## **BOOK REVIEWS**

## A Legendary Thinker

**Hypatia of Alexandria**. MARIA DZIELSKA. Harvard University Press, Cambridge, MA, 1995. xii, 159 pp. \$29.95 or £23.95. Revealing Antiquity, 8. Translated by F. Lyra.

A library fire in A.D. 391, the lynching of a philosopher by Christian radicals in A.D. 415, and with these incidents the end of learning in the ancient world-the story has become familiar in popular histories. In this detailed, critical reassessment of the life of Hypatia of Alexandria, Maria Dzielska exposes these legends as literary and historiographic inventions (promulgated, for example, in Edward Gibbon's great Decline and Fall and in Charles Kingsley's 1853 novel Hypatia or New Foes with an Old Face), fed by anticlerical ideologies in the 18th and 19th centuries. The accurate account, painstakingly pieced together by Dzielska from the fragmentary record, is more complex and far more interesting.

By the early 390s Hypatia (then about 40 years of age) was a distinguished teacher of Neoplatonic philosophy, the charismatic leader of a tight-knit and influential circle of intellectuals and aristocrats, including some prominent Christians (among them three future bishops). Dzielska portrays the group as elitist, secretive, and devoted to classical learning and philosophical spirituality, with modest elements of ritual, like meditation, prayers, and hymns. Even as the Serapeum, a pagan cultic center, was stormed by the military at the request of the patriarch Theophilus in 391 (or 392), in the wake of riots instigated by the patriarch's anti-pagan policies, Hypatia's group continued unmolested for over a decade. Hypatia and Theophilus appear to have worked out a modus vivendi that accorded to both of them political influence with the civil authorities.

The situation changed with the appointment of a new patriarch, Cyril, in 412. Dzielska emphasizes that in his dealings with Hypatia Cyril acted through political, rather than religious, motives. Ambitious for power, he launched a persecution of his Christian opponents and then a pogrom of the Alexandrian Jews in 414, after which, when he perceived her influence over the prefect, he sowed a campaign of hate against Hypatia for alleged sorcery. Hypatia was assaulted by a mob (perhaps the patriarch's own militia, the "parabolans"), dragged from her carriage, and brutally murdered. As Dzielska interprets the event it was a politically motivated assassination in accordance with the wishes, if not the express command, of the patriarch.

Through a subtle reading of the ancient sources Dzielska reconstructs a powerful and persuasive account of Hypatia's life. She also addresses the difficult task of describing her philosophy. A charismatic teacher and lecturer, Hypatia left no philosophical writings. Consulting what is known of the writings of her followers, combined with a few anecdotes in the ancient histories, Dzielska portrays Hypatia as an eclectic Neoplatonist (in the metaphysical tradition of Plotinus and Porphyry) who, by avoiding the cultic and theurgic excesses of the tradition of Iamblichus, could thrive amid the anti-pagan policies of the Alexandrian patriarchs.

It is clear, however, that Hypatia's historical influence was more significant in mathematics than in philosophy and that the major audience for Hypatia studies today is among scientists and mathematicians. Dzielska's discussion of this aspect of Hypatia's work is unsatisfactory. Dzielska plainly does not know mathematics (she twice describes Apollonius's Conic Sections as a treatise in trigonometry). Her remarks, brief as they are, depend almost entirely on two recent accounts by Alan Cameron that are emphatically revisionist and provocative, but speculative and unpersuasive. She follows Cameron, for instance, in his conclusion, reached through an analysis of the titles (in fact, of two words in two of the titles) of the various commentaries by Hypatia's father, the astronomer Theon, that Hypatia, working as his collaborator, prepared the extant texts of Ptolemy's Almagest and Handy Tables (p. 102). Dzielska might better have reported the more cautious words of the late Otto Neugebauer: "Nothing definitive can be said about a Theonic edition of the Handy Tables without an investigation of all extant manuscripts" (History of Ancient Mathematical Astronomy, 1975). No such investigation has yet been undertaken.

Further, Dzielska observes that Hypatia's technical studies were devoted mostly to editions and commentaries of standard authors like Diophantus, Apollonius, and

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Ptolemy, whence "Cameron's observation that there is no reason to lament the complete loss of Hypatia's writings seems justified" (p. 72). Yet through their commentaries and editions of Euclid, Diophantus, Apollonius, and Archimedes, Theon and Hypatia, as well as their distant successors Eutocius of Ascalon and Isidore of Miletus (sixth century), profoundly affected the surviving Greek texts of these writers. Even a few fragments of Hypatia's commentaries could assist the effort to filter out the oldest stratum of the texts from the commentators' additions. Recent efforts along these lines, which Dzielska does not cite, appear in the editions of Diophantus prepared by J. Sesiano (1982) and R. Rashed (1984), for instance, as well as in the present reviewer's Textual Studies in Ancient and Medieval Geometry (1989).

While discussions of these matters are necessarily speculative, since Hypatia's mathematical works are lost, the situation is no different from that of her philosophy, about which Dzielska inquires with such engagement and finesse. If it is true that mathematicians writing on Hypatia have tended to be naïve on the cultural context, the cultural experts provide no remedy by slighting scholarship on the mathematics. The obvious solution would be a collaboration. For now, we still await a satisfactory account of Hypatia's work and influence.

Dzielska attaches a brief but valuable note on "other learned women of late antiquity" (pp. 115–117). To that list one can add the dedicatee of Pappus's third book of the *Collection*, a distinguished teacher of geometry, named Pandrosion, whose gender has recently been restored by Alexander Jones through a correct reading of a single letter in the manuscript (see his *Pappus of Alexandria*, 1985).

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## Other Books of Interest

**The Chocolate Tree**. A Natural History of Cacao. ALLEN M. YOUNG. Smithsonian Institution Press, Washington, DC, 1995. xvi, 200 pp., illus., + plates. \$24.95 or £19.50. Smithsonian Nature Books.

Ready for a new research topic at the end of his fieldwork on cicadas in Costa Rica, Allen Young turned his attention to the pollination biology of *Theobroma cacao*. One result is this account of the natural and agricultural history of a plant with "a most