

**Ann E. Moyer, *The Philosophers' Game. Rithmomachia in Medieval and Renaissance Europe*. With an edition of Ralph Lever and William Fulke, *The Most Noble, Auncient, and Learned Playe* (1563). (Studies in Medieval and Early Modern Civilization). Ann Arbor: The University of Michigan Press, 2001. 205 pp. Index. ISBN 0-472-11228-7. Published in *Annals of Science* 61 (2004), 504–505.**

Rithmomachia was a board game, probably invented around 1030 CE, and falling into oblivion in the early seventeenth century. It was rediscovered by historians in the outgoing nineteenth century, described by David Eugene Smith and Clara Eaton in 1911, and has been dealt with by a few medievalists in recent decades (thus Gillian Evans, Menso Folkerts and Charles Burnett). An exhaustive presentation of the first century of its history including description and edition of many sources (less exhaustive but still fundamental for the next three centuries) was published by Arno Borst in 1986<sup>1</sup>.

Ann Moyer gives a brief overview of the period covered by Borst (c. 38 pp.), and concentrates on the further history of the game (c. 80 pp.); she also offers an edition of an English description printed in 1563 (in modernized orthography but otherwise faithful), and a list of 25 manuscripts not described by Borst.

Playing the game presupposed familiarity with the system of “proportions” (i.e., ratios) as described in Boethius’ *De institutione arithmetica* and *De musica*, and the only ones that could play it were thus those who were brought up in the intellectual environment of monastic and cathedral schools and, eventually, universities; it only began moving into a lay ambience toward 1600, when members of the English gentry began frequenting the universities – but that was the moment when Boethian arithmetic was about to disappear from the curriculum. The game thus “occupied only a modest part of the leisure of” a “group, mainly clerical and male, [...] only a small minority of European society” – but a group whose influence “extended, for centuries, far beyond their actual numbers”, as pointed out by Moyer (p. 3).

Moyer uses the history of the game as an indicator for the persistence of quadrivial studies, distinguished from mathematical studies in general by their concentration on “features of cosmic order [that] were eternally and changelessly true and divine in origin” (p. 14), and thus also for the ongoing inculcation of a particular ethic and “Platonic” world view in the minds of future clerics and scholars. She points to a number of manuscript expositions of the game emphasizing its ethical importance (as opposed not least to the corruption caused by the favourite games of the laity). In general, she finds that practicing the game was in harmony with the view expressed in Boethius’s *De musica*, not least in the discussion (I.ii) of *musica mundana* (the music of the heavenly machine, and the harmony of the four elements) and *musica humana*, the harmony of the soul which each of us may find by introspection. All in all, her

---

<sup>1</sup> Arno Borst, *Das mittelalterliche Zahlenkampfspiel*. (Supplemente zu den Sitzungsberichten der Heidelberger Akademie der Wissenschaften, Philosophisch-historische Klasse, Band 5, Jahrgang 1986. Heidelberg, 1986).

analysis suggests that the scholarly culture of the eleventh through sixteenth centuries was characterized by a high degree of cultural coherence and permanence, at least if Italy and the Iberian area are left out of the picture.

Whereas the details of the narrative are informative and the distinction between the quadrivium and mathematics in general important, the reviewer fears this cultural coherence and permanence to result from failing sensitivity to contrast and conflict. This already becomes evident if Moyer's narrative is confronted with Borst's. Borst's incipient High Middle Ages are populated by schools in prestige conflict, by monks who appear to be more motivated by their appurtenance to noble families than by transcendental concerns, by the struggle between lay and ecclesiastical power, by nascent urban communities, by crusaders and other warriors – all of which play a role in *his* version of the cultural history of the game. None of them are conspicuous in Moyer's Middle Ages, which in many ways are closer to the pious picture admitted during the era of Romanticism. It is emblematic that Georges Duby is absent from Moyer's otherwise extensive and excellent bibliography but regularly referred to by Borst.

Moyer's philosophical and mathematical history also seems too even. All references to "proportions" in medieval and Renaissance sources are taken to refer to the Boethian tradition; perhaps because the only version of Euclid that is mentioned is the Heath translation, it is overlooked that Euclidean "proportions" and "proportionalities" (not to speak of Menelaos's use of them) are those that really serve astronomical computation. Similarly, it is overlooked that culturally conservative writers like John of Salisbury (those whose views really fit Moyer's portrait) certainly did not see Arabic and Ptolemean astrology as mere filling out of the "detail that had been lacking in the traditional Latin texts" (Chalcidius, Martianus Capella, Macrobius, Boethius) that carried Moyer's "Platonism" (p. 61).

"Platonism" itself is problematic, in the sense that Moyer tends to identify all philosophy that can be labelled thus, whether Boethian or Hermetico-astrological – the closest she comes to distinguishing is the regretful observation (p. 112) that "the signs of specifically Boethian influence" on Francesco Barozzi's mathematics "are scanty at best", his "overall Platonic interests" notwithstanding.

In general, statements in the sources about the ethical or moral value of mathematics (quadrivial or otherwise) or the game in question are taken at face value, and open or indirect citations of authorities (e.g., of Boethius) are taken as evidence of general adoption of everything this author is supposed to stand for. The reviewer fears that several conclusions might have looked differently if sincere confessions of faith had been distinguished from token references to generally revered authorities, commonplaces and symptoms of eclecticism.

The bibliographic system is user-friendly, combining titles in the footnotes with a complete bibliography. The artwork of the volume is irreproachable.

Jens Høyrup