

al-Dalāl wal-Mūṣīl ilā dhil-Izzah wal-Jalāl. Khalidi includes an intriguing portion of this book—the section where al-Ghazālī demonstrates in three distinct ways that prophecy is a genuine phenomenon which surpasses reason. He first offers a rational demonstration that nonrational apprehension is possible; secondly, he shows how prophecy can be affirmed through direct, albeit restricted, awareness of the mystical state; and, finally, al-Ghazālī shows how prophecy can be established through trust in testimony and second-hand corroboration, which he interestingly terms *Īmān* (faith).

Like al-Ghazālī's *al-Munqidh*, Ibn Ṭufayl's *Ḥayy bin Yaqzān* (*Alive, Son of Awake*) is a compelling choice. Relying on Albert Naṣrī Nādir's 1993 edition, Khalidi has retranslated over three quarters of the book, omitting the extensive introductory section and the concluding epilogue.

The fifth and the last selection is from Ibn Rushd's famous response to al-Ghazālī's *Incoherence of the Philosophers*, *Tahāfut al-Tahāfut* (*The Incoherence of the Incoherence*). Ibn Rushd's response can be read as a debate between the two philosophers, though Ibn Rushd always has the last word. This aspect of the work, however, is not as overwhelming as it might be, since al-Ghazālī had the foresight of including future objections to his arguments in his own work. The excerpted section regards the seventeenth issue of twenty and deals with the nature of causation. This is perhaps the most important section of the book, since it deals with the respective positions of the two writers on causation and miracles and leads to the last four sections, which discuss the natural sciences.

Overall, the book is an excellent introduction to the intricate and involved world of medieval Islamic learning—an enriching experience for both general readers and advanced students.

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Gad Freudenthal: *Science in the Medieval Hebrew and Arabic Traditions*

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Each new volume in Ashgate's Variorum Collected Studies Series provides researchers and the general public an opportunity to access articles

written over a long period of time in their “raw” form—just as they first appeared. It is a compromise, of sorts: the writer of the articles does not have to put much time or effort to see his or her work published in one volume; readers do not have to search for scattered articles; and the publisher does not invest greater resources into printing the book. This arrangement has attracted a significant number of historians of science and the Series has been a huge success in terms of its importance for the history of ideas. With the publication of his *Science in the Medieval Hebrew and Arabic Traditions* Gad Freudenthal has joined such respected names as C. E. Bosworth, Edward S. Kennedy, Franz Rosenthal, A. I. Sabra, and Roshdi Rashed, all of whom have published in this Series.

Freudenthal’s collection of sixteen articles, written over a period of twenty years, is thematically divided into three sections: Science in the Medieval Hebrew Tradition: Socio-Cultural Considerations (two articles); Maimonides, Gersonides and Some Others (eight articles); and Reverberations of Greek Theory of Matter in Arabic and Hebrew (eight articles).

The occasion of this collection’s publication also gave Freudenthal an opportunity to reminisce; the short preface provides insight into his career, scholarly interests, and friendships. Written primarily for specialists, this collection of articles is useful as a barometer, telling us much about the obsessions and ideas of a particular generation of historians of science concerned with two non-Western scientific traditions which never intersected in real time, but which have remained closely associated with each other because of their common view of nature: Jewish and Muslim philosophers of the past shared a certain common domain which made it possible for them to study nature in a like manner; this common dimension can be seen in the third section of this book. The title of the book is somewhat misleading, as there are only three articles out of sixteen which deal with Arabic Tradition.



William R. Newman and Anthony Grafton (eds.):
Secrets of Nature: Astrology and Alchemy in Early Modern Europe
 Cambridge, Massachusetts: The MIT Press 2001, 443 pp, HC
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To the modern mind, uttering the word “alchemy” conjures images of a