

pernicus's works, large-scale observatories (to name just a few), which are unacknowledged by Renaissance and early modern European savants, deserve more discussion than Hasse's incidental remarks. As argued by Nancy Bisaha, this lack of acknowledgment by Renaissance scholars may not be accidental. After all, Islam presented a clear and present danger that was put in civilizational terms by none other than Pope Pius II, making Hasse's contention that "humanists did not oppose Arabic sciences because they were Oriental or because they originated from Islamic culture" (313) contestable. But although one might disagree with this wider point, Hasse's work represents an important contribution to Renaissance studies.

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John Buridan, "Quaestiones super octo libros Physicorum Aristotelis (secundum ultimam lectionem): Libri III–IV." Michiel Streijger and Paul J. J. M. Bakker, eds. Guide to text by Edith D. Sylla. *History of Science and Medicine* 55; *Medieval and Early Modern Philosophy and Science* 27. Leiden: Brill, 2016. ccxviii + 360 pp. \$166.

This volume provides the critical Latin edition of books 3–4 of John Buridan's question commentary on Aristotle's *Physics*. Buridan (ca. 1300–61) lectured on the texts of Aristotle many times over the course of his long career in the faculty of arts at the University of Paris. The manuscripts themselves identify the work as having been prepared "according to the final version [*secundum ultimam lectionem*]" of Buridan's *Physics* lectures, and, like his other commentaries on Aristotle, the work is arranged as a series of *quaestiones* on particular topics raised by Aristotle's text—e.g., whether contrary qualities such as heat and cold could be in same subject at the same time (book 3, q. 3), whether infinite magnitudes exist (book 3, q. 15), and whether Aristotle is right to think of place as the limit of a containing body (book 4, q. 2). Buridan uses the methods of nominalist logic and semantics (to which he also hugely contributed) in his resolution of many questions, reframing traditional problems in natural philosophy around the significance of key terms such as *motion* (*motus*) and *infinite* (*infinitum*), and the truth conditions of the propositions containing them—propositions, rather than things, being in his view the proper objects of scientific knowledge. The positions he takes are always carefully considered, even if not always plausible, but his work has the virtue of eminent clarity (no doubt won from many years in the classroom), which is why subsequent generations of students and teachers read Buridan when they wanted to understand the authority of Aristotle on these subjects.

The present volume continues the groundbreaking work of the editorial team that produced the critical edition of books 1–2 of Buridan's *Quaestiones* on the *Physics* in 2015. The edition examined all thirty-two known manuscripts of the work, with the

text itself based, like books 1–2, on a late fourteenth-century manuscript, København KB cod. Ny kgl. Samling 1801 fol., which has been fully collated with two other manuscripts as well as the incunabular edition by John Dullaert (1509). Other manuscripts were used to help decipher places where the collated manuscripts were damaged, and the editors consulted all surviving manuscripts on a number of occasions to make sense of difficult passages. The edition itself is beautifully done, with a full *apparatus criticus* that does not overwhelm the text because it is constructed from the small group of manuscripts determined by the editors to be the most reliable. The edition also contains a helpful *apparatus fontium* enabling the reader to track down Buridan's references to Aristotle and other authors, but somewhat less helpfully, it does not quote the relevant bit of text from the Latin Aristotle in cases where it directly inspires the topic question. This is important because, like other commentators, the actual wording of the Latin translation of Aristotle provided Buridan with lexical parameters for his reply, as well as a conceptual link to the *expositio* or literal commentary—i.e., the line-by-line explanation of Aristotle's words we know Buridan usually gave his students in the first part of his lecture (Buridan's *expositio* of the *Physics* survives in a few manuscripts, which are not edited here). Medieval authors intended their hearers/readers to be aware of the continuity between the *verbum* of Aristotle, its literal exposition, and the speculative questions raised by it, even if modern historians of philosophy are mostly interested in the speculative part.

This volume continues Edith Sylla's "Guide to the Text" from the first volume. Coming in at nearly 200 pages for books 3–4, the guide discusses for each question Buridan's possible sources as well as sketching, where appropriate, relevant research in the history of medieval science. This is good as far as it goes, but like all reports on the state of the question, it will, unlike the edition, become less useful over time as more sources are uncovered and the historical picture becomes clearer. The guide also does not provide much context for the work in terms of Buridan's own thought: e.g., how the arguments he gives in the *Quaestiones* on the *Physics* are driven by his influential teachings in logic and metaphysics. In view of this, and the heft of the guide, it might have been better to publish it separately.

All in all, this edition is an extremely valuable contribution to the history of medieval philosophy and medieval science. Scholars will be using this key source text for many years to come.

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