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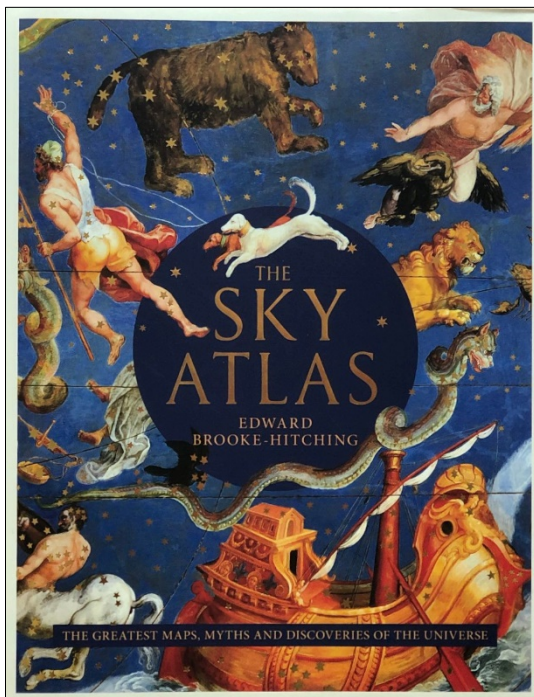
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***The Sky Atlas*, by Edward Brooke-Hitching (San Francisco, Chronicle Books, 2019). Pp. 255. ISBN 978-1-7972-0118-4 (hardback), 195 × 250 mm, US \$29.95.**

***Star Maps: History, Artistry, and Cartography (Third Edition)*, by Nick Kanas. (Chichester, Springer/Praxis, 2019). Pp. xxxvi + 563. ISBN 978-3-030-13612-3 (hardback), 175 × 250 mm, US \$54.99.**

***Celestial Atlas: A Journey in the Sky through Maps*, by Elena Percivaldi. (Milan, White Star, 2018). Pp. 207. ISBN 978-88-544-1310-8 (hardback), 277 × 319 mm, US \$39.95.**

These three books each offer a different perspective on celestial cartography. *The Sky Atlas* is by Edward Brooke-Hitching, who has no academic credentials and is the author of a book on obsolete pastimes. Not surprisingly the book contains no references, and is replete with inaccurate or misleading statements. This is unfortunate as it contains a huge number of beautifully reproduced images that nicely illustrate man's enduring fascination with depicting the cosmos.



The most egregious of the errors is his bald assertion about Hipparchus. “By ranking the stars in six tiers by order of brightness, he invented the first stellar magnitude scale.” (page 58). As I have shown ([Cunningham, 2020](#)), that is not the case. In a section on Islamic astronomy, he devotes a full page to

the dramatic painting of the seventeenth-century Mogul Emperor Jahangir, “... holding what is likely a celestial globe.” The painting shows him balancing a globe in his right hand, an allusion to the name he took on his accession to the throne since Jahangir means ‘world-seizer’. Thus, it more is likely to signify a globe of the Earth, as even he could hardly aspire to seize the heavens. In any case the globe depicts neither stars nor land, so its true meaning is quite uncertain. The author does qualify his assertion with “likely,” but I find this insufficient without further informing the reader about the allusion to his name.

Another questionable interpretation derives from Thomas Kuhn’s widely criticised book *The Copernican Revolution*. In a discussion of Copernicus, Brooke-Hitching uses the famous ‘Frankenstein’ quote from Copernicus about taking various body parts to produce a monster rather than a man. Brooke-Hitching employs a misplaced metaphor (Copernicus himself used ballet as a metaphor) when he writes “Copernicus was fascinated by his predecessor’s lack of success in rationalizing the system as a fully working symphony.” (page 120). But as the historian of mathematics Viktor Blåsjö (2007) stated in a review of Kuhn’s book with specific reference to the Copernican quote, the failure of his predecessors was not the motivating factor:

Thus, I say: Copernicus was driven not by a crisis of Ptolemaic astronomy but by the beautiful consequences of his theory, such as the determination of the planetary distances and simple explanations of previously unexplained phenomena (e.g., retrograde motion, bounded elongation, etc.).

Finally, I will mention a diagram reproduced on page 180. It is misleadingly captioned “William Herschel’s sketch of the Milky Way.” Rather than depicting the Milky Way as a whole, as the caption implies, it was never meant to be other than a ‘section’ through the Milky Way, as explained by [Steinecke \(2018: 76–78\)](#).

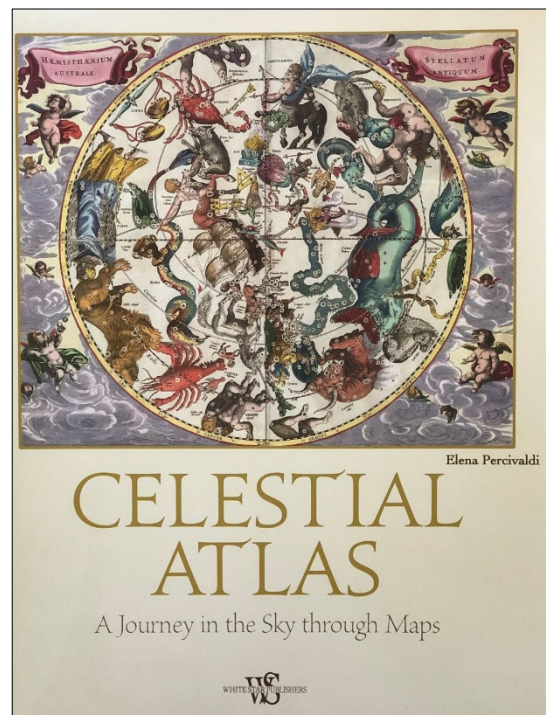
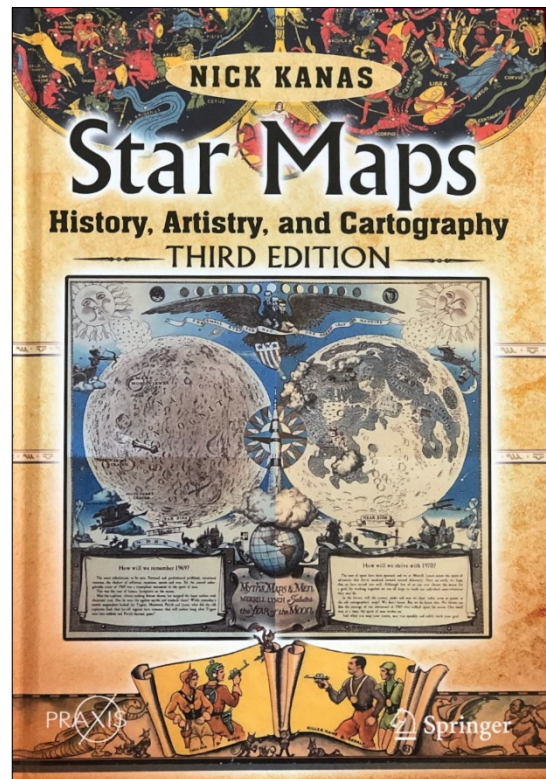
*The Celestial Atlas* is by Elena Percivaldi, who has a degree in Medieval history from Milan University. The large format of her book enables one to get a fine appreciation for much of the detail in maps. For each of the 11 atlases under consideration, from those by Peter Apian in 1540 to Elijah Burritt in 1833, we are treated to the most spectacular celestial imagery ever created, with most shown in colour. The Latin title of each plate is given in full, followed by a description of typically 150–200 words. A fuller description would give the reader further insight into

the myriad details each map displays, and there is ample room for more text as it appears on a nearly blank facing page. Most illustrations cover a full page and continue about a fifth of the way across a second page which contains the text, meaning the spine of the book interferes with an unobstructed view of the plates. The only alternative would have required the book to be printed even larger than it is, to maintain the typical image size width of 325 mm and height of 290 mm. This was the route taken in a monumental book (van Gent, 2006) that fully reproduced the atlas of Andreas Cellarius: it measures 325 × 540 mm. In that book many plates were given a full two-page spread, but the central section (obscured by the book spine) was given again in another full-page. The explanatory details that are lacking in Percivaldi, such as the identification of all the human figures in the frontispiece to Cellarius' atlas, can be found in van Gent. Nevertheless, the Percivaldi book is the finest I have seen in offering a large number of large high-quality images from not just one, but every major celestial atlas ever printed. A stunning display.

The third edition of *Star Maps* is by Nick Kanas, a medical doctor who is Professor Emeritus at the University of California. This is certainly the finest book ever published on its broad remit that covers the history, artistry and cartography of celestial maps, but its largest image size of only 125 × 180 mm means that details can only be seen with the aid of a magnifier.

On occasion Kanas falls back on platitudes, such as “The constellation of Musca has an interesting story.” (page 131). But overall, the text is clear and packed with detail, which sometimes serves as a corrective to the text by Percivaldi. In a description of the nomenclature history of the obsolete constellation Musca Borealis, she states “... in 1674 Ignace-Gaston Pardies named it Liliun (fleur-de-lis) ...” (page 185). Kanas, however, correctly explains that while Pardies placed an image of the fleur-de-lis for these stars near Aries, the name Liliun only appeared “... five years later in a map by Royer.” (page 133). The Kanas book would benefit from an Appendix listing all the obsolete constellations, with their dates of creation and other pertinent data. The 3-page section on the subject is good, but much other relevant detail appears elsewhere in the book. The Index is of no help, as constellation names are not included. A more inclusive index would be of great benefit to the reader, but having a bibliography at the conclusion of each chapter is excellent.

*Star Maps* was first printed in 2007, followed by the Second Edition in 2012. One can now say the work has come to maturity, with new chapters on Terrestrial and Celestial Pictorial Maps, and 42 pages on Celestial



Images in Artistic Paintings. Fifty-four new figures have been added, and unlike earlier editions this one is hardcover. It includes celestial globes and astronomical instruments,

a study of the frontispieces of atlases, and even a few maps of the Solar System, although the focus of the book is on stellar/constellation maps. In its totality, this is a tremendous reference source.

### References

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**Storočia Astronómie v Prešove, edited by Renáta Kolišovská. (Hurbanovo (Slovakia), Slovenská ústredná hviezdáreň, 2018). Pp. 228, ISBN 978-80-85221-97-8 (hard-back), 165 × 235 mm, €6.**

This book, *Storočia astronómie v Prešove (Centuries of Astronomy in Prešov)*, was published on the occasion of the 70<sup>th</sup> anniversary of the first public observatory in Slovakia, which was established in Prešov. The author divided the book into twelve chapters:

- I. Fifteenth to Nineteenth Centuries
- II. Astronomical Activities before the Establishment of the Public Observatory
- III. Directors of the Observatory in Presov
- IV. Professional Activity
- V. Overview of Observation Equipment
- VI. Popularization and Methodical Activity
- VII. Astronomical Campaigns
- VIII. Slovak Astronomical Society and Club of Young Astronomers
- IX. Projects
- X. Curiosities
- XI. Planetarium
- XII. Summary

The author of this publication is Renáta Kolišovská, who has been working as an independent specialist at the Observatory and Planetarium (hereinafter referred to as HaP) in Prešov since 1990. She is a long-term contributor to the *Astronomický informátor* bulletin (*Astronomical Informant*), published by HaP Prešov for the general public, as well

as for members of the Slovak Astronomical Society at the Slovak Academy of Sciences. Her professional activities include in particular the preparation of popular material in the form of educational publications for children and youths; audiovisual programs in the planetarium; the organization of seminars for teachers of physics; and various projects focusing on astronomy. Given these facts, I cannot imagine a more appropriate author for the book under discussion here.

The early chapters of this historical tour map the astronomical activities in the city of Prešov and its surroundings long before the establishment of the Observatory itself. Although it often happens that the archive is the only source of relevant historical information, in this case the author still managed to identify and summarize the activities of important astronomers present between the fifteenth and nineteenth centuries.

A few pages later, I was pleasantly surprised and pleased by the text, which describes the difficult path of one telescope, the so-called 'Starod'alská 60-ka'. Much has been written about the journey of this telescope, but in this case, the author summarizes its pilgrimage into a holistic story. Anyone who reads the story of this telescope will understand that it educated more than one generation of Slovak astronomers.

The book also introduces us to the personalities involved in the birth of the Observatory in 1948. This was the result of the endless efforts of people like Alexej Duchoň, Ján Lešo, Ján Hanzély, Štefan Karabín, and the first Director, Imrich Szeghy. Their diligence resulted in the ceremonial opening of the Public Observatory of Prešov, in a building situated on Rumanova Street. This happened on 28 October 1948, which was an important date at that time: The Day of Nationalization, and at the same time the 30<sup>th</sup> anniversary of the establishment of the Czechoslovak Republic.

As part of its professional activities, the Observatory in Prešov initially focused mainly on observing the Sun: systematic observations of sunspots, reflecting the activity of our nearest star. The oldest observation that can be found in the Observatory's archives dates back to 10 January 1941. It was performed by Dr Alexej Duchoň. At the beginning of the 1960s, another subject in the professional program of the Observatory began to emerge: the visual and telescopic observation of meteors, meteor showers and comets. In addition, an increasing interest in the visual observation of variable stars was re-