ABSTRACT: The kalām jadīd or new dialectics intellectual movement initiated by al-Ghazālī and matured by Fakhr al-Dīn al-Rāzī succeeded in putting all the hellenising philosophical and natural sciences firmly within the theological and epistemological ambit of tradition. This historical success provides pertinent lessons for Muslim scholars and intellectuals today to formulate what can be called kalām al-ʿāsr, or the Dialectics of the Age, in order to bring tradition to engage creatively and evaluatively with the challenge and allure of contemporary secularising sciences.

KEYWORDS: Al-Ghazālī, Fakhr al-Dīn al-Rāzī, Al-Attas, Worldview of Islam, kalām jadīd, kalām al-ʿāsr, Dewesternization, Islamization of Present-Day Knowledge

Even as a discourse on religion, kalām obviously inclined, right from the start, to use forms of arguments some of which were clearly employed by ancient (and modern) philosophers; and it is of course important to identify these forms, their sources and characteristics.

1. Preamble

In Knowledge Triumphant, Franz Rosenthal observes that the Islamic civilisation is one that is essentially characterised by knowledge (ʿilm), “for ʿilm is one of those concepts that have dominated Islam and given Muslim civilization its distinctive shape and complexion.” This should not be surprising since the divine revelation itself repeatedly emphasises that its signs or verses are only understandable “for a people who think,” (li qawmin yaʿqilūna). It exhorts believers, nay, even non-believers, to look to the cosmic horizons (al-āfāq) and into their very selves (al-anfus) for empirical evidences/indications/āyāt demonstrating the revealed truth (al-ḥaqq).

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4 For an elaboration of the term “āyāt” See Mohd Zaidi Ismail, “The Cosmos as the created book and its implications for the orientation of science,” Islam & Science 6, no. 1 (Summer,
scholars, Muslims and non-Muslims alike, the seeds of rational/cognitive thinking were already in early Islam, in the Qurʾānic revelation itself,\(^6\) or as Nuh Ha Mim Keller puts it, “the Qurʾan itself uses rational argument.”\(^7\)

From the very beginning, Muslims have taken a rational (or rather, intellectual and cognitive, ‘aqlī) and scientific (ʿilmī) approach to matters in both the religious (including, spiritual) and mundane domains (umūr al-dīn wa al-dunyā).\(^8\) Simply put, there was never in Islamic intellectual history—Ibn Rushd (520—595/1126—1198) notwithstanding\(^9\)—the peculiarly medieval Christian and early modern problem of reconciling between reason and revelation as if the two were mutually exclusive avenues to truth and knowledge that have to be brought together in some form of uneasy compromise and co-existence.\(^10\) As far as Muslims are concerned, revelation and reason are in mutual harmony as complementary avenues to objective knowledge that spring ultimately from the same transcendent, ontological source.\(^11\)

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\(^5\) Fussūla (41): 53.


\(^7\) Nuh Ha Mim Keller “Kalām and Islam: Traditional Theology and the Future of Islam,” in Islamica 13 (Summer 2005): 15–27 (on p. 17); accessible also online http://www.livingislam.org/k/ki_e.html.


\(^9\) Ibn Rushd, Faṣl al-Maqāf li mā bayna al-ḥikmah wa al-shariʿah min al-ittisāl, trans. George F. Hourani (Leiden: Brill, 1959). His tendency in that book to resolve this tension by subjugating revelation to reason is unacceptable to Orthodoxy, for divine revelation has higher ontological, and hence, epistemological, warrant than human reason.

\(^10\) Etienne Gilson, Reason and Revelation in the Middle Ages (New York: Charles Scribner’s, 1966). It seems to me that, despite himself, Gilson (pp. 81ff.) is subscribing to a kind of Thomistic “two-fold” truth, viz., the truth of Revelation which can only be “believed” rather than “known,” and the truth of “natural reason,” which can only be “known” and hence not “believed,” and to him the two truths should not be mixed up or fused or integrated into a single Truth, for such integration is not possible, and that lack of integration is to him harmony! From the Islamic point of view, believing is not separate or distinct from knowing, hence awwal al-dīn maʿrifat Allāh (the beginning of religion is the knowing of God), i.e., to “believe” in God is to “know” God.

This understanding is quite evident in ʿUmar Najm al-Dīn al-Nasafī’s (d. 537/1142) important epistemological preamble to his creed. For the Muslim theologians, to whom belief (ʿīmān) must be grounded in true knowledge (ʿilm), the problem is merely that of specifying the precise relation between the two, which is that reason and all the rational sciences derived from it find its role, purpose and proper place (and hence its cognitive and axiological limits) within the enveloping context of experience, including the “trans-empirical” religious or spiritual experience of divine revelation, or Transcendence, and such was the position taken by the mutakallimin and the jālāṣifah. They “did not distinguish theology from philosophy,” and neither did they distinguish it from physics or mathematics or medicine for that matter. Hence, al-Attas makes clear that:

Islamic science and philosophy (i.e. ḥikmah as contrasted with falsafah) have always found coherent expression within a basic metaphysical structure formulated according to the tradition of Sufism and founded upon the authority of revelation, Tradition, sound reason, experience and intuition.

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Their underlying epistemic point of departure is that true belief cannot be simply “willed” into the heart,\textsuperscript{17} for it has objective cognitive content that must be known or understood, and even experienced,\textsuperscript{18} in order to be properly affirmed (*tasdiq*). Moreover, that content can be demonstrable in various ways, and thus, communicated, shared, debated and rationalised.\textsuperscript{19} In short, it was clearly understood and accepted that belief or faith is not something you can simply shove down people’s throats or wishy-washily wished into being out of thin air. As Keller puts it:

Indeed, Islam is a sapiential religion, in which salvation itself rests not on vicarious atonement as in Christianity, or on ethnic origin as in Judaism, but on *personal knowledge*. Whoever *knows* that there is no god but God and that Muhammad is the Messenger of God is by that very fact saved.\textsuperscript{20}

\section*{2. The Islamic Scientific Endeavour}

The scientific endeavour (in the sense of systematic intellectual inquiry) in Islamic history began with the textual standardisation of the Qur‘ān, and with the systematic transmission, collection and authentication of the *Sunnah*.\textsuperscript{21} These budding endeavours in systematic intellectual work soon inspired the cultivation of sophisticated linguistic sciences (etymology, phonology, morphology, syntax, semantics, lexicography, prosody, metrics, rhetoric and *tajwīd* = art of Qur‘ānic recitation) which emphasised the precise relations between words and their meanings.\textsuperscript{22}

On these elaborate linguistic foundations, the science of jurisprudence (*fiqh*) was rigorously developed with its own internal analogical principles (*qiyās*) or “comparative-deductive”\textsuperscript{23} method of juristic inference that facilitated the creative application of the normative injunctions of the Qur‘ān and *Sunnah* to the

\begin{footnotesize}
\begin{enumerate}
\item As William James would have it in his essay “The Will to Believe,” in William James, *The Will to Believe and other Essays in Popular Philosophy* (New York: Dover, 1956).
\item See the nice discussion in Hamza Yusuf, trans. *The Creed of Imam al-Ṭahāwī* (Zaytuna Institute, 2007), 13—14.
\item Thus, for instance, the position of Ibn al-Nafīs; see Nahyan Fancy, “The Virtuous Son of the Rational: A Traditionalist’s Response to the *Falāsifa*,” in Langermann, *Avicenna and His Legacy*, 219–248.
\item Keller, “*Kalam* and Islam,” 26 (italics mine).
\item Hans Daiber’s term, unpublished academic course lectures delivered at ISTAC during the academic year 2001–2002.
\end{enumerate}
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particular local and temporal contexts of diverse Muslim communities. This cultivation of linguistic definition24 and rational argumentation in the context of religious, intellectual (viz., the translation movement) and political discourse (viz., administrative imperatives of government) prepared the minds of Muslim scholars for their eventual creative engagement with the attractions and challenges of the rich intellectual and scientific cultures of the ancient Egyptians, Chinese, Greeks, Persians and Indians which they encountered in the newly-acquired and far-flung territories beyond the immediate boundaries of the Arabian peninsula.

The Muslims were most attracted to Greek philosophical, logical, medical, mathematical, scientific and ethical principles, and studied them very thoroughly, critically and self-consciously indeed.25 By the time of the Caliph al-Maʿmūn (10th century CE), a cross-cultural26 intellectual movement for translating these Greek works into Arabic was in full swing with the active support of the state and affluent, well-connected individuals. While rejecting some of those Greek principles, Muslim scholars readily recognised many others that were clearly in general accord with the Qur’anic injunction of grounding knowledge, belief and practice in objective rational thinking and empirical experience. Clearly, this critical, self-conscious appropriation of these ancient sciences (al-ʿulūm al-awāʾil) was motivated and framed both by the cognitive and pragmatic needs of the new, expanding empire and by the intrinsic intellectual allure and challenge of the new, “foreign” system of knowledge.27 But long before the attractions of Greek rational thought had taken root, the initially dormant discursive and argumentative acumen of Muslims had already been activated and honed by external theological debates with the Jews, Christians, Hindus, Buddhists and Zoroastrians28 as well as by intra-Muslim political, theological and juristic controversies which resulted in the rise of distinct, contending doctrinal sects (firaq),29 and schools of thought (madhāhib) in theological, philosophical, scientific and legal matters.30

24 Roshdi Rashed once said, “If the writings of these two [principal] civilizations [Hellenistic and Persian] and the information they had acquired were to be understood and, therefore, expressed in Arabic, the first task was to translate them and, consequently, to make Arabic, which was a language of the desert, a language of science.” See his public lecture organised by UNESCO, “Islam and the flowering of the exact sciences,” in Islam, philosophy and science (Paris: UNESCO Press, 1981), 133–67 (on p. 133).


30 Concerning these extra- and intra-communal politico-theological controversies, see respectively Daniel J. Sahas, John of Damascus on Islam: The “Heresy of the Ishmaelites” (Leiden:
Indeed, there were heated controversies amongst these opposing schools of thought as to the extent to which these Greek philosophico-scientific sciences were or were not in accord with the worldview of Islam projected into the minds of Muslims through their reading and understanding of the Qur‘ān.31 On the one hand, stood the Muslim philosophers (*falāsifah/hukamā‘*), for example, al-Kindī (d. 866), al-Fārābī (d. 950), Ibn Sinā (d. 1037) and Ibn Rushd who, on the whole, could be said to be more receptive than critical of the Greek speculative sciences. On the other hand, stood the Ash‘arite rationalist theologians (*mutakallimūn*) such as al-Ash‘ārī (d. 935), al-Bāqillānī (d. 1013), al-Juwaynī (d. 1085),32 al-Ghazālī (d. 1111), Fakhr al-Dīn al-Rāzī (d. 1209) and al-Bayḍāwī (ca. 1225—1316 CE) who could be said to be more critical than receptive to Greek rationality. Moreover, both camps were at the same time in heated engagement with the (more “conservative”) Ḥanbalīs, Mu‘tazilites and Shi‘ītes.33

Even amongst the philosophers, Fārābīan-Avicennan Aristotelianism was not received uncritically. A particular case in point is Abū al-Barakāt al-Baghdādī’s (d. 1164) remarkable *Kitāb al-Mu‘tabar*34 which criticised Aristotelian physics and metaphysics just as al-Ghazālī had previously done so in his celebrated *Tahāfut al-Falāsifah*, and which prefigured much of the Fakhrurāzīn wide-ranging polemics against peripateticism in general. Later on, even the so-called “anti-rationalist” Ibn Taymiyyah (1263—1328 CE) could not help but be appreciative of the *al-Mu‘tabar* and its author and of Ibn Rushd himself while being rather critical of both Ibn Sinā and al-Fakhr al-Rāzī.35 In other words, to

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50 On the concept “Worldview of Islam” see al-Atas, *Prolegomena*, especially his forty-page Introduction, viz. (paraphrased from pp. 1–5), “The worldview of Islam is the vision of reality and truth that reveals to the Muslim mind what existence is all about. It is a metaphysical survey of the visible as well as the invisible worlds, including the perspective of life as a whole. In this holistic perspective of life, the dunya-aspect of life is thoroughly integrated into the akhirah-aspect of life, in which the akhirah-aspect of life has ultimate and final significance.”

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effectively attack the philosophers and the logicians—and this means engaging
them on their own grounds, and bringing the battle to their turf, as it were—Ibn
Taymiyyah was compelled to be speculative in philosophical and logical
reasoning himself; there was simply no two ways to go about it.

Ironically, even surprisingly, the perceived intellectual threat of Hellenistic
thought, particularly Aristotelianism in its Neoplatonic garb, was in the end
overcome by a gradual, self-conscious, and self-confident process of cooption of it
into the orthodox Islamic theological framework on the part of post-Ghazālīan
mutakallimīn. In this process, the Greek sciences were actively “appropriated”
and “naturalised” to such an extent that Ibn Khaldūn in the 15th century was
drawn to observe that one could no longer differentiate between kalām and falsafah
so much have the two been fused together.

It may be surmised that the eventual triumph of Ashʿarism (including
Māturidism and Ṭahāwism, or Sunnism in general), was due to its creative
intellectual versatility in co-opting or “appropriating” the rationalism of the
Muʿtazilites and the falsafah and the traditionalism of the Ḥanbalites into its own
“synthetic” theological framework, which “gave both naql and ‘aql their due,
and took a middle course between the doctrines of the opposing sects.” It can
be seen that this “middle” course was not a “neutral” uncommitted course but a
critically integrative one which gives each view and each school its “proper place”
in relation to other contending views and schools within what may be referred to
as a hierarchic onto-epistemic “scale of truth-reality” in which Kalām theology was
harmonised with and integrated into Sūfī metaphysics and ontology.

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A recent translation of al-Ṭahāwī’s (d. 321/933) creedal statement is Hamza Yusuf, trans. The Creed of Imam al-Ṭahāwī (Zaytuna Institute, 2007).

On this “synthetic” (i.e., synthesizing) theological framework, see Mustafa Ceric, Roots of Synthetic Theology in Islam: A Study of the Theology of Abū Mansūr al-Māturīdī (Kuala Lumpur: ISTAC, 1995).


Not only kalām and falsafah was fused together in this long process of intellectual appropriation and naturalisation (or even “Islamization” in the Attasian sense of the term),\(^{42}\) but that all the four main mutually autonomous intellectual systems, namely, kalām, falsafah, fiqh and usul al-fiqh\(^{43}\) and tasawwuf\(^{44}\) were fused together into a single, enlarged more encompassing and self-consciously integrative Orthodoxy, which thereby thoroughly embeds all the intellectual or discursive sciences (‘aqīliyyāt) into the firm ambit of divine revelation and prophetic tradition (naqīliyyāt/sam‘iyyāt). That was the singular achievement of al-Ghazālī’s monumental Iḥyā‘ Ulūm al-Dīn (The Revivification of the Sciences of Religion), and eventually the whole Muslim world would come to endorse whole-heartedly that grand synthesis and proclaim him Ḥujjat al-Islām, ‘The Proof of Islam.

In the Iḥyā‘, the intellectual was delicately and elegantly fused with, or rather, into the religious and the spiritual, so much so that the intellectual man and the religious, spiritual man became one and the same man or woman;\(^{45}\) at least, that was the case for centuries in the Islamic world before the relatively recent onslaught of secularisation brought on by colonisation and westernisation which systematically banished all people of religious vision from having any meaningful, directive role in the realm of the mundane and the worldly and the discourse pertaining to it.

3. Al-Ghazālī and the New Kalām (Kalām Jadid )

Instead of impeding philosophico-scientific thought in Islam, al-Ghazālī’s Tahāfut al-Falāsifah, by the intense positive and negative responses it provoked amongst scientists and philosophers through subsequent centuries, actually did much to hasten this process of critical, self-conscious deconstruction, reconstruction, synthesis and naturalisation. In relation to the new kalam’s engagement with astrology and astronomy, for instance, George Saliba says that:

It forced the scientists to redefine their disciplines and to attempt to achieve the consistency that they perceived to have been lacking

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\(^{45}\) That is, tasawwuf in its metaphysical, cognitive or mukāṣhafah or gnostic mode, i.e., in the form of metaphysical Sufism, in contrast to its more popular and accessible ethical, practical or mu‘īdūnālah or pragmatic mode.

in the Greek legacy. That new reconstruction had very positive effects on the making of what later became a truly Islamic science.46

The Tahāfut marked the rise of the new philosophical kalām (kalām jadīd) which was characterised by an aggressive, self-confident, thoroughgoing polemic against Avicennian falsafah on the latter’s own conceptual, methodological, analytical and logical terms, a polemic which ended with the former taking over as its own much of the ground covered by the latter.37 By the time al-Ghazālī passed away, logic (mantiq) was naturalised as a conceptual tool for kalām and fiqh. Moreover, by the time of al-Rāzī and his successors, logic was well on its way to becoming a self-contained Islamic discipline in its own right,48 while the subject matter of falsafah was as a whole thoroughly integrated into the new kalām. As Elder puts it, “New proofs were forthcoming which made use of the physics, metaphysics and mathematics of the philosophers.”49 Similarly, Nicholas Heer says:

In the wake of al-Ghazzālī there eventually came to be an increasingly close bond between logic and theological study. The theologian must be able to assess the weight of contending views, distinguish the demonstrative (ṣaḥīḥi) from the dialectic (jadāli), the merely persuasive (iqtā’i), the sophistic (mughālaṭi), and the poetic (shi’i). Thus logic increasingly came to be accepted as an essential instrument for theology as well as other branches of knowledge.50

In recognition of the pivotal roles of al-Ghazzālī and al-Rāzī in the rise and establishment of the new kalām, Ibn Khaldūn says: “The first (scholar) to write in accordance with the (new) theological approach was al-Ghazzālī. He was followed by the Imām ibn al-Khaṭīb [i.e., Fakhr al-Dīn al-Rāzī]. A large number of scholars followed in their steps and adhered to their tradition.”51

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46 George Saliba, “The Ash’arites and the science of the stars,” in Richard G. Hovannisian and George Sabagh, eds., Religion and Culture in Medieval Islam (Cambridge: Cambridge University Press, 1999), 79—92, on 90. For an interesting, nuanced discussion comparing the contending views of Hoodbhoy and Saliba, see Arun Bala, “Did Medieval Islamic Theology Subvert Science?,” in George Gheverghese Joseph and Burjor Avari, Knowledge and Cultures: Crossing Boundaries in History (Manchester: Manchester Metropolitan University, 2009).


51 Ibn Khaldūn, Muqaddimah, 3: 43.
Eventually, through the intellectual example and influence of al-Ghazālī, and then al-Rāzī, the original threatening Hellenistic background faded into oblivion and falsafah was gradually Islamised until it became totally transformed into a “naturalised” Islamic science in the form of ḥikmah ishrāqiyyah (which can be read as metaphysical Sufism/mysticism) at the hands of al-Suhrawardī (549—587/1154—1191) and his successors, 52 and in the form of mantiq and philosophical kalām at the hands of al-Rāzī and his successors from Sayf al-Dīn al-Āmiddī 53 (d. 551—631/1156—1234) to al-Bayḍāwī (ca. 1225—ca. 1316 CE), 54 al-Ījī (d. 1355 CE), al-Taftāzānī (d. 1390 CE), and al-Jurjānī (d. 1413 CE), 55 and leading eventually to the profound Sufi metaphysical synthesis of the contending falsafah and kalām perspectives in al-Jamī’s al-Durrāh al-Fākhirah. 56

Indeed, there would always be influential detractors, for example Ibn Taymiyyah (d. 1328 CE) and al-Suyūṭī 57 (d. 1505 CE); or scholars of the caliber of say, Tāj al-Dīn al-Subkī (d. 771/1370), for instance, who, though supportive of kalām, voiced his misgivings over what he perceived to be some of kalām jadīd’s excesses. 58 In any case for all intents and purposes, falsafah in the guise of kalām,


55 Shlomo Pines, “Some Problems of Islamic Philosophy,” in Islamic Culture (January 1957): 66—80 (on pp. 68—9, 80). The reading of kalām as philosophical is reflected in the title and substance of the monumental work by Harry Austryn Wolfson, The Philosophy of the Kalām (Cambridge, MA: Harvard University Press, 1976). Though useful and thoroughly informative, it is unfortunately marred by a too-hasty tendency to “hunt” for parallels to, hence sources of, kalām theories in classical, hellenistic and patristic theological and concepts. A compelling reaction to this is R. M. Frank, who, in his presidential address “Hearing and saying what was said,” said that “...the highly nuanced language of the classical kalām was developed in an ongoing process of autonomous discourse in Arabic.” See Journal of American Oriental Society (JAWS) 116, no. 4 (1996): 615.


58 Tāj al-Dīn al-Subkī, Mu’ṣīd al-Ni’âm, 79—80, cited in Keller “Kalâm and Islam,” 22 and 27n.2 (italics mine). However, for a sensitive, nuanced treatment, see Talal al-Azem, “Traditionalism against Scholasticism: The Debate over Curriculum in Damascus between 1150—1350,” Master’s thesis (University of Oxford, 2007), where he notes (p. 38), inter alia, that al-Subkî’s “fâm ‘al-Jawâmi’” is viewed as a milestone in scholastic jurisprudence (üşūl al-
and *mantiq* as a conceptual tool became thoroughly Islamised and firmly entrenched in mainstream traditional Islamic education from the Maghrib to the Malay Archipelago. It is against this general intellectual historical background that one must situate and evaluate the significance of the impact of al-Ghazālī and al-Rāzī and their works on the process of the Islamization of the intellectual and empirical sciences.

4. The Ghazālīan-Fakhirūzān Investigative (*Tabayyuni*) Approach and Its Historical Impact

The works of al-Ghazālī and al-Fakhir al-Rāzī marked a historic turning point in the long “movement of thought” in the Sunni kalām engagement with Hellenistic philosophy and science from al-Ashʿarī (d. 935 CE), al-Māturīdī (d. 944 CE), al-Bāqillānī (d. 1013 CE), al-Juwaynī (d. 1085 CE) and al-Rāzī (d. 1206 CE), al-Nasafī (ca. d. 1142 CE), al-Shahrastānī (d. 1153 CE) to al-Āmidī (d. 1233 CE), al-Bayḍāwī (d. ca. 1316 CE), al-Ījī (d. 1355 CE), al-Taftāzānī (d. 1390 CE) and al-Jurjānī (d. 1413 CE). This movement of thought integrated theological, philosophical and scientific themes, and resulted in a resurgent full-fledged philosophical kalām or dialectics (called kalām jādīd or the “new dialectics”) characterised by an unapologetic self-confident “investigative” reeulcification of traditional Islamic beliefs (uaqīliyyāt) on rational principles (mabūdi ʿaqīliyyah).

As Sabra sees it, “kalām was an argumentative approach to religion which sought, through discussion and discursive thought, to interpret and transform the content of the Islamic revelation into a rationally-based doctrine,” and as such, it was a “genuine form of knowledge” that is essentially not apologetic nor polemical in its intellectual goals, for:

> The mutakallimūn in particular made it their business to meet the falsafīya on their own ground, not however by merely arguing against their opponent’s views, but by being able to produce a distinct body of thought that proved powerful and elaborate enough to function as a substitute for falsafa.

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59 For the case of the Maghrib, the educational role of Abū ʿAbd Allāh al-Sanūsī (d. 1490) and his Umm al-Barrāhin is significant; see article on him in *EI2* by H. Bencheneb, s.v., “al-Sanūsī,” with copious references.

60 For the case of the Malay Archipelago, see, for instance, al-Attas, *The Oldest Known Malay Manuscript*, 1–52 passim. For the reception of the Umm al-Barrāhin in the Malay-Islamic world, see Che Razi Jusoh, “Al-Sanūsī’s Umm al-Barrāhin in its Malay exposition: with an annotated transliteration and translation of the Malay text,” (Master’s thesis, International Institute of Islamic Thought and Civilization (ISTAC), 2000)


63 Ibid., p. 23 n. 24.
In short, the kalam approach is one of both negative and positive critique. Sabra applies this characterisation to both Mu‘tazilite and Ash‘arite kalām, and in this regard, one finds ready support for him in R. M. Frank, and in the important recent, as yet unpublished doctoral dissertation of Muhammad Afifi al-Aktī. Al-Aktī notes that within a century of al-Ghazālī’s thoroughgoing “disassembling,” and “reassembling” of falsafah,

The Eastern Islamic world saw the emergence of a new kind of religious scholar: the madrasah-trained, orthodox Sunni who was an Ashʿarī theologian as well as a Shāfi‘ī jurist. These scholars included Fakhr al-Dīn al-Rāzī, Sayf al-Dīn al-Āmidī (d. 631/1234) and ‘Abd al-Laṭīf al-Baghdādī (d. 629/1231–32)—all of whom were well-versed in the ilāhiyyāt and in the rest of the theoretical sciences of the medieval tradition of falsafa, including ontology, cosmology, and psychology. Unlike their founding father [i.e., al-Ghazālī], who could only philosophize behind closed doors to a restricted audience, they were able to publish their ilāhiyyāt and falsafī works in the full light of day.

We may continue to quote at some length some of al-Aktī’s multifaceted conclusions on the net harvest of al-Ghazālī’s engagement with falsafah:

The arguments of these three works—the Madnūn, the Tahāfut, and the Maqāsid—are mainly presented at the highest scholarly level, that of burhān, a style of exposition which is itself a result of al-Ghazālī’s engagements with the falsafīa. For al-Ghazālī, burhān—but not kalam—is what he considered to be scientific knowledge, the ‘gold standard’ in the art of reasoning—a judgement expounded in his Mi‘yār al-ʿilm. This standard is higher than what was offered in the tradition from which he emerged and the traditional proofs which he rehearses (or should we say ‘preserves’) in the Iqtiṣād . . . .

Al-Ghazālī made the art of burhān acceptable in the Weltanschauung of Islam’s religious scholars. In time, that allowed Aristotelianizing theologians to emerge in the traditional Muslim Ash‘arite school, men such as Fakhr al-Dīn al-Rāzī (d. 606/1209–10)—a doctor subtilis

67 Al-Aktī, “The Good, the Bad, and the Ugly” 94–95 (words in square brackets mine).
in his own right. Indeed, al-Ghazālī was the first among this new breed of scholastic theologians: a committed rationalist of the Aristotelian sort, yet equally a spokesperson for the Sunni, orthodox tradition (and also, of course, a strong advocate of Sufism).

However, the earlier disputes between Arabic grammar and Greek logic—best exemplified in the famous debate between Abū Saʿīd al-Sirāfī (d. 368/979) and Abū Bishr Mattā (d. 328/940) over the legitimacy of Aristotelian logic—still loomed large in the memories of many in the community of religious scholarship to which al-Ghazālī belonged. Yet al-Ghazālī did what the eminent grammarian Ibn al-Sarrāj was unable to do, which was, in effect, to resolve the quarrels between those two sides and, indeed, marry them off.  

5. The Investigative (Tabayyuni)69 Nature of Dialectical Theology

“Investigation” or “research” is the key word in al-Hathth ʿalā al-Balūth (The Exhortation to Investigation), the title given by the great al-Ashʿarī himself to his work for the purpose of encouraging the study of kalām or rationalistic theology.70 This rigorous intellectual work of investigation and research toward objective truth by engaging the sciences of the day became the governing scholarly ethos of subsequent mutakallims. Hence, we may say that, in this regard, al-Ghazālī was preceded by al-Ashʿarī, and he, perhaps, took his cue from him.

According to Marmura, al-Ghazālī’s Tahāfut al-Falāsifah (Incoherence of the Philosophers) was third in an integral, investigative series of four works in which he expounded on the rational methodology of the philosophers (Miʿyār al-Iʿlām, i.e., The Gauge of Knowledge), summarised their cognitive objectives (Maqāṣid al-Falāsifah, i.e., The Objectives of the Philosophers), exposed the internal inconsistencies of their philosophical belief system (Tahāfut al-Falāsifah) and finally expounded on the true beliefs of Islam as he understood them (al-Iqtiṣād fi al-Iʿtiqād, i.e., The Golden Mean of Belief). Al-Akiti’s detailed study of the al-Ghazālī’s Maṣnūn corpus further reinforces this notion of “scientific investigation”—“scientific” due to its inherently cognitive, constructive and positive nature, rather than merely dialectical, argumentative, reactive and apologetic. As Langermann puts it in his excellent summary of al-Akiti’s ample, detailed study:

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69 In allusion to the verse “if a vicious person brings any news, try to get at the facts” (in jāʿakum fāsiqun bi nabaʾin fatabayyanū), sūrah al-Ḥujūrāt (49): 6, trans. Thomas Cleary, The Qurʾan, A New Translation (Starlatch, 2004), 255.
Afifi al-Akiti detects, uncovers, and displays three levels of writing in al-Ghazālī’s approach to falsafā (hellenistic philosophy), particularly as formulated for the Muslim public by Ibn Sinā. He presents this philosophy as ugly in his Maqāsid (Intentions of the Philosophers): it appears ugly because he includes without comment teachings that are clearly unacceptable. However, in his Tahāfut (Incoherence of the Philosophers), this same philosophy is presented as merely bad: specific faults are identified and criticized. Finally, in the corpus of texts known as the Madnūn (restricted), philosophy is seen to be good; sound philosophical doctrines are exploited in order to formulate key Muslim beliefs...

Al-Ghazālī’s project allows him to present a coherent explanation of the world, expressed in traditional terms, whose rationale derives from Avicennan science and philosophy; but he is also able to articulate the traditional, orthodox faith in philosophical terms. The differences in presentation between the good, the bad, and the ugly often amount, as al-Akiti amply demonstrates, to nothing more than the addition or excision of a single word or phrase. In doing so, al-Ghazālī puts into practice a dictum attributed to ‘Ali, the Prophet’s nephew, which states that the true and the false can be very similar indeed, just like the venom of a snake so closely resembles its antidote.\(^1\)

Similarly, al-Fahkr al-Rāzī’s early work critically engaging Avicennan thought was entitled al-Mabāḥith al-Mashrīqiyyah (The Eastern Investigations). The Mabāḥith was already at this early stage of his scholarly career a work very critical of Avicennan philosophy, somewhat in the spirit of Abū al-Barakāt’s Kitāb al-Mu’tabar, or even as some have asserted, in the spirit of al-Ghazālī’s Tahāfut.\(^2\) It cannot be said that he started out as a straightforward peripatetic philosopher and ended up eventually to become a straightforward Ashʿarite mutakallim. Rather, his intellectual journey was highly nuanced from the very beginning to the very end, as indicated by the title of his last philosophico-kalām work, al-Matlūb al-ʿĀliyah, which may be roughly translated as The Lofty Researches.\(^3\)

Although the century after al-Ghazālī witnessed some notable mutakallimūn such as al-Nasafī and al-Shahrastānī,\(^4\) al-Rāzī is still clearly the first post-

\(^{1}\) Langermann, “Foreword,” in Avicenna and His Legacy, viii–ix.


Ghazāli’s *mutakallim* who brought to comprehensive realisation the intellectual project of close, detailed and comprehensive critical engagement with Greek philosophy initiated by al-Ghazāli in his *Maqāsid al-Falāsifah* and *Tahāfut al-Falāsifah*. While al-Ghazāli succeeded in integrating Aristotelian logic into the principles of kalām and fiqh, al-Rāzī managed further to critically integrate much of the subject matter of Aristotelian metaphysics and physics into his many kalām and falsafah works, including his great commentary on the Qur’an, *al-Tafsir al-Kabīr* (The Great Exegesis), otherwise known as *Mafātiḥ al-Ghayb* (Keys to the Unseen).  

He is noted by Dhanani as the first *mutakallim* to discuss space and time in a comprehensive manner, and probably the first also to undertake a critical comparative study of atomism and hylomorphism of any comprehensive scope and intensity of treatment. This versatility is no doubt due in large part to his own intimate, first-hand knowledge of the philosophical and empirical sciences such as logic, physics, medicine, mathematics and astronomy, in addition to his complete mastery of the traditional Islamic sciences. Hence, it is hardly surprising that “here Fakhr al-Dīn al-Rāzī was to become al-Ghazāli’s most influential continuator,” and perhaps also his “completor.”

According to Marmura, al-Ghazāli’s *Tahāfut* can be interpreted as a response to Ibn Sīnā’s “wide-ranging criticisms of the kalām.” However, in launching his wide-ranging counter-attack, Al-Ghazāli could not avoid being persuaded to some extent by the obvious objective cognitive merits of his adversary, hence, his appropriation of some key Avicennan ideas to flesh out his basically Ashʿarite framework. As al-Ghazāli’s “most influential continuator,” and most probably also “the most outstanding Sunnite figure” after him, al-Rāzī took up where the former had left off, and intensified the debate with Ibn Sīnā,

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86 Richard M. Frank’s misgivings notwithstanding; see his *Creation and the Cosmic System: Al-Ghazālī and Avicenna* (Heidelberg: Carl Winter Universitätsverlag, 1992).
even while Ibn Rushd, his contemporary in the Islamic far west, was preparing his own counter-Tahāfut to criticise both Ibn Sīnā and al-Ghazālī.84

Al-Ghazālī’s engagement with falsafah was such that he can be said to have succeeded in “kālāmising” philosophy and, as an unavoidable consequence, “philosophising” kālām, thus integrating (if not “con-fusing”) the two originally separate intellectual disciplines. Such is the judgement of Ibn Khaldūn, and one cannot but agree with him somewhat after even a cursory reading of al-Rāzī’s works.85

So it seems that historically the “exciting intellectual combat”86 between falsafah and kālām has always been a dynamic two-sided affair, with blows and counter-blows actively exchanged and no implications, however nuanced or subtle, left hidden and unexplicated. Kalām may have won finally87 but as can be surmised from Ibn Khaldūn’s and Tāj al-Dīn al-Subkī’s remarks, the victory was somewhat bitter-sweet—kālām ended up thoroughly imbued with the philosophising spirit which demands of Muslims that they, as responsible thinking individuals, be self-conscious and self-critical about their beliefs, al-Ghazālī’s (somewhat ambivalent?) Iljām al-ʿAwāmm notwithstanding.88 Just as the unexamined life was not worth living (as it would be aimless), so it was as if the unexamined faith was not worth keeping (as it could be easily shaken and corrupted by doubts generated by the onslaught of alien ideas).

The long-term intellectual consequences of al-Ghazālī’s and after him, al-Rāzī’s wholesale creative “appropriation” of the philosophical sciences into kālām discourse was duly, if critically and even reluctantly, appreciated not only by subsequent Ashʿarīite mutakallimīn but also by Ḥanbalīte theologians such as Ibn Taymiyyah,89 and by the formulatores of Shiʿī kālām in the Persian East, such as al-Ṭūsī (d. 1274),90 and the Christian scholastics of the late medieval Latin West.91

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85 Ibn Khaldūn, Muqaddimah, 3: 43.
87 Interestingly Hourani (“Dialogue,” p. 191) judges Ibn Rushd argumentative performance to be “disappointing,” as does van den Bergh (Averroes, p. 20, and p. 23. n. 1).
89 See, for instance, Hoover, “Perpetual Creativity,” 287–329.
The intellectual impact of this new kalām as manifested about two centuries later in al-ʿĪjī’s al-Mawāqīf and al-Jurjānī’s commentary on it was also felt by medieval Jewish thinkers and the thinkers, philosophers and scientists of the European Renaissance and Enlightenment who shared with the mutakallimūn “a determined rejection of Aristotelianism and a preference for experimentation with various forms of atomism, as well as, the belief in an omnipotent and free creator.”

One may also add that the new kalām also impacted on early modern European explorations of various forms of occasionalism and their epistemological, cosmological and theological implications. Modern-day Christian creationist theologians and philosophers have also not failed to notice the Ghazalīan-Fakhrūzīan intellectual historical link in the further development of the kalām cosmological argument and its fine-tuning in modern physical, philosophical and mathematical terms.

6. Kalām Jadid and Contemporary Concerns

The whole point of this schematic sketch of the intellectual historical impact and relevance of the new kalām shall be, in what follows, elaborated insofar as it may interest thinking Muslims today who are deeply concerned about how to intelligently and effectively engage the all-enveloping secular modernity and its intellectually seductive language of discourse.

I have to say that Muslim progress in appreciating their rich intellectual heritage will not be boosted by the prevailing negative attitude, implicit or explicit.

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94 Sabra, “Science and Philosophy,” 52. A separate, detailed inquiry is obviously needed regarding late kalām influence on the metaphysical foundations of early modern science.


96 For the kalām cosmological argument in Christian creationist thought, see the excellent exposition by William L. Craig, The Kalām Cosmological Argument (Eugene, OR: Wipf and Stock, 2000).
explicit, amongst many Muslim academicians, educationists and intellectuals, toward considering the contemporary relevance, or lack thereof, of the seemingly “abstruse” and “error-prone” traditional Islamic philosophies and sciences of those long bygone and forgotten centuries. Quite on the contrary, Professor Hans Daiber asserts that “Islamic philosophy exercises the mind and trains it to grasp structures and methods revealed through the passage of time. Its comprehension represents a constant challenge to the powers of human understanding and its creative force, the imagination.”

In short, if Muslims fail to exercise their minds to study and appreciate the achievement of their rich and varied intellectual history, they will thereby fail to comprehend the predicament of their present moment, and in turn fail to take positive action for their future revival as a constructive civilisational force for the common good in the post-modern, post-industrial and post-development world. Intelligent, thinking, reflective, self-conscious Muslims should read their rich classical past as a beacon for the present toward the future, for the past has not really “passed” away into eternal oblivion but is always perpetually present as a living tradition from which insights (tabsirah) and lessons (‘ibrarah) can always be drawn for overcoming the internal and external challenges and crises of the present age, or of any future ages for that matter; “indeed, in their histories is a lesson for a people possessing of heart-felt reflection.”

It has been said by not a few observers to the effect that in sheer intellectual range, al-Ghazâlî and al-Râzî stood alone, and the issues they raised and the difficulties they faced gave their thought a character that in many places addresses concerns that we find to be modern and perennial. A case in point is al-Ghazâlî’s overriding concern in the first book of his magnum opus Iḥyâ’ Ulūm al-Dîn, Kitâb al-‘Ilm (The Book of Knowledge) and in his introduction to the Tahâfut for not conflating the form of knowledge with its substance and content, and for differentiating between true and pseudo-sciences, as well as differentiating between beneficial and harmful sciences—a concern which resonates very well with current debates in both East and West about the form, substance, methods and objectives of modern religious and secular education. The revival of his

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97 Daiber, “What is the meaning,” xxxiii.
98 That is, the current situation in which there is much ongoing rethinking of the foundational notions of secular modernity such as development and progress; see the rest of the paper.
99 Yūsuf: 111.
100 In Peter G. Ridell and Tony Street, eds., Islam: Essays on Scripture, Thought and Society, a Festschrift in Honour of Anthony H. Johns (Leiden: Brill, 1997), 11 (paraphrased). That was said in regard to the Mafâtîh, but it applies just as well to many other major works of al-Râzî, especially the Matâlîb
101 A good, wide-ranging discussion is Wan Mohd Nor Wan Daud, The Educational Philosophy and Practice of Syed Muhammad Naquib al-Attas (Kuala Lumpur, ISTAC, 1998); see also his “De-Westernization and Islamization: Their Epistemic Framework and Final Purpose,” a paper presented at The International Conference on Islamic University Education in Russia and Its Surrounding Areas, Kazan, Tatarstan, Russia 27-30 Sept 2009, organized by Russian Islamic University (RIU-Kazan) and the Institute of Islamic Culture (IIC-Moscow) in Cooperation with the Federation the Universities of the Islamic World (FUIUC) and ISESCO (http://www.scribd.com/fullscreen/54419348?access_key=key-1jiwj64pfbjts7a0w78); and published in Noritah Omar, Washima Che Dan et al., eds., Critical Perspectives on Literature and Culture in the New World Order (Newcastle: Cambridge Scholars Publishing, 2010), 2—25. See
and al-Rāzī’s intellectual jihād in the postmodern dissipative and nihilistic age may well result in the realisation of a contemporary, distinctively Islamic counter-science (or counter system of knowledge and counter academia) “powerful and elaborate enough” to replace a modern, exploitative Western science and civilisation that is now speeding headlong into its twilight, “death-bound” phase.102

But what about al-Ghazālī’s Iljām al-ʿAwāmm ʿan ʿIlm al-Kalām, which seems to bar Muslims in general from indulging in discursive philosophy and dialectical theology? The answer in fact lies in the very title of the book, Iljām al-ʿAwāmm, which means “Barring the (Unlearned) Laity,” and not Iljām al-Khawāss or “Barring the (Intellectual) Elite,” which of course begs the question of what is really meant by ʿawāmm and what is meant by khawāss.

In this age of institutionalised mass public education and electronic mass media in which the West has become something akin to a disembodied megamachine that has long cut itself loose from its original masters—a kind of turbo-charged techni-Frankenstein run amok on the world stage—an age when the West and the East are intermingling in every nook and cranny, strange sciences and stranger ideas that were once only accessible to the relatively few dedicated intellectual khawāss (elite) are now required standard readings for high school students and university undergraduates and postgraduates who do not really know why they should be in schools in the first place or have a clue as to what the word “university” really means for and demands of them. In an age when the laity are compelled in one way or another, directly or indirectly, to become from among the educated and informed elite, it will be hard to find anyone, farmer or professor, to whom a good dose of Ghazālīan Tahāfuti kalām—reexpressed of course in modern idiom—will not be of real remedy for recovering and preserving the health and wholesomeness of their minds and souls.

also Claude Alvares and Shad Saleem Faruqi, eds., Decolonising the University: The Emerging Quest for Non-Eurocentric Paradigms (Penang: USM, 2012).


7. *Kalām Jadīd* and the Islamization of *Falsafah*

Hellenising *falsafah* was in the beginning a largely autonomous (i.e., autonomous of traditional orthodoxy), comprehensive conceptual system (or body of thought) for relating the absolute to the relative, or the transcendent to the contingent, in metaphysical, physical and mathematical terms by using its own hellenistic conceptual categories and logico-rational methodology. Moreover, many intelligent Muslims were drawn into that rich universe of intellectual discourse, either directly through studying the philosophical works of al-Fārābī and Ibn Sīnā, or indirectly through cultivating the empirical and mathematical sciences generated by that philosophy. That in itself was not a threat to traditional Islamic orthodoxy as represented by the *fuqahā* and *muḥaddithīn*. But when it became increasingly clear to the defenders of orthodoxy that the language used by *falsafah* to describe the relation between God and the world was compromising the foundational Qur’ānic doctrines of divine omnipotence and omniscience and the absolute dependence of the world on God (*iftiqār al-khalq ilā al-khāliq*), or even effectively denying it altogether, then orthodoxy had no choice but to step in forcefully and decisively, as it were, and come to a head on, close engagement with the truth-claims of *falsafah*, especially when some of those truth-claims were seen to pose a direct challenge to the Sunni theological consensus established by the Ashʿari-Māturidī-Ṭahawī school. The situation was akin to the predicament faced by Frodo, as it were, who, in order to destroy the Ring of Power, had to bring it out of his home in the Shire and venture far away with it into the infernal depths of Mordor where the Shadow lies.\(^{105}\)

This long process of close engagement culminated in al-Ghazālī and al-Rāzī who decided to neutralise the intellectual-theological threat posed by the autonomous status of *falsafah*, not only by refuting some its truth claims (*negative critique*), but, by also critically and systemically bringing that whole intellectual edifice within the credal ambit of traditional orthodoxy (*positive critique*), so that, henceforth, all Muslims, regardless of their particular intellectual inclinations with respect to the traditional and intellectual sciences, would discourse within the ethico-cognitive parameters of the worldview of divine revelation and prophetic tradition. The Ghazālīan-Fakhruḏīan encounter with *falsafah* can thus be summarised in three words: *engagement, neutralisation, appropriation*—in effect, a systemic and programmatic Islamisation of *falsafah* and all the logical, empirical and mathematical sciences that have been generated from it. In short, *kalām jadīd* was a long-term theologico-philosophico-scientific research programme that has served its purpose wonderfully well in the classical age of Islam, and my thesis

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\(^{105}\) Though the author himself denies it, J. R. R. Tolkien’s *The Lord of the Rings* can be read in many ways as an eloquent and captivating allegory of the sorry state of western civilization in the world war decades of the twentieth century, rendered compellingly real to the reader’s imagination by one who had himself fought deep in the foul, muddy trenches of the Western Front and survived to express his experience of those dark and bloody years in the novel of the century; see Daniel Grotta, *The Biography of J. R. R. Tolkien: Architect of Middle Earth* (Philadelphia: Rummy Press, 1992); Stratford Caldecott, *The Power of the Ring: The Spiritual Vision Behind the Lord of the Rings* (Crossroad Publishing, 2005); cf. the Muslim perspective on it by Mahmoud Shelton, *Alchemy in Middle Earth: The Significance of J R R. Tolkien’s The Lord of the Rings* (Temple of Justice Books, 2003).
here is that research programme needs to be vigorously revived and applied to current intellectual challenges, for this is the very “Jihad of the Word” and positive action which the great mujaddid/renewer of our age, Badiuzzaman Sa’id Nursi calls us to undertake.\textsuperscript{106}

There is a real need for Muslim ʿulamāʾ, scholars, intellectuals, thinkers, researchers and scientists of today’s age to learn afresh from that rich intellectual historical experience and thereby revive that research program in contemporary terms within a context of close, critical and self-confident engagement with all aspects of Western science and philosophy now being imbued by Muslims through their witting or unwitting participation in the modern academia.\textsuperscript{107}

8. “Kalām of the Age” (Kalām al-ʿAṣr) and the Worldview of Islam
The intellectual challenges to tradition faced and overcame by al-Ghazālī and al-Rāzī close to a thousand years ago has now again resurfaced in a new form and in a new idiom in the guise of the modern, secular, western sciences and philosophies systematically imparted to Muslims in the modern mainstream academia, but with a much more draconian objective, namely, a thoroughgoing nihilistic disenchantment of the world and the whole of life and existence. Moreover, young, intelligent Muslims in their countless millions are unsuspectingly imbueing this secularising nihilism masquerading as value-free education and knowledge quite oblivious to its negative cognitive, moral and actual impact\textsuperscript{108} on their belief, practice and value system as Muslims, and on their communities and societies, if insofar as being “Muslim” to them denotes any substantial intellectual and practical content different and distinct from being “non-Muslim.”

In the face of this challenge, the relevance and lesson of the Ghazālian-Fakhrurāzian encounter with falsafah to Muslims in the present age may be encapsulated into what can be called the “Kalām of the Age” initiative (kalām al-ʿaṣr or Dialectics of the Age) which pertains to a creative revival of the Ghazālian-Fakhrurāzian dialectics for coming to terms with the multifarious challenges of modern western sciences, ideologies and philosophies and their impact on our religio-cultural traditions, values and communities. By “coming to terms” we mean coming to terms in a way that serves rather than subverts the Worldview of Islam, which al-Attas has defined as follows:

The worldview of Islam is the vision of reality and truth that reveals to the Muslim mind what existence is all about. It is a metaphysical

\textsuperscript{106}Nursi, \textit{Jihad of the Word and Positive Action} (Istanbul: Sozler, n.d.). This is saying truth to power and money peacefully not by physical violence, as exemplified in Nursi’s jihad against the radical secularization of post-Ottoman Turkey by Ataturk. Here, the West is state of mind, an outlook, not a particular physical geographical or ethnic or even national entity. It is a kind masterless mega-machine like the the one dramatized in the film Matrix; see Latouche, \textit{The Westernization of the World}.


\textsuperscript{108}i.e., impact on their understanding and actions.
survey of the visible as well as the invisible worlds, including the perspective of life as a whole. In this holistic perspective of life, the dunyā-aspect of life is thoroughly integrated into the ākhīrah-aspect of life, and in which the ākhīrah-aspect of life has ultimate and final significance.\(^{109}\)

My tone in the following lines will be deliberately personal and directed primarily to a Muslim audience who knows and cares for their Worldview, i.e., the Worldview of Islam,\(^{110}\) and desires to see it operative again in both their private and public domains of life through a proactive, constructive engagement with the dominant modern Western secular worldview—a worldview with which many major Western thinkers, authors and activists are themselves becoming increasingly disillusioned as evidenced in their current conceptual and practical experiments with many diverse strands of postmodernism and various other "postisms."\(^{111}\)

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\(^{109}\) Prolegomena, 1—5 passim (abridged and slightly paraphrased).

\(^{110}\) Comprehensively defined and elaborated by Professor al-Attas in his Prolegomena to the Metaphysics of Islam: An Exposition of the Fundamental Elements of the Worldview of Islam (Kuala Lumpur: ISTAC, 2001). This important and profound book can be read as (i) a guide to the Islamic intellectual tradition, as well as (ii) a guide to applying that tradition in navigating ourselves safely through the pitfalls of modernity.

The Kalām of the Age (kalām al-ʿaṣr) is the systemic deconstruction of all the Western sciences and philosophies and their reconstruction from within the epistemic and axiological framework of the Worldview of Islam, by which, along the way, some of those sciences and philosophies or aspects thereof may be evaluated to be irrelevant or even discpicable altogether, while others modified, restructured, appropriated and redirected to serve the higher axiological purposes of the divine Law (maqāṣid al-shariʿah), i.e., to serve the true purpose of our lives as Muslims in this temporal world, which to us is but the temporal seedbed of the next world of eternal life (al-dunyā mazraʿat al-akhirah).

We should not allow our present preoccupation with the current socio-political upheavals in the Muslim world, or intra-Muslim credal controversies and sectarian strife, or even the commendable inter-religious “Common Word”

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initiative\textsuperscript{114} to divert us from the great, if not greater, task of drawing creatively from the profound lessons of traditional classical kalām to meet head on the real underlying, common challenge of the age—the challenge of a subtle and sophisticated secularism, materialism, scientism and nihilism surreptitiously and systematically imparted into the minds and hearts of both Muslim and non-Muslim students, intellectuals and scholars in Western and Western-type universities (including those labelling themselves “Islamic University”). For there is no war between religions but only between religions and the ideologies of secularism, consumerism, scientism and nihilism, and hence, we need a Common Word between Religions in order to effectively engage that common enemy. As Keller puts it,

The real challenge to religion today is the mythic power of science to theologize its experimental method, and imply that since it has not discovered God, He must not exist.\textsuperscript{115}

This call of the Kalām of the Age is precisely the call which Asīfī al-Akiti is inviting us to heed in his important article, “The Negotiation of Modernity through Tradition in Contemporary Muslim Intellectual Discourse: The Neo-Ghazalian, Attasian Perspective,”\textsuperscript{116} but then again we must learn to know how to negotiate to the advantage of religion rather than to its detriment, and this is no easy task.

This is a common challenge insofar as it challenges the paramount emphasis on humanity’s conscious responsiveness to Transcendence expressed in all traditional religions. Keller himself has alluded to this real challenge of the age when he says,

. . . attacks today on religion by scientism should be met by Muslims as Ashʿarī and Māturīdī met the Muʿtazilites and Jahmites in their times: with a dialectic critique of the premises and conclusions thoroughly grounded in their own terms. The names that come to mind in our day are not Ashʿarī, Baqillānī, and Rāzī, but rather those like Huston Smith in his Beyond the Post-Modern Mind, Charles Le Gai Eaton in his King of the Castle, Keith Ward in his God, Chance, and Necessity, and even non-religious writers like Paul Davies in The Mind of God, and John Horgan in his The End of Science and The Undiscovered Mind. Answering reductionist attacks on religion is a communal obligation, which Muslims can only ignore at their peril.

\textsuperscript{114} See the official website, http://www.acommonword.com/.
\textsuperscript{115} Keller, “Kalām and Islam,” 25.
This too is of the legacy of kalam, or the “aptness of words to answer words.”

In the light of this consideration, understanding the Ghazālian Tahāfut and the Fakhruʾzādīan Maṭālīb and the creative re-articulation of this understanding in contemporary philosophical, dialectical and scientific terms, should be rendered accessible to all who are studying, teaching or practising the Western sciences—those who, by the very fact of their involvement or engagement with the modern sciences, cease altogether to be from amongst the ‘awāmm but become, whether they like it or not, from among the khawāss. If one is not prepared to be trained, prepared and guided like Frodo, then they have no business venturing into Mordor.

The real intellectual battleground for Muslims in the modern age is the neo-Dahrism of the western sciences which many of them gleefully imbibe, including those students who might even now be learning the din at the feet of the great living shuyūkh of our time in Malaysia, Indonesia, Patani, Syria, Jordan, Egypt, Yemen, Morocco, Mauritania, Pakistan and India, or even in Britain and the United States and Canada, nourishing themselves from the wellsprings of tradition. “Gleefully,” because it alludes to the joyful innocence or naivete of those who do not have a clue as to what they are actually imbibing as “education” or “knowledge” or “skills” and other apparently good things in the modern, western-style universities. By enrolling in the modern academia, they are rather unlikely to be able to avoid becoming unwitting intellectual victims of that grand, elaborate and tedious charade called science, technology and economics, the funūn al-zunūn (multifarious sciences of conjectures) of the current age.

Gleeful in the beginning but tragic the end result.


118 Literally temporalism, temporalists, referring to the beliefs of the materialists and atheists who believe in the eternity of the world and disbelieve in the Hereafter; see the article “Dahriyya,” in http://www.muslimphilosophy.com/2e2/dahriyya.htm, which includes useful references.

119 Allusion to al-Ghazālī’s use of the term in the beginning of his hard-hitting introduction to his Tahāfut al-Falāsifah, intro. Ṣalāḥ al-Dīn al-Hawwārī (Beirut: al-Maktabah al-ʿAsriyyah, 2007), 41. Marmura translates it as “multifarious beliefs,” but it can also be more literally rendered as “the multifarious sciences (or varieties) of conjectures,” in which case then al-Ghazālī is rebuking those so enamored of Greek philosophy—which is but sciences based on conjectures rather than certain knowledge—that they have gone so far as to “belittle the devotions and ordinances prescribed by the divine law.” See also Michael Marmura, trans., Al-Ghazalī: The Incoherence of the Philosophers (Provo, Utah: Brigham Young University Press, 2000), 1–2.

120 A very recent case in point is the new religious “Ahl al-Sunnah” university launched with great fanfare in Malaysia, but even a cursory perusal of its poorly prepared brochure shows a complete lack of any intelligent, coherent exposition as to how its self-proclaimed
O youth, how many nights have you remained awake repeating science and poring over books and have denied yourself sleep. I do not know what the purpose of it was. If it was attaining worldly ends and securing its vanities and acquiring its dignities and surpassing your contemporaries and such like, woe to you and again woe. The great task of these students and scholars is to see through this intellectual charade and then to systematically construct and elaborate a sophisticated counter-intellectual framework or *dialectics* by which the tradition can be brought to bear critically and constructively on these Western sciences, lest they go on allowing their own knowledge of tradition to be intellectually impotent and silent or even seriously compromised and even corrupted in the face of a modern, aggressive, arrogant and even militant neo-Dahristm now reinventing itself as “globalization.” The fault then lies not within the tradition as such but within their own minds and hearts for failing to understand the true nature and purpose of knowledge so lucidly expounded in al-Ghazālī’s *Kitāb al-ʿIlm*, and to operationalize that understanding today in their encounter with the modern sciences.

None of these concerns about the negative impact of the modern knowledge system are new, for even many of the conscientious thinkers of the West have been making similar forceful indictment of their own elaborate intellectual edifice—*wa shahidū ‘alā anfusihim = “and they bear witness against their own selves”*. These thinkers include names such as Martin Heidegger, foundational Sunni theological framework will be made to bear evaluatively on its selection and conduct of academic programs, the design of curricula, and the choice of academic faculties or departments to establish or not to establish. Interestingly, one of the papers presented at the launch (by Tim Winter, no less) actually criticised, albeit indirectly, this thoughtless mimicking of conventional western-style educational structure and content. It will of course be impolite for me to name that university explicitly, but those in the know will know.


122 A case in point is the Islamic Banking and Finance (IBF) industry which has been thoroughly coopted and corrupted into serving the neoliberal economic agenda, resulting in the reduction of Shariʿah (Islamic law) to fiqh (jurisprudence) and then to *tamwīl* (finance). The best critique of IBF so far is Mahmoud A. El-Gamal, *Islamic Finance: Law, Economics, and Practice* (Cambridge: Cambridge University Press, 2009). There is now a strong groundswell of systematic response amongst fuqaha and intellectuals against this subversion of sacred law to the service of Mammon; see for instance, Adi Setia, “*Muʿāmalah and the Revival of the Islamic Gift Economy,*” in *Islam & Science* (Summer, 2011), 67—88.

123 It is the first book of the *Iḥyāʾ*. See the splendid English translation by Nabih Amin Faris, *The Book of Knowledge* (New Delhi: Idara, 2008). Professor al-Attas’s philosophy of education and project of Islamization of Contemporary Knowledge is inspired to a great extent by the *Kitāb al-ʿIlm*; see the excellent study by Wan Mohd Nor Wan Daud, *The Educational Philosophy and Practice of Syed Muhammad Naquib al-Attas: An Exposition of the Original Concept of Islamization* (Kuala Lumpur: ISTAC).

124 Allusion to the verse “the life of the world deceived them and so they testified against themselves that they were atheistic [ingrate; disbelievers],” (*wa gharrathum al-ḥayātu al-dawāyah wa shahidū ‘alā anfushim annahum kānū kāfīrin*) (Cleary’s translation) in *al-Anʿām* (6): 130. We may elaborate by saying that they indict the very structure they are a part of simply because they know it so well from the inside, and thereafter some of them may disown it, which is only
Jacques Ellul, Karl Polanyi, E. F. Schumacher, Serge Latouche, Michael Sahlins, James Howard Kunstler, and many others. In fact, a whole century ago, the eminent American philosopher and psychologist, William James had already come to the damning judgement that,

The most significant characteristic of modern civilization is the sacrifice of the future for the present, and all the power of science has been prostituted for this purpose.

Similarly, in his important book, *Nature’s Economy: A History of Ecological Ideas*, which can be read as an eloquent indictment of Western technoscientific negative attitude towards the integrity of nature, Donald Worster says:

The sudden acceleration of environmental damage throughout the world since World War Two has been largely the consequence of our scientific enterprise...there can be no getting around the fact that science has made possible the modern devastation of nature.

Without a rigorous kalām of the Age, Muslims today cannot be too sure that they are in fact not being complicit in that “sacrifice of the future for the present.”

Knowing the tradition alone is not enough, for the carriers of tradition must also know how to read the “situation of the age” (ahwāl al-ʿaṣr), that they may bring the former to bear creatively, evaluatively and critically on the latter through the means of a Dialectics of the Age (kalām al-ʿaṣr), and thereby, avoid falling into the pitfalls of nihilistic neo-Dahris masquerading as evolution.

possible if they admit to their own complicity in it. For Muslims, in the Hereafter, our own hands and legs and other bodily organs will indict us for our complicity in the machine, if we are careless. The West is currently engaged in a profound civilizational self-confession and self-indictment, and has been earnestly doing so for the past few decades. In this sense, much of the tahafti hardwork has already been done by the thinking, honest and conscientious people of the West itself. Muslims today simply have to be aware of this work, in constrast to al-Ghazali who had to do the tahaft work himself. This is a situation also alluded to by Keller in his important kalam article.

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126 Jacques Ellul, *The Technological Society*, trans. John Wilkinson (New York: Vintage, 1967), which has been described (on the front cover) as “a penetrating analysis of our technical civilization and of the effect of an increasingly standardized culture on the future of man.”
progress, historicism, growth, development, change, globalisation, science and technology. This is called neo-Dahrism because it harks back to the Dhrism and the *Dahriyyin*\(^{134}\) of old, so that we may be shaken out of our slumber to real constructive, proactive and anticipative intellectual and educational action, and hence, social action, and thereby go way beyond the narrow post-9/11 agenda that has been directly or indirectly imposed on us, for the real ongoing challenge is at core intellectual, even if there happens in the near future a complete geopolitical reapproachment between Islam and the West.\(^{135}\)

The whole problem with neo-Dahrism (*al-dahriyyah al-jadidah*) is that it does not ostensibly present itself to us as heresy, and thus, many of us do not see it as such, but to see it as such is to revive the *kalām jadid* of the Ghazāliān *Tahāfut*, the Fakhruzāzian *Matālīb*, the Taftazāniān *Maqāṣid*, and the Ījān *Mawāqīf*. Failing to do so may not necessarily render us formal neo-Dahris (self-conscious believers in secular progress, historical relativism, and natural and social Darwinism), but nevertheless, we will be neo-Dahrists in practice because the neo-Dahrist disciplines we imbibe in the universities present themselves to us as value-neutral objective data, facts, statistics, methods and truths, and we are gullible enough to accept that presentation, lock, stock and barrel. In brief, the heresy of the age demands a *Kalām* of the Age to expose its true face to all thinking Muslims who care about *reviving* the wisdom of Tradition, *reorientating* themselves to Transcendence, and *reorganising* their personal, communal and civilisational life on the belief in the ultimate life to come; for our identity consists in our service to Transcendence, and not to some fanciful science-fictional, techno-futurist Utopia\(^{136}\) or to the nation-state.\(^{137}\)

Therefore, it is of the outmost imperative that we not only master completely the Worldview of Islam,\(^{138}\) but also master completely the various specific contemporary civilisational contexts in which it is to be made *operational*,\(^{139}\) for the Worldview of Islam must not only inform, it must also transform—i.e., we should be able to create for ourselves a world in which that Worldview can find its home and belong and flourish. We simply have to revive

\(^{134}\) Literally temporalism, temporalists, referring to the beliefs of the materialists and atheists who believe in the eternity of the world; see the article “Dhiriya,” in [http://www.muslimphilosophy.com/ei2/dahriyya.htm](http://www.muslimphilosophy.com/ei2/dahriyya.htm), which includes useful references; alluded to in the Qur’ān, *al-jāhiyyah: 24,* “And they have said, ‘This is nothing but our life in the world; we die and we live, and nothing annihilates us but the passage of time (dahr).’ But they have no knowledge of that; they are only conjecturing.”


\(^{137}\) On this, see al-Attas, *Prolegomena*, especially the Introduction and the first chapter. It should also be mentioned that the *Tahafut* was also a positive critique and reconstructive, hence for it is more than likely that doing the *tahafut* today will open up our eyes to positive, viable alternatives already current which we have so far remained oblivious of due to the tunnel vision way of seeing we have been accustomed to in the secular academia. Once we go on to the *tahafut* mode of thinking, the practical transformative re-direction will be pretty drastic.


\(^{139}\) On this, see Chapter 5 of al-Attas, *Islam and Secularism*. 

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and implement the Ghazālīan intellectual approach of the Maqāsid and the Tahāfut for the addressing and overcoming the challenges of the current era, which is essentially “The Challenge of Knowledge.” Professor al-Attas has explained the nature of this challenge in very frank, candid and direct terms:

I venture to maintain that the greatest challenge that has surreptitiously arisen in our age is the challenge of knowledge, indeed, not as against ignorance; but knowledge as conceived and disseminated throughout the world by Western civilization; knowledge whose nature has become problematic because it has lost its true purpose due to being unjustly conceived, and has thus brought about chaos in man’s life instead of, and rather than, peace and justice; knowledge which pretends to be real but which is productive of confusion and scepticism, which has elevated doubt and conjecture to the ‘scientific’ rank in methodology and which regards doubt as an eminently valid epistemological tool in the pursuit of truth; knowledge which has, for the first time in history, brought chaos to the Three Kingdoms of Nature: the animal, vegetal and mineral. It seems to me important to emphasize that knowledge is not neutral, and can indeed, be infused with a nature and content which masquerade as knowledge. Yet, it is, in fact, taken as a whole, not true knowledge, but its interpretation through the prism, as it were, the worldview, the intellectual vision and psychological perception of the civilisation that now plays the key role in its formulation and dissemination. What is formulated and disseminated is knowledge infused with the character and personality of that civilisation—knowledge as presented and conveyed as knowledge in that guise so subtly fused together with the real so that others take it unawares in toto to be the real knowledge per se.¹⁴⁰

This rigorous re-articulation of the Worldview of Islam will be the new dialectics, the Dialectics of the Age (kalām al-ʿāsr). It is hoped that through these well-grounded efforts in collaboration with like-minded scholars, intellectuals and institutions, Muslim and non-Muslim, and with the guidance of our independent, community-rooted teachers and shuyūkh, the Worldview of Islam will once again find public expression as a world culture and civilisation to which it belongs and blossoms and finds its home and thereby contribute to the universal revival of a heart-felt consciousness of the Transcendent in human life and society.


Al-Attas defines and elaborates the term ‘islamization’ as follows:

Islamization is the liberation of man first from mythological, magical, animistic, natural-cultural tradition opposed to Islam, and then from secular control over his reason and his language. The man of Islam is he whose reason and language are no longer controlled by magic, mythology, animism, his own national and cultural traditions opposed to Islam, and secularism. He is liberated from both the magical and secular world views….since man is both physical being and spirit, the liberation refers to his spirit, for man as such is the real man to whom all conscious and significant actions ultimately refer. The liberation of his spirit or soul bears direct influence upon his physical being or body in that it brings about peace and harmony within himself in his manifestation as a human being, and also between him as such and nature. He has, in liberation in this sense, set his course towards attainment to his original state, which is in harmony with the state of all being and existence (i.e. fitrah).\textsuperscript{141}

In the present context of liberating ourselves from the suffocating intellectual and cultural hegemony of the West and its secularising impact on us, this project of true Islamization entails Dewesternisation. As a matter of fact, al-Attas has said to the effect that dewesternisation is a condition of Islamization:

In appraising the situation with regard to the formulation and dissemination of knowledge in the Muslim world, we must see that the infiltration of key concepts from the Western world has brought confusion which will ultimately cause grave consequences if left unchecked. Since what is formulated and disseminated in and through universities and other institutions of learning from the lower to the higher levels is in fact knowledge infused with the character and personality of Western culture and civilization and moulded in the crucible of Western culture . . . , our task will be first to isolate the elements including the key concepts which make up that culture and civilization. These elements and key concepts are mainly prevalent in that branch of knowledge pertaining to the human sciences, although it must be noted that even in the natural, physical and applied sciences, particularly where they deal with interpretations of facts and formulation of theories, the same process of isolation of the elements and key concepts should be applied; for the interpretations and formulations indeed belong to the sphere of the human sciences. The “islamization” of present-day knowledge means precisely that, after the isolation process referred to, the knowledge free of the elements and key concepts isolated are then infused with the Islamic elements and key concepts which,

\textsuperscript{141} Islam and Secularism, 44—45.
in view of their fundamental nature as defining the *fitrah*, in fact imbue the knowledge with the quality of its natural function and purpose and thus makes it *true knowledge*. It will not do to accept present-day knowledge as it is, and then hope to “Islamize” it merely by “grafting” or “transplanting” into it Islamic sciences and principles; this method will but produce conflicting results not altogether beneficial nor desirable. Neither “grafting” nor “transplant” can produce the desired result when the “body” is already possessed by foreign elements consumed in the disease. The foreign elements and disease will have first to be drawn out and neutralized before the body of knowledge can be remoulded in the crucible of Islam.\(^{142}\)

Quite apart from the ongoing foundational work of conceptual engagement and explication outlined above by al-Attas, one practical outcome of the *Kalām* of the Age approach will be to design a two-part certificate or diploma course on the Worldview of Islam covering both its “pure” (i.e., conceptual = *mujāhīmi*) and “applied” (operational = *maʿmūli, ʿamali*) dimensions, with a view to helping students or participants engage creatively and closely with both tradition and modernity in a manner which will enable them to bring the tradition to bear critically, evaluatively and constructively on the sciences of the modern academia, and thereby, differentiating between objective truths and subjective fictions,\(^{143}\) and separating the beneficial from the harmful of those sciences, or separating the beneficial from the harmful aspects of each of those sciences, especially those sciences having general *axiological warrant*\(^{144}\) from within the perspective of tradition and local culture. Scholars and students alike are invited to implement an educational and research programme toward operationalising Nuh Ha Mim’s important and urgent call to

scientifically literate Muslims today to clarify the provisional nature of the logic of science, and to show how its epistemology, values, and


\(^{144}\) See, for instance, Archie J. Bahm, *Axiology: The Science of Values* (Amsterdam: Editions Rodopi, 1993), and its useful bibliography on various aspects of the subject.
historical and cultural moment condition the very nature of questions it can ask—or answer.\(^{145}\)

And we should systematically build the intellectual and institutional capacity to apply this deconstructive-reconstructive approach to sciences such as medicine, agriculture, economics, biology, physics, chemistry, engineering and other important disciplines of the modern academia impacting on Muslim intellectual, cultural, social and economic life.

Operationally, the Worldview of Islam Course (WIC) or Worldview of Islam Intellectual Series (WISE)\(^ {146}\) shall be offered at two levels. One level is for high school or pre-university matriculation students before they enrol in the modern academia for formal studies of the various modern disciplines. Another level is that which targets high school teachers and university lecturers, including postgraduate researchers, working professionals, educational policy-makers and curriculum-developers, who teach and/or design the courses in any of the modern disciplines, from preschool to tertiary levels of education. These two levels are conceptually connected but with different immediate pragmatic objectives.

The objective of the first level or WISE Level I is to provide pre-university students with a critical survey or mapping of the numerous, diverse disciplines on offer in the modern academia. The mapping can equip the students in a way that will enable them to stand back, reflect and consider carefully the intellectual and career direction they are about to undertake, and its long-term implications for their belief and value system as Muslims who are self-conscious about their worldview, and about their duty to their local communities and to the larger cosmopolitan society in which their communities may be embedded, whether in the East or West. This mapping, as a generative guide to creative reflection and thoughtful deliberation, will help soon-to-be university students to be more discriminative in the course of choosing their fields of study and their majors; to be very selective in their choice of universities, faculties or departments to enrol in; and even to be very particular about their choice of professors, lecturers and academic supervisors, insofar as they are able or allowed to exercise that choice.

By means of this critical mapping—which itself is deeply rooted in and inspired by the classical Islamic classification of the sciences\(^ {147}\)—it is hoped that students will be able to opt for disciplines and decide on career paths that are truly beneficial rather than harmful, meaningful rather than frivolous or superfluous, and that are geared toward meeting some real social, cultural, intellectual or economic needs of their communities, rather than serving narrow corporate greed, nihilistic economic growth or disembedded material development, or even aimless idle curiosity. For instance, by means of this critical

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\(^ {145}\) Keller, “Kalam and Islam,” 25.

\(^ {146}\) Title and acronym proposed by Dr. Mohd Zaidi Ismail of IKIM, and accepted by the management of the course.

mapping one may want to opt for green chemistry\textsuperscript{148} rather than conventional chemistry, natural medicine\textsuperscript{149} or naturopathy over conventional allopathic medicine, cognitive psychology\textsuperscript{150} over behavioural psychology, ecological and steady-state economics\textsuperscript{151} over neoliberal capitalism, organic or permaculture\textsuperscript{152} over chemical intensive agriculture, biomimicry\textsuperscript{153} over biotechnology,\textsuperscript{154} appropriate technology\textsuperscript{155} over high technology, and so on and so forth.

Such choices are arguably more in accord with the Islamic axiological principles of not harming (lā ḍarara wa lā ḍirara), beneficial knowledge (‘ilm nāfi‘) and compassion (raḥmah). Along the way, one is also to be guided by means of this critical mapping toward unravelling the ideological, methodological, philosophical and metaphysical assumptions underpinning those disciplines and the often hidden, murky parochial background of their original development in post-Enlightenment socio-intellectual history, or even in the relatively recent post-World War II geopolitical restructuring and readjustment leading to the current world-system.\textsuperscript{156}

The objective of the second level or WISE Level II is to help working professionals, researchers and policy-makers to transform both the content and the method of what they are presently doing so that these will eventually be brought into axiological accord with the Worldview of Islam. For instance, as a result of this critical mapping, a Muslim researcher in physics can be more critically aware of the ontic and epistemic limits of the laws of physics,\textsuperscript{157} and he

\textsuperscript{148} Including related areas such as green engineering and green technology; see, for instance, Paul T. Anastas and John C. Warner, \textit{Green Chemistry: Theory and Practice} (Oxford: Oxford University Press, 1998).


may thereby opt for the Bohmian ontological interpretation of quantum mechanics over the mainstream Copenhagen instrumentalist interpretation; an education policy-maker may want to make a course in ecology a prerequisite to an economics programme or even embed economics altogether into ecology and/or sociology, thereby redefining economics and creating what can be termed an ecologies of economics.

Similarly, a biology school teacher may want to transform his biology course into a true “science of life” by putting the “bio” back into biology through the phenomenological approach to the study of nature by opting, inter alia, for the class to study, say, actual living frogs by a pond embedded in the woods, rather than chloroformed or tortured, dead, dissected frogs pinned to a cold lab bench, thoroughly disembedded from any real, living ecosystemic contexts of the natural world. As the Nature Institute puts it:

Many of us were introduced to biology—the science of life—by dissecting frogs, and we never learned anything about living frogs in nature. Modern biology has increasingly moved out of nature and into the laboratory, driven by a desire to find an underlying mechanistic basis of life. Despite all its success, this approach is one-sided and urgently calls for a counterbalancing movement toward nature. Only if we find ways of transforming our propensity to reduce the world to parts and mechanisms, will we be able to see, value, and protect the integrity of nature and the interconnectedness of all things. This demands a new way of seeing.

This phenomenological approach to science and the study of nature is obviously way much more in accord with the Islamic conception of nature as exhibiting the signs of God (āyātulLāh), and as āyātulLāh they all celebrate, with the tongues of their existential states (lisān al-ḥāl), the praises of their Lord: wa in min shay’in illā yusabbihu bi ḥamdihī—“And there is not a thing but hymns His praise.”

The Kalām/Dialectics of the Age approach discussed above may be schematised in the form of three concentric circles as follows:

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163 al-Isrā’: 44.
The inner circle represents the unchanging, permanent metaphysical core expressed as the “Worldview of Islam” (ruʾyat al-Islām li al-wujūd).\(^{164}\) The middle circle represents the network of auxiliary conceptual constructs, theories and hypotheses, which may be modified, changed or added to from time to time and may be called the “network of auxiliary theories” (shabakah al-nazariyyāt al-mulhaqah). This middle circle effectively represents the creative, critical yet self-critical kālām or dialectics of the age. The outer circle represents nature (al-tabīʿah), the physical, sensible world itself, or simply, the “physical world,” which may also be extended to include the human, socio-cultural world insofar as it is inextricably embedded in the larger natural world. The challenge of Islamic scientific creativity today lies squarely in the middle circle and consists in the intellectual work of articulating objective conceptual and theoretical frameworks for bringing the worldview of tradition to bear evaluatively, in both the cognitive and ethical sense, on our engagement with and understanding of the natural and cultural world, especially the cultural world which is now so overwhelmingly under the sway of a secularising, nihilistic mode of thinking and doing systemically imparted to both Muslims and non-Muslims alike through the various disciplines of the modern academia.\(^{165}\)

By “objective” is meant that this dialectics is to be also amenable to participation and scrutiny by non-Muslim thinkers, philosophers and scientists, if they so wish, even if they do not believe or are not committed to the metaphysical core (i.e., the Worldview of Islam), by common reference to the very same

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\(^{164}\) Al-Attas, Prolegomena, 2.

physical and social world observationally and experientially accessible to both Muslims and non-Muslims alike and in which they are both embedded.

It is by virtue of this objectivity that Muslim scientists involved in the new dialectics will have no problem recognising certain positive elements of Western and Eastern sciences and incorporating their insights into both their intellectual and practical work. For example, modern permaculture and organic farming can be easily assimilated into classical Islamic filāḥah (science of agriculture and animal husbandry), thereby reviving it to play a meaningful and beneficial role in the current world-wide movement for returning to and reviving natural farming without the use of chemicals, pesticides, synthetic fertilizers and genetic engineering.

To underline this important point about objectivity, it is worth mentioning the recent 72-hour Permaculture Design Certificate course on the science, art and practice of permaculture and sustainable living that was recently organised by Murujan Permaculture in Kuang, Selangor, Malaysia. Most of the nearly twenty participants from Malaysia and elsewhere were Muslims but the three non-Muslims participants (from Australia, Poland and Singapore) also found the course to be very useful and beneficial to them. Another case in point is the recent 5-day Christian-Muslim Interfaith Dialogue on Structural Greed organised by the Lutheran World Federation in which the roughly fifty participants, Muslim and Christians from Malaysia, Indonesia, Germany, England, United States, Peru and other countries, succeeded in converging, on the very first day itself, on redefining economics with respect to its ends as the science of the organization of livelihood for the common good, and in the process they all agreed to do away with the conventional obsessive concern with the idea of scarcity and growth.

Although further elaboration is needed on the creative nature of the dialectical middle circle, which is basically where the discursive reason (fikr/nazar) and contemplative intellect (ʿaql/wijdlān) mediate between the book of revelation and the book of creation, a simple general example may here suffice to give some degree of insight into what this creativity entails in operative terms.

The Qurʾān says that the Prophet was sent by the Creator as a mercy to all the worlds (rahmatan lil-ʿālamin). If we, as scientists, are to follow in the footsteps of the merciful Prophet, then the way we study nature and interact with it (muʿāmalatu al-nāsī al-tabīʿāta) is constrained by the prophetic ethics of cosmic mercy. This means that much of what we do or take for granted in contemporary science and technology has to be seriously and systemically

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166 http://www.filaha.org/
167 A review of the course is on the website: http://murujan.com/2012/03/19/permaculture-design-course-review/.
rethought and reconsidered since it is obviously unrestrained by the ethics of mercy. Modern science and its technological offshoots are, in many diverse, complex ways, very aggressive and destructive toward nature and, by extension, toward humankind as part of nature.\(^\text{171}\) If, by definition, science is “the study of nature,” then obviously it is in the interest of science to preserve nature in order to guarantee its continued study by science. Thus, *scientific curiosity entails moral responsibility*.

However, the paradox now is that the more science discovers and knows about nature, the more of nature is devastated, and the less there remains of it to be studied and appreciated. It is as if the modern pursuit of abstract, cerebral science and its manipulative technological offshoots have to go hand in hand with the desolation and disappearance of living nature as an unavoidable consequence, but that position is unacceptably fatalistic for truly concerned and reflective Muslim scientists, including non-Muslim scientists like Bill Mollison.\(^\text{172}\) For them, the Qur’anic ethics of universal, cosmic mercy points the way clearly toward another way of doing science, namely, one that respects and preserves nature (and by extension humankind) rather than destroys it, and a well-articulated *kalām* dialectics of science involving the active participation of all thinking, reflective and self-critical ulama and scientists (including all sensible people who works closely with nature) will facilitate the task and duty toward realising that science in practice. The following are some specific examples by way of further illustration.

Vivisection—meaning ‘to cut alive’ hence, the preferred, more polite term, ‘animal testing’, or ‘animal experimentation’ in modern medical academia—is the way western, business-driven medicine tortures various species of live animals (rats, mice, rabbits, chimpanzees, dogs, cats) to test drugs in order to rid humanity of their ever-lengthening list of old and new diseases. As a method of medical research (specifically testing drugs for safety and effectiveness), it is relatively new (only a hundred or so years old) and peculiar to modern Western medical culture that is now hopelessly corrupted, cognitively and morally, by crass commercialism and corporatism.\(^\text{173}\) Quite apart from the extrinsic question of ethical concern for the welfare of lab animals in respect thereof, there is also a more fundamental intrinsic question, namely, the question of the scientific integrity (or cognitive value) of the underlying, largely unexamined assumption of a significant degree of biological, biochemical and physiological parity between

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laboratory test animals and human beings justifying extrapolations of laboratory data from the former to the latter.\textsuperscript{174}

The \textit{kalam} dialectical deconstruction and reconstruction of modern medicine for Muslim medical researchers in this regard will be to find systemic alternatives of unquestioned scientific probity and ethical integrity to vivisection, including valid alternatives critically-sourced from presently marginalised Western (e.g., homeopathy, naturopathy) and eastern medical traditions (e.g., traditional Chinese medicine\textsuperscript{175}) which could be incorporated into a well-articulated Islamic Medicine Research Program (IMRP). Some of these alternatives can also be gleaned by undertaking evidence-based medical research into the well-documented but largely neglected vast corpus of the very successful one thousand year-old Islamic cosmopolitan medical tradition.

Modern agriculture, to take another case in point, is overly chemical-intensive with widespread use of pesticides, herbicides, synthetic nitrogen fertilisers and other toxic inputs, which poison and degrade the soil, kill rural wildlife, even toxify the harvests and disrupt the health of farmers and workers. Traditional farming methods have been perfectly adapted to local socio-natural conditions generating a symbiotic, holistic balance between the needs of humanity and the rights of nature.\textsuperscript{176} As the word implies, agriculture is a \textit{culture}, a whole way of life of mutual respect, communal give and take, and cooperative rather than competitive living. Indeed, there are also agro-innovations, but innovations within ecological and cultural limits, as the case of Andalusian agricultural science and practice (\textit{`ilm al-filahah}) shows.\textsuperscript{177} It is not a mere business, as the modern corruption of the original word into “agribusiness” would have it—most exemplified perhaps in the infamous case of Monsanto\textsuperscript{178}—which imposes the \textit{face-less} corporate tyranny of disembodied, impersonal profit-


\textsuperscript{175} For understanding traditional Chinese medicine, see the sensitive, nuanced and deeply reflective book by Stephen Fulder, \textit{The Tao of Medicine: Oriental Remedies and the Pharmacology of Harmony} (Rochester, Vermont: Destiny Books, 1987).

\textsuperscript{176} Mae-Wan Ho, Sam Burcher et al., \textit{Food Futures Now: Organic, Sustainable, Fossil Fuel Free} (Penang: Third World Network, and London: Institute of Science in Society, 2008).


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maximisation on once self-respectful, independent farmers and indigenous peoples, reducing them to wage- and debt-slaves, squatters and refugees on the very lands they once have had ancestral and native customary rights to, but now wrested from them by faceless, soulless corporations which have cleverly lobbied and coopted the political and legal structures of the state into serving their narrow, self-serving agenda.

It is strange that agricultural food production, which once unquestionably served the well-being of humankind, should now, in the hands of big transnational agrochemical companies like Monsanto, be seen to be working toward destroying the very ecological and cultural basis of that well-being. In order to return agricultural practice onto the ethical and moral path of compassion and service toward both culture and nature, the kalām dialectics would work toward rearticulating an authentic Islamic Agricultural Research Program (IARP) as one that eschews harmful chemicals altogether, and instead looks into the various effective sustainable organic agricultural methods now available, such as permaculture and natural farming, and develop new ones by, for instance, drawing on the thousand years’ accumulated experience of the very successful Islamic agricultural tradition—the original, truly “green” revolution in the history of mankind. In this respect, the “greening the desert” initiative by the world-renowned permaculturist Geoff Lawton and his partners in Jordan is a great inspiration for us all who care deeply about nurturing a healthy relationship with “soil, soul and society.”

10. Worldview of Islam, the Counter-Academia, and the Imperative of Scientific Objectivity
Ultimately, all these initiatives toward a constructive counter-academia will have to be systemically consolidated under academic and vocational educational structures quite independent of the mainstream educational establishment. The underlying consideration here is that we really want our students and graduates to be able not only to understand the Islamic tradition and the Worldview of Islam, but also to be able have careers and make a decent, respectable and meaningful livelihood for the common good (al-maslāhah al-ʿāmmah) by using their knowledge and training to operationalise the Worldview of Islam in the

179 Bill Mollison, Permaculture: A Designers’ Manual (Tasmania: Sisters Creek, Tagari, 1988)
181 Please access the information about this wonderful work online at the website, http://permaculture.org.au/project_profiles/middle_east/jordan_valley_permaculture_project.htm.
183 Examples that spring to mind is the Schumacher College in the UK and the networks of permaculture research institutes throughout the world. Another recent and promising initiative in this regard (though as yet not totally independent) is the Center for Advanced Studies on Islam, Science and Civilisation (CASIS), based in Kuala Lumpur, Malaysia, http://www.utm.my/casis/. There are also serious plans in place for establishing the Worldview of Islam Research Academy (WIRA) to be based in the state of Terengganu in Malaysia.
public, socio-economic domain within the local communities in which they are embedded, hence, for instance, the HAKIM (http://www.hakim.org.my/) initiative in organizing the public educational Worldview of Islam Intellectual Series (WISE) with various partners and supporters, and the Muʿāmalah Research Unit (MRU) at the International Islamic University Malaysia (IIUM) for reviving an economics for the common good.

While WISE works toward fleshing out in conceptual and pragmatic terms the operational implications of the Worldview of Islam by formulating and offering curricula, syllabi and courses for reviving the arts and sciences of responsible intellectuality and sustainable living in the world, the focus of the MRU is to revive the original meaning and purpose of economics, which we have formally redefined as the science of “provisioning and sharing, by mutual giving and receiving, of natural and cultural abundance for realising material and spiritual well-being for the common good,” or “the science of earning and provisioning for livelihoods,” (= ‘ibn al-īktaṣāb wa al-infāq) and thereby, put into operation the Islamic Gift Economy (IGE, al-īktaṣād al-infāqī) or Common-Good Economics.\(^\text{184}\)

The question of scientific objectivity (i.e., the question of what should count as objectively-verified knowledge and the research methods by which this objectivity is ascertained and attained) has more to do with the cognitive rather than ethical values underpinning the kalām dialectical approach, although in Islamic scientific practice, the cognitive merges seamlessly into the ethical and becomes one with it, hence, the foundational notion of adab as knowledge realised in virtue through taʾdīb (education as discipline of mind, soul and body).\(^\text{185}\) In other words, cognitive evaluation and ethical evaluation are both intrinsic to the success of the scientific enterprise in Islam, as is quite evident in, say, Ibn Haytham’s much studied scientific methodology, which also involved a thoroughgoing “kalāmic” dialectics with Greek physical and optical theories.\(^\text{186}\) The realisation that scientific objectivity and methodological probity are not possible without concomitant ethico-moral integrity has been growing in the West and is now converging on a position more in accord with that of the Worldview of Islam, thereby allowing much room for mutual constructive engagement on this important meta-scientific issue.\(^\text{187}\)


\(^{185}\) Al-Attas, *The Concept of Education*; see also the elaborate and insightful discussion in Wan Mold Nor, *The Educational Philosophy*.


\(^{187}\) See, for instance, Alvin M. Weinberg, “The Axiology of Science: The urgent question of scientific priorities has helped promote a growing concern with value in science,” in *American Scientist*, vol. 58 no. 6 (November-December 1970), 612-617; Brian Martin, “Scientific fraud and the power structure of science,” *Prometheus*, vol. 10, no. 1 (June 1992), 83-98.
To illustrate briefly how the concept of scientific objectivity actually operates in the kalām dialectics with respect to cultivating an intellectually self-competent and self-confident critical attitude toward the Western sciences and disciplines, let us consider the twin Qurʾānic cognitive principles of tabayyun (investigation, scrutiny) and tabarhun (proof, evidence). Due to the global dominance of Western science, Muslim scientists are continuously bombarded with reports of promising new methods, discoveries and techniques in prestigious Western science journals like the Journal of the American Medical Association (JAMA), Nature, Science, New Scientist and Scientific American. It will be thoroughly irresponsible of them to take these reports at face value without undertaking their own investigation (tabayyun) into the often hidden, diverse underlying socio-economic contexts of these reports and ascertaining their empirical adequacy (burhān) and epistemic autonomy (al-istīghlāl al-ʿilmī) from powerful forces geared less toward global scientific enlightenment than narrow political economic and commercial self-enrichment.188

Creative understanding and practice of tabayyun and tabarhun, as exemplified by Ibn Haytham, will help Muslim scientists to separate the wheat from the chaff of Western science and technology and incorporate it into an integrative Islamic Science Research Program (ISRP). For instance, in the case of chemistry, the growing new field of “green chemistry”189 is something that shows great promise for eliminating the threat of toxic chemicals from the cultural and natural landscape, thus realising the foundational ethico-juridical principle of lā ḍarara wa lā ḍirara (“no harming and no reciprocating harm”),190 which is itself derived from the cosmic, prophetic principle of universal mercy.

11. Conclusion: The Question of Viable and Feasible Structures and Strategies

As alluded to above, the highly important, strategic question of appropriate higher educational institutional structures needs to be addressed for realising the Islamic Science Research Program (ISRP)191 over the long term, especially by educating and training postgraduate researchers (including university professors, even) to creatively apply ISRP principles (culled from kalām jādiḍ and contemporary history, philosophy and sociology of science)192 to their respective specializations.

Frankly speaking, I harbour grave misgivings as to whether this vision of the ISRP in the framework of the Kalām of the Age can be faithfully and successfully realised from within the current restrictive and compromised pedagogic framework of the modern academia, including the current “Islamic University” system, which to a large extent, is either overly coopted into the

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188 For the case of modern medicine and the structural conflicts of interest plaguing it, see Marc A. Rodwin, Conflicts of Interest and the Future of Medicine: The United States, France, and Japan (New York: Oxford University Press, 2011).
189 And related areas such as green technology, green engineering and green architecture (eco-building).
190 Which is actually hadith no. 32 in Imām al-Nawawī’s Forty Hadiths (al-Arbaʿīn al-Nawawiyyah).
secular agenda of corporate globalization or into the political economic agenda of the over-centralised state, or into both.

Under the current difficult circumstances, the way forward may have to take the form of a loose, informal network of autonomous grassroots educational and research initiatives, such as centers, institutes, academies, madrasahs and think-tanks, build up by independent, community-rooted scholar-intellectuals of conscience and vision and their student-supporters who know one another intimately through formal and informal visits, talks, conferences and other avenues of close intellectual and personal interactions toward a common educational and civilisational mission in which the ISRP can be embedded and realised.

Some of these grassroots educational initiatives, though small and limited in scope and resources, are already well-established and flourishing in places such as Malaysia, Turkey, Syria, Egypt, Libya, Dubai, Jordan, Yemen, England, Scotland, the United States, South Africa, Indonesia and Canada, some of which I have personally visited to share some of the Worldview ideas outlined in this paper and other papers. I may take the liberty here of mentioning some of these initiatives by name, such as the Solas Foundation (UK), the Center for Islam & Science (Canada), HAKIM (Malaysia), Cambridge Muslim College (UK), CASIS (Malaysia), INSISTS (Indonesia), Andalus Institute (Singapore), Waqf Academy (South Africa) and others, some of which are currently in the early planning stages, such as the Worldview of Islam Research Academy (WIRA) project to be initially based in Tok Jiring, Terrengganu, Malaysia.

Eventually, some form of consensus will emerge on common academic and scholarly standards by which a student qualified in, say, the traditional religious sciences from one institute can be recognised and accepted for a course of study in the intellectual, empirical and vocational sciences in another institute dedicated to the programme of Islamizing the disciplines that have to do with earning an honourable and meaningful livelihood in the service of the common good of the community—i.e., the fardu kifāyah sciences in general. This will of course entail a really, really hard-headed look at how the concept of fardu kifāyah (communal duty realised for the common good) should actually be made operative in serving the common good rather than remaining for the most part a deceptive feel-good slogan, as is largely the case today. One bad habit we definitely need to overcome is reducing lofty Islamic principles and concepts (e.g., fardu kifāyah, maqāsid al-shārī‘ah) into verbal fodder for empty sloganeering.

As pointed out by S. Nomanul Haq, there is a great need today to revise the way we educate university science students so that they know how to integrate their scientific learning and expertise into the more fundamental and higher goals of human life, and thus, avoid altogether the destructive, suicidal pitfalls of scientism. True science is beneficial knowledge (al-‘ilm al-nāfis) resulting in wholesome livelihoods (al-kasb al-ṭayyib) and virtuous works (al-a‘māl al-sālihah) that are geared toward serving rather than subverting these higher, human goals. The highest goal, the summum bonum, is, of course, “to bring a sound conscience

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(qalbin salīm) to the meeting with the Lord,” and thereby, to attain His pleasure (mardātiLLāh). We may now finally wrap up all these intertwined considerations and reflections with these wise and perceptive words of counsel from Professor Syed Muhammad Naquib al-Attas:

What we need, then, is not a reconstruction, but a restatement of the statements and conclusions of Islamic metaphysics in accordance with the intellectual perspectives of our times and the developments in the domain of knowledge; and this entails an realignment, where relevant and necessary, of the direction of developments in the various sciences such that they become integrated with it.\textsuperscript{195}

In another place, he says:

We must learn from the great of the past their knowledge and wisdom. This does not mean that we ourselves cannot contribute any further knowledge that can be contributed, but it does mean that we must first draw our strength [and] inspiration from their wisdom and knowledge, and that when we do begin to contribute ours, we must recognize and acknowledge them as our teachers. and not disparage and denounce, for ijtihad can be exercised without having to undermine legitimate authority. They are like torches that light the way along difficult paths; when we have such torches to light our way, of what use are mere candles?\textsuperscript{196}

In short, we all have to learn again how to stand firmly on the shoulders of giants, and reapply their insight, vison and wisdom to engaging the difficult situation of our age, dispelling its darkness and shadows, and finding the liberating light at the end of the long, winding tunnel. \textit{WāLlāhu aʿlam.}

\textit{yahdiLLāhu li nūrihī man yashāʾū}

\textit{ALLĀH GUIDES TO HIS LIGHT WHOMEVER HE WILLS}\textsuperscript{197}

\textsuperscript{194} \textit{Al-Shuʿārāʾ} (26): 89.
\textsuperscript{195} \textit{Hujjat al-Ṣiddīq}, 465. In a similar vein, Maulana Ashraf Ali al-Thanvi (1863—1934), in his \textit{al-Intibahat al-Mufeedah}, translated by Muhammad Hassan Askari and Karrar Husain as \textit{Answer to Modernism}, 2\textsuperscript{nd} ed. (Karachi: Maktaba Darul-Uloom), has pointed to the fact that this intellectual engagement would require an elaborate reappraisal of the “sufficient and comprehensive” principles of traditional ‘ilm kalām (dialectical theology) to answering the challenge of modern science and philosophy (on pp. 1—5).
\textsuperscript{196} \textit{Islam and Secularism}, 132.
\textsuperscript{197} \textit{Qurʾān}, \textit{al-Nūr}: 35.


Alvares, Claude and Shad Saleem Faruqi, Decolonising the University: The Emerging Quest for Non-Eurocentric Paradigms (Penang: USM, 2012).


Lest the average, interested reader feels overwhelmed by the many academic and popular references cited in the copious footnotes to this paper, what follows is a hopefully more manageable guide to what I believe are some of the more accessible principal readings in English pertaining to the paper’s thesis that they can peruse at a steady yet leisurely pace over the course of a month or so, in shāʾ Allāh.


