Avner Ben-Zaken. *Cross-Cultural Scientific Exchanges in the Eastern Mediterranean, 1560–1660.*

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Seen from the mainstream perspective of the Renaissance history of science, Avner Ben-Zaken's book is highly challenging, although it raises a very simple question: how did early modern scientific thought travel between Western and Eastern cultures in the age of the so-called Scientific Revolution? *Cross-Cultural Scientific Exchanges in the Eastern Mediterranean, 1560–1660* is small in size, but

ambitious in scope. It discusses and questions a consolidated Eurocentric assumption, which locates the origins of modern science in Renaissance Europe and, by consequence, through the development of post-Copernican astronomy, strengthens the scientific and cultural gap between Europe and the Islamic world. By decentering the traditional stage of the narrative from Europe to the "Eastern Mediterranean," the book offers a displacement of focus that unveils unknown (or unobserved) scientific connections between areas generally studied as separate units, as part of "incommensurable cultures" — an idea the author puts under discussion in his introduction.

Thus, the major claim of the book is to highlight the very marginal processes that permitted a scientific exchange in this part of the world, beyond any kind of border. They are presented through five case-studies, each constituting the subject of a chapter that the author defines as microhistorical approaches (6). The protagonists of the stories he traces between Western Europe and Asia, by means of fragmented material and archives spread in Istanbul, Goa, Cairo, Rome, and Jerusalem, are mostly unknown, but each of them mirrors the local context that made the circulation of knowledge possible. Ben-Zaken sheds new light on our understanding of crosscultural scientific exchanges in relation with characters and areas still largely understudied, or rather still asymmetrically studied (the huge amount of work dedicated to the European "Republic of Letters and Science" has no equivalent, in today's scholarly research, for other areas of the Renaissance world, be it the Mughal, the Chinese, the Japanese, or the Ottoman). The clues he offers about the sixteenth-century Jewish mathematical school of Thessalonica, to take one example among many, are certainly a convincing example of the major injunction of his enterprise, to rethink scientific exchanges in non-Eurocentric terms and to move systematically toward a connected history of science.

In this sense, *Cross-Cultural Scientific Exchanges in the Eastern Mediterranean* is part of a very dynamic and vivid trend of historiographical research that has developed over the last decades: connected, entangled history, or "histoire croisée." But this trend has not become yet a priority in the agenda of the Renaissance historians of science, with the exception of those who work in the field of science and empires, or those who shift toward the perspective of global history.

In this shifting historiographical context, the major contribution of this book is to exhume new materials, to highlight new agencies, and to delineate new spatialities. With regard to the first point, Ben-Zaken pleads for a more systematic cultural and social history of science, on the model of what has been established by work devoted to merchants, administrators, missionaries, or soldiers: the "scientific revolution" is thus encapsulated within practices that enlarge the social and cultural spectrum of our inquiries. The other idea underpinning the book — that our understanding of cultural exchanges is closely connected to the spatial framework we take into consideration — clearly builds on the recent spatial turn. In this sense, the Ottoman Empire, and its entangled communities, Muslim as well as Jewish or Christian, deserves more attention, as well as the broader area of the "Eastern Mediterranean" to which the author consciously refers, by including Persia. In other words, this book is

part of a more general attempt in historical research to shape alternative spatialities (as for instance the Atlantic, or Eurasian space) in order to differently understand cultural exchanges, and the shaping of a global world. The space here delineated requires the sophisticated combination of erudition — especially from a linguistic point of view: Arabic, Latin, Persian, and Hebrew — the command of a vast historical culture, and the mastering of broad historiographical debates. The book demonstrates, as do other recent contributions, the crucial part played by the Ottoman Empire in the fashioning of a global world, not only in terms of its dialogues with the European empires, but also its conflicts.

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