Der harmonische Aufbau der Welt: Keplers wissenschaftliches und spekulatives Werk. Werner Diederich.

Blaue Reihe. Hamburg: Felix Meiner Verlag, 2014. 138 pp. €16.90.

This book presents a brief introduction to Johannes Kepler, one of the most fascinating personalities in the history of the so-called Scientific Revolution. As is known in the history of ideas, but not always in the current fields of modern science, Kepler's achievement goes beyond the discovery of the three astronomical laws that bear his name. I think that this book succeeds — although at a basic level — in focusing the attention of the reader on this important point. However, the realization of its main aim remains too simple and unoriginal.

The focus of the book lies in Kepler's "Harmony of the World," his favorite philosophical project on which he commenced to work at the very beginning of his career and published in 1619 with the title *Harmonices Mundi Libri Quinque*. In between, he was preoccupied with many other different projects that, on the one hand, distracted him

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from his main interest and contributed to the work's losing its initial ingenuity, even if, on the other hand, it made the final design more complex and deeper. As a matter of fact, only the last chapters of Diederich's book (approximately one-third of it) deal with the whole complex of "harmony." In the previous chapters Diederich provides the reader with background information and with the different steps that led Kepler to his main cosmological work.

Thus in the first two chapters some basics about the development of astronomy before Kepler and Kepler's own work are presented. Even the nonspecialist will find all this too simple and naïve to be true (a graphic showing us the old and once again rehashed conception of Newton as the "synthesis" of Copernicus, Galileo, and Kepler). The third chapter focuses on Kepler's first important publication, his *Mysterium Cosmographicum* (1596/97 and again 1621). I think that this chapter, especially because the author is interested in the development of Kepler's ideas toward the *Harmony of the World*, should be more detailed and denser in content. After all, this "little work" represents an important cross point between Aristotelianism and Platonism with several significant epistemological questions that Kepler carried over from his main works.

In chapter 4 Diederich treats the field of astrology, which is a fortunate decision, since astrology later became an essential component of Kepler's Harmony of the World. Taken into consideration here are some chapters of Kepler's Mysterium and De Fundamentis. Other very important works are not discussed. Thus — and since this a field on which a lot of good research has been done in the last years — the reader has to look for support in other works about the topic to gain a more accurate idea of Kepler's astrology. While the chapter on astrology is a necessary preparation for the Harmony of the World, chapters 5 (on the optic of the eye) and 6 (on the New Astronomy) can therefore only be read as supplements. They do not have any intrinsic connection to the main issue of the book, except that, of course, they represent further steps (and, to be sure, quite important ones for the history of sciences) in Kepler's development. Chapter 7 provides some background to Kepler's harmony (Pythagoras, Plato's Timaeus). In chapter 8 the author comes finally to Kepler's Harmony of the World, where he explains at a very introductory level the main principles of the work. Astrology is treated here again, which is correct, but without connection to Kepler's theory of the soul, which is in my opinion an inexcusable omission. The book ends with some remarks about the reception of Kepler's cosmology and with some modern epistemological speculations about the question of a "final theory."

In general, this book seems not to contain any grave deficiencies or mistakes. The reader can take it as one of the several introductions to Kepler, though focusing on the notion of harmony. However, from a stronger scientific point of view it is to be noticed that this book is a repetitive and summary presentation of other already extant and well-known works (mainly of Max Caspar's classical biography, which is once quoted in passing in a footnote on page 49 but not mentioned in the literature list). In fact, some titles of the modern literature (in English or German) are mentioned but not really discussed. Many other achievements of Kepler's are not treated and the last volumes of

the Kepler edition containing pertinent materials on harmonics and astrology are not considered. Moreover, the enormous correspondence of Kepler, which is unavoidable for a developed study of an author, is not used.

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