chemistry (ch. 6); and life, whether vegetable or animal or human (ch. 7), before the substantive text ends with a discussion of Newton, gravity and God (ch. 8). The undergraduate student new to these topics will be instructed fruitfully and painlessly, whilst more advanced readers will be refreshed by a synoptic and well-structured guide to a wide field.

Both classes of reader will do well to pay attention continuously: the only obtrusive example of repetition that sticks in this reviewer's mind is that the Council of Trent met from 1545 to 1563 (pp. 38 and 52). But it may be said of reviewers, as it was said of nature, that they abhor a vacuum; however, it is not ill-nature which prompts this reviewer to offer a comment. Rather, he feels that the book, which was evidently written according to a close brief about length, would have improved with more information about the late Professor Osler's own research interests. For instance, it was a thoroughly good idea to begin with Aristotelian causality and teleology (pp. 6–8), but thereafter these themes tend to disappear – despite the author having written elsewhere about teleology (Osiris, 2001). Again, Descartes and Gassendi make their proper bows, but one would like to see more of the characteristic interests of the author's *Divine Will and the Mechanical Philosophy* (Cambridge, 1994). To put it another way, within this survey of the scientific revolution, as its subtitle suggests, Osler touches on (yet never fully develops) a complementary and connected account of the philosophical and theological developments of the day. It is a pity that now we shall never read it in its entirety from Margaret Osler's pen.

Iain Harris, University of Leicester, UK

Avner ben-Zaken, *Cross-Cultural Scientific Exchanges in the Eastern Mediterranean, 1560–1660*. Baltimore: The Johns Hopkins University Press, 2010. Pp. 256. $60.00.

On the book's jacket, George Saliba notes that 'this book is a bag of gems'. It is indeed. It is one of those rare works that sheds light on a thoroughly studied area, making it look fresh and challenging. In a very general sense, the subject of the book is the Scientific Revolution. The implicit question permeating its narrative is: Which were the knowledge quests that shaped the intellectual context of the new heliocentric astronomy and contributed to its consolidation? To answer this question the author shifts his viewpoint from the 'centre' to the 'margins' and his narrative style from big-picture to microhistory.

The book consists of five stories. Their heroes occasionally cross at the knowledge centres of the Eastern Mediterranean, but what is more im-

portant is that they share a common perception about what constitutes valid scientific knowledge – a perception significantly different than the one informing most mainstream histories of Scientific Revolution.

The first story is about how the skies became a field of politics and apocalyptic visions in the context of the late-sixteenth-century conflict between Europe and the Ottoman Empire. The short-lived observatory of Constantinople and the far more famous observatory of Tycho Brahe produced scientific knowledge while looking at the skies for signs of their opponents' doom and while seeking 'mechanical' means to manipulate the omens. The second story is about the search of the authentic cosmological knowledge contained in ancient and long-lost versions of the Bible. The travels motivated by this search had the peculiar effect of extending the Galilean affair to the Holy Land and Mesopotamia.

The third story is also about the search of the original natural knowledge in the Middle East. In this case, however, the emphasis is placed on how the retrieval of ancient manuscripts aimed at overcoming the implicit censorship of the print culture and at rescuing the primacy of the Hebrew tradition in cosmological issues. In the fourth story, a professor of astronomy at Oxford University fashioned his epistemic inquiries to match his patrons' search for purified Christianity. This pairing incited geographical and intellectual itineraries, which involved the retrieval of archetypal measures and the consolidation of a universal language. The traveller of the last story is a French astronomical text, which resurrected as an Arabic manuscript and faced the rejection of Sultan's chief astronomer up to the time when he was convinced of its astrological efficiency. The occasion of this translation brings to light the epistemological importance of Islam's mystical traditions oriented towards spiritual illumination and the harmonious perception of natural order.

Each story contains more stories, and, at a certain point, the reader feels immersed in a quite complicated world. In the end, however, these overlapping stories create a vivid environment, where people and objects circulate, motivated by knowledge quests much broader than the mere search for 'scientific' truth. Although the author does not name it, he stresses the importance of longue durée, which often passes unnoticed in our discipline. The intellectual priorities, the epistemic means and the technical contrivances of the emerging science when viewed from the 'margins' reveal their heavy dependence on local cultural features and mutually transformative intercultural encounters. In this sense, heliocentrism gained wide acceptability in early modern period not only (and maybe not mainly) because of its evident truthfulness, but also because of the widespread belief that it revived the pristine knowledge contained in the original versions of the Holy Scriptures. Thus, microhistory becomes a gateway to a global history of

science, which invites us to reassess the established views about the origins of modern science and the factors that fuelled its expansion.

Manolis Patiniotis, University of Athens, Greece

Steven Gimbel, *Einstein's Jewish Science: Physics and the Intersection of Politics and Religion*. Baltimore: Johns Hopkins University Press, 2012. Pp. 256. $24.95.

Steven Gimbel's *Einstein's Jewish Science: Physics and the Intersection of Politics and Religion* is doubtless a strange book. Anyone might think it quite redundant nowadays to argue that the Nazi distinction between 'German' and 'Jewish' science was ridiculous – silly at best, and evil in its implications. So, in order to establish the originality of his work, Gimbel has to justify his own exploration of this question. Why, since it has long been clear that the motives of Nazi scientists were personal/political and without intellectual foundation, should one labour the point once more? Indeed, there were many other German and Hungarian scientists of Jewish extraction who did not become such a target as Einstein, even if they all eventually had to seek asylum in the USA or elsewhere. Gimbel thus endeavours to find something specifically Jewish in Einstein's physics, but he does not succeed. His effort involves delving into a little history of early science, and when he twice describes Tycho Brahe as Dutch instead of Danish, his history begins to look dubious. So, too, does his strained distinction between Descartes starting from a Catholic background and Newton from a Protestant one. Gimbel also goes so far as to include a lengthy, quite irrelevant digression on the Talmud (which Einstein never studied), but it is unclear whether or not he really understood it. Nor does Gimbel show how Einstein's methods differed from those of scientists such as Lorentz, Planck and Bohr (who is only mentioned once, rather spitefully).

Why then was Einstein singled out by the Nazis? The answer is simply because he was the most successful and highly admired scientist – not least, by many people who understood his work as poorly as did his enemies. If we look for theories that supposedly undermine the assumptions of the nineteenth century, quantum mechanics might be as much to the point. Although Einstein was involved, he disliked some of the more radical implications of quantum mechanics; however, quantum mechanics cannot be identified with a single genius in the way that we link relativity to one man. Because Einstein became a hero to those who marvel at the achievements of modern science, he is apparently still detested by those who are suspicious of it (one of those quoted at length has been deemed clearly clinically insane, so why