expressed in Dürer's celebrated print, correlates neatly with the link between that science and melancholia; the sometime effort of philosophers to distill a universal mathesis from the narrower confines of a single discipline is a related development.

One occasionally wishes for more context than this intriguing study provides. A sketch of a typical early modern mathematical education, for instance, would offer some measure of the conceptual distance of these less conventional approaches. More emphasis might be placed on the very different media of the images examined in this work. The many quarrels within the world of Euclidean geometry—the fidelity of various editions and translations of the *Elements* to its author's imagined intentions, the nature of proof, the availability and relevance of a method, the role of diagrams, the changing definitions of ratio and proportionality, the legitimacy of conceptual outliers such as curvilinear angles and superposition, among others—might be examined in tandem with the objections being raised just beyond that realm. Other desiderata would include larger, clearer images, more attention to the impact of European notions, however distorted, of mathematical notions and artistic practices beyond the continent, and some examination of the other scholarly areas that, like mathematics, were claiming to offer a metalanguage as they jockeyed for position as the master discipline.

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Penser les mathématiques au XVI^e siècle. Shin Higashi.
Histoire et philosophie des sciences 17. Paris: Classiques Garnier, 2018. 490 pp. €49.

In this book, Shin Higashi investigates possible sixteenth-century roots of the seventeenth-century rise of the modern mathematical sciences. It is a virtue that Higashi sticks closely to presenting sixteenth-century work in its own right, rather than seeing everything from the perspective of the new science, such as that of Galileo, but this means that the narrative lacks much sense of tension or development over time. Only at the end does the author underline the great distance between the views on mathematics of late Renaissance commentators on Aristotle and the views of Galileo or Descartes. Almost all possible connections to medieval views of mathematics in the fourteenth or fifteenth centuries—which do exist—are also left unexplored. In one case, John Buridan is mentioned as a person who defended a view on the scientific status of mathematical demonstrations similar to that of Piccolomini. The echo of the fourteenth-century nominalists, or *moderni*, in the view of the Coimbra Jesuits that mathematical entities are fictive or imaginary is entirely missed. Thomas Aquinas gets more attention because of the resurgence by the sixteenth century of the so-called *antiqui*, especially the Thomists.

For a list of authors, Higashi asks, (1) what were their positions concerning the ontology of mathematical objects, (2) what did they have to say about the epistemological status of mathematical demonstrations, and (3) what did they believe about the scientific status of mathematical disciplines? In his introduction Higashi writes briefly about the history of the philosophy of mathematics and the history of Renaissance Aristotelianisms (the authors he covers are by and large Aristotelians), and then describes briefly the authors and problems he will study. He claims (though I am skeptical about it) that Thomas Kuhn's notion of scientific paradigms is key to grasping the significance of Renaissance Aristotelian writers on mathematics as a group: organizing his chapters author by author tends to obscure interactions between them.

Nevertheless, the precision and thoroughness with which Shin Higashi treats each author are commendable, as is his command of previous literature on the topics covered. This book can profitably be used as a guide to further research, without the need to read everything in order. The major thematic foci are as follows: (1) Marcantonio Zimara (1476–before 1537) and his works *Theoremata* and *Tabula* (to the printed editions of the works of Aristotle with the commentaries of Averroes); Higashi characterizes Zimara's position as Averroistic encyclopedism; Averroes, indeed, had an influential view of the distinction between mathematics and physical sciences that deserves more attention; (2–3) Alessandro Piccolomini (1508–79) on the objects of mathematics and on mathematical demonstration; this is the heart of the book; the scope and depth of these parts reflects Higashi's previous work on Piccolomini; (4) Francisco Barozzi on mathematics and the transformation of the soul; (5) the Jesuits, especially those of Coimbra (including Christopher Clavius, Josephus Blancanus, Benedictus Pererius, Petrus Fonseca, and Franciscus Toletus).

This book appears as the seventeenth volume in Classiques Garnier's series Histoire et philosophie des sciences, under the direction of Bernard Joly and Vincent Jullien, and it lives up to the Classiques label.

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The Astronomer and the Witch: Johannes Kepler's Fight for His Mother.
Ulinka Rublack.
Oxford: Oxford University Press, 2015. xxxii + 360 pp. $29.95.

The witch trial of Katharina Kepler is one of the best-documented cases among the early modern German witch hunts. Scholars specializing in studies of her famous son Johannes know about this trial, but it is of secondary interest to them, a curious episode occupying perhaps a few paragraphs in a biography. Surprisingly, this trial has been virtually ignored in English-language narratives of the witch hunts.