

THE GENESIS OF GREEK PHILOSOPHICO-SCIENTIFIC
THOUGHT IN ISLAMIC AND MODERN HISTORIOGRA-
PHIES OF SCIENCE: A BRIEF COMPARATIVE OVERVIEW

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According to Abū Ma'shar Ja'far b. Muḥammad b. 'Umar al-Balkhī (171—272/787—886) in his *Kitāb al-Ulūf*²: “All knowledge is really one, granted by God to the first Hermes, who is also Hush-ank, Enoch, and Idrīs.”³ He goes on to say that the Greeks learned their sciences from Hermes the Third, a great Egyptian scholar, who taught the sciences to Asclepius the Syrian, who in turn taught the Ionians.⁴ So, according to this view, it was through the Ionians⁵ that the ancient sciences spread to the rest of the Greek speaking world.

In his well known book, *Ṭabaqāt al-Umam*, Ṣā'id al-Andalusī (420-462/1029—1070)⁶ lists four nations who cultivated the sci-

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² See David Pingree, *The Thousands of Abū Ma'shar* (London: Warburg Institute, 1968). The Arabic text is included in Section II of this study. For a short biographical sketch, see Robert Zoller, “Abū Ma'shar: Prince of Astrologers,” (<http://www.new-library.com/zoller/features/rz-article-abumashar.shtml>).

³ *Ibid.*, 18.

⁴ *Ibid.*

⁵ An ancient Greek speaking people who resided on the coastal region of Anatolia.

⁶ See Sema'an I. Salem and Alok Kumar, trans. and eds., *Science in the Medieval World: “Book of the Categories of Nations”* by Ṣā'id al-Andalusī (Austin: University of Texas Press, 1991). An introduction to Ṣā'id and his book, together with a full translation is presented in this study, but, unfortunately, without an accompanying Arabic text. Useful bibliographical information and notes relevant to Ṣā'id's book can be found in M. S. Khan, “A Chapter on Ancient Chaldean Sciences in an Eleventh-Century Hispano-Arabic Work,” *Islamic Quarterly*, XVI no. 1—2 (1972), 14—35^{passim}. See also M. S. Khan, “*Ṭabaqāt al-Umam* of Qālī Ṣā'id al-Andalusī,” in *Indian Journal of History of Science*, 30 (2—4), 1995 (http://www.new.dli.ernet.in/rawdataupload/upload/insa/INSA_1/20005abc_133.pdf); idem, Qālī Ṣā'id's Introduction to his *Ṭabaqāt al-Umam*,” in *Islam & Science* (Winter 2004); I am indebted to Professor Dr. Aref Nayed for drawing my attention to Ṣā'id's work.

ences prior to the Greeks, namely the Egyptians, the Chaldeans, the Indians and the Persians, and notes the indebtedness of Ptolemy in his *Almagest* to the observational records of the Chaldeans.⁷ In the chapter on science in Greece, he mentions that Empedocles studied philosophy with Luqmān the sage in Syria, that Pythagoras studied philosophy and geometry in Egypt, and that from there these sciences were introduced by the latter into Greece.⁸ He goes on to mention the intellectual connections of Thales,⁹ Socrates, Plato, and Aristotle to Pythagoras and the Pythagorean school.¹⁰ As for science in Egypt, he mentions, among others, that "After the Flood, there lived in Egypt scientists who were knowledgeable in all aspects of science and philosophy, including mathematics, the physical sciences, and theology."¹¹

In his *'Uyūn al-Anbā' fī Ṭabaqāt al-Aṭibbā'*, the noted historian of medicine, Ibn Abī 'Usaybi'ah (d. 667 or 68/1269 or 70) is of the opinion that "Allāh created the art of medicine and inspired it into [the hearts] of man." Apparently he concurs with the view that this genesis of medical science in divine inspiration applies also to all other arts and sciences.¹² He then goes on to relate the traditions of the Nabateans, the Chaldeans, and the Syrians which proclaim that the Greeks acquired the medical sciences from India and Egypt.¹³

In a work of the Ikhwān al-Ṣafā' (The Fellowship of the Pure-Hearted), entitled *Dispute between Man and the Animals*, there is a dialogue in which a Greek is reprimanded for boasting too much of the scientific achievements of his people. He was reminded and brought to admit that the Greeks did not discover their sciences by their "own penetration," but rather that they had acquired them from

⁷ M. S. Khan, "A Chapter on Ancient Chaldean Sciences in an Eleventh-Century Hispano-Arabic Work," *Islamic Quarterly*, XVI no. 1—2 (1972), 15, 22, 28; Salem and Kumar, *Science in the Medieval World*, xxi, xxii, 19.

⁸ Salem and Kumar, *Science in the Medieval World*, 21.

⁹ *Ibid.*, 25.

¹⁰ *Ibid.*, 22—23.

¹¹ *Ibid.*, 36.

¹² Ibn Abī 'Uṣaybi'ah, *'Uyūn al-Anbā' fī Ṭabaqāt al-Aṭibbā'* (Beirut: Manthūrat Dār Maktabat al-Ḥayāh, n.d.), 13—14.

¹³ *Ibid.*, 8.