connected to plants and plants to animals. The last horizon of minerals (*ākhir ufuq al-ma'ādin*) is ‘connected’ to (*muttaṣil bi*) the first horizon of plants (*awwal ufuq al-nabāt*). He defines the word connection (*ittiṣāl*) in this context. For him ‘connection’ of one type of formation (e.g. minerals) to another (plants) means that the last horizon (*ākhir ufuq*) of the first type (e.g. minerals) becomes prepared (*musta'idd*) to be the first horizon (*awwal ufuq*) of the next type (plants). Each

type of formation is therefore bound by a first horizon (*awwal ufuq*) and a last horizon (*ākhir ufuq*) and this last horizon becomes the first horizon of the next type. There is no suggestion here of the crossing of the horizons. In the definition that he has given, the sense of transmutation of one kind of creation or formation (*takwīn*) into another is totally absent! If various life forms are arranged in an ascending order one can clearly see that there is a gradation from lower to higher forms which perfectly conforms to the notion of *fixity of species*. In the writings of Ibn Khaldun it is not only that human beings have not evolved from lower animals but there is no suggestion that animals themselves have evolved although there exists a gradation of forms among them.

Finally, the phrase in the above quotation, “[The higher stage of man] is reached from the world of the monkeys” is a translation of *tartafi’ ilaih min ‘ālam al-qiradah*. This can be read to mean that when the animal forms are arranged in an ascending order, human beings occupy the position above monkeys. When the animal world is arranged in an ascending order, the horizon of the animal world ends and the horizon of the human beings begins. There is no indication of transformation from one species into another here.

Ibn Khaldun seems to believe in gradation among human beings also, based on their character and habits but he has nowhere stated in his *Muqaddimah* that a certain type of human beings has evolved from another type of human beings. Ibn Khaldun has proposed no cause for his ‘ingenious gradual’ progress in the natural world, nor any mechanism for his ‘gradual process of creation’ that led to man from ‘the world of the monkeys’. However, based on a misreading of the text some readers think he appears to have been suggesting that God made everything in a sort of theistic evolutionary process. A proper reading of the text of *Muqaddimah* does not show that Ibn Khaldun is proposing the transformation of monkeys into human beings. In some manuscripts *‘ālam al-qudrah* (the world of faculty) appears instead of *‘ālam al-qiradah*, in which case the idea of the human being’s being connected to monkeys does not even arise.

Let me give another example from Mawlana Jalal al-Din Rumi’s poem, “I Died as a Mineral” translated by A. J. Arberry which has been interpreted as embodying the concept of evolution:

I died as a mineral and became a plant,

I died as plant and rose to animal,
 I died as animal and I was Man.
 Why should I fear? When was I less by dying?
 Yet once more I shall die as Man, to soar
 With angels blest; but even from angelhood
 I must pass on: all except God doth perish.
 When I have sacrificed my angel-soul,
 I shall become what no mind e'er conceived.
 Oh, let me not exist! for Non-existence
 Proclaims in organ tones, "To Him we shall return."³¹

This poem, conveying a deep metaphysical thought, should not be interpreted literally. This should be understood in the light of Rumi's overall religious philosophical perspective. Rumi believed in the evolution of the human ego that is capable of passing through different levels of consciousness. The human ego has the potential to pass from the lowest stage, the consciousness of inanimate objects (*jamādī*), to the consciousness of the animate (*nāmī*), then animal (*ḥayawān*) and then human beings (*ādam*). The spiritual journey does not end here. After the human (*bashar*) state, the human ego has to pass through countless levels of progression in the world of the spirit when it imbibes the characteristics of angels (*malā'ik*). But Rumi says that the human soul must pass even through the state of angel-hood, as "All except God shall perish." (*kull shay' hālik illā wajhah*). The final destination is God as "Truly, to Allah we belong and truly, to Him we shall return (*innā lillāhi wa innā ilaihi rājiū'n*). The evolution of the spiritual state of the soul continues back to its original state in the world of the spirits (*ālam al-arwāh*). It would be a great injustice to seek support for the evolutionary theory in this and similar other poems of Rumi as he is not concerned with the human form but with its spiritual development. In his spiritual philosophy the line of progression does not end with the attainment of the human character but extends to the realm of the unseen. In this small poem Rumi has drawn our attention to two Qur'ānic verses, which sets the framework for its interpretation. In Rumi's understanding matter is not the source of its own cause. His *Masnavi* begins with a reference to soul's longing for the Origin, and the transformation of the state of the soul along the path towards the

Origin is the story of our journey in the spiritual world, not a story of godless evolution. Some Muslims dazzled by the supremacy of modern science are desperately trying to adduce evidence from the writings of classical Islamic scholars in support of the modern theory of evolution. Such attempts have been largely unsuccessful since no classical Muslim writer has clearly stated that species have appeared through the actual process of transformation of one species into another. Modern-day Muslim evolutionists are reading Darwin's theory of evolution into the classical texts, an exercise that is neither acceptable to the proponent modern science nor to those Muslim intellectuals who are deeply grounded in the teachings of the Qur'ān and the Prophet (p.b.u.h.). They have misunderstood the purpose or distorted the meaning of the writings of great scholars of Islam in an attempt to make them compatible with biological evolution.

Science stands or falls on its own ability to explain the natural world. The hard facts of empirical observation override other considerations. Islamic religious principles do not teach its adherents to negate empirical evidence, so there is no contradiction between hard science and Islam. Thus science and Islam are integrated at the 'source'. Let me quote what I said nine years ago:

Hundreds of books and articles have been written both in support of and against the theory of evolution. It would be clear from a reading of such books that there are hundreds of non-creationist scientists from diverse fields of the biological sciences, many of whom are Nobel laureates, who have never been able to bring themselves to accept the validity of the theory of evolution. It is not their religious bigotry, but their genuine concern for scientific truth that led them to express their discontent with the theory of evolution.^{32, 33}

The purpose of this essay is not to enter into a scientific debate about the efficacy or failure of the neo-Darwinian theory of evolution, but to show that the problem of evolutionary theory continues up until the present day. Scientists as well as others from diverse fields are still debating this issue. As I have stated earlier, the denial of evolution does not always spring from religious beliefs. Tom Wolfe, whom NPR News describes as "one of America's most distinguished men of letters" is an atheist and in an article published by NPR News on 8 September 2016, Barbara King reports on his devastating criticism of the Darwinian theory evolution, especially the evolution of speech, in his book, *The Kingdom of Speech*. In an interview he said:

And I think it's misleading to say that human beings evolved from animals—actually, nobody knows whether they did or not. There are very few physical signs, aside from the general resemblance of apes and humans.³⁴

There are western scientists who find the approach to integrate religion and modern science completely nonsensical. In the “Radio 4 Live Debate Between Golshani and Dawkins” on the connection between science and religion Richard Dawkins said, “religion and science can never evolve together by saying that you are undermining science. Science is a structured, proven and rational subject. Science cannot prove religion, and religion cannot prove science.”³⁵ This sounds like Stephen Jay Gould's ‘non-overlapping magisteria’ according to which science and religion have mutually exclusive spheres of authority.³⁶

This shows that there will be scientists will continue to oppose working with religion. Those who want to integrate science and religion will have both allies and foes. There are people in all religions who want to integrate their religion with science, just as there are people in those religions who vehemently oppose such a move. Again in every major religion such as Christianity, Islam and Judaism opinions vary as to how this integration could be achieved. Views of certain Christian denominations are closer to Islamic views than those of other denominations. Difference of opinions exists among Muslims just as among Christians but as far as empirical science is concerned religion does not conflict with it unless it is on ethical grounds.

F. The Task Ahead

Many conferences of various shapes and forms have been held on Muslim education during the last forty years and many are being organized now, all discussing the same or similar issues, that is, how to make education Islamic in character, how to integrate Islamic and western knowledge and how to respond to the onslaught of secularism on Muslim education. These issues have been discussed again and again but the fundamental problem of Islamisation still continues to occupy the minds of scholars and practitioners alike. If we have to have a veritable Islamic educational system, we need to be aware of the pitfalls of acting without plans and talking about it without confronting the actual problems involved. Many of the educational issues we are

confronted with today were thoroughly discussed in the First World Conferences on Muslim Education held in Makkah in 1977. Masterminded by late Professor Syed Ali Ashraf, an organizing secretary of this conference, and attended by 307 scholars from different countries, this conference worked out the foundational principles of Islamic education derived from the Qur'ān and Sunnah and dealt with all the major problems associated with the development and implementation of a truly Islamic system of education.³⁷ With vigour, enthusiasm and honesty Professor Ashraf spearheaded the campaign for the Islamisation of education by organizing a series of conferences in the years that followed. There were only a few people in those days who were working independently in this and other related fields, notably among them being such great scholars as Professor Syed Naquib al-Attas, Professor Seyyed Hossein Nasr and Professor Ismail Raji al-Faruqi.

The Second World Conferences on Muslim Education held in Islamabad in 1980 discussed the issue of curriculum designing, the Third World Conference held in Dhaka in 1981 discussed textbook development and the Fourth held in Jakarta in 1982 discussed teaching methodology. There was no shortage of ideas or resolutions but it soon became clear that there are obstacles in the path of implementing the resolutions of these conferences. There was no enthusiasm on the part of any Muslim government to implement these resolutions or to develop a truly Islamic education appropriate for their own country. The resolutions of these and many such conferences held since were implemented only piecemeal. Not enough work has been done to thoroughly analyse the existing curriculum and distinguish between what is authentically Islamic and what is modern. By modern curriculum we mean all those disciplines that have been born and nurtured within the worldview of the Enlightenment. Professor Ashraf has discussed all the hurdles that he faced in trying to implement the resolutions of the World Conferences.³⁸ The biggest hurdles were political and philosophical hurdles.

Before we talk about integration of Islamic sciences with the modern ones we must stress that it is integration that we are after and not co-existence. A unified coherent curriculum needs to be formulated that should be governed by the worldview of Islam where no discipline will contradict the foundational principles of another as they are derived from the same source. Although each subject will have its autonomy,

the fundamental principles at the roots of all subjects will provide organic interconnections among them in a way that they manifest various aspects of the same truth. Despite the curricular autonomy various subjects are interrelated through a hierarchy of knowledge reflecting the principle of *tawhīd*, the unitary principle of Islam. Unless the organic link between a branch of knowledge and the Islamic religion is established, integration of Islamic sciences and interconnections of various disciplines will remain a dream. The real synthesis must happen within the mind of those engaged in the process of integration as the secularization of the education system is a manifestation of the secularization of the mind.

What is needed today is an epistemological response to the dangers posed by secular ideas permeating all branches of knowledge. Rather than being absorbed by the Western secular ideas we should master them along with their various techniques and methodologies only to reassert our own traditions and present them in a contemporary language. This will help dispel doubts and confusions that assail the minds of our youth. We accept from the West whatever conforms to the metaphysical concepts supplied by the Qur'ān and Sunnah and formulate an Islamic approach to social and natural sciences that are in harmony with the Islamic concept of human nature, and their relationship with God and the created world. It is the lack of this conceptualization that is missing in all the attempts that are being made to Islamise various disciplines. Educationalists involved with developing an integrative formula for curriculum designing must be aware of the fundamental theories at the root of secular education. For Muslim educationalists conceptualization requires first developing Islamic concepts for all branches of knowledge, then substituting Islamic concepts for secularist concepts of knowledge at present prevalent in all branches of knowledge. Practical steps for implementing the ideas so developed requires getting curricula and textbooks revised or rewritten accordingly and formulating concrete strategies for revising teacher education including teaching methodology.

In order to develop Islamic concepts, we need to have a thorough understanding of the Qur'ān, Hadith and Muslim intellectual traditions of *fiqh* (jurisprudence), *tasawwuf* (Sufism) and *falsafah* (philosophy). Secondly, those Muslim educationalists who are engaged in the task of integrating Islamic and Western knowledge should have

a deep understanding of Western philosophy of education. Thirdly, they should have humility and an open mind to learn from other traditions and civilisations. They should avoid saying ‘no’ to everything Western but critically judge all knowledge in the light of the concepts discussed above. As Rudloff has noted:

The Internet has the potential to proliferate knowledge as never before if only correct knowledge were promoted. Unfortunately, we have to resign ourselves to the fact that we are all too human and the good comes always with the bad. Here again arise the two faces of Janus.³⁹

How are Muslims going to separate the wheat from the chaff? To be able to recognize wheat as wheat and chaff as chaff requires knowledge and understanding of these. Traditional institutions where such knowledge can be acquired are fast declining; traditional scholars are becoming rare and wisdom scarce. We cannot implant the Islamic approach to all branches of knowledge in the minds of children unless we purge our education system of all secular influences and teach them all branches of knowledge from the Islamic perspective. However, Nasr notes that:

Islamization of knowledge cannot be achieved by simply claiming that all science is Islamic because the *Qur’ān* and *Hadīth* emphasize the importance of knowledge (*‘ilm*) nor even by accentuating the ethical use of the application of science which is in itself necessary but which does not by itself Islamicize a science based upon the secular view of existence and of knowledge.⁴⁰

Muslim scholars should develop educational theories based on the Islamic view of existence and of knowledge, and they should critically analyse western knowledge and accept it only if it conforms to such theories, or modify it to make it compatible with the Islamic worldview. Any knowledge that cannot make peace with the Islamic worldview should not be accepted as part of it. This is true Islamisation. If this is not done and Islamic subjects are taught along with secular subjects, we will simply perpetuate duality in education and produce graduates in our so called Islamic institutions of learning who will themselves be devoid of Islamic spirit and lack the intellectual vision necessary to guide others.

G. Conclusion

Is integration of Islamic knowledge and Western secular knowledge possible? Excellent work has been done by many educationalists over the years to achieve integration of Islamic and modern knowledge but their innovative ideas have had little

chance to be implemented and assessed for further improvement.⁴¹ Integration has been an issue in the West where Muslims are living as a minority and demanding their right to be educated without compromising their faith. People of other religions also want their faiths to be reflected in the schools ethos and the curriculum. To satisfy people of all faiths in a particular country is indeed a great challenge for the educational authorities of that country. In this complex situation Muslims scholars need to have dialogue amongst themselves, with educational authorities, as well as with non-Muslim scholars. While criticizing the Western educational theory one should keep in mind that it is not monolithic, and there are many educationalists who are sympathetic to religion on rational grounds. There are also those who recognize cultural diversity as contributing to the enrichment of the society and want to see this diversity to be reflected in the education policy of the country. The boundary between the religious and the secular is being debated by the Western educationalists themselves. Muslims should do well joining in these debates. There are many non-Muslim parents in the West who are equally critical of the secular education that their children are being forced to accept and Muslims should cooperate with them in their battle against the onslaught of secularism. There are also Western scholars who have critically examined the fundamental concepts, aims and objectives of modern education and finding flaws in them, have turned to traditional education that is based on a holistic view of human needs and capacities.⁴² Also, a lot of beneficial knowledge that one finds in the West, Muslims can accept it as their own. But most of all, Muslims should devote their time and energy to the development of an Islamic theory of education for all branches of knowledge—the criterion for judging all knowledge, an enormous challenge for Muslim educationalists, but without this the realization of a complete Islamic system of education will remain a dream.

Notes

¹ *Sunan Ibn Majah*.

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- ³ S A Mabud (1988), "Editorial", *Muslim Education Quarterly*, Vol. 18, No. 4, p. 1.
- ⁴ W A J Meijer (2006), *Tradition and Future of Islamic Education*, Amsterdam: Bulaaq, p. 176.
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- ⁶ Qur'an 30:7.
- ⁷ Judy D. Saltzman, "The Concept of Spiritual Knowledge in the Philosophy of Seyyed Hossein Nasr," in E Hahn, R E Auxier and L W Stone, Jr. (Ed.) (2001), *The Philosophy of Seyyed Hossein Nasr*, The Library of Living Philosophers, Vol. XXVIII, Chicago and La Salle, Illinois, Open Court, p. 597.
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- ¹⁰ Quoted in Bilgrami, H. H. and S. A. Ashraf (1985), *The Concept of an Islamic University*, Hodder and Stoughton, Sevenoaks and The Islamic Academy, Cambridge, p. 24.
- ¹¹ Syed Ali Ashraf (1987), "Education and Values: Islamic Vis-a-Vis the Secularist Approaches," *Muslim Education Quarterly*, Vol. 4, No. 2, pp. 4-16.
- ¹² Qur'an 38:72 "And when I have fashioned him and breathed into him of My Spirit, then fall down before him prostrate." Every human being carries this spiritual spark within himself or herself.
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- ¹⁴ Bilgrami, H. H. and S. A. Ashraf (1985), *The Concept of an Islamic University*, Hodder and Stoughton, Sevenoaks and The Islamic Academy, Cambridge, p. 40.
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- ¹⁶ E Hahn, R E Auxier and L W Stone, Jr. (Ed.) (2001), *The Philosophy of Seyyed Hossein Nasr*, The Library of Living Philosophers, Vol. XXVIII, Chicago and La Salle, Illinois, Open Court, p. 466.

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