

# ARTICLES

## CLASSICAL AND CONTEMPORARY APPROACHES TO EDUCATION: AN ISLAMIC PERSPECTIVE

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**Abstract:** The gap between the classical and contemporary approaches to education in Islam is a theme which has not yet met with adequate response and solution. To fully comprehend the nature of classical education demands no less than a thorough understanding of its characteristic features as distinct from the modern methods of education, yet appreciating how later developments brought about its eclipse. This article charts the historical trajectories of education in Islam, surveying the scriptural, philosophical, and institutional foundations and examines how they have been affected by reforms following the advent of modernity and its attendant philosophies. The discourse begins with an enquiry into the ethico-religious basis of learning in the Qur'ān, *Sunnah* and juristic doctrine, as well as the spirit that guides them, such as academic freedom, classifications of knowledge, and teaching methodologies. The discussion proceeds to consider contemporary challenges to Islamic approaches to learning especially those coming from scientific modernity, rationality and science, which need to be negotiated, confronted if necessary, and integrated when deemed beneficial.

### Introduction

This article offers insights into an Islamic perspective on classical and contemporary approaches to education. The epistemology and attitude to learning envisioned in the revealed sources were reflected institutionally, in the emergence of the mosque as a learning centre, *madrasah*, and *jāmi'ah* (university), and legally, in the body of rules incorporated in scholastic jurisprudence and *fiqh*. These developments explain how Islamic educational philosophy was understood in classical times through the reading

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of scripture and underlying postulates of institutions and practices. The modern era ushered in a new episode of Islamic education unleashing novel challenges from emanating modernity with its attendant secularist and positivist overtones, as well as the more pragmatic demands of pluralism and the market economy.

Our discussion begins with a review of the main sources of Islam, the Qur'ān and *Sunnah* to show Islam's foundational guidelines on knowledge. From this one can see how these sources seek to establish education as a right for every Muslim and then the ensuing responsibility of certain parties to observe that right. We then look at the classical approaches to education and its holistic view of knowledge, ending with reviewing the responses to challenges brought by modernity and how Muslims have managed to deal with them.

### **Qur'ān and *Sunnah*: Foundations of the Islamic Educational Agenda**

The Qur'ān and *Sunnah* contain guidelines that are understood and manifested in different ways. First, they extol the virtue of knowledge and provide inspiration and moral encouragement toward learning. Second, they secure this as a matter of right with juridical implications as well as laying down the institutional support for education through the delineation of rights and responsibilities. Third, they formulate epistemological principles that map out the cognitive terrains through which the Muslim scholar may traverse.

The singular leitmotif pervading the Islamic educational agenda is that of *tawhīd*, the Oneness and Unity of God. This permeates the whole of Islamic epistemology which posits God as the ultimate source and goal of knowledge. Man's knowledge is possible only because God has given him the necessary faculties of knowing and his intellect is illuminated by the Divine Intellect. All knowledge thus originates in God – a principle that also finds ample support in the *Sunnah*.

The very first message of the Qur'ān that marked the beginning of its revelation to Prophet Muḥammad pertains to knowledge. Man is summoned to “read in the name of your Lord and Cherisher!” (96:1), “He who taught the use of the Pen, taught mankind that which he knew not” (96:3–4). God here refers to Himself as the first teacher. It was knowledge too that held aloft Adam, the archetypal man, to a higher rank than the angels, for he was “taught the names of all things” (2:30–5), the knowledge of which the angels did not possess. As a mark of respect for this gift, the angels were thus commanded to prostrate before Adam. Such veneration of knowledge is a reflection of the broader vision of Islam and the qur'ānic attitude to learning. The sacred character of knowledge is readily attested to by the fact that there are numerous references to it and cognate concepts in the Qur'ān. God even takes instruments of learning as objects of solemn oath. There is a chapter, bearing the title *al-Qalam* (The Pen), which begins with the phrase, “*Nūn*, by the Pen, and

by the record which [men] write” (68:1). In yet another chapter, attention is focused on the “written book” as the chapter opens with the words, “By the Mount [of Revelation], and by a Book Inscribed” (52:1–2). Knowledge is compared to light that delivers from darkness, the “light of all lights” being God Himself.

This being the conception of knowledge in Islam, Muslims are enjoined to pursue knowledge and see life as a journey in the perfection of knowledge. The Qur’ān makes numerous references to those who devote themselves to pursuit of knowledge, to “people who think”, “to those who reflect”, “to those who know”, and to “those who possess intellect and the ability to comprehend”, etc. Consequently, learning is enjoined, not only with reference to religious knowledge, but all other beneficial knowledge, for the Qur’ān states that the “signs of God” are also to be found “in the horizons and within themselves” (41:53), “in the heavens and the earth” (10:101), in the earth and in various other resources (29:20). In effect the Qur’ān thoroughly sacralised the whole world as a matrix of ‘signs’ (*āyāt*) of God that encourage enquiry and knowledge-based investigation.

The *ḥadīth* literature evinces a similar ethos. The high position accorded to knowledge and the people of learning is seen in how scholars are described as ‘heirs to the Prophets’. Indeed, the Prophet said of them that “those who possess knowledge are lights of the earth and successors of the prophets”.<sup>1</sup>

### Education as Right

Given such veneration for knowledge, it is only natural that Islam makes the pursuit of knowledge an obligation. The Prophet, pbuh, thus declared that “the pursuit of knowledge is an obligation upon every Muslim”. A variant report of this *ḥadīth* also adds at its very end the phrase “man and woman”. The question remains whether this means that the individual has a right to education. Some commentators have noted that the Islamic polity is under an obligation to provide free universal education to the extent of its capability for all citizens. When there is a duty, there is a corresponding right of every citizen *vis-à-vis* the state to be provided with basic education. It should be noted further, as I later elaborate, that learning in Islam is not confined to schools or educational institutions. This is because dissemination of knowledge is also a responsibility of the society and state. Reports indicate that the Prophet employed women teachers to teach basic literacy to his wives and also to Muslim children. It is most likely that he did so in his Prophetic capacity which would confirm that education is both a right and an obligation of every Muslim, but if some of what he did was in his capacity as head of state, then that would further support the conclusion that education is one of the basic functions of the state in Islam.

Since it is a right, obligation is thus imposed upon all, namely, the community, the state (as representative of society), the family (particularly the parents), relatives,

neighbours and also the learned. If we accept that the individual has a right to education, then the next question is who has the responsibility for its implementation? Assuredly, each individual must himself take the initiative, but certain parties should be entrusted with the obligation to secure its possibility. After all, if there are hardly any opportunities to learn, the individual himself can't be blamed for not learning. This is why the scholars are emphatic on this point. Based on the *ḥadīth* and exemplary conduct of the Prophet, it is clear that he himself undertook personal responsibility for the education of his people.

The scholarly tradition points to the fact that the society as a whole is entrusted with the task of providing education. This is especially so regarding the collective obligation (*farḍ al-kifāyah*), which, according to the jurist Ibn 'Ābidīn (d. 1836) comprises every branch of knowledge which is necessary for the maintenance of worldly affairs because maintenance of religion depends on good management of worldly affairs. As the representative (*wakīl*) of the community, the state is also entrusted to shoulder this responsibility.<sup>2</sup> For the modern jurist Taqī al-Dīn al-Nabhānī (d. 1977) this means that the state is obliged to provide every individual with free education at the primary and secondary levels of schooling. 'Essential education' in his vocabulary means the learning of disciplines that secure the basic interests of the people (*al-maṣāliḥ al-asāsiyyah*) and safeguard them against prejudice and harm.<sup>3</sup>

Yet this does not preclude others from assuming responsibility, for the obligation conveyed in the *ḥadīth* also addresses the parents, spouses and relatives, even neighbours, to play a direct or indirect role in the education of their dependants and other children they might be in a position to help.

More importantly, the learned are also obliged to disseminate their knowledge. When the Prophet came to know that there were illiterates among the neighbours of a learned group (called the *Ash 'ariyyūn*), he criticised them and gave them a period of a year to teach their neighbours basic literacy.<sup>4</sup> According to the caliph 'Alī b. Abī Ṭālib (d. 661), "on the Day of Judgment, the ignorant will not be asked as to their failure to acquire knowledge until the learned have been faced with the question as to why did they not make it available in the first place".<sup>5</sup>

To facilitate this task, the jurists have produced legal rulings that serve as 'incentives' to the pursuit of knowledge. Such is the case with Abū Ḥāmid al-Ghazālī (d. 1111), who maintained that the adult son is not required to seek permission from his parents in pursuit of learning, nor is the woman in need of her husband's permission when it comes to learning obligatory knowledge. Books are deemed to be so precious to the individual that even in the event of bankruptcy one still has a right to retain them. They are exempted from *zakāh* (alms tax) and the one who wishes to perform the *ḥajj* pilgrimage to Mecca need not sell his books to do so. The learned man who owns books uses them in due fulfilment of a collective duty

and hence is exonerated from the said liabilities.<sup>6</sup> Ibn ‘Ābidīn added that scholarly works owned by a learned man even count as his basic necessities.<sup>7</sup>

In its exhortation to learning, Islam makes no gender distinction between genders. The oft-quoted *ḥadīth*, “the pursuit of knowledge is obligatory upon all Muslims” applies equally to women. Indeed, women were taught literacy even in pre-Islamic Arabia – a practice that was continued even with Prophet Muḥammad. His wife Ḥafṣah (d. between 661 and 665) was one of the beneficiaries under this earlier arrangement, being taught by the then renowned *Shifā’ al-‘Adawiyyah*. It was Ḥafṣah who also became the keeper of the original text of the Qur’ān, which was solicited by the caliph for making authoritative copies of the Holy Book.<sup>8</sup> All this points to the fact that women during the Prophet’s time did not suffer the fate that was to attend them thanks to later cultural accretions in the Muslim world. Indeed, the Prophet even assigned a special day for teaching women when the latter complained to him. Shyness and modesty, virtues extolled in most domains of life, are not encouraged with respect to learning, as confirmed by the remark of ‘Ā’ishah (d. 678), “How excellent the women of the *Anṣār* (‘Helpers’) are: they do not feel shy while learning religious knowledge.”<sup>9</sup> It may be said that women have equal rights with men to education. The later segregation and discrimination made against women are largely attributable to historical and patriarchal development of Muslim societies, which have no basis in the source evidence on the subject of knowledge.

Of course, the Islamic educational agenda lays down far more than the ethico-religious basis or reason for learning. The Qur’ān and *Sunnah* have been treated as the foundational texts for Muslim scholars throughout the centuries in their deliberations on fundamental epistemological questions. The scholarly corpus that emerged from these discourses crystallised as manifold schools of thought, each emphasising a certain aspect of this epistemology and developed it into well-articulated philosophies. As we will see below, these epistemological principles were not pure theoretical quibbles but rather the bedrock on which the contents and methods of education rest, both in the practice of education and in the form of educational institutions.

The qur’ānic vision of knowledge may be characterised as knowledge that is founded in understanding (*al-fahm*) and insight (*al-tafaqquh*), which is knowledge espoused with insight that the Qur’ān visualised in its expression *al-tafaqquh fi ‘l-dīn*, that is, understanding of religion, privileging analytical knowledge rather than dogmatism. This can be seen in the verse, “if some individuals from every multitude would devote themselves to the study of religion (*li-yatafaqqahū fi ‘l-dīn*) and admonish their people [...]” (9:122).

### Academic Freedom in Islamic Education

Islam's valorisation of the learned – the 'heirs to the prophets' as we have seen earlier – would not have been secured if there existed no intellectual freedom on the part of scholars. A pivotal aspect of the Qur'ānic ethos of knowledge is its advocacy of intellectual freedom as a dimension of human dignity.<sup>10</sup> To this end, Islam is committed to the dissemination of knowledge. The so-called restriction on academic freedom is only relevant to the extent that it does not halt the constructive course knowledge ought rightfully to pursue. This would include the propagation of heresy, misguidance, corrupt and misleading ideas inimical to the basic tenets and principles of Islam as enshrined, in the objectives of the *sharī'ah* (*maqāṣid al-sharī'ah*), including those that are prejudicial to human welfare. Academic freedom is thus qualified by the need to protect the moral fabric of society.

One of the instruments by which academic freedom and rational enquiry are promoted in Islam is through the process of *ijtihād* (personal reasoning), which is often associated solely with Islamic jurisprudence. A careful analysis of the concept does not indicate such restriction. *Ijtihād* may thus be applied even in scientific and other fields of enquiry. Applied in this context, the often legal strictures appended to it can be adjusted not only in order to encourage *ijtihād* but also in light of advancement in knowledge and science. This flexibility applies even jurisprudentially, for many so-called limitations on *ijtihād* may fall due for a review. The maxim, for example, that: no *ijtihād* may be exercised when there is a clear text, may now require rethinking. Yet in practice it may be said that the text has to be understood first and there is always room for a better understanding of the text such that no black and white restrictions need be imposed on *ijtihād*.

Despite the historical tendency to treat *ijtihād* as a juristic exercise, its applicability extends beyond the legal frontier to other disciplines such as humanities and the sciences. As the twentieth-century scholar Abdul Wahab Khallaf noted, where the subject matter of *ijtihād* concerns temporal matters which are not of immediate concern to religion, "the individual enjoys total freedom of expression and may express an opinion as he pleases provided that it does not amount to slander, hostility or sedition".<sup>11</sup> This, no doubt, invites court criticisms. After all, scientific and academic research is guided by its own objectives that appear to preclude religious scrutiny. This is why we maintain the need for *value-oriented ijtihād* which is sustained by the *maqāṣid al-sharī'ah* rather than legal technicalities.<sup>12</sup> In this respect, *ijtihād* functions as an enquiry and research that is informed by the relevant data of the Qur'ān and *Sunnah* on a variety of themes and subjects not necessarily confined to any particular discipline. The *ijtihād*-oriented enquiry should be guided by the spirit and value-orientation of the *maqāṣid*. The emphasis therefore shifts from an initial legal enquiry to one that is more relevant to educational practices, in particular to those that pertain to recourse to the Qur'ān and *ḥadīth*, not to

extract legal rulings, but as guidance in myriad fields of learning, such as science, economics, sociology, etc.

In this sense, every person capable of research and enquiry into the sources is entitled to conduct *ijtihād*. It is by this means that scholars, even those who were not strictly speaking ‘religious’ scholars, have been able to formulate creative and imaginative ideas drawing explicitly from the Qur’ān and *Sunnah* as their principal guides. This is why *ijtihād* is applicable even in this context. For example, regarding the limitation of *ijtihād*, the question becomes: does this apply to non-legal references in the Qur’ān? Thus, a scientific interpretation of the qur’ānic verse, “Glory be to Him Who created everything in pairs” (36:36), has been given by some philosophers to refer to the cosmological principle of pairing, a sort of ‘yin and yang’ for Islam. Thus all that God creates has its complementary form (i.e. man–woman, night–day...). What is the significance of *ijtihād* in this respect? Moreover, *ijtihād* has also been confused with mere speculation, or *ẓann*. Yet *ijtihād* often consists of a strong probability that is more than just speculative exercise.

As stated above, the Qur’ān and *Sunnah* are the foundational texts, not only in ‘religious’ matters but also in the pursuit of knowledge more generally. Scholars of the intellectual sciences invariably turn to these sources for fundamental knowledge. Accordingly, *ijtihād* is needed when new problems arise. Much can be achieved in *ijtihād* through offering fresh but relevant interpretations of the Qur’ān in line with the existing methodology of *tafsīr*. There is also a significant aspect to qur’ānic exegesis (*tafsīr*) called *ta’wīl* or ‘allegorical interpretation’ that opens further scope for creativity. In fact this *ta’wīl* often gives rise to imaginative interpretations of Islamic principles. It appeals to the symbolic meaning of the Sacred Text on the basis that there is a distinction between the literal (*ḥaqīqī*) and metaphorical (*majāzī*) meanings. To this end, the qualified *mujtahid* deploys to his service a number of interpretive tools, such as *tafsīr*, *ta’wīl* and the *ḥaqīqī-majāzī* distinction. *Tafsīr* based on reason should be cautioned against abuse, but there exists some flexibility. Ibn Taymiyyah (d. 1328), despite his stand on *tafsīr* based on tradition, had to acknowledge that *tafsīr* based on knowledge of the subject matter not contradicting textual evidence should be considered acceptable.<sup>13</sup>

Such qur’ānic methodology has even been applied outside a qur’ānic context by synchronising one’s approach to knowledge and reality that lends credence to the broader vision of *shar’ī* knowledge as propounded by the likes of al-Shāṭibī (d. 1388; see further discussion below). Thus in Islamic cosmology, Muslim philosophers have adopted the methodology of *tafsīr* and *ta’wīl* to understand the natural world, *tafsīr* being the interpretation of the ‘outward’ appearances of reality while *ta’wīl* seeks to give a symbolic meaning to these natural processes.<sup>14</sup> This in fact is possible precisely because the Qur’ān itself establishes the world as a cosmos of *āyāt*, or ‘signs’ pointing to realities beyond themselves, ending ultimately in God.<sup>15</sup>

The spirit of intellectual freedom in Islam is further seen in the celebration of diversity (*ikhtilāf*) and plurality in interpretation and opinion. Disagreement over rational conclusions that are motivated by the spirit of sincere contribution partakes in meritorious work and Islam has nurtured a robust tradition of *ikhtilāf*.

## Classical Approaches to Education

### The Development of the Institutions of Learning

Why was learning institutionalised to start with? The Islamic exhortation to knowledge and learning ensured that the Muslim community is never bereft of any religious instruction, even during the nascent religious community of the Prophet. This general ethos soon crystallised and encouraged the development of formal educational establishments such as the *maktab* or *kuttāb* (elementary school), *madrasah* (college or school), *jāmi'ah* (higher education/university) and *ḥalaqah* or *majlis* (reading circles). An informal tradition of vocational training also developed through apprenticeship schemes in the craft guilds (*futuwwāt*) as well as hospitals, observatories and the Sufi hospices (*zāwiyah*). In most cases the training was offered for free subject to the applied rules of guilds and professional associations.

Nevertheless, even during the Prophet's time, institutionalised learning was already beginning to emerge. The Prophet took personal responsibility for a group of homeless and poor people who became known in the Qur'ān and other literature as the 'companions of the bench' (*aṣḥāb al-ṣuffah*). What began as informal instruction on religion soon evolved into the classical equivalent of a modern residential school. The people of the bench devoted most of their time to worship, learning and other scholarly pursuits. It was during this period that the earliest vocabularies of the Islamic scientific tradition were formulated. Moreover, it has been observed that the *ṣuffah* was not the only institution of learning at that time.<sup>16</sup>

It was the normal pattern for learning to take place in the mosque. Indeed, the mosque-based *maktab* and *ḥalaqah* remained the main institutions of learning until the eleventh century, when the *madrasahs* became fully established. These were circles centred on a person (called *shaykh*, *ḥakīm* or *ustādh*) and provided platform for preaching, disputation and solicitation of legal opinion. They continued even after the formation of colleges (*madrasah*) although in a peripheral manner.

The *madrasah* is akin to secondary school or undergraduate education. Although begun much earlier, it developed into a fully fledged college and university system by the tenth century. The *madrasah* mainly taught the religious sciences ('*ulūm al-naqliyyah* or 'transmitted sciences') such as the Qur'ān, *ḥadīth*, *sharī'ah*, theology (*kalām*) and jurisprudence (*fiqh*). The *jāmi'ah* is the highest form of formal education though in many cases its function was earlier subsumed by the



*madrasah*.<sup>17</sup> Mention must also be made of the *zāwiyah*, or Sufi hospice. It is to the credit of this institution that the intuitive faculty of the student is nourished.

Less formal instruction, especially in a particular art or craft, was received through craft guilds, but a word has to be said about the nature of such training. Although outwardly it may be concerned with craft production, the instruction also involved a spiritual component through which the apprentice may learn the fundamental metaphysical and cosmological principles associated with the art. Thus even a comb-maker may invoke the origin of his craft to a sacred personality, such as the prophet Seth.<sup>18</sup> The significance of the *futuwwāt* or *ashnāf* is especially relevant today in the light of the rise of ‘corporate’ universities and commercialised institutions of learning. Islamic intellectual history thus points to the fact that such a phenomenon is not new. It becomes especially critical to assess how the religious and spiritual outlook was still retained despite the practical or vocational orientation of that education. Cries of protest from both the academic and religious community on the value of disinterested scholarship ought not to be downplayed but appreciated.

### Methods of Learning

What gives the Islamic education system its unique character? Unlike what we witness today, education was an intensely personal affair. The student then was given the freedom to choose his own teacher such that it was not uncommon for educational tracts to devote considerable discussion on advice in seeking a teacher.<sup>19</sup> Once a teacher–student relationship is established, each is assigned specific roles and responsibilities. The veneration of teachers was axiomatic to the point that the teacher was almost sanctified. Al-Ghazālī elucidated purification of the self and displaying humility towards the teacher among the duties of the students. The teacher in turn should consider himself in the position of a parent and look after the affairs of the student, both for this world and the next.<sup>20</sup>

These methods were not uniform throughout the Muslim lands. As late as the fourteenth century, the philosopher-historian Ibn Khaldūn (d. 1406), observed this in his travels across the continents and recorded, among others, the methods employed in North Africa and Andalusian Spain. The emphasis on the Qur’ān to the near total exclusion of the other sciences, has resulted in a tendency for students to be “incapable of mastering the linguistic habit”. After all, how could one acquire knowledge of writing skills by acquaintance with a work not produced by a human being? In North Africa and the Middle East the situation was different as Qur’ānic instruction was combined with training in other sciences.<sup>21</sup>

As we have seen there is a consensus that education is both a right and an obligation in the writings of the jurists (*fuqahā’*). What is not clear, however, is whether or not there can be punishment for one who obstructed the pursuit of learning. The closest that came to giving an affirmative response to this is in the

work of Abū 'l-Ḥasan 'Alī al-Qabīṣī (d. 1012) (apparently also the first to address this issue) who obligated the state, in cooperation with the parents, to provide education for children. At the same time, the parents' freedom ought to be respected and neither the state nor the scholars ( '*ulamā*' ) should coerce them towards the education of their children.<sup>22</sup>

In relation to discipline and punishment in child education, various scholars such as al-Qabīṣī, Ibn Saḥnūn (d. 854), Ibn Sīnā (Avicenna, d. 1037), al-Ghazālī, Ibn Khaldūn and Shams al-Dīn al-Anbānī permit punishment though insisting on leniency and compassion. The Islamic attitude to punishment holds that it may often achieve reformation, excellence and beauty. Although punishment is in principle allowed, the prospect of its abuse is stifled by qualifications, rules and restrictions. Thus the punishment is to be disciplinary rather than punitive and executed only upon the failure of advice and admonition. Even when beating is carried out, it should not be more than three strokes. The only odd voice here is Ibn Sīnā, for whom the first punishment should be so painful to serve as deterrent against repetition.<sup>23</sup> Al-Ghazālī advised restraint from severity and anger and not to rebuke the children too frequently as this is likely to damage their ability to respond to gentle advice and normal communication.<sup>24</sup> The approach to education is practical, and thus insists on elements of compassion and leniency. This is why graduality is stressed in classical Islamic education.

In summary, punishment is allowed as part of child discipline but conditions are laid down to restrict its use, e.g. it must only be resorted to on failure of advice and admonition, that it must not exceed three strokes, not to apply to very young children and not to be applied to the face and sensitive parts of the body. In this respect, child education in Islam is primarily concerned with building the child's character towards perfection, in tandem with the view of the philosophers.

### **Classification of Knowledge**

The spirit of *tawḥīd* underlined above is further reflected in the scheme of classification of the sciences. Classical Muslim scholars limit the pursuit of knowledge in a particular discipline by reference to the goals and objectives of each. Beyond this, they maintain that the basic unity and harmony among the sciences, in line with the spirit of *tawḥīd* is likely to be disturbed when pursued exclusively. There was, in short, a caveat against the type of over-specialisation so much in vogue in contemporary scholarship. We may add here that it is through this openness that early scholars were able to master many disciplines at the same time, a fairly common phenomenon then, which has become rather scarce today, given the inevitable tendency towards 'specialisation' and the sheer bulk of information in modern disciplines.

The versatility of classical scholars is a point of particular interest. It was quite possible that a single thinker combined within his range of expertise manifold disciplines of learning at the same time. This represents a striking blow to the system that our contemporaries are accustomed to, namely specialisation upon specialisation to the extent that the ‘bigger picture’ is increasingly overshadowed and obscured. Analytical knowledge should never be pursued to the extent of compromising synthetic knowledge. This means that the balance and unity of the sciences should always be maintained. As the prominent contemporary thinker Seyyed Hossein Nasr (b. 1933) observed,

The various branches of knowledge in Islam have [...] come to be regarded as so many branches of a single tree, which grows and sends leaves and fruit in conformity with its natural capacity and endowment. Just as a branch does not continue to grow indefinitely, so also is science, none of whose branches may be extended and pursued beyond certain limits, for any disregard of such natural limitations is likely to disturb and destroy the harmony and proportion of things and ultimately prove to be a useless activity. A branch that continues to grow in disproportion to the tree itself is likely to destroy the harmony of the tree as a whole. The attempt to classify knowledge in certain inter-related categories was a means by which the scholars have sought to preserve the balance and unity of the sciences.<sup>25</sup>

Ibn Ḥazm (d. 1064) distinguished sharply between the religious and non-religious sciences. Ibn Ḥazm opined that the search for knowledge is either a personal obligation (for matters relating to personal religious duties such as prayer, fasting, alms tax, etc) or a collective duty (*farḍ kifāyah*). Matters which involve the performance of religious duties are considered as personal obligation while those that relate to the society’s welfare generally fall under collective duty. In this way, Ibn Ḥazm’s classification adheres to the conventional dichotomy of religious and secular sciences.<sup>26</sup>

Al-Shāṭibī presented a holistic and unified view of knowledge in his scheme. His central thesis is that the highest science is *shar‘ī* knowledge, although his version of *shar‘ī* is much broader than those of other thinkers. It is closer to the approach of *maqāṣid al-sharī‘ah*. He gave a wider meaning to worship (*ta‘abbud*). Al-Shāṭibī’s classification, insofar as it is brought closer to *maqāṣid*, bridges the gap between law and ethics, thus evading the so-called ‘conflict’ between the two that one sees in Western jurisprudence.<sup>27</sup>

The case with al-Ghazālī was somewhat more complex, for as a reformer and holistic thinker he was painfully aware of the balkanisation of the original unity of knowledge that plagued the scholars of his time. This is why his project to revive the religious sciences incorporated elements from a whole range of disciplines. In his time, the scholars of each discipline of *kalām* (scholastic theology), *fiqh*

(jurisprudence), *tafsīr* (Qur'ānic exegesis), *ḥadīth* and *taṣawwuf* (mysticism) asserted the prominence of their respective fields over the rest.<sup>28</sup>

Although al-Ghazālī affirmed a distinction between *shar'ī* knowledge and the rational sciences, he accepted the unfeasibility of a clear-cut distinction between the two. Thus he divided the *shar'ī* sciences into the praiseworthy and reprehensible. Even within this scheme, al-Ghazālī adopted two positions. As a theologian, he was concerned with the distinction between religious and intellectual sciences. But as a Sufi, however, he acknowledged the limit of such a dichotomy since from this perspective all knowledge was at once intellectual and religious, particularly what the Sufis term 'knowledge by presence' (*'ilm al-ḥuḍūrī*).<sup>29</sup> The extent to which this shares with al-Shāṭibī's approach is another question that merits serious study.

How does the classification of the sciences into obligatory and optional, or religious and non-religious, or the four-tier classification of *shar'ī* knowledge, or the three evaluative categories of high, average and low, able to secure the unity of the sciences? By 'unity' of the sciences we mean that individual sciences were never completely detached from one another, which rendered it possible for a scholar to traverse from one discipline to another quite smoothly. It enables the scholar to have a holistic view of knowledge that sees things not as mere concepts but as parts of a single composite reality. This further allows him to use the findings in one discipline to benefit another discipline, which further reinforces their mutual inter-dependency.

The unitary perspective of early Muslim scholars is partly attributable to the system of education that they received. In most cases, they were first taught knowledge of the Qur'ān and *Sunnah*, the twin sources of knowledge of the ultimate reality of things. These, as we have seen in our discussion on the Qur'ān and *Sunnah*, recurrently appear in every field of learning which the Muslim pursues, be it 'religious' or 'non-religious'.

## Contemporary Islamic Education

### The Encounter with the West

When we come to the modern world we observe that Islam's intellectual glory has succumbed to twilight. Its political might was all but spent. Western ascendancy pressed new claims upon Muslims presenting them with hard choices between reform or deform. Assuredly, Muslims chose the first and the consequences have been far-reaching. We may divide them into two broad themes, namely the institutional and the intellectual. The former is necessarily influenced by the latter insofar as institutions are but crystallisation of ideas. Today's state school systems in many Muslim countries trace their origin to the introduction of western-style schools in the nineteenth century, though as early as the eighteenth century such reforms were already taking place even before western intrusion.<sup>30</sup>

During the eighteenth and nineteenth centuries, several changes occurred that brought to an end the classical approaches to education in the Muslim world. The first was European colonialism. Political domination and colonialism wreaked severe damage. The introduction of western liberal education supplanted the traditional curriculum and assigned the *naqliyyah* sciences to only a limited role in public education, as well penetrating the *'aqliyyah* sciences with western interpretations. This anomaly made a holistic approach to education unfeasible, and the duality has persisted ever since. More than this, it has created considerable confusion in the minds of many people today, that 'Islamic education' is conflated with 'religious education'.<sup>31</sup> The net result is that many are unable to understand that 'Islamic education' actually included what they would call 'secular' sciences. To give an illustration of how Muslims perceive western tradition, one may only consider the words of the literary scholar Tāhā Ḥusayn (d. 1973) who called for a wholesale adoption of European ways and thought, "the good and the bad; the sweet and the bitter; the attractive and the repulsive; the praiseworthy and the blameworthy alike".<sup>32</sup> Others showed a similar attitude with respect to western science and technology and accepted uncritically the premises on which they were based. They went to great lengths to demonstrate and even revise qur'ānic claims to suit the demands of 'modernity'.

One component of European education that posed a considerable threat to traditional Islamic education was modern science which claimed supremacy of scientific rationality. In the early episodes of encounter, Muslim apologists generally maintained that there was no significant conflict between Islam and science. These include Karāmat 'Alī Jawnpūrī (d. 1873), Sir Sayyid Aḥmad Khān (d. 1898), Jamāl al-Dīn al-Afghānī (d. 1897), and Muḥammad 'Abduh (d. 1905). Afghānī asserted that the loss of Muslims to the authority of the West was greater in no other area than that of science. Similarly, 'Abduh sought to establish education on the basis of morality and religion but maintained that there is no conflict between religion and science.

Despite this, there were voices that insisted on the lack of rationality on the part of Muslims. It was asserted by a Western intellectual that "the oriental mind is quite different from ours. The oriental mind has no sense of critical rationalism, no sense of reality."<sup>33</sup> Even the Arab polymath, Ibn Khaldūn apparently did not possess any originality, for "this oriental had a sharp, critical mind. In other words, he had a western sense of history".<sup>34</sup>

### **Institutional Changes**

Institutional changes served as the catalyst for alterations in the Islamic educational establishments passing as 'reforms'. It is especially evident with regard to Al-Azhar University in Egypt which experienced a phase of massive educational reform under

the leadership of its modern reformers. It was first established as a mosque in CE 972 by the Fatimid caliph but evolved into a *madrasah* later. Al-Azhar's history narrates the process of evolution. The end of the nineteenth century witnessed a period of transition to a modern educational system that was based on formal course structures, syllabi, semesters and degree programmes. In 1961, it was established as a modern university, incorporating many 'secular' faculties such as economics, medicine, engineering and agriculture. Under the Egyptian law (no. 103) of 1961, the university opened admission to female students and added various 'secular' faculties.

The first academic governing body at al-Azhar was established in 1908 as a result of a statutory law promulgated in that year. Under the chairmanship of the Shaykh al-Azhar, the High Council of al-Azhar included among its members the Grand Mufti of Egypt and representative '*ulamā*' from each of the other three leading *madhāhib*, namely Mālikī, Ḥanbalī, and Ḥanafī – aside from the dominant Shāfi'ī law school. This was the beginning of a process where some of the decision-making functions of the professor were overtaken by a university body. Academic freedom which professors and students had hitherto enjoyed was wide-ranging and unencumbered by hierarchy and officialdom of the kind that has since become normal practice in al-Azhar.

Secularism in Arab countries and elsewhere in the Muslim world is also manifested in the replacement in modern schools of *fuqahā'* largely by lawyers, and religious teachers by trained teachers, especially when the *kuttāb/maktab* or the qur'ānic schools were transformed into modern schools on western models, although the process was gradual and uneven. The changes that took place were on a wider scale in other parts of the Middle East compared to Egypt, where for various reasons, al-Azhar kept its control over primary education with its system of *madrasahs* throughout Egypt. In the Maghreb French colonialism divided the education system into a modern sector closely modelled on the French system and another, older sector, based on the *kuttāb*. The transformation was extended with the replacement of the *madāris*, which had taught *fiqh*, the Qur'ān, the *ḥadīth* and elements of Arabic, by universities applying modern curricula. Drastically revised curricula were later somewhat reluctantly introduced by institutions like Cairo's al-Azhar and al-Zaytūnah in Tunis, perhaps less drastically in the former. But al-Zaytūnah was transformed so much that its status was reduced from a university to what is now a part of a modern university known as the Faculty of Religious Studies. Changes in al-Azhar were not so radical as in the new faculties, and their revised curricula still remained under the umbrella of the original al-Azhar principles and traditions.

Turkey under Kemal Atatürk (d. 1938) had imported the western secular education without even attempting to reform the traditional system. Indonesia and Malaysia, although Muslim majority countries, considered it wise to accept secularism and remain non-committal to the idea of a reformed Islamic educational

system beyond retaining religious education as a subject in their school curricula. These changes led to a shift from a perception which saw public affairs, society and education through the prism of religion, to one that bore the imprint of modernity, or *nahḍah* (awakening), that implied openness to further modernisation. Changes were often accompanied by social upheavals that took place in Arab and Muslim societies for over a century which affected their education system and the judiciary more than most. The body of ‘*ulamā*’ was displaced from the leading places it had occupied in public life. Judges were now to be trained in British common law as the application of *sharī‘ah* became confined to private and personal law matters. The introduction of legal codes in many fields which were previously governed by the *fiqh* texts added to the marginalised status of the ‘*ulamā*’. Formal constitutions introduced on the eve of colonialism in many Muslim and Arab countries were yet other instruments of secularism which articulated the ideas and foundations of the western nation state in these countries. Colonialism transformed other Muslim countries as well.

These developments are ironic, particularly because much of the educational heritage of Islam had been previously taken over by the Europeans themselves. Modern educational practices such as the issuing of degree certificates, universities, chairs and personal tutorials may have their origin in classical Islam,<sup>35</sup> and were introduced into Europe in the medieval period.

### Science and Rationality

Rationality, a challenge raised at the beginning of the nineteenth century, was thought to be of immense importance. Yet the way in which Muslims have responded to it is problematic. Muslim philosophers, following the Greeks, understood man as a ‘rational or speaking animal’ (*ḥayawān nāṭiq*). Thus it is rationality that defines man. Yet this ought not to be confused with the rationalism developed in the West among post-Descartes thinkers. When Muslims use the word ‘*aql*’ they mean by it the intelligence–reason synergy that was truncated when medieval European philosophers distinguished between *intellectus* (intellect) and *ratio* (reason). The Arabic word ‘*aql*’ is so composite that it includes both intellect and reason, and much more, which is why some early philosophers speak of *al-‘aql al-juz’ī* (individual intellect) to refer to ‘reason’ and *al-‘aql al-kullī* (universal intellect) to refer to ‘intellect’.<sup>36</sup> It has been even argued that the rationality that Muslims speak of refers to ‘deeper reason’.<sup>37</sup>

Even on the level that is popularly deemed as ‘scientific’, Islamic epistemology does recognise elements that may have been described as ‘rational’ or ‘scientific’. This includes the Qur’ānic rejection of conjecture (*al-zann*) vis-à-vis certitude (*al-yaqīn*) (“...they follow but a guess, and a guess can never take the place of the truth” – 53:28; “follow not that of which you have no knowledge” – 17:36);

rejection of passion and untrammelled desire (*hawā*) (“O David! We made you a vicegerent in the earth so that you judge among people with truth, and follow not the passion that sways you away from the path of God – 38:26; “Have you seen the [predicament of] one who chooses for his god his own passion? Would you then be a guardian over him?” – 25:43); rejection of blind imitation (criticism of those who “follow the way of our ancestors, even if their ancestors did not know nor were they rightly guided” – 5:104); and rejection of dictatorship (“We obeyed our princes and great men and they misled us” – 33:66). Nevertheless, Islam does not accept the rational faculty alone as the exclusive source of knowledge. The means of knowledge are various, though its source is God the Most High. To this end, Islam accepts a plurality of sources and a broader concept of rationality, which embraces aspects of intuition as well. The Indian Muslim scholar Muḥammad Iqbāl (d. 1938), who argued that the Qur’ān marked the birth of the inductive intellect, still affirmed that intuition is organically related to thought.<sup>38</sup>

Several scholars affirmed there is no incompatibility between Islam and science but embraced without question the entire scientific project without even considering its foundational assumptions. The real problem with this perspective is not the contention of the essential incompatibility between Islam and science, but the very formulation of the question itself. It should be noted that although the western historical experience records intense confrontation between the two, this has never been the case throughout Islamic history. Indeed, the very persons who cultivated science were also religious scholars.<sup>39</sup> This does not mean that such a challenge *today* is artificial. When the Muslim world ceased to cultivate science, the Europeans then took over where Muslims left off. Yet they effectuated a fundamental change in the scientific project. Whereas within the Muslim milieu the metaphysical basis was acquired from revealed sources, European science moved increasingly towards an anti-metaphysical direction. This constitutes one of the major, if not *the* major, dividing line between western and Islamic – or indeed, any religiously cultivated – science. Western science then posits itself as a ‘neutral’ and ‘disinterested’ project when it is in fact profoundly value-laden and value-loaded.<sup>40</sup>

The disparity between the Islamic and modern outlook has prompted a flurry of critique from amongst Muslim intelligentsia, ranging from philosophical censure of modern science’s metaphysical foundations (or the lack thereof), of its moral and ethical neglect to the plethora of social and environmental consequences of its abuse. Islamic rationality is inextricably bound to its vision of reality as laid down in a metaphysic divinely revealed and deliberated by the scholars. Indeed, “there is a dividing line between the Islamic and Western conceptions of rationality, especially in its post-Enlightenment context”.<sup>41</sup>



In this Islamic perspective, the word *'aql*, often translated by modernists and 'rationalists' as 'reason', embraces the faith dimension of knowledge informed by ethical values.<sup>42</sup> We have seen earlier that the traditional Islamic education system does not focus exclusively on the development of the 'intellectual' skills of a person but also cultivates his or her moral and spiritual qualities. Such recognition is only possible within this metaphysical framework that posits reality as hierarchically graded. We have also alluded earlier to the creativity through *ijtihad*. All of this stems from the basic affirmation of manifold rationalities. The Qur'ānic sacralisation of the whole world as a matrix of 'signs' (*āyāt*) has far-reaching consequences for the intellectual-spiritual makeup of Muslims.

As we have asserted, the Islamic concept of rationality is broader than that understood in the West. Even in the West the enlightenment notion of rationality is already under siege. The scientific community has become more liberal in its reception of non-conventional methodologies.<sup>43</sup> What gives the Islamic concept of rationality its distinct character is the acceptance of hierarchical levels of reality – a concept rooted ultimately in the Islamic revelation. Thus traditional Islamic thought accepts various levels of reality, corresponding to the different faculties in man adequate to grasp its knowledge. This is a far-cry from the rejection of metaphysics and realities beyond the sensible as articulated in contemporary western experience.

### **World Conferences on Muslim Education**

The considerable gap between the traditional Islamic approach to education and the reality of contemporary education is acknowledged by many contemporary scholars. Their concerns were well-articulated in the deliberations at the World Conferences on Muslim Education held since 1977. These initiatives explored critical issues of actionable implications, from philosophical underpinnings that sustain Islamic education, classifications of knowledge, curriculum and textbook, to child education. The worldview within which the pursuit of knowledge operated in the Islamic intellectual milieu was given due recognition as early as the First Conference in 1977 in Mecca, Saudi Arabia. The Conference suggestion for classification of knowledge into 'revealed' and 'acquired' was reminiscent of the Ghazālīan formula that we encountered earlier.<sup>44</sup> Three other international conferences followed in close succession in Pakistan and Bangladesh that advanced a wide spectrum of issues of concern to a revised programme and agenda of Islamic education at various levels. The emergence of Islamic universities with English as their principal medium of instruction in several Muslim countries is a tangible result of those deliberations.

Several other challenges yet to be addressed include the problem of Islamic education in a plural society (note that 'Islamic education' here is broadly construed),

the commercialisation of academic institutions on a corporate model, as well as, integrating the traditional science and modern disciplines.

## Conclusion and Recommendations

The advent of modernity represents a momentous episode in Islamic educational history as evidenced by the widespread ‘reforms’ in thought and institutions throughout the Muslim world. The boundaries between the classical and contemporary approaches to education in Islam are drawn from the experiences of encounter between the Islamic worldview which affirms a theocentric conception of knowledge and cognisance of both the physical and metaphysical dimensions of reality, and the modern outlook which posits a different epistemological model guided by the spirit of secularist modern science.

These developments demand an effective response to bridge the gap – and strike a balance – between traditional and modern education. A transition is needed from the predominantly intellectual focus of modern education to one that combines a balanced emphasis integrating both character and intellect. This may be achieved through the following ways:

- The curriculum content and syllabi of modern sciences – including social sciences – must incorporate the metaphysical principles and insights derived from the revealed sources of Islam and elaborated by scholars. These should be the starting point in defining the scope and purpose of Islamic education as well as defining its relations with other sciences.
- The holistic conception of education which embraces the development of the human person should be integrated into the school and university curricula in all areas of knowledge. This may include programmes that strengthen teacher–student relations and endorse continuity with the traditional roots of Islamic education.
- Balanced amalgamation of modern knowledge with traditional methods should be facilitated through encouragement of critical thinking, originality and creativity in learning. These may be achieved by capitalising on modern approaches to education and research methodologies that contemplate beneficial outcomes for society.
- The sheer pressure of numbers and frequent examinations in modern educational institutions have suppressed the traditional patterns of Islamic learning and student–teacher relationship. The Islamic institutions of learning should revive these, even if selectively, to the extent that may enhance and enrich their learning environment.

## Notes

1. Al-Bukhārī, *Ṣaḥīḥ al-Bukhārī*, transl. Muhsin Khan (New Delhi: Kitāb Bhavan, 1980–1984), 1:56, *ḥadīth* no. 67.
2. Cf. ‘Abd al-Hakim Hasan Al-‘Ili, *al-Huriyyat al-‘ammah fī ‘l-fikr wa ‘l-nizām al-siyāsī al-Islāmī* (Kuwait: Dār al-Kitāb al-Ḥadīth, 1983), 448; Ismā‘īl Badawī, *Da‘ā‘im al-hukm fī ‘l-sharī‘ah al-islāmīyyah wa ‘l-nuzum al-dustūriyyah al-mu‘āṣirah: al-ḥuqūq wa ‘l-ḥurriyyāt al-‘ammah* (Cairo: Dār al-Nahḍah al-‘Arabiyyah, 1994); see also Muḥammad al-Ghazālī, *Ḥuqūq al-insān bayn ta‘ālīm al-insān wa-i‘lān al-umam al-muttaḥidah* (Cairo: Dār al-Kutub al-Islāmīyyah, 1984), 210; Muḥammad al-Ḥusaynī al-Muṣayliḥī, *Ḥuqūq al-insān* (Cairo: Dār al-Nahḍah al-‘Arabiyyah, 1988), 110.
3. Taqī al-Dīn al-Nabhānī, *Muqaddimat al-dustūr* (n. pl.: n. p., 1963), 420.
4. Long *ḥadīth* recorded in ‘Abd al-‘Azīm b. ‘Abd al-Qawī al-Mundhirī, *al-Targhīb wa ‘l-tarhīb* (Cairo: Dār al-Ḥadīth, 1994), 1:60; Muḥammad ‘Abd al-Qādir al-Haythamī, *Majma‘ al-zawā‘id wa-manba‘ al-fawā‘id* (Beirut: Dār al-Kutub al-‘ilmiyyah), 1:164; Muṣṭafā Sibā‘ī, *al-Takāful al-ijtimā‘ī fī ‘l-islām* (Beirut: al-Maktab al-Islāmī, 2009), 101.
5. Abū Zahrah, *Fī ‘l-mujtama‘ al-islāmī* (Kuwait: Dār al-Fikr al-‘Arabī, n.d.), 7; ‘Abd al-Wahhāb ‘Abd al-‘Azīz al-Shīshanī, *Ḥuqūq al-insān wa ḥurriyyātuh al-asāsīyyah fī ‘l-nizām al-islāmī wa ‘l-nuzum al-mu‘āṣirah* (Riyadh: Maṭābī‘ al-Jam‘īyah al-Malakiyyah, 1980/1400), 582.
6. Abū Ḥamid al-Ghazālī, *Iḥyā‘ ‘ulūm al-dīn*, transl. Maulana Fazul-Ul-Karim (Delhi: Kitāb Bhavan, 1982), 1:221; Sibā‘ī, *al-Takāful*, 109–10.
7. Muḥammad Amīn Ibn ‘Ābidīn, *Hāshiyah* (Damascus: Dār al-Thaqāfah wa ‘l-Turāth et al., 2000), 2:6.
8. Cf. al-Muṣayliḥī, *Ḥuqūq*, 137.
9. Al-Bukhārī, *Ṣaḥīḥ*, transl. Muhsin Khan, 1:96, *ḥadīth* no. 131.
10. For a discussion on human dignity from the Islamic perspective, see Mohammad Hashim Kamali, *The Dignity of Man: An Islamic Perspective* (Cambridge: Islamic Texts Society, 2002).
11. Quoted in idem, *Freedom of Expression in Islam* (Cambridge: Islamic Texts Society, 1997), 48.
12. Indeed, it is through the *maqāṣid* that the gulf between disciplines is bridged. See for example how the bifurcation of law and ethics that is characteristic of modern Western jurisprudence is bridged in Mohammad Hashim Kamali, “Law and Ethics in Islam: The Role of *Maqāṣid*”, in: Kari Vogt, Lena Larsen, and Christian Moe (eds), *New Directions in Islamic Thought: Exploring Reform and Muslim Tradition* (London: I.B. Tauris, 2008).
13. Abdullah Saeed, *Interpreting the Qur‘an: Towards a Contemporary Approach* (New York and London: Routledge, 2006), 66–8.
14. See the discussion in Osman Bakar, *Tawhid and Science: Islamic Perspectives on Religion and Science* (Shah Alam [Malaysia]: Araḥ Publications, 2008). This ingenious intellectual device has been critical to the development and growth of many sciences which have an interior, mystical component, such as alchemy or astrology. See also Seyyed Hossein Nasr, *Science and Civilisation in Islam* (Cambridge: Islamic Texts Society, 1987).
15. On how to understand these signs, see Mohammad Hashim Kamali, “Reading the Signs: A Qur‘anic Perspective on Thinking”, *Islam and Science* 4, no. 2 (Winter 2006), 181–205, also available online at <http://www.iais.org.my> (accessed on 15 December 2010). This topic is further discussed *infra*, in the section on “Science and Rationality”.
16. Alparslan Açıkgenç, *Islamic Science: Towards a Definition* (Kuala Lumpur: ISTAC, 1996), 81–6; see also M. Hamidullah, “Educational System in the Time of the Prophet”, *Islamic Culture* 13 (1939), 53–5.
17. Seyyed Hossein Nasr, *Traditional Islam in the Modern World* (Lahore: Suhail Academy, 1987).
18. See for example, the discussion in Titus Burckhardt, *Fez: City of Islam* (Cambridge: Islamic Texts Society, 1992).

19. For instance, Burhān al-Dīn al-Zarnūjī, *Ta'lim al-muta'allim: Tarīq al-ta'allum*, English transl. by Gustave E. von Grunebaum and Theodore M. Abel, *Instruction of the Student: The Methods of Learning* (Chicago: Starlatch Press, 2003), especially chapter 3, "The Choices in Learning".
20. Al-Ghazālī, *Ihyā'*, 1:61–3.
21. Ibn Khaldūn, *The Muqaddimah: An Introduction to History*, transl. Franz Rosenthal, Bollingen Series XLIII (Princeton: Princeton University Press, 1967), 3:300–3.
22. Abū 'l-Ḥasan 'Alī al-Qabīṣī, *al-Risālah al-mufaṣṣal li-aḥwāl al-mu'allimīn*, appearing as an appendix in: Aḥmad Fu'ād al-Aḥwānī, *al-Tarbiyah fi 'l-islām* (Cairo: Dār al-Ma'ārif, 1968), 267–351.
23. Ibn Sīnā, *Risālah fi riyāḍat al-ṣibyān* (unpublished MS), quoted in al-Aḥwānī, *al-Tarbiyah*, 158 and 232.
24. Al-Ghazālī, *Ihyā'*, 3:70.
25. Nasr, *Science and Civilisation*, 59.
26. Ibn Hazm, *Al-Iḥkām fi uṣūl al-aḥkām* (Cairo: Muḥammad Amīn al-Khanjī 1347AH/1929), 5:121–3.
27. See above, n. 12.
28. Al-Ghazālī, *Ihyā'*, 1:21–2.
29. Osman Bakar, *Classification of Knowledge in Islam* (Kuala Lumpur: Institute for Policy Research, 1992), 267–8.
30. Donald Malcom Reid, "Education: Educational Institutions", in: John L. Esposito et al. (eds), *The Oxford Encyclopedia of the Modern Islamic World* (Oxford: Oxford University Press, 1995), 412–16.
31. For a brief description of this broader meaning of 'Islamic education' see Osman Bakar, "Interfaith Dialogue as a New Approach in Islamic Education", *Islam and Civilisational Renewal* 1, no. 4 (July 2010), 700–4. See also the entry on "Religious Education" in Esposito et al. (eds), *The Oxford Encyclopedia of the Modern Islamic World* for the distinction between Islamic education and religious education. Islamic education *subsumes* religious education, but not *reducible* to it.
32. Ṭāhā Ḥusayn, *Mustaqbal al-thaqāfah fi Miṣr* (Beirut: Dār al-Kitāb al-Lubnānī wa Maktab al-Madrasah, 1982), 9:54, quoted in Muddathir Abd al-Rahim, Harold Coward, Robert E. Florida, and Peter J. Haas, *Human Rights and the World's Major Religions* (London: Praeger, 2005), vol. 3: "The Islamic Tradition", 92.
33. E.F. Gautier, *Le Passé de l'Afrique du Nord* (Paris: Payot, 1937), 9, quoted in Karim Crow, "Islam and Reason", *Al-Shajarah* [Kuala Lumpur] 8, no. 1 (2003), 109.
34. *Ibid.*
35. For some discussion on the parallels between Islamic and modern educational concepts and practices, see George Makdisi, *The Rise of Colleges: Institutions of Learning in Islam and the West* (Edinburgh: Edinburgh University Press, 1981). For arguments on Islamic precedents of modern education, see Mehdi Nakosteen, *History of Islamic Origins of Western Education* (Boulder CO: University of Colorado Press, 1964).
36. Seyyed Hossein Nasr, *Islamic Philosophy from its Origin to the Present* (New York: State University of New York Press, 2006), 93–7.
37. Saeeda Iqbal, *Islamic Rationalism in the Subcontinent* (Lahore: Sh. Muḥammad Ashraf, 1984).
38. Muḥammad Iqbal, *The Reconstruction of Religious Thought in Islam* (Delhi: Adam Publishers, 2001), 101 and 104, respectively.
39. This is in part due to the Islamic worldview within which the sciences were cultivated; see Açıkgöç, *Islamic Science*.
40. For a critical assessment of the so-called neutrality of science, see Robert Proctor, *Value-Free Science? Purity and Power in Modern Knowledge* (Cambridge MA: Harvard University Press, 1991).
41. Kamali, "Reading the Signs".
42. *Ibid.* See also Crow, "Islam and Reason", where Crow maintains that there is an "inherent interdependence of human rationality with moral imperatives and transcendent values within the organic

intellectual unity of Islam's worldview". This way, to be 'good' does not partake of a moral worth alone but also harnesses one's intelligence.

43. See, for example, Paul Feyerabend, *Against Method: Outline of an Anarchistic Theory of Knowledge* (London: Verso, 1982).
44. Corresponding to the distinction between religious and intellectual sciences by al-Ghazālī.