

THE THEOLOGICO-SCIENTIFIC RESEARCH PROGRAM
OF THE MUTAKALLIMŪN: INTELLECTUAL HISTORICAL
CONTEXT AND CONTEMPORARY CONCERNS
WITH SPECIAL REFERENCE TO FAKHR AL-DĪN AL-RĀZĪ

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Situating *kalām* in its full intellectual historical context reveals it as a systematic theocentric scientific research program possessing of objective cognitive content. On the one hand *kalām* is about understanding God, and on the other it is about understanding Creation, and in between lies the rational mind mediating between the two poles of Being: one absolute, the other contingent, relating one to the other and integrating them within the framework of a comprehensive and coherent Qurʾānic worldview. Unsurprisingly, the investigative nature of this research program demands of the *mutakallimūn* a mastery of the revealed, rational, and empirical sciences which enables them to critically engage the scientists and philosophers with a view toward the formulation of a sophisticated, empirically rich, theocentric counter-science. Fakhr al-Dīn al-Rāzī plays a central role in the conceptual and empirical maturation of this research program, thus serving as an intellectual beacon for Muslim scientists in their systemic quest for a contemporary counter-science “powerful and elaborate enough to function as a substitute” for modern Western science.

Keywords: Fakhr al-Dīn al-Rāzī, al-Ghazālī, Ibn Sīnā, *ʿilm*, *kalām*, *al-kalām al-jadīd*, *mutakallimūn*, *falāsifah*, scientific research program, *falsafah*, *Tahāfut al-Falāsifah*, *al-Mabāḥith al-Mashriqiyyah*, *al-Maṭālib al-ʿĀliyyah*, *Mafūṭih al-Ghayb*,

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Ibn Khaldūn, Abū al-Barakāt al-Baghdādī, science,
philosophy, theology.

Introduction: for a people who think

In *Knowledge Triumphant*, Franz Rosenthal observes that the Islamic civilization is one that is essentially characterized by knowledge (*ilm*), for “*ilm* is one of those concepts that have dominated Islam and given Muslim civilization its distinctive shape and complexion.”¹ This should not be surprising since the divine revelation itself repeatedly emphasizes that its signs or verses are only understandable “for a people who think,”² and exhorts believers, nay, even non-believers, to look to the cosmic horizons and into their very selves for empirical indications of the revealed truth.³ For many scholars, including some professional orientalists, the seeds of rational thinking are already to be found in “early” Islam, in the Qur’ānic revelation itself.⁴

Hence, from the very beginning, Muslims have taken a rational and scientific approach to matters in both the religious and mundane domains. Simply put, there was never in Islam the peculiarly Christian problem of reconciling between reason and revelation as if the two were somehow mutually exclusive avenues to truth and knowledge that have

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1. *Knowledge Triumphant: The Concept of Knowledge in Medieval Islam* (Leiden: Brill, 1970), 2.
 2. *al-Baqarah*: 164. All translations of Qur’ānic verses are based on Muhammad Marmaduke Pickthall, *The Meaning of the Glorious Qur’ān: Text and Explanatory Translation* (Mecca: Muslim World League, 1977).
 3. Ibid, *Fuṣṣilat (Hā Mīm al-Sajdah)*: 53.
 4. For instance, Professor Hans Daiber in his unpublished series of lectures entitled “Islamic Philosophy: Innovation and Mediation between Greek and Medieval European Thought,” delivered to his graduate students at ISTAC during the 2001–2002 academic year; see also his “The Qur’ān as Stimulus of Science in Early Islam” cited in “What is the meaning of and to what end do we study the history of Islamic Philosophy?: The history of a neglected discipline,” in his *Bibliography of Islamic Philosophy*, 2 vols. (Leiden: Brill, 1999), 1: xxxi, note 127. Cf. J. van Ess, “Early Development of *Kalām*,” in G. H. A. Juynboll, ed., *Studies on the First Century of Islamic Society* (Carbondale, IL: Southern Illinois University Press, 1982), 109–123 on 110ff.

to be brought together in some form of uneasy compromise. As far as Muslims are concerned, revelation and reason are in mutual harmony as complementary avenues to knowledge that spring ultimately from the same source. For Muslims, to whom belief must be grounded in knowledge possessing of objective cognitive value, the problem is merely that of specifying the precise relation between the two, which is reason finding its proper role within the context of experience, including the religious experience of revelation. Such was the position taken by the *mutakallimūn* and the *falāsifah*, both of whom “did not distinguish theology from philosophy,”⁵ and neither did they distinguish it from physics or mathematics for that matter.⁶

Islamic scientific endeavor

The scientific endeavor in Islam can be said to have begun with the textual standardization of the Qurʾān, and with the systematic transmission, collection, and authentication of the *Sunnah*. These budding endeavors in systematic intellectual work soon inspired the cultivation of sophisticated linguistic sciences (etymology, phonology, morphology, syntax, semantics, lexicography, prosody, metrics, rhetoric, and *tajwīd*, the art of Qurʾānic recitation) which emphasized the precise relations between words and their meanings.⁷ On these elaborate linguistic foundations the science of jurisprudence (*fiqh*) was rigorously developed with its own internal analogical principles (*qiyās*) or a “comparative-deductive”⁸ method of juristic inference which facilitated the creative application of the normative injunctions of the Qurʾān and *Sunnah* to the particular local and temporal

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5. Richard M. Frank, “The Science of *Kalām*” in *Arabic Sciences and Philosophy*, Vol. 2, No. 1 (March, 1992), 7–37 on 19.
 6. They realized that acceptance of atomism entails rejection of Euclidean geometry and affirmation of discontinuous or discrete geometry, as shown, for instance, by Alnoor Dhanani, *The Physical Theory of Kalām* (Leiden: Brill, 1994), 62ff, 101ff, 133ff. Al-Kindī himself was able to argue for cosmic finitude “wholly along mathematical lines,” as shown by Nicholas Heer and Haig Khatchadourian, “Al-Kindī’s Epistle on the Finitude of the Universe” in *Isis*, 56 (1965), 426–433. See also, Anton M. Heinen, “Mutakallimūn and Mathematicians: Traces of a controversy with lasting consequences” in *Der Islām*, 55 (1978), 57–73.
 7. G. Bohas, Jean-Patrick Guillaume and D. E. Kouloughli, *The Arabic Linguistic Tradition* (London: Routledge, 1990).
 8. Hans Daiber’s term, unpublished academic course lectures delivered at ISTAC, 2001–2002.

contexts of Muslim society. This cultivation of linguistic definition⁹ and rational argumentation in the context of religious discourse prepared the minds of Muslim scholars for their eventual creative engagement with the attractions and challenges of the rich intellectual aspects of the cultures of the ancient Greeks, Persians, and Indians which they encountered in the newly acquired, far-flung territories beyond the borders of the Arabian peninsula.

The Muslims were most attracted to the Greek philosophical, logical, mathematical, scientific, and ethical principles and studied them very thoroughly and critically indeed. By the time of the Caliph al-Ma'mūn (ca. mid-10th century) an intellectual movement for translating these Greek works into Arabic was in full swing with the active patronage of the state and rich individuals. While rejecting some of those Greek principles, Muslim scholars readily recognized many others that were found to be clearly in general accord with the Qur'ānic injunction to ground belief and practice in rational thinking and empirical experience. Clearly the appropriation of these ancient sciences (*al-ʿulūm al-awā'il*) was motivated and framed both by the cognitive and pragmatic needs of the new empire and the intrinsic intellectual allure of the new knowledge.¹⁰ But long before the attractions of Greek rational thought had taken root, the initially dormant argumentative acumen of Muslims had already been activated and honed by external theological debates with the Jews and Christians, as well as by intra-Muslim political, theological, and juristic controversies which resulted in the rise and consolidation of distinct, opposing doctrinal sects (*firaq*), and schools of thought (*madhāhib*) in philosophical, scientific, and legal matters.¹¹

9. In his public lecture organized by UNESCO, "Islam and the flowering of the exact sciences" in *Islam, Philosophy, and Science* (Paris: UNESCO Press, 1981), 133–167 on 133, Roshdi Rashed says, "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."

10. Details in Dimitri Gutas, *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early ʿAbbasid* (London: Routledge, 1998).

11. 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: Brill, 1972); and Josef van

To be sure, there were heated controversies amongst these opposing schools of thought as to the extent to which Greek philosophico-scientific thought was or was not compatible with the Islamic worldview¹² projected by the Qurʾān. On the one hand there were the Muslim philosophers (*falāsifah/hukamāʾ*) like al-Kindī (d. 866), al-Fārābī (d. 950), and ibn Sīnā (d. 1037) who can be said to be more receptive than critical of the Greek speculative sciences, while, on the other hand, there were the Ashʿarite rationalist theologians (*mutakallimūn*) like al-Ashʿarī himself (d. 935), as the founder of the school, al-Juwaynī (d. 1085),¹³ al-Ghazālī (d. 1111), and F. al-Rāzī (d. 1209), all of whom, in contrast, can be said to be more critical of than receptive to Greek rationality; both camps were at the same time in heated engagement with the Ḥanbalites, Muʿtazilites and Shīʿites.¹⁴ Even amongst the philosophers, Fārābian-Avicennan Aristotelism was not received uncritically; a particular case in point is Abū al-Barakāt al-Baghdādī's (d. 1164) remarkable *Kitāb al-Muʿtabar*,¹⁵ which criticized Aristotelian physics and metaphysics just as al-Ghazālī earlier criticized its metaphysics, and which prefigured much of the Fakhrurāzian wide-ranging polemics against peripateticism. Even the so-called “anti-rationalist” ibn Taymiyyah can be found to be appreciative of the *Muʿtabar* and its author and of ibn Rushd himself while being rather critical of both ibn

Ess, “Umar II and His Epistle against the Qadariyya” in *Abr-Nahrain*, XII (1971–72), 19–26. A survey in this regard is W. Montgomery Watt, *The Formative Period of Islamic Thought* (Edinburgh: Edinburgh University Press, 1973).

12. For a detailed, authoritative exposition of the Islamic worldview that is thoroughly grounded in the Islamic tradition while critically cognizant of the Western tradition, see Syed Muhammad Naquib al-Attas, *Prolegomena to the Metaphysics of Islam: An Exposition of the Basic Elements of the Worldview of Islam* (Kuala Lumpur: ISTAC, 2002).
13. On al-Juwaynī, see the useful introduction by Paul E. Walker, trans., *A Guide to Conclusive Proofs for the Principles of Belief: Kitāb al-Irshād ilā Qawāʿi al-Adillah fī Uṣūl al-ʿItiqād* (Reading: Garnet, 2000), xix–xxxvii.
14. See, for instance, the useful survey by Shlomo Pines, “Islamic Philosophy” in *The Collected Works of Shlomo Pines*, vol. III: *Studies in the History of Arabic Philosophy*, ed., Sarah Stroumsa (Jerusalem: Magnes Press, 1996).
15. *Kitāb al-Muʿtabar*, 3 vols. in 1 (Hyderabad: 1357H). A monograph on his metaphysics is Jamīl Rajab Sīdabī, *Abū al-Barakāt al-Baghdādī wa Falsafatuhu al-Ilāhiyyah: Dirāsah li Mawqifihi al-Naqdī min Falsafah ibn Sīnā* (Cairo: Maktabah Wahbah, 1996).

Sīnā and al-Fakhr al-Rāzī.¹⁶

Ironically, even surprisingly, the perceived intellectual threat of Hellenistic thought, particularly Aristotelianism in its Neoplatonic garb, was in the end overcome by a gradual process of co-option in which the Greek sciences were actively “appropriated” and completely “naturalized” to such an extent that Ibn Khaldūn in the fifteenth century was drawn to observe that one could no longer differentiate between *kalām* and *falsafah*, so much had the two been fused together.¹⁷ It may be surmised that the eventual triumph of Ash‘arism (including Māturīdism and Ṭahāwism, or Sunnism in general), was due to its creative intellectual versatility in co-opting and integrating both the rationalism of the Mu‘tazilites and the *falāsifah* and the traditionalism of the Ḥanbalites into its own “synthetic” theological framework¹⁸ which “gave both *naql* and *‘aql* their due, and took a middle course between the doctrines of the opposing sects.”¹⁹

So instead of impeding philosophico-scientific thought in Islam, al-Ghazālī’s celebrated *Tahāfut al-Falāsifah*, by the intense positive and negative responses it provoked through subsequent centuries, actually did much to hasten this process of synthesis and naturalization. The *Tahāfut* marked the rise of the new philosophical *kalām* (*al-kalām al-jadīd*) which was characterized by an aggressive, self-confident, thorough-going po-

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16. See Sulaymān al-Nadwī’s informative introduction to the *Kitāb al-Mu‘tabar*, 3 vols. in 1 (Hyderabad: 1357H), 3: 230–252. Ibn Taymiyyah’s philosophical acumen is remarkably borne out in some recent meticulous studies such as those by Yahya J. Michot, “A Mamlūk Theologian’s Commentary on Avicenna’s *Risāla Adhāwiyya*, being a translation of a part of the *Dar’ al-Ta‘arruḍ* of Ibn Taymiyya, with introduction, annotation, and appendices” in two parts, in *Journal of Islamic Studies*, Vol. 14 (2003) No. 2 and 3, 149–203 and 309–363 respectively; and Jon Hoover, “Perpetual Creativity in the Perfection of God: Ibn Taymiyya’s Hadith Commentary on God’s Creation of this World,” in *Journal of Islamic Studies*, Vol. 15 (2004), No. 3, 287–329.
17. Ibn Khaldūn, *Muqaddimah*, trans. Franz Rosenthal, 3 vols. (New York: Pantheon Books, 1958), 3: 52–53; cf. A. I. Sabra, “The Appropriation and Subsequent Naturalization of Greek Science in Medieval Islam: A Preliminary Statement” in *History of Science*, Vol. 27 (1987), 223–243.
18. Mustafa Ceric, *Roots of Synthetic Theology in Islam* (Kuala Lumpur: ISTAC, 1995).
19. Fathalla Kholeif, ed. and intro., al-Māturīdī, *Kitāb al-Tawḥīd* (Beirut: Dar al-Machreq, 1982), xiii.

lemic against Avicennan *falsafah* on its own terms, a polemic which ended with the former taking over as its own much of the ground covered by the latter.²⁰ By the time al-Ghazālī (d. 1111) died, logic was naturalized as a conceptual tool for *kalām* and *fiqh*, and by the time F. al-Rāzī (d. 1209), died logic was well on its way to becoming an independent Islamic discipline in its own right,²¹ 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.”²² In recognition of the pivotal roles of al-Ghazālī and F. 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-Ghazālī. 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.”²³

Eventually the originally threatening Hellenistic background faded into oblivion and *falsafah* gradually Islamized until it became totally transformed into a “naturalized” Islamic science in the form of *ḥikmah ishrāqīyyah* at the hands of al-Suhrawardī and his successors,²⁴ and in the form of *manṭiq* and philosophical *kalām* at the hands of F. al-Rāzī and his successors from al-Āmidī to al-Taftāzānī and al-Jurjānī.²⁵ Of course there

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20. Al-Ghazālī, *The Incoherence of the Philosophers*, trans. Michael Marmura (Provo, Utah: Brigham Young University Press, 2000), xv–xvi.
21. Nicholas Rescher, *The Development of Arabic Logic* (Pittsburgh: University of Pittsburgh Press, 1964), 51–54, 57ff.
22. Earl Edgar Elder, trans., *A Commentary on the Creed of Islam: Sa’d al-Dīn al-Taftāzānī on the Creed of Najm al-Dīn al-Nasafī* (New York: Columbia University Press, 1950), xvi.
23. *Muqaddimah*, 3: 43.
24. Mehdi Amin Razavi, *Suhrawardī and the School of Illumination* (Surrey: Curzon Press, 1997); also, Ian Richard Netton, *Allāh Transcendent: Studies in the Structure and Semiotics of Islamic Philosophy, Theology and Cosmology* (London: Routledge, 1989), 256ff. Cf. Bilal Kuspinar, *Ismā’īl Ankaravī on the Illuminative Philosophy: His İzāḥu’l-Ḥikem: Its edition and analysis in comparison with Dawwānī’s Shawākīl al-Ḥūr, together with the translation of Suhrawardī’s Hayākīl al-Nūr* (Kuala Lumpur: ISTAC, 1996).
25. Shlomo Pines, “Some Problems of Islamic Philosophy” in *Islamic Culture* (January 1937), 66–80 on 68–69, 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

would always be detractors like ibn Taymiyyah and al-Suyūṭī,²⁶ but in effect, *falsafah* in the guise of *kalām*, and *manṭiq* as an independent science, had become thoroughly Islamized and firmly entrenched in mainstream traditional Islamic education throughout the Muslim world, from the Maghrib²⁷ to the Malay Archipelago.²⁸ It is against this general intellectual historical background that one must situate and evaluate the continuing significance of F. al-Rāzī's life and works.

Fakhr al-Dīn al-Rāzī's intellectual life: a brief sketch²⁹

The empire of the Great Seljuqs in which al-Ghazālī flourished was already crumbling when Fakhr al-Dīn first saw the light of day in Rayy in northern Persia in 543/1149. As a renowned scholar he found generous patronage under the Ghūrīds and later on under the Khwārizm Shahs who inherited the Seljuq realms. As a young student he studied with his scholarly father

too-hasty tendency to "hunt" for parallels to, hence sources of, *kalām* theories in classical, Hellenistic, and patristic theological thought and concepts. A compelling reaction to this is R. M. Frank, who, in his presidential address "Hearing and saying what was said" in *Journal of the American Oriental Society*, 116.4 (1996), 615, says that "...the highly nuanced language of the classical *kalām* was developed in an ongoing process of autonomous discourse in Arabic."

26. Jalāl al-Dīn al-Suyūṭī, *Ṣawn al-Manṭiq w'al-Kalām 'an Fann al-Manṭiq wal-Kalām*, bound in one volume with his abridgement of Taqīyy al-Dīn ibn Taymiyyah, *Nasīḥah Ahl al-Imān fī Radd 'alā Manṭiq al-Yūnān*, ed., 'Alī Shāmī al-Nashshār (Cairo, 1947?).
27. For the case of the Maghrib, the educational role of Abū 'Abd Allāh al-Sanūsī (d. 1490) is significant; see article on him in *EI2* by H. Bencheneb, s.v., "al-Sanūsī," with copious references.
28. For the case of the Malay Archipelago, see, for instance, Syed Muhammad Naquib al-Attas, *The Oldest Known Malay Manuscript: A 16th Century Malay Translation of the Aqā'id of al-Nasafī* (Kuala Lumpur: University of Malaya Press, 1988), 1–52 passim.
29. This sketch is largely based on the detailed, critical, and comprehensive account by Muḥammad Ṣālīḥ al-Zarkān, *Fakhr al-Dīn al-Rāzī wa Arā'uhu al-Kalāmiyyah wa al-Falsafīyyah* (Beirut: Dār al-Fikr, 1963), 8–36 passim. Cf. Fathallah Kholeif, ed. and trans., *A Study on Fakhr al-Dīn al-Rāzī and His Controversies in Transoxiana* (Beirut: Dar el-Machreq, 1966), 9–25; idem, (Fatḥ Allāh Khulayf), *Fakhr al-Dīn al-Rāzī* (Cairo: Dār al-Ma'ārif, 1969), 1–23; Yasin Ceylan, *Theology and Tafṣīr in the Works of Fakhr al-Dīn al-Rāzī* (Kuala Lumpur: ISTAC, 1996), 1–13; and G. C. Anawati, "Fakhr al-Dīn al-Rāzī," in *Encyclopedia of Islam 2nd ed.* (*EI2*). All provide references to the classical biographical dictionaries.

Ḍiyā' al-Dīn Abū al-Qāsim and traced through him his intellectual lineage in Ash'arite *kalām* to al-Juwaynī (d. 1085) and al-Ash'arī, and in *fiqh* to ibn Surayj (d. 918) and al-Shāfi'ī (d. 820).³⁰

Together with al-Suhrawardī, he was a pupil of Majd al-Dīn al-Jīlī in *kalām* and *falsafah*. According to Kraus³¹ and Rescher,³² al-Rāzī was also a pupil of Hibat Allāh ibn 'Alī ibn Malkī Abū al-Barakāt al-Baghdādī (d. 1164),³³ the famed Jewish-turned-Muslim physician and philosopher who authored the important contra-Avicennan treatise on logic, physics, and metaphysics entitled *al-Mu'tabar fī al-Ḥikmah*,³⁴ the influence of which on al-Rāzī is apparent by his many references to it.³⁵

Thoroughly learned in practically all the intellectual, scientific, and religious sciences of his time, F. al-Rāzī was a strong, even aggressive defender of Ash'arite theology against the Karrāmites and the Mu'tazilites. His unrelenting critique of ibn Sīnā's logic, physics, and metaphysics, so reminiscent of the spirit of the *Tahāfut*, provoked a strong counter-attack from Naṣīr al-Dīn al-Ṭūsī (d. 1274), which only serves to enhance his intellectual stature. His controversies with the scholars of Transoxiana show him to be a very combative, self-assured debater with an incisive and agile mind.³⁶

While yet a young scholar, many of his works were already widely studied and used as teaching texts.³⁷ Any doubt about his erudition is quickly dispelled by a quick perusal of the list of his many extant works and a cursory appraisal of their contents.³⁸ Thus ibn Khallikān (d. 1282) is more

30. Ibn Khallikān, *Kitāb Wafayāt al-A'yān*, trans. Mac Guckin de Slane, 3 vols. (New York: Johnson Reprint, 1961), 1: 655.

31. Paul Kraus, "The Controversies of Fakhr al-Dīn al-Rāzī" in *Islamic Culture*, Vol. XII (1938), 131–153, on 133.

32. Rescher, *Arabic Logic*, 183.

33. On him see Collette Sirat, *A History of Jewish Philosophy in the Middle Ages* (Cambridge: Cambridge University Press, 1993), 131–140; cf. Shlomo Pines, "Abū al-Barakāt al-Baghdādī" in *EI2*, 1: 111–113; idem, "Abū al-Barakāt al-Baghdādī" in *Dictionary of Scientific Biography*, ed. C. C. Gillispie (New York: Scribner's, 1970–1980), 1: 26–28.

34. (Hyderabad, 1357H).

35. Pines, *Atomism*, 94–95.

36. Fathallah Kholeif, ed. and trans., *A Study on Fakhr al-Dīn al-Rāzī and His Controversies in Transoxiana* (Beirut: Dar El-Machreq, 1966); cf. Paul Kraus, "The Controversies of Fakhr al-Dīn al-Rāzī" in *Islamic Culture*, Vol. XII (1938), 131–153, on 136.

37. *Ibid.*, 82.

38. The best and most reliable critical account and list of his works is by

than justified in declaring Fakhr al-Dīn to be “the pearl of the age, a man without a peer” who “surpassed all his contemporaries in scholastic theology, metaphysics, and philosophy.”³⁹ Most of the other classical biographers and historians such as ibn al-Athīr, al-Subkī, al-Ṣafadī, and ibn Khaldūn also paint him in similar positive light, while the negative evaluation of either his works or his person by his detractors such as ibn Taymiyyah turns out on closer inspection to be either trivial or unfounded. How can it be otherwise, since ibn Taymiyyah was himself led by F. al-Rāzī “to a deeper personal understanding of philosophy and heresiography”?⁴⁰

Before dying in 1209, al-Rāzī dictated a *wasīyyah* or will which tells us of his intellectual and spiritual motivation for his wide-ranging scholarly investigations as well as of his final evaluation of their worth. It has been interpreted in different ways by different readers, with most seeing it as a typical deathbed remorseful disavowal of philosophical *kalām* and a reaffirmation of the simple faith of the old woman. However, as persuasively argued by Tony Street, a less superficial and more nuanced reading will show that the will is in fact an affirmation of both the simple and the sophisticated approach toward fathoming the relation between man and God.⁴¹ The one negates not the other and each has its role to play in the intellectual and spiritual adventure of man from his earthly sojourn to everlasting life.

Another way to capture some of the motivating spirit of Fakhr al-Dīn al-Rāzī’s intellectual investigations is by citing his own conclusion to volume four of his *kalām* work, *al-Maṭālib al-Āliyyah*, after a four hundred-page long debate with the various parties of the philosophers and theologians over the problem of the incipience (*ḥudūth*) versus the eternity (*qidam*) of the world (*al-‘ālam*):

Zarkān, 40ff. I have not been able to access the articles of Jomier cited in Tony Street, “Concerning the Life and Works of Fakhr al-Dīn al-Rāzī” in *Islam: Essays on Scripture, Thought and Society, a festschrift in honour of Anthony H. Johns* (Leiden: Brill, 1997), 135–146, on 135n1.

39. Ibn Khallikān, *Kitāb Wafayāt al-A‘yān*, trans. Mac Guckin de Slane, 3 vols. (New York: Johnson Reprint, 1961), 1: 652.
40. H. Laoust, *Essai sur les doctrines sociales et politiques de Taki-d-din Ahmad b. Taymiya*, cited in G. C. Anawati, “Fakhr al-Dīn al-Rāzī” in *EI2*.
41. Tony Street, “Concerning the Life and Works of Fakhr al-Dīn al-Rāzī” in *Islam: Essays on Scripture, Thought and Society, a festschrift in honour of Anthony H. Johns*, eds., Peter G. Riddell and Tony Street (Leiden: Brill, 1997), 135–146.

Know that these schools of thought (*al-madhāhib*) have been summarized in this way such that each is exposed in all their praiseworthy strengths and repugnant weaknesses; and [that] upon [perusal] of this [exposition], people who are amazed and perplexed may say: these arguments do not attain to [the degree of] clarity and tenacity such as may dispel doubts and invalidate excuses, and satisfy the mind with their soundness and insight. Indeed, each of these arguments is prone to abstruseness, so much so that it behooves the Merciful, the Gracious, to excuse the mistaken [interlocutor] in complexities such as these....O my Lord, my knowledge is but as the mirage, while my heart is done in by trepidation [in the face] of diverse problems as numerous as [all] the particles of sand and dust. Yet, despite all this, I have hope that I may be among [Your] beloved, so let not my hope be vain, O Most Gracious, O Most Generous. O my Lord, You know that all which I have said and all which I have written are not intended save to attain to truth and correctness, and to depart from ignorance and vacillation. If I have been correct, do accept it by Your grace, and if I have been mistaken do disregard it by Your mercy and forbearance, O Most Generous, O Endower of being!⁴²

Al-Rāzī clearly views his work as a noble and pious intellectual quest for the truth, and that was the whole point of his dialectical thoroughness in examining the viewpoints of all intellectual stakeholders in any particular question or issue or bone of contention. While confident and forceful in espousing and arguing exhaustively for what he found to be sound and correct, he is at the same time humble and candid in admitting that in certain problems no cognitive commitment can be made as to their solutions. Though clearly belonging to the party of the *mutakallimūn*, he does not hesitate to show what they have overlooked in their argumentation. For him, the intellectual quest for the truth has a moral dimension as well, which is expressed in his perpetual awareness of the utter reliance of human intelligence on the guidance of the Knower of the Unseen and the Manifest, and of the dependence of the human soul for its salvation on the Mercy and Grace of the Creator. To sum up his scholarly legacy

42. *Al-Maṭālib al-Āliyyah*, ed. Aḥmad Ḥijāzī al-Saqqā, 9 vols. in 5 (Beirut: Dar al-Kitāb al-ʿArabī, 1987), 4: 26–27.

in one sentence, one can do no better than to cite the words of Effat al-Sharqawi:

He was a man of an Ash'arī heart and Avicennian mind, and in practice he tried to put the Ash'arī traditions into a philosophical system that could appeal to the intellectual Muslim.⁴³

Fakhr al-Dīn al-Rāzī's "investigations" and their historical impact

The works of Fakhr al-Dīn al-Rāzī are in many ways (especially in the breadth and depth of their logico-empirical analyses) the apogee in the long "movement of thought"⁴⁴ in the Sunni *kalām* engagement with Hellenistic philosophy and science from al-Ash'arī (d. 935), al-Māturidī (d. 944), al-Bāqillānī (d. 1013), al-Juwaynī (d. 1085), al-Ghazālī (d. 1111), al-Nasafī (ca. d. 1142), and al-Shahrastānī (d. 1153) to al-Āmidī (d. 1233), al-Bayḍāwī (d. 1286), al-Ījī (d. 1355), al-Taftāzānī (1390), and al-Jurjānī (d. 1413) and beyond (for which one will have to take a closer look at the many substantial post-fifteenth century *kalām* works). This movement of thought integrated theological, philosophical, and scientific themes, and resulted in a resurgent full-fledged philosophical *kalām* characterized by an unapologetic self-confident "investigative" re-elucidation of traditional Islamic beliefs (*naqliyyāt*) on rational principles (*al-mabādī' al-'aqliyyah*). As Sabraputsit, "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,"⁴⁵ and as such it was a "genuine form of knowledge" that is essentially neither apologetic nor polemical in its intellectual goals, for, moreover:

The mutakallimūn in particular made it their business to meet the falāsifa on their own ground, not however by merely argu-

43. Cited in Anthony H. Johns, "On Qur'ānic Exegetes and Exegesis: A Case Study in the Transmission of Islamic Learning" in *Islam: Essays on Scripture, Thought and Society, a festschrift in honour of Anthony H. Johns* (Leiden: Brill, 1997), 3–49 on 11.

44. A. I. Sabra, "Science and Philosophy in Medieval Islamic Theology: the Evidence of the fourteenth Century" in *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften (ZGAIW)*, vol. 9 (1994), 23.

45. A. I. Sabra, "Science and Philosophy in Medieval Islamic Theology: the Evidence of the Fourteenth Century" in *ZGAIW*, vol. 9 (1994), 1–42 on 11.

ing 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.⁴⁶

Sabra applies this characterization to both Ash'arite and Mu'tazilite *kalām*, and in this regard he finds ready support in R. M. Frank and Alnoor Dhanani, both of whom are inclined to view *kalām* as a kind of intellectual research program.⁴⁷

"Investigation" or "research" is the key word here, for *al-Ḥathth 'alā l-Baḥth* (*The Encouragement to Investigation*) was the title the great al-Ash'arī himself gave to a work of his, the purpose of which was to encourage the study of *kalām*, or rationalistic theology.⁴⁸ Al-Rāzī's early work critically engaging Avicennan thought was entitled *al-Mabāḥith al-Mashriqiyyah* (*The Eastern Investigations*). The *Mabāḥith* was already, even at this early stage of his intellectual life, 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 claimed, in the spirit of al-Ghazālī's *Tahāfut*.⁴⁹

As a matter of fact, 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-Maṭālib al-Āliyyah* (*The Lofty Researches*). Instances of this intellectual self-criticism are many, including his initial rejection and later whole-hearted acceptance and exposition of atomism in terms

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46. A. I. Sabra, "Science and Philosophy in Medieval Islamic Theology: the Evidence of the Fourteenth Century" in *ZGAIW*, vol. 9 (1994), 1–42 on 23n24.
47. A. I. Sabra, "Science and Philosophy in Medieval Islamic Theology: the Evidence of the Fourteenth Century" in *ZGAIW*, vol. 9 (1994), 1–42 on 11; R. M. Frank, "The Science of *Kalām*" in *Arabic Sciences and Philosophy*, vol. 2 (1992), 7–37; cf., idem, "The *Kalām*, an Art of Contradiction-Making or Theological Science?: Some Remarks on the Question" review article in *JAOS* 88 (1968), 295–309.
48. R. M. Frank, trans. and ed., "al-Ash'arī's *Kitāb al-Ḥathth 'alā l-Baḥth*" in *Mélanges de l'Institut Dominicain d'Etudes Orientales du Caire* (*MIDEO*) 18 (1988), 83–152; cf. Alnoor Dhanani, *The Physical Theory of Kalām* (Leiden: Brill, 1994), 2–3, for *kalām* as a "research program."
49. Muḥammad 'Āṭif al-Īrāqī, *al-Falsafah al-Ṭabī'iyyah 'inda ibn Sīnā* (Cairo: Dār al-Ma'ārif, 1971), 414; cf. Abd al-Raḥmān al-Badawī, *al-Turāth al-Yūnānī 'fī al-Ḥaḍārah al-Islāmiyyah* (Cairo: Dār al-Nahḍah al-'Arabiyyah), 270n. 1; cf. Muḥammad al-'Uraybī, *Munṭalaqah al-Fikriyyah 'inda al-Imām al-Fakhr al-Rāzī* (Beirut: Dār al-Fikr al-Lubnānī, 1992), 44; cf. discussion in Zarkān, 85ff.

of discrete minimal parts,⁵⁰ and his critical consideration of ibn Sinā's statement in *al-Najāh* that, "verily, for every body (*jism*) there is a natural place (*makānan ṭabī'iyyan*),"⁵¹ in which he ended up saying, "This is the end of the inquiry into this matter. It is incumbent on us to figure out (*natafakkar*) the solution to these uncertainties (*al-shukūk*), and may God Most High accord us the attainment of the truth regarding it."⁵² Hence, it cannot be said that he started out as a straightforward peripatetic philosopher to end up eventually as a straightforward Ash'arite *mutakallim*.

This investigative tone of his discourse is a prominent and stable feature of all his major works throughout his lifetime, even in the *Maṭālib*, which most probably was his last major philosophico-*kalām* work.⁵³ A striking evidence of this is the often impassive manner in which he goes at great lengths to present the arguments of various opposing viewpoints so much so that at times it can be a rather delicate task to ascertain his own personal and final positions, for, as noted by Ceylan, "he criticizes the philosophers and the theologians equally, and adopts a position according to the strength of argument put forward."⁵⁴ Thus the general impression of him that comes to mind even through a cursory perusal of his works is that of a researcher meticulously carrying out a wide-ranging intellectual research program into understanding the nature and reality of things, and insofar as *falsafah* and *kalām* contribute to his research, he gladly delves into them and integrates their approaches and arguments into conclusions of his own creation which may even turn out to be inconclusive. Hence, it would be in perfect accord with the tentative nature of scientific inquiry in which F. al-Rāzī was deeply involved to find in his works complex shifting positions as the inquiry progresses until attaining final maturity in his late works, in what can be termed as a thoroughly philosophized Ash'arī *kalām* worldview.⁵⁵

Although the century after al-Ghazālī also bears witness to some notable *mutakallimūn* such as al-Nasafī and al-Shahrastānī,⁵⁶ Fakhr al-Dīn

50. For instance in *al-Maṭālib*, 6: 29–82.

51. *Al-Najāh*, ed., Muḥammad Taqī Dānish-pazhūh (Tehran: 1364?), 134.

52. *Al-Mabāḥith al-Mashriqiyyah*, ed., Muḥammad al-Muṭaṣṣim biLlāh al-Baghdādī, 2 vols. (Beirut: Dār al-Kitāb al-ʿArabī, 1990), 2: 66–69; cf. Zarkān, 448–449.

53. A detailed but not quite definitive chronology of al-Rāzī's works is in Zarkān, 56ff, with references to editions and manuscripts' locations.

54. Ceylan, xv.

55. Zarkān, 388.

56. Among others he wrote the contra-Avicennan *Kitāb al-Muṣāraʿah*,

al-Rāzī is still clearly the first post-Ghazālian *mutakallim* to bring to comprehensive realization the intellectual project of close and comprehensive critical engagement with Greek philosophy initiated by al-Ghazālī in his celebrated *Tahāfut al-Falāsifah*. While al-Ghazālī succeeded in integrating Aristotelian logic into the principles of *kalām* and *fiqh*, al-Rāzī managed further to integrate much of the subject matter of Aristotelian metaphysics and physics into his many *kalām* and *falsafah* works. He is noted by Dhanani as the first *mutakallim* to discuss space and time in a comprehensive manner,⁵⁷ and probably the first also to undertake a comparative study of atomism and hylomorphism of any comprehensive scope and intensity of treatment.⁵⁸ This versatility is no doubt due in large measure to his own intimate, first-hand knowledge of the philosophical and natural sciences such as logic, physics, medicine, mathematics, and astronomy, in addition to his complete mastery of traditional Islamic sciences.⁵⁹ As a matter of fact, two of his pupils, Quṭb al-Dīn al-Miṣrī and Farīd Dāmād, were Naṣīr al-Dīn al-Ṭūsī’s “teachers in mathematics, natural sciences, ibn Sīnā’s philosophy and medicine.”⁶⁰ Therefore it is hardly surprising to find that “here Fakhr al-Dīn al-Rāzī was to become al-Ghazālī’s most influential continuator.”⁶¹

According to Marmura, al-Ghazālī’s *Tahāfut* can be interpreted as a response to ibn Sīnā’s “wide-ranging criticisms of the *kalām*.”⁶² Yet, in launching his blistering counter-attack, al-Ghazālī could not avoid being persuaded to some extent by the obvious intellectual merits of his adversary, hence his appropriation of some Avicennan ideas to flesh out his

ed. and trans. by Wilfred Madelung and Toby Mayer (London: I. B. Tauris, 2001); and a treatise on atomism, see Aḥmad Sa‘id al-Damardash, “Makḥṭūṭat al-Sharastānī ‘an al-Jawhar al-Fard” in *Majallah Ma‘had al-Makḥṭūṭāt al-‘Arabiyyah*, vol. 25 (1979), 195–218.

57. Alnoor Dhanani, “Al-Ghazālī’s Perspective on Physical Theory,” paper presented to the International Conference on al-Ghazālī’s Legacy, ISTAC, Kuala Lumpur, October 24–27, 2001, 6–7.
58. Volume 6 of 200 pages of the *Maṭālib* is devoted to the issue of atomism versus hylomorphism; see discussion in Adi Setia, “The Physical Theory of Fakhr al-Dīn al-Rāzī,” doctoral dissertation (Kuala Lumpur: ISTAC, September 2005), Chapter Two.
59. Zarkān, 37–55.
60. Hans Daiber, “Al-Ṭūsī, Naṣīr al-Dīn” in *EI2*.
61. Gerhard Endress, “The Defense of Reason: The Plea for Philosophy in the Religious Community” in *ZGAIW*, vol. 6 (1990), 1–49 on 37.
62. Michael Marmura, “Avicenna and the *Kalām*” in *ZGAIW*, vol. 6 (1990), 173–206 on 206.

basically Ash'arite framework. As al-Ghazālī's "most influential continuator," and most probably also "the most outstanding Sunnite figure"⁶³ after him, F. al-Rāzī took up where the former let off, and intensified the debate with ibn Sīnā, even while ibn Rushd, his illustrious contemporary in the Islamic far west, was preparing his own counter-*Tahāfut* to criticize al-Ghazālī and ibn Sīnā.⁶⁴

F. al-Rāzī's engagement with *falsafah* was such that he can be said to have succeeded in "kalāmizing" philosophy and, as an unavoidable consequence, "philosophizing" *kalām*, thus integrating (if not "confusing") the two intellectual disciplines. Such is the judgment of Ibn Khaldūn, and one cannot but agree with him somewhat after even a cursory reading of al-Rāzī's works.⁶⁵ So it seems that historically the "exciting intellectual combat"⁶⁶ between *falsafah* and *kalām* has always been a dynamic two-sided affair, with blows and counter-blows actively exchanged and no implications, however subtle, left hidden and un-explicated. *Kalām* may have won finally,⁶⁷ but as can be surmised from Ibn Khaldūn's remarks, the victory was bitter-sweet—*kalām* ended up thoroughly imbued with the philosophizing spirit which demands of Muslims that they, as responsible thinking individuals, be self-conscious and self-critical about their own beliefs.

F. al-Rāzī's celebrated *Muḥaṣṣal Afkār al-Mutaqaddimīn wa'l-Muta'akhhirīn*⁶⁸ generated great impact on both the Shī'ite and Sunnī

63. Kholeif, *Controversies*, 6.

64. Simon van den Bergh, trans., *Averroes' Tahāfut al-Tahāfut* (London: Luzac, 1978). An aspect of this Ibn Rushd-Ghazālīan debate is well summarized by George F. Hourani, "The Dialogue between al-Ghazālī and the Philosophers on the Origin of the World," 2 parts, in *Muslim World* 48 (1958).

65. The *Muqaddimah*, trans. Franz Rosenthal, 3 vols. (New York: Pantheon, 1958), 3: 43.

66. Hourani, "Dialogue...," 183.

67. Interestingly Hourani ("Dialogue...," 191) judged ibn Rushd's argumentative performance to be "disappointing" as had Van den Bergh (*Averroes*, 20, note p. 23. 1).

68. *Muḥaṣṣal Afkār al-Mutaqaddimīn wa al-Muta'akhhirīn min al-'Ulamā' wa al-Ḥukamā' wa al-Mutakallimīn* (Beirut: Dār al-Fikr al-Lubnānī, 1992) and (Cairo: Maktabah al-Kulliyāt al-Azhāriyyah, n.d.).

worlds with both al-Ṭūsī⁶⁹ and ibn Khaldūn,⁷⁰ for instance, writing their respective summaries of it. The important later *kalām* works by al-Āmidī,⁷¹ al-Bayḍāwī, al-Taftāzānī, al-Ījī, and al-Jurjānī owe much of their self-confident, thorough-going engagement with the philosophical and natural sciences to the intellectual example set by F. al-Rāzī. A brief comparison of their works and al-Rāzī's will clearly bear this out. He also attracted the attention of Ṣūfī metaphysicians, for the Great Master of the Ṣūfīs, Muḥyī al-Dīn ibn 'Arabī, was sufficiently impressed by the agility and versatility of al-Rāzī's thought to engage in a long correspondence with him in the hope of winning him over to (metaphysical?) Ṣūfism.⁷² The works of F. al-Rāzī reinforce the general impression of the major *kalām* works from al-Ash'arī to al-Taftāzānī as being less dogmatic than investigative—hence, for instance, the “investigative character”⁷³ of al-Ījī's *Mawāqif*—more in the nature of an ongoing long-term scientific research program than a petrified, repetitively reactive system of unexamined doctrines.⁷⁴

F. al-Rāzī was also very influential in other disciplines, which, unsurprisingly, tend to be imbued with the rationalistic approach he cultivated

69. *Talkhīṣ al-Muḥaṣṣal*, introduced by Ṭā Hā 'Abd al-Ra'ūf Sa'd and bound together with al-Rāzī's *Muḥaṣṣal* (Cairo: Maktabah al-Kulliyāt al-Azhāriyyah, n.d.).

70. *Lubāb al-Muḥaṣṣal fī Usūl al-Dīn*, ed., Rafīq al-'Ajam (Beirut: Dār al-Mashriq, 1995).

71. Sayf al-Dīn al-Āmidī (d. 1233) wrote a critical summary of F. al-Rāzī's *Maṭālib* entitled *al-Mā'akhidh 'alā al-Imām al-Rāzī*; see the introduction by Ḥasan Maḥmūd 'Abd al-Laṭīf, ed., to al-Āmidī's *Ghāyat al-Marām fī 'Ilm al-Kalām* (Cairo: 1971), 12.

72. See Muḥammad Muṣṭafā, ed., *Kitāb Risālah al-Shaykh Muḥyī al-Dīn ibn 'Arabī ilā al-Shaykh Fakhr al-Dīn al-Rāzī* (Cairo: al-Ṭibā'at al-Muḥammadiyyah, 1987), though it does seem that Ṣūfīs like al-Rūmī and al-Ankaravī do not consider F. al-Rāzī to be adept in the mysteries of the spirit (see Bilal Kuspinar, *Ismā'īl Ankaravī on the Illuminative Philosophy* {Kuala Lumpur: ISTAC, 1996}, 136–38).

73. A. I. Sabra, “Science and Philosophy in Medieval Islamic Theology: the Evidence of the Fourteenth Century” *ZGAIW*, vol. 9 (1994), 1–42 on 27.

74. More discussion in R. M. Frank, “Knowledge and *Taqīd*, the Foundations of Belief in Classical Ash'arism” in *JAOS*, 109 (1989), 38–62; idem, “Elements in the Development of the Teaching of al-Ash'arī” in *Le Museon*, 104 (1991), 141–190; idem, “The Science of Kalām”; cf. A. I. Sabra, “Science and Philosophy in Medieval Islamic Theology: The Evidence of the Fourteenth Century” in *ZGAIW*, vol. 9 (1994), 1–42.

in *kalām*. His major multi-volume work on the principles of Islamic jurisprudence *al-Maḥṣūl fī Uṣūl al-Fiqh*⁷⁵ has had major impact on subsequent Shāfiʿī, Ḥanafī, and Mālikī *uṣūl* works, including the important works of al-Shāṭibī (d. 790/1388) on the philosophy of Islamic law.⁷⁶ In the long history of Qurʾānic exegesis, al-Rāzī's multi-volume *Mafātīḥ al-Ghayb* is unique and outstanding in its combination of traditionalist, linguistic, philosophical, and theologico-scientific approaches to understanding the revealed text. Throughout the centuries many abridgements and adaptations have been made of it, including the two-volume Arabic *tafsīr* of the important nineteenth century Makkah-based Javanese Muslim scholar al-Nawawī al-Bantanī al-Jāwī (d. 1897), *Marāḥ Labīd*, which is largely derived from the *Mafātīḥ*.⁷⁷ In his pioneering research, Rescher has shown F. al-Rāzī to be a pivotal figure in the development of logic in Islam,⁷⁸ while his significance for the general history of science is indicated by Gabrieli's article in *Isis*⁷⁹ and by Sarton's notice in his *Introduction to the History of Science*,⁸⁰ though his noticeable absence—noticeable because of the presence of many lesser figures—from C. C. Gillispie's *Dictionary of Scientific Biography*⁸¹ and Roshdi Rashed's *Encyclopedia of the History of Arabic Science*⁸² only exposes the general absence of detailed, systematic textual studies on F. al-Rāzī's major philosophical and scientific works.

The long term intellectual consequences of F. al-Rāzī's wholesale creative "appropriation" of the philosophical sciences into *kalām* discourse was duly, if critically, appreciated not only by subsequent Ashʿarite *mutakallimūn* but also by Ḥanbalite theologians such as ibn Taymiyyah,⁸³ and by the formulators of Shīʿī *kalām* in the Persian East, such as al-Ṭūsī

75. Ed., Ṭāhā Jābir al-ʿAlwānī (Beirut: Muʾassasah al-Risālah), 1992.

76. See Muhammad Khalid Masud, *Shāṭibī's Philosophy of Islamic Law* (Kuala Lumpur: IBT, 2000).

77. Anthony H. Johns, "On Qurʾānic Exegetes and Exegesis; A Case Study in the Transmission of Islamic Learning" in *Islam: Essays on Scripture, Thought and Society, a festschrift in honour of Anthony H. Johns* (Leiden: Brill, 1997), 3–49 on 9ff.

78. Rescher, 72, 183–85.

79. Giuseppe Gabrieli, "Fakhr-al-din al-Razi" in *Isis* 7 (1925), 9–13.

80. George Sarton, *Introduction to the History of Science*, 2: 364.

81. Ed. in chief, 16 vols. (New York: Scribner's, 1970–1980).

82. Ed., 3 vols. (London: Routledge, 1996).

83. See, for instance, Jon Hoover, "Perpetual Creativity in the Perfection of God: Ibn Taymiyya's Hadith Commentary on God's Creation of this World" in *JIS*, 15: 3 (2004), 287–329.

(d. 1274),⁸⁴ and Christian scholastics in the Latin West.⁸⁵ The intellectual impact of this new *kalām*, as manifested about two centuries later in al-Ījī and al-Taftāzānī, was also felt by medieval Jewish thinkers⁸⁶ and the thinkers, philosophers, and scientists of the European Renaissance and Enlightenment who shared with the *mutakallimūn* “a determined rejection of Aristotelism and a preference for experimentation with various forms of atomism, as well as the belief in an omnipotent and free creator.”⁸⁷ Even modern day Christian creationist theologians have not failed to notice the Fakhrurāzian link in the intellectual historical development of the *kalām* cosmological argument.⁸⁸

Contemporary Concerns

Despite F. al-Rāzī’s obvious importance as a pivotal figure of post-Ghazālian philosophical *kalām* and his far-ranging influence in many other traditional Islamic disciplines such as *uṣūl al-fiqh* and *tafsīr*, precious little has been studied of his thought as compared to the many book- or article-length textual studies on al-Ash‘arī, ibn Sīnā, and al-Ghazālī

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84. Seyyed Hossein Nasr, “Fakhr al-Dīn al-Rāzī” in M. M. Sharif, ed., *A History of Muslim Philosophy* (Delhi: D. K. Publications), 1: 642–656 on 646. Cf. editor’s introduction to F. al-Rāzī’s *al-Maṭālib al-Āliyyah*, ed., Aḥmad Ḥijāzī al-Saqqā, 9 vols. in 5 (Beirut: Dār al-Kitāb al-‘Arabī, 1987), 8–9, 12ff. Naṣīr al-Dīn al-Ṭūsī can be said to be the pivotal figure who helped Avicennan philosophy recover somewhat from the Fakhrurāzian onslaught. See also Hans Daiber, “Al-Ṭūsī, Naṣīr al-Dīn” in *EI2*.
85. Shlomo Pines, “Some Problems of Islamic Philosophy” in *Islamic Culture* (January 1937), 66–80 on 68n. 2; cf. Hans Daiber, unpublished ISTAC lectures, parts 5 and 6 with copious invaluable references.
86. For instant, Maimonides, *Guide of the Perplexed*, trans. Shlomo Pines, 2 vols. (Chicago: University of Chicago Press, 1963), 1: 179ff. Shlomo Pines in his *Studies in Islamic Atomism*, trans. Michael Schwarz and ed., Tzvi Langermann (Jerusalem: Magnes Press, 1997), 97n.152, notes that al-Rāzī’s *al-Mabāḥiṭh al-Mashriqiyyah* was already translated into Hebrew in the fourteenth century and used as a basis for the Hebrew version of al-Ghazālī’s *al-Maqāsid al-Falāsifah*.
87. Sabra, “Science and Philosophy...,” 52. A separate, detailed inquiry is obviously needed regarding late *kalām* influence on the metaphysical foundations of early modern science.
88. William L. Craig, *The Kalām Cosmological Argument* (Eugene, OR: Wipf and Stock, 2000), 17–18.

published almost every year. A perusal of Daiber's⁸⁹ and Pearson's⁹⁰ Islamic bibliographic indices only serves to confirm this impression of general scholarly neglect of F. al-Rāzī's works amongst scholars in the flourishing field of Islamic studies. Only lately has this situation seen some promising improvement, especially in Muslim Arab scholarship, with many of his works edited and published, and some detailed monographic studies done on various aspects of his thought. Still, forty long years have passed, and al-Zarkān's pioneering, extensive though still far from definitive, 650-page, one-volume study of F. al-Rāzī's life and works have yet to be surpassed in its general informative usefulness.⁹¹ It has been and remains the starting point for any serious research into any aspect of F. al-Rāzī's thought, including any fresh attempt toward a much needed definitive authentication, chronological ordering, and synoptic descriptions of the contents of the vast Fakhrurāzian corpus.⁹²

Since the publication of al-Zarkān's work in 1963, a number of F. al-Rāzī's extant works in manuscripts have been edited and published,⁹³

89. Hans Daiber, *Bibliography of Islamic Philosophy*, 2 vols. (Leiden: Brill, 1999).

90. J. D. Pearson, *Index Islamicus: 1906–1955* (Cambridge: Heffer, 1961), and continued and expanded with additions by other compilers and publishers, including, currently, G. J. Roper and C. H. Bleaney (London: Bowker, 1993–2000).

91. Muḥammad Ṣāliḥ al-Zarkān, *Fakhr al-Dīn al-Rāzī wa Avā'uhu al-Kalāmiyyah wa al-Falsafiyah* (Beirut: Dar al-Fikr, 1963). His study is divided into three main parts, the second of which concerns F. al-Rāzī's theory of the physical world (*al-'ālam*) and is a substantial study of his physical theory in its own right.

92. See Zarkān, 56ff, for a useful but far from definitive chronological ordering. A more recent attempt is by Jomier but I have not been able to access his articles. Much of this work is made easier because al-Rāzī likes to cross-reference to his other earlier works, and in many cases an absolute chronology is determinable as in the case of the *Maṭālib* and *Mafātīḥ*, where he often records the date when he completes a particular section or *sūrah*. The relative chronology I follow throughout this study is based on Zarkān's work, but, needless to say, a new improved chronology will necessitate a separate study.

93. Of which among the most notable is his *al-Maḥṣūl fī 'Ilm Uṣūl al-Fiqh*, ed., Ṭahā Jābir al-'Alwānī (Beirut: Mu'assasah al-Risālah, 1992).

and substantial monographic studies of his rhetoric,⁹⁴ cognitive theory,⁹⁵ psychology, and ethics⁹⁶ have appeared, including a handy dictionary of Fakhrurāzian technical terminologies⁹⁷ as well as two handy one-volume indices to his *Maḥāṭiḥ al-Ghayb*.⁹⁸ Recently Brill published an informative comparative study of F. al-Rāzī's and Thomas Aquinas' views on the question of the eternity of the world, but, as pointed out by a reviewer, much more needs to be known about F. al-Rāzī's system of thought first before any meaningful comparison with other thinkers can be made.⁹⁹ A modest doctoral dissertation on his physical theory has just recently been completed¹⁰⁰ while another (tentatively entitled "Basis of Divine Transcendence") is in progress on his theological interpretation of the so-called anthropomorphic verses of the Qurʾān based on his *Asās al-Taqdīs fī 'Ilm al-Kalām*.¹⁰¹ A work on F. Razi's "teleological" ethics by Ayman Shihadeh entitled "The Teleological Ethics of Fakhr al-Dīn al-Rāzī" has also been recently submitted to Brill for possible publication in the series on "Islamic Philosophy, Theology and Science".¹⁰²

Among the most important of F. al-Rāzī's extant writings are his many critical commentaries on Ibn Sīnā's philosophical works, his *kalām* or ra-

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94. Aḥmad Hindawī Ḥilāl, *Al-Mabāḥiṭh al-Bayāniyyah fī Tafsīr al-Fakhr al-Rāzī: Dirāsah Balāghiyyah Tafsīliyyah* (Cairo: Maktabah Wahbah, 1999).
 95. Muḥammad al-ʿArabī Buʿazīzī, *Nazāriyyah al-Maʿrifah ʿinda al-Rāzī min khilālī Tafsīrihi* (Beirut: Dar al-Fikr al-ʿArabī, 1999).
 96. M. Ṣaghīr Ḥasan Maʿṣūmī, *Imām Rāzī's 'Ilm al-Akhlāq: English Translation of his Kitāb al-Nafs wa'l-Rūḥ wa Sharḥ Quwāhumā* (Islamabad: Islamic Research Institute, 1985). He also edited the Arabic text published by the same institute in 1968.
 97. Samīl Dughaym, *Mawsūʿah Muṣṭalahāt al-Imām Fakhr al-Dīn al-Rāzī* (Beirut: Maktabah Lubnān, 2001).
 98. Michel Lagarde, *Index du Grand Commentaire de Fakhr al-Dīn al-Rāzī* (Leiden: E. J. Brill, 1996); cf. Ibrāhīm Shams al-Dīn and Aḥmad Shams al-Dīn, *al-Tafsīr al-Kabīr: al-Fahāris* (Beirut: Dar al-Kutub al-ʿilmiyyah, 1992).
 99. Muammer Iskenderoglu, *Fakhr al-Dīn al-Rāzī and Thomas Aquinas on the Question of the Eternity of the World* (Leiden: Brill, 2002). The review is by Ayman Shihadeh in the *Oxford Journal of Islamic Studies*, vol. 15 no. 2 (May, 2004), 213–215.
 100. Adi Setia, "The Physical Theory of Fakhr al-Dīn al-Rāzī" (Kuala Lumpur: ISTAC, September 2005).
 101. Introduced by Muḥammad al-ʿUraybī (Beirut: Dār al-Fikr al-Lubnāni, 1993); doctoral research by Farid Shahrān of ISTAC.
 102. Based on information provided by Professor Hans Daiber.

tionalist theological works, and his magnum opus *Mafātīḥ al-Ghayb*, a remarkable philosophico-scientific-kalāmic exegesis of the Qurʾān in thirty-two volumes. Many of these published philosophical and *kalām* works have been critically edited by Aḥmad Ḥijāzī al-Saqqā, including a lucid, critical edition of the nine-part *al-Maṭālib al-ʿĀliyyah* in five volumes, apparently al-Rāzī's final and most important *kalām* work, written during the last few years of his life.¹⁰³ Also to be noted here is Muḥammad al-Muʿtaṣim bi-Llāh al-Baghdādī's lightly annotated but otherwise uncritical two-volume edition of F. al-Rāzī's very early work, *al-Mabāḥiṭh al-Mashriqiyyah*,¹⁰⁴ which is basically an extensive critical study of the *al-Shifāʾ* and *al-Najāh* of ibn Sīnā. Another important late work of al-Rāzī's is the one-volume *Sharḥ ʿUyūn al-Ḥikmah*,¹⁰⁵ which, as the title indicates, is a critical commentary on ibn Sīnā's *ʿUyūn al-Ḥikmah (Fountains of Wisdom)*.¹⁰⁶

By reading and reflecting on F. al-Rāzī's works, especially his very accessible *Mafātīḥ* and *Maṭālib*, Muslim thinkers and intellectuals today are sure to learn a thing or two about the kind of critical, creative thinking that is needed for the cultivation of an intelligent, self-confident engagement with the theoretical frameworks of modern science and philosophy. By learning afresh the "sufficient and comprehensive"¹⁰⁷ principles of traditional Islamic *kalām* and working toward its elaborative reapplication in the contemporary socio-intellectual context, serious, thinking Muslims are sure to acquire a powerful conceptual tool for overcoming the intellectual challenges of modernity and providing a viable, systemic alternative.

With respect to his physical theory, for instance, one finds in him a detailed, strikingly impartial review of past reflections on the nature of the sensible world, from the ancient Greeks to ibn Sīnā and Abū al-Barakāt al-Baghdādī, and in him one finds also a pre-figuration, or rather, a preview, as it were, of all further intellectual developments in Sunnī *kalām*, from al-ʿĀmidī to al-Jurjānī and beyond, and even unto the modern age, for any serious revival of *kalām* amongst present-day Muslim scholars will have much to learn from the intellectual genius and versatility of al-Rāzī. To

103. (Beirut: Dār al-Kitāb al-ʿArabī, 1987).

104. (Beirut: Dār al-Kitāb al-ʿArabī, 1990).

105. Ed., Aḥmad Ḥijāzī al-Saqqā, 3 parts in 1 vol. (Tehran: Muʿassasat al-Ṣādiq, 1994).

106. Ed. Abd al-Raḥmān al-Badawī (Beirut: Dār al-Qalam, 1980).

107. Mawlānā ʿAlī Ashraf al-Thānvī (d. 1934), *al-Intibāḥāt al-Mufīdah*, translated by Muhammad Hassan al-Askari and Karrar Husain as *Answer to Modernism*, 2nd ed. (Karachi: Maktaba Darul-Uloom, 1992), 1–5.

be more explicit and to the point, one must say, and say with intellectual certainty born of long years of academic experience and reflection, that an Islamic counter-science as a viable research program in the contemporary context presupposes a thorough-going conceptual mastery of the *kalām* method of creative, rational analysis. In the absence of this creative mastery, the alternatives are, and have been, either sophisticated but ultimately vacuous, obscurantist romanticism, repetitive negative criticism *ad nauseam*, or a form of pseudo-Islamic science born of conceptual naiveté and constituted of an incoherent patchwork of unexamined traditional and modern categories.

In light of the foregoing, Muslim progress in appreciating their rich intellectual heritage will not be boosted by the prevailing negative talk amongst many Muslim academicians, educationists, intellectuals, and policy-makers about the contemporary relevance or lack thereof of the seemingly “obtuse” and “error-prone” traditional Islamic philosophies and sciences of the long bygone and well nigh forgotten past. “Quite on the contrary, 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.”¹⁰⁸ This colossal, even deliberate, charlatanistic lack of real, informed, and creative appreciation of their cultural history among the Muslim “educated” elite underlies their pathetically reactive, imitative, and defensive attitude toward western systems of thought, an attitude that can only inspire secret contempt instead of grudging respect in the minds and hearts of our dialogue partners.

In short, if Muslims fail to appreciate the relevance of their past history, they thereby fail to comprehend the predicament of their present moment, and in turn fail to plan for their future revival as a leading, creative and positive civilizational force in the post-rational, post-modern, post-western, post-liberal, post-scientific, post-technological, postprogressive, post-secular, post-industrial, post-neocolonial, post-development, post-economic, and, shall we say, post-global dollar world¹⁰⁹.

108. Daiber, “What is the meaning...,” xxxiii.

109. Paul Feyerabend, *Farewell to Reason* (London: Verso, 1988); P. Radin, *Primitive Man as Philosopher* (London & New York: Appleton, 1927). Christian Comeliau, *The Impasse of Modernity: Debating the Future of the Global Market Economy*, trans. Patrick Camiller (London: Zed Books, 2002); and R. Vachon, Ashis Nandy, Wolfgang Sachs, and Raimon Pannikar, “The Post-Modern Era: Some Signs and Priorities” in

Interculture, special issue, vol. 24, no. 1, Winter 1996; cf. Gustavo Esteva and Madhu Suri Prakash, *Grassroots Post-Modernism: Beyond Human Rights, the Individual Self, the Global Economy* (New York: Peter Lang, 1996); Marshall Berman, *All That Is Solid Melts into Air: The Experience of Modernity* (London: Verso, 1983). Serge Latouche, *The Westernization of the World: The Significance, Scope and Limits of the Drive towards Global Uniformity*, trans. Rosemary Morris (Oxford: Polity Press, 1996); Robert J. Ringer, *How You Can Find Happiness During the Collapse of Western Civilization* (New York: QED/Harper and Row, 1983); B. McKibben, *The End of Nature* (New York: Random House, 1989); Carolyn Merchant, *The Death of Nature: Women, Ecology and the Scientific Revolution* (San Francisco: Harper and Row, 1980). Frederic F. Clairmont, *The Rise and Fall of Economic Liberalism: The Making of the Economic Gulag*, republished (Penang: Southbound and Third World Network, 1996). Paul Feyerabend, *Against Method*, 3rd ed. (London: Verso, 1993); Paul Horgan, *The End of Science: Facing the Limits of Knowledge in the Twilight of the Scientific Age* (Reading, MA: Addison-Wesley, 1996); cf. David Lindley, *The End of Physics: The Myth of a Unified Theory* (New York: Basic Books, 1994); Majid Rahnema, "Science and Subjugated Knowledges: A Third World Perspective," in Ruth Hayhoe, ed., *Knowledge Across Cultures: Universities East and West* (Toronto/Wuhan: OISE Press and Hubei Education Press, 1993); Ashis Nandy, *Science, Hegemony and Violence* (Bombay: Oxford University Press, 1988). L. Winner, *The Whale and the Reactor: A Search for Limits in the Age of High Technology* (Chicago: University of Chicago Press, 1985); idem, *Autonomous Technology* (Cambridge: MIT Press, 1977); R. Romanyshin, *Technology as Symptom and Dream* (London: Routledge, 1989); Jerry Mander, *In the Absence of the Sacred: The Failure of Technology and the Survival of the Indian Nations* (San Francisco: Sierra Club Books, 1991). G. A. Almond, M. Chodorow, and R. H. Pearce, *Progress and Its Discontents* (Berkeley: University of California Press, 1982); W. W. Wagar, "Modern Views on the Origins of the Idea of Progress" in *Journal of the History of Ideas*, 28, 1967, 55–70; Larry Laudan, *Progress and Its Problems: Towards a Theory of Scientific Growth* (Berkeley: University of California Press, 1977); James Bernard, *The Death of Progress* (New York: Alfred Knopf, 1973); Trevor Blackwell and Jeremy Seabrook, *The Revolt Against Change: Towards a Conserving Radicalism* (London: Vintage, 1993). Syed Muhammad Naquib al-Attas, *Islam and Secularism*, 2nd ed. (Kuala Lumpur: ISTAC, 1993). K. A. Gourlay, *World of Waste: Dilemmas of Industrial Development* (London: Zed Books, 1992); cf. Theodore Roszak, *Where the Wasteland Ends: Politics and Transcendence in Postindustrial Society*, reprinted (Berkeley: Celestial Arts: 1989); idem, *Person/Planet: The Creative Disintegration of Industrial Society* (Backinprint.com, 2003). Ivan Illich, *Shadow Work* (London: Marion

To be active, we have to be pro-active. To create history, we have to learn from history.

*Verily, in their histories is a lesson for owners of hearts.*¹¹⁰

Boyars, 1981), which helps us to re-look the past 500 years so as to be able to *really* look afresh to the next 500; cf. B. Ashcroft, G. Griffiths, and H. Tiffin, *The Post-Colonial Studies Reader* (London: Routledge, 1995). Gilbert Rist, *The History of Development: From Western Origins to Global Faith*, trans. Patrick Camiller (London and New York: Zed Books and Cape Town: UCT Press, 2000); Majid Rahnema with Victoria Bawtree, *The Post-Development Reader* (London: Zed Books, 2001); Jeremy Seabrook, *Victims of Development: Resistance and Alternatives* (London: Verso, 1994); Ramashray Roy, *Against the Current: Essays in Alternative Development* (Delhi: Satvahan Publications, 1982); Wolfgang Sachs, ed., *The Development Dictionary: A Guide to Knowledge and Power* (London: Zed Books, 1992); W. Rodney, *How Europe Underdeveloped Africa* (Washington DC: Howard University Press, 1981); Bruce M. Rich, *Mortgaging the Earth: The World Bank, Environmental Impoverishment and the Crisis of Development* (London: Earthscan, 1994); Kothari Rajni, *Rethinking Development: In Search of Human Alternatives* (Croton-on-Hudson: Apex Press, 1989); Samir Amin, *Maldevelopment: Anatomy of a Global Failure* (London: Zed Books, 1990); H. W. Arndt, *The Rise and Fall of Economic Growth: A Study in Contemporary Thought* (Chicago: University of Chicago Press, 1984). Paul Ekins, *The Living Economy: A New Economics in the Making* (London: Routledge, 1986); Richard Douthwaite, *The Growth Illusion: How Economic Growth Has Enriched the Few, Impoverished the Many and Endangered the Planet* (Dublin: Lilliput Press, 1992); E. Herman Daley and John B. Cobb, Jr, *For the Common Good: Redirecting the Economy toward Community, the Environment and a Sustainable Future* (Boston, MA: Beacon Press, 1971). Cheryl Payer, *The World Bank: A Critical Analysis* (New York: Monthly Review Press, 1982); cf. Susan George and Fabrizo Sabelli, *Faith and Credit: The World Bank Secular Empire* (Harmondsworth: Penguin, 1994), and cf. John Perkins, *The Confessions of An Economic Hit Man* (San Francisco: Berrett Koehler, 2004).

110. *Yūsuf*: 111.