

Book Review:

De sphaera

Iohannis de

Sacrobosco

apud Boemos

ALENA HADRAVOVÁ AND PETR HADRAVA. 2019.
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— A few years ago, the working group “The Sphere: Knowledge System Evolution and the Shared Scientific Identity of Europe” was established. Under the leadership of Matteo Valleriani, it focused, among other things, on exploring the importance of the *Tractatus de sphaera* of Johannes de Sacrobosco. In addition to numerous articles and other outputs, the group’s work has resulted in two collective monographs published in open access mode: firstly *De sphaera of Johannes de Sacrobosco in the Early Modern Period: The Authors of the Commentaries*, ed. M. Valleriani, Springer 2020, and secondly *Publishing Sacrobosco’s de sphaera in Early Modern Europe*, ed. by M. Valleriani and A. Ottone, Springer 2022.

Independently of this project, Alena Hadravová and Petr Hadrava, Czech authors who concentrate on researching the history of astronomy and cosmology in the Czech area, have also recently worked on the Sphere of Johannes de Sacrobosco. It is somewhat unfortunate that the research of the Hadravas and that of Valleriani’s team were conducted separately. When the Hadravas published their book in 2020, they mentioned Valleriani’s project in the introduction, but with a note that they learned about it only after they had finished their work on the book. Similarly, the aforementioned monographs published by Valleriani and his team do not mention the work of the Hadravas, except for one rather marginal reference in the second publication. This is certainly because the Hadravas’ book is written in Czech, which, of course, has a good

reason. The aim of the book is to bring the significance of Johannes de Sacrobosco's textbook closer to the Czech reader. On the other hand, however, the publication also contains a lot of non-trivial information and research results, especially regarding the reception of the *Sphere* in the Czech lands, which would be useful for foreign researchers as well. The aim of this review is therefore to bring the Hadravas' book closer to foreign readers.

Alena and Petr Hadrava have become a well-known two-person team in the Czech lands, dealing with the history of astronomy with a combination of systematic and historical aspects. Petr Hadrava, an astronomer and physicist, is able to look at historical texts from the perspective of modern science, while Alena Hadravová, as a classical philologist, provides a philological and historical perspective on the text under study. Together, they have prepared a number of texts in Czech translations for Czech readers, starting with Tycho Brahe's *Instruments of Renewed Astronomy* (1996), Johannes Kepler's *Dream* (2004), and Galileo Galilei's *Starry Messenger*, together with Kepler's *Discussion* (2016), to the four-volume work on the *Ninth Sphere*, *Sphaera octava*, including Czech translations of Pseudo-Hygin's *Fables*, Hyginus' *On Astronomy*, medieval treatises on the constellations, and

medieval catalogues of the stars and the Premyslid celestial globe (2016). Thus, it is perhaps not surprising that they also turned their attention to Sacrobosco's 13th-century medieval astronomy textbook, which became a key text for astronomy and its teaching well into the 17th century.

In their book *The Sphere of Johannes de Sacrobosco - The Medieval Textbook of Elementary Astronomy*, the Hadravas present Sacrobosco's book itself, its sources and astronomical foundations, as well as manuscripts, incunabula and prints. Their aim, however, is not to prepare a critical edition of *De sphaera*. They refer to the edition prepared by Lynn Thorndike who used only a few manuscripts, but they rightly point out that to attempt a critical edition of the text would be, on the one hand, almost impossible, given the extent of its distribution in manuscripts and prints, and, on the other hand, actually useless, given the small number of different readings, since it was a textbook. Hadravas's goal is something else, not even just to introduce *De sphaera* and translate it into Czech. Their aim is to present Johannes de Sacrobosco's *Sphere* in a special Bohemian context. This aspect, however, and it should be critically pointed out, is not apparent either from the title of the book or from the first insight into it.

Thus, more than half of the book's introduction is devoted to the topic of "Reception of the Treatise on the Sphere and Commentaries on it". The Hadravas divide this part into three sections. First, they deal with adoptions from the text, specifically passages taken from the *Sphere* by the master Paulus de Praga, Paulerinus (c. 1417-1471), in his encyclopaedic *Book of the Twenty Arts*. Here, the paragraphs concerning climates are particularly relevant; the Hadravas present them in Latin form and supplement them with a Czech translation. The subsection on Paulerinus is relatively short, but readers can be referred to their article on his astronomy ("Astronomy in Paulerinus' Fifteenth-Century Encyclopaedia Liber viginti arcium", *Journal for the History of Astronomy* 38, 2007, 305-324).

The second part, concerning the reception of the *Sphere*, is the topic of comments. The Hadravas first briefly mention the commentaries dealt with by Lynn Thorndike in his edition of the *Sphere*, i.e. that of Robertus Anglicus and a commentary ascribed to Michael Scot. They then discuss three commentaries of Bohemian provenance. The scholarly contribution of this part is the greatest of the entire book, as in it texts that are mostly unknown are analysed. So let us dwell on them more thoroughly.

The first of the commentators to whom the Hadravas pay attention is Nicholas of Teplá, probably a Premonstratensian from the monastery of Teplá, who, under the name of Ialocin de Alpet (which mirrors Nicolai de Tepla),

produced a manuscript copy of the *Sphere* in 1443 and commented on the measurement of the circumference of the Earth in the margin. This is given here again in the Latin text and in the Czech translation. There is not much mention of Nicholas of Teplá and the manuscript in the book; in fact, it is not explicitly stated whether this is the only commentary in the margin on the text.

The Hadravas devote more space to Martin of Lenčice (Martinus de Lancicia, c. 1405-c. 1474), a master at the University of Prague, and his commentary on the *Sphere*, which is known from a single manuscript dating from 1428-1433. His commentary shows that he was a fairly well-read author who added to Sacrobosco's text on the basis of his knowledge of ancient literature. The Hadravas also point out that this commentary shows a familiarity with Hyginus' *Astronomy*, which seems to be unique in the context of the reception of Sacrobosco's *Sphere* and commentaries on it, especially in the Bohemian Middle Latin milieu. They then select a few passages from Martin of Lenčice's commentary, from passages on climates and on the solar eclipse at Jesus' crucifixion.

Finally, the most important work to which the Hadravas pay attention is the commentary of Václav Faber of Budějovice (c.1455/1460-1518), a Leipzig master and professor of astronomy, later a physician in Most and finally a parish priest in České Budějovice. Faber wrote his commentary in Leipzig in 1491 and published it there in 1495. Many other editions followed. The Hadravas describe them, or give the titles of the individual

prints and information on where and how many of them have been preserved. The number of editions and the extent to which Faber's edition of the *Sphere* with its commentary is represented in libraries shows that this was indeed a widely circulated and popular work in the early sixteenth century. The Hadravas list the sources Faber used in his commentary, also mentioning other works by him, especially astronomical and astrological writings. The Hadravas' approach to Faber's commentary and the whole work is rather descriptive, somewhat lacking in the book's interpretive level.

The third mode of reception of Sacrobosco's *Sphere* that the Hadravas cite is Philip Melanchthon's preface to his *Treatise on the Sphere*. The Hadravas present it to illustrate the impact the *Sphere* had in the humanist period, printing Melanchthon's Latin text followed by a Czech translation. The presentation of Melanchthon's reception is certainly interesting, but it seems somewhat inorganic given that the reception in the Czech environment is not completed here. In particular, one might ask to what extent Melanchthon's approach to Sacrobosco's *Sphere* and the *Sphere* itself was reciprocated by, for example, Thaddaeus Hagecius ab Hayck (1525-1600), perhaps the most important astronomer in the Czech lands in the 16th century, especially in his early works, particularly *Diagramma seu typi eclipsium Solis et Lunae futurarum* from 1551.

The centre of the whole book is the Latin text of Johannes de Sacrobosco's *De Sphaera*, not on its own, but together with a commentary by Václav Faber.

Graphically, the two texts are separated so that they can be easily distinguished: the original text of the textbook is set in bold type, while Faber's commentary is set in normal type. This is followed by a Czech translation, and the whole book is supplemented by a Latin-Czech glossary of basic terms, as well as by a bibliography and an index of names. At the end of the book, we find an appendix, which offers photocopies of selected pages from the manuscripts and prints that are mentioned.

Graphically, the book is very elegantly prepared; the individual parts are separated by coloured pages, while the cover of the book is reminiscent of an old print. From the reader's point of view, however, it is a pity that the method of parallel presentation of the Latin text and the Czech translation in juxtaposition was not chosen. This could certainly have led the reader to compare the terms in the translation with those in the Latin, or possibly to try to assess the appropriateness of the translation procedures. Unfortunately, the Latin text and its Czech translation, both of Sacrobosco's book and of the shorter texts that precede it in the Hadravas' book, are given in succession. This makes it difficult to find one's way in the text. On the other hand, a foreign-language reader who wishes to look at the Latin text with Faber's commentary will get to it in a separate section, which may be convenient. However, in the case of other, shorter Latin texts (those of Pavel Žídek, Mikuláš of Teplá, and Martin of Lenčice), these are not graphically separated from their translations, and even

the Czech reader has to look for where the Latin text begins and ends.

For the Czech reader it is still very beneficial to have the Latin edition of Sacrobosco's *Sphere* with the commentary by Václav Faber and its Czech

translation, especially as it is introduced by an erudite preface. The Latin text itself could be useful for foreign readers and scholars, so one can only hope that the book will encourage further work with the texts that are mentioned.

