Muzaffar Iqbal (ed.). *Islam and Science: Historic and Contemporary Perspectives*. 4 vols. Aldershot: Ashgate, 2012. 2000+ pages, with index; ISBN for the 4-Volume Set: 978-0-7546-2918-4; £450 Website price: £405.00

Vol. 1: *Studies in the Islam and Science Nexus*; 564 pages; Hardback; ISBN: 978-0-7546-2915-3; Price: £140.00; Website price: £126.00

Vol. 2: *Contemporary Issues in Islam and Science*; 518 pages; Hardback; ISBN: 978-0-7546-2917-7; Price: £140.00, Website price: £126.00

Vol. 3: *New Perspectives on the History of Islamic Science*; 570 pages; Hardback; ISBN: 978-0-7546-2914-6; Price: £140.00, Website price: £126.00

Vol. 4: *Studies in the Making of Islamic Science: Knowledge in Motion*; 576 pages; Hardback; ISBN: 978-0-7546-2916-0; Price: £140.00, Website price: £126.00

This new publication by Ashgate can be read as a multi-author Variorum collected studies touching on the theme of the complex, multi-dimensional relation between Islam and science. The editor of this four-volume series, Muzaffar Iqbal, President of the Center for Islam and Science, has done a splendid job in shifting through innumerable scholarly (including some not-so-scholarly) previously published papers in various learned journals to present to the discerning reader a comprehensive survey of the discourse. Of course one can always complain why a paper or two by this or that author was not included, but clearly one cannot collect everything, including everything that is good, even within the ample 2,000+ pages of the series. It will be beyond my capacity and interest to consider all the nearly 90 papers reproduced here, and so I survey only some of the more intellectually compelling ones.

The first volume of 30 papers in 5 parts, thematically entitled "Studies in the Islam and Science Nexus," focuses on the broader philosophical, conceptual, and intellectual aspects of the discourse. These include whether the relation between Islam and science should even be a proper topic of intellectual inquiry (Gutas); if it is, then how should it be framed (Kalin, Rashed, Bakar); and, once framed, how one should go about fleshing out that framework in

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historical, philosophical, and methodological terms (Attas, Nasr, Ismail, Setia). If the abstract conceptual term 'Islamic science' has had historical reality, and if there was any good in it, then how might one go about reviving it in the current techno-scientific context (Setia, Zain)? The debate over the nature of the relation between Islam and science furthermore entails investigating the nature of the relation between Islam's revealed scripture, the Qur'an, and science. In the process, questions arise as to whether the Qur'an is amenable to exegeses in the light of modern scientific discoveries (Mir, Wood), or whether such attempts will lead to a worrying "new form of scientism" (Rehman).

The second volume of 18 papers in 4 parts is entitled "Contemporary Issues in Islam and Science." Sardar is keen on reviving Islamic Science on axiological grounds and offers to map out the future of its possible revival. This theme is further explored in more operative terms in papers by Shaharir, Setia, and Nasr in Part IV. Some "major voices" in the conceptual aspects of the Islam-Science discourse have their views presented in Part II. Setia considers how post-Ghazālian theology did not impede creative inquiry into the nature of nature with special reference to Fakhr al-Dīn al-Rāzī. Mermer and Ameur correct what they perceive to be a misunderstanding about Nursi's attitude towards modern science. They show that his acceptance of some of the technological fruits of modern science (such as electricity) does not at all express a naive, value-free view of modern science. In another paper, Setia gives a comprehensive outline of Attas's philosophy of science covering its ontological, cosmological, epistemological, methodological and axiological dimensions, all of which dovetail for the most part with the Nasr's call for a "sacred" science (Kalin and Wolfgang). Two papers in Part III by Iqbal (based on his conversations with Nasr) tackle the question of "cosmological origins," for Islamic science must also be able to offer plausible solutions to the big questions of how the world came into being. This implies a common methodological ground for testing plausibility across different metaphysical accounts of origins, but, so far as I know, that question has not been tackled in depth by Muslim thinkers here or elsewhere (only Christian intelligent design theorists appear to have done so).

Volume 3 considers "New Perspectives on the History of Islamic Science" in 3 parts. This volume conveniently gathers in one place much of the cutting-edge empirical, technical, and mathematical research into classical Islamic scientific texts—which, inter alia, debunks the myth of a post-Ghazālian Islamic scientific decline (Abdalla, King) and the Eurocentric account of scientific discoveries, and thereby puts into greater relief the extent and depth of European Renaissance's scientific debt to Islam (Rashed, Saliba). For example, King shows that the Mamluk period was one of high quality astronomical research in Cairo and Damascus; Rashed shows that the geometrical study of lenses at a highly mathematically advanced level was already evident in Ibn al-Haytham and before him Ibn Sahl who preceded Kepler by five centuries; and

Saliba shows that some of the scientists of the Renaissance like Guillame Postel (1510-1581) could read Arabic scientific treatises in their original language without the need for Latin intermediaries. Some of the papers deal with aspects of the technical ingenuity of Islamic science for its own sake, quite apart from extrinsic considerations of its influence on scientific progress in Europe or lack thereof (King's paper on Nastulus).

We may study the achievements of Islamic science in terms of its intrinsic worth, its influence on the Renaissance, the Hellenistic influence on its unfolding in history, or in terms of all three. Since Islamic science lies at the historical interface between the earlier Hellenistic heritage and the later advent of modern science, it is at times necessary to study it in terms of all these three considerations, especially for correcting certain intellectually crippling historical misconceptions about aspects of the history of science in general. The last volume, in 3 parts, can be read in the light of these three considerations. Aspects of the transmission of Greek science into Arabic are explored by Berggren and Saliba, while aspects of the influence of this Greek-Islamic synthesis on Europe are explored by Hugonnard-Roche, Sezgin, and Rashed. Sabra's three papers in part III give a compelling broad overview of the essentially proactive and creative intellectual nature of the process of this transmission from the Greek into Arabic. His treatment provides a much needed counterbalance to the well-worn thesis of passive reception or its antithesis of reactionary rejection. To be sure, there were elements of both in Islamic intellectual history, but, especially in the post-Ghāzalī period leading up to modern times, the general consensus amongst learned Muslims was one of critical and creative cooption of the Greek legacy into serving the worldview of Islam. This post-Ghazālian classical consensus provides a way for Muslims today to engage effectively with modern science and technology.

Each volume is amply introduced and overviewed by Iqbal. One may question his thematic categorization and sub-categorization, but in a collection as expansive and useful as this, there is bound to be a significant degree of thematic overlapping—and in any case these thematic divisions only serve as a rough guide for readers to navigate themselves through the rich discourse. After perusing all four volumes, the interested reader may do his or her own thematic re-arrangement. In sum, this 4-volume set is a necessary collection for anyone wanting to talk or write seriously about Islamic science.

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