translated extracts of Hyginus Book 3, which are found as part of almost every chapter of her book, are completely undependable. Readers will be seriously misled if they believe that Hyginus described the constellations according to Condos's translations. Other textual problems could be cited, but this is enough to warn the reader to scrutinize the translation carefully and not to expect complete accuracy. Often when the text seems to show contradictions or make no sense, one should suspect errors in the translation.

On the positive side, the extensive notes at the back of the book seem very useful, and are easy to reference to the relevant parts of the commentaries on each constellation myth. The bibliographies are extensive and helpful, and the author index, which identifies the many ancient authors referred to in the *Catasterisms* and the *De astronomia*, was a good idea.

My only major complaint in these areas concerns Condos's extensive use of R. H. Allen's: Star names: Their lore and meaning (New York, 1963; originally published as Star-names and their meanings (New York, 1899)). This book is seriously obsolete and is long past time when anyone should consult it except for historical reasons. Likewise, R. Brown's Researches into the origin of the primitive constellations of the Greeks, Phoenicians and Babylonians (Oxford, 1899–1900) is another outdated book. In general, however, Condos uses more contemporary and reliable scholarship.

Finally, let me say that although I am obliged to point out the problems, I believe that for the casual reader Condos has done a fine enough job. The worst errors (apart from the false translations of Hyginus Book 3) actually comprise only a small amount of the text, whereas the vast majority is accurate enough and quite serviceable for all but specialists. I hope that eventually Condos will produce a second edition that rectifies the problems and lives up to the promise of this handy and potentially very useful book.

For a longer review of great value, see *Bryn Mawr classical review* (electronic version) 98.6.28, by J. Ramsey.

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ROGER C. CERAGIOLI

## ON ISAGOGICAL QUESTIONS

Prolegomena Mathematica: From Apollonius of Perga to the Late Neoplatonists. With an Appendix on Pappus and the History of Platonism. Jaap Mansfeld (Brill Academic Publishers, Leiden, Boston and Cologne, 1998). Pp. 181. NLG 115/US \$68.

In 1994 Jaap Mansfeld produced a book entitled *Prolegomena: Questions to be settled before the study of an author, or a text*, a valuable study of the conventions followed by many classical, especially philosophical, authors in introducing students to a work, whether their own or someone else's. By late Antiquity a systematic

format for 'prolegomena' had become established, dealing in turn with topics such as the theme and purpose of the work under study, where it fits in a larger corpus, how it is useful, the choice of title, the work's authenticity, how it is divided, and what is expected of the student or the teacher. Mansfeld demonstrated how prominent such 'isagogical questions' are in authors' and commentators' introductions already in the Imperial, and even the Hellenistic periods. However, with the important exception of the commentators on Aratus, Mansfeld made scarce use of Greek mathematical and astronomical texts. In the present volume, intended to correct this omission, Mansfeld discovers that the literature of the exact sciences is unexpectedly rich in material pertinent to his subject.

Among the texts that Mansfeld discusses in depth several are astronomical: Ptolemy's Almagest and Tetrabiblos, Pappus's Collection Book VI (notes on a reading list in mathematical astronomy), and the commentaries on the Almagest. Mansfeld manages to pack a wealth of scholarly detail into twenty-three pages. I would single out for especial praise the judicious discussion of the corpus of treatises on spherics and other topics pertaining to elementary astronomy to which Pappus's Book VI is a sort of commentary; in arguing convincingly that Pappus's list is historically connected with the collections of such treatises in later Byzantine codices (a hypothesis that Neugebauer, among others, disputed), Mansfeld has illuminating things to say about the title or titles by which this corpus was taught, and he finds evidence that it was already starting to coalesce in Galen's time. Another interesting point is that Ptolemy turns out to have been more conscious than his commentators Pappus and Theon of the pedagogical functions of a preface to a scientific book. Mansfeld's study has no direct bearing on the technical content of the Greek astronomical literature, but he makes a fundamental contribution to our understanding of how these works were read and taught in Antiquity.

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## ADLER ASTROLABES

Western Astrolabes: Historic Scientific Instruments of the Adler Planetarium & Astronomy Museum, i. Roderick and Marjorie Webster (Adler Planetarium & Astronomy Museum, Chicago, 1998). Pp. xiv + 179, \$45.

This beautifully produced and illustrated volume, written by Roderick and Marjorie Webster, Curators Emeriti of the Adler Planetarium & Astronomy Museum, catalogues the Adler's important collection of 35 astrolabes and related instruments such as astrolabe quadrants (10) and mariner's astrolabes (2) of western provenance. A companion catalogue on the eastern astrolabes by David Pingree is forthcoming.

The catalogue heads off with an introductory chapter on the history of the scientific instrument collection of the Museum. Details are given of how the founder