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Cosmos: The Art and Science of the Universe,
by Roberta J.M. Olson and Jay M. Pasachoff.
(London, Reaktion Books, 2019). Pp. 303,
ISBN 978-1-78914-054-5 (hardback), 225 × 286
mm, £35.

This is a beautiful book, both physically and intellectually, and a fitting sequel to their earlier classic, *Fire in the Sky: Comets and Meteors, the Decisive Centuries in British Art and Science* (Olson and Pasachoff, 1998). Their new book, however, covers far more territory, its ten chapters extending from “Astronomy: The Personification and the Practice”, to Star Maps, Constellations and Globes; the Sun; the Moon; Comets; Meteors and Bolides; Novae, Nebulae and Galaxies; the Planets; the Aurora Borealis; “New Horizons in the Cosmos: Photographs of Space” (some of them taken *from* space); and finally a 1-page Conclusion. Then there are references, Acknowledgements, Photo Acknowledgements and an Index.

The authors explain the rationale for this book:

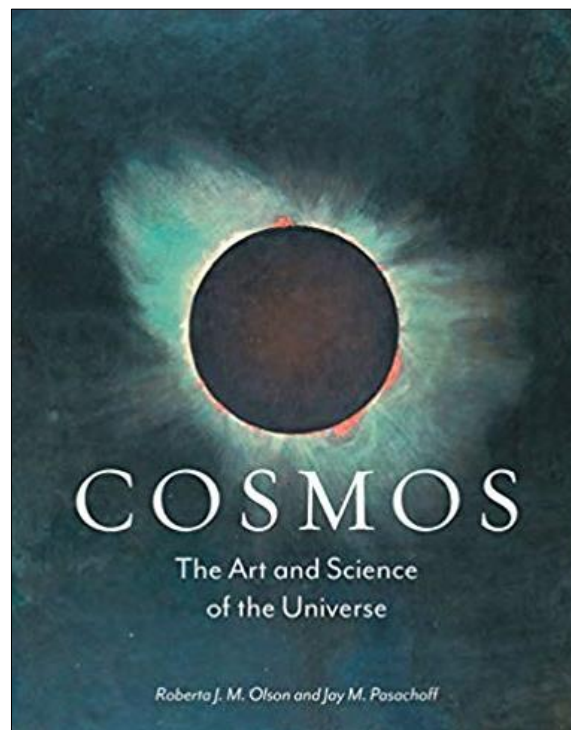
This visually provocative volume charts the human love affair with the heavens in art and astronomy. We have written the book based on exciting science, art and cultural history, for a general but intellectually acute audience interested in the compelling story of the discovery of how the universe is arranged and how it functions. (p. 7).

Later on the same page Olson and Pasachoff explain that they began working together in 1985, and have “... pioneered the multidisci-

plinary study of astronomical phenomena in art.” Furthermore,

We are grateful that our work seems to have sparked much enthusiasm in many new areas of exploration, including a highly regarded international series of conferences entitled ‘The Inspiration of Astronomical Phenomena’. (ibid.).

Olson and Pasachoff spent more than three decades accumulating material for this book, “... resulting in an archive of thousands of candidates for its illustrations.” Three hundred and six made the cut, and this visual extravaganza is one of the highlights of the book, with each chapter presenting an exciting mix of text and art works. The latter include oil and watercolour paintings, an Aboriginal Australian bark painting, drawings, mixed media works, a fresco, wood cuts, engravings, etchings, chromolithographs, astronomical photographs, star maps, sculptures, astronomical instruments (including orreries), museum exhibitions, archaeological artifacts and even clothing, jewellery and a unique letter-opener.



One well-known artist/astronomer represented throughout the book is the French-born Étienne Léopold Trouvelot (1827–1895), and it is interesting to compare and contrast his different works. While some are beautiful and realistic, other renditions lack credibility (as with his drawing on page 182 of the 1868 Leonid meteors and his drawings of Jupiter and Mars on pages 234 and 241).

For those wanting to explore astronomical art further Olson and Pasachoff provide 10.5 pages of references, but two new references

(chock-a-block with beautiful images) that they may wish to include in the next edition of this book are Gislén (2018) and Tobin (2013). The first of these papers reviews all of the volvelles in Peter Apian's famous book *Astronomicum Caesareum*; Olson and Pasachoff show two colourful volvelles, on pages 32 and 99. Tobin's paper, meanwhile, presents an entertaining selection of artistic creations that have been inspired by the historic transits of Venus and Mercury, topics of special interest to Jay Pasachoff and discussed in *Cosmos ...* on pages 244–247.

This is a lovely book to look at and to read, with fine-quality images throughout that are printed on art paper. It deserves to be in the library of anyone interested in the art-astronomy interface.

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