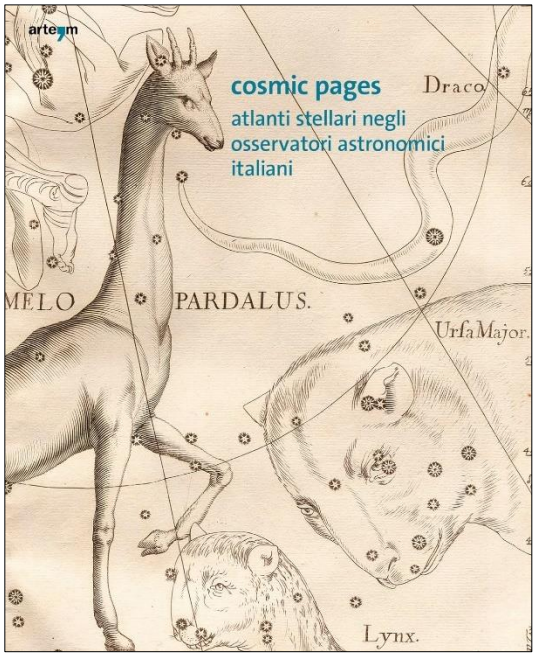
BOOK REVIEWS

***Cosmic Pages: Atlanti Stellari Negli Osservatori Astronomici Italiana,* edited by Ileana Chinnici and Mauro Gargano. (Naples, Artem, 2022). Pp. xxiii + 175. ISBN 978-88-5690894-7 (softcover), 240 × 300 mm, Euro 34.53.**

This book on star atlases found in Italian archives is quite different from the other star atlas book reviewed in this issue. Even though the subtitle indicates it is entirely about star atlases, it is actually much more than that.

Thirty-three pages (consisting of both English and Italian text) include three extended essays. The first, "The Representation of the Sky: Cultural Evolution and Scientific Development", is written by Mauro Gargano (Osservatorio Astronomico di Capodimonte) and Valeria Zanini (Osservatorio Astronomico di Padova). They begin with the fragment of a Seleucid astrological table from the third century BCE and end in 1928 with the adoption of the 88 canonical constellations by the IAU. That entire cartographic survey is completed in just five pages that also include illustrations.

The second essay, by Antonella Vallenari (Osservatorio Astronomico di Padova), is "The 3D Map of the Galaxy: The Measure of the Parallaxes". This more focused study, in four pages, includes one point which is often glossed over. We all know about the early nineteenth century discovery of parallax, but along the way an



> … experiment lead [*sic*] to the detection of a small systematic shift in the star position, very different from the parallax effect. Bradley called it aberration …This was the first proof of the Earth [sic] motion in space and confirmed Newton's hypothesis of star huge [*sic*] distances. (page 24)

This brief excerpt from James Bradley's attempt to measure parallax also highlights the fact that the text is littered with issues that presumably arose in the translation from Italian to English. Securing the services of a native English speaker would have been an easy way to clean up the text.

The final essay is "Imaginations of Astronomical Sky in Italian Visual Art", by Oleh Petruk (National Academy of Sciences of Ukraine/Osservatorio Astronomico di Palermo). This is the essay that one hopes will eventually be turned into a full book. It is a fine but extremely condensed survey of astronomy as depicted in the very broad remit of Italian art. This includes such things as ceiling paintings in various palaces and villas (Farnese, Besta, Farnesina), churches (Basilica of San Lorenzo), and the Vatican. Those are just the ones actually pictured—the text lists scores more, and one yearns to see detailed imagery of all of them.

Following the essays are the star atlases. Most of these are quite famous: the ones by Bayer (1661), Hevelius (1690), Flamsteed (1753), Bode (1801) and Argelander (1843). Others less so prominent are: Piccolomini (1548), Toaldo (1790), a Chinese star map created by Gustaaf Schlegel (1875), and Gould (1877). The uncompleted photographic survey *Carte Photographique du Ciel* concludes the volume: an image from 1897 is shown.

A great strength of this final section is the use of fold-out plates that enable the reader to see large swaths of a star chart without the bedevilling centre-fold of the book. For Flamsteed and Bode there are four fold-outs each, which thus measure twice the size of the book. They allow one to see the minutest detail in these extraordinary examples of artistic astronomy, which is the prime subject matter of this beautifully constructed book. The first editor of the book is Ileana Chinnici, who kindly allowed me to view the Ramsden Circle at Palermo Observatory on my visit there in 2013.

There are a couple of typos that must be mentioned: Struve measured parallax in 1837 not 1937 (page 24); and “read is a number” should be “read in a number” (page 38).

Dr. Clifford Cunningham
University of Southern Queensland,
3915 Cordova Drive,
Austin, TX 78759, USA.
E-mail: Cliff.Cunningham@unisq.edu.au

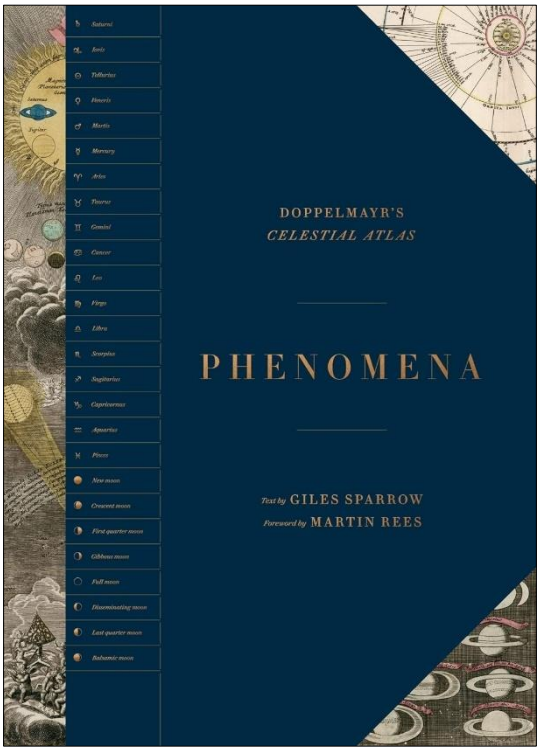
***Phenomena: Doppelmayr’s Celestial Atlas*, by Giles Sparrow. (Chicago, University of Chicago Press, 2022). Pp. 256. ISBN 978-0-226-82411-6 (hardback), 270 × 375 mm, US$65.**

This large-format book is a re-imagining of an original star atlas from 1742. It was produced by the German astronomer and cartographer Johann Gabriel Doppelmayr (1677–1750).

It is a book largely of illustrations, and while there is much commentary by the editor, Giles Sparrow, I will concentrate here on matters—both positively and negatively—that impact the visual effect of the book. The most important point to note at the outset is the scale of the imagery: these pages, while large, are only two-thirds the size of the originals. For each plate, Sparrow rightly devotes an entire chapter. Instead of using fold-out pages, he has opted to reproduce each plate across two pages. This means the centre of each image is within the fold of the book. To solve the issue of not being able to see the plates properly, each one is then given again on the following page: the size of these images is typically 22 × 22 cm, but sometimes smaller.

Each plate in the original atlas was very busy: Doppelmayr obviously was not a fan of blank spaces. For example, a plate showing the phenomena of irregular motion, which depicts the orbits of Mercury and Venus, has six insets. Two of these plot the positions of those planets relative to the ecliptic, and act as right and left borders to the central circular diagram. Four more insets fill in the spaces around the central diagram. Sparrow reproduces each of these separately, and larger, on the two pages following the two-page spread. Each is given a caption that explains in sufficient detail what they depict.

All well and good, but the original plates also contain complex allegorical images. It is given short shrift in the description. “A central motif depicts the three planets in their respective circuits around the Sun.” (page 80). In the case of this plate, the motif is set to the left, so that most of it is clearly visible in the two-page spread. But in many cases, it is centrally placed, and only rarely does Sparrow focus on the Classically-inspired motif by printing it separately. In some cases, it is not mentioned at all: the beautiful engraving on a plate depicting the Ephemerides of Geometric Celestial Motion (page 86) is ignored. While most classicists might be able to discern its meaning, the majority of potential readers will be left in the dark. This is most unfortunate, but it reflects the modern disdain for anything not of a strictly scientific nature. Artistic elements, such as allegorical engravings and poetry, which were obviously of



great importance in the early Modern era, are quite often dismissed. The result is an incomplete understanding of what we as historians of astronomy are supposed to be offering in the way of analysis.

Another key element of the early Modern era was Latin, which is an almost insuperable barrier to nearly everybody now, historians not excepted. Dopplemayr wrote his atlas in Latin, which makes any modern rendition of his atlas even more obligated to give us a full, or nearly full, translation. Once again, this production fails to deliver. A quick glance at the plate labelled Selenographical Table (pages 104–105) shows a huge tranch of text below two maps of the Moon (one from 1647 by Hevelius, the other 1651 by Riccioli). None