

*Astronomical Instruments and Archives from the Asia-Pacific Region*. Edited by Wayne Orchiston, F. Richard Stephenson, Suzanne Débarbat, and Nha Il-Seong (Seoul, IAU Commission 41, 2004), 204 pp., ISBN 89-7141-656-4 (93440), hard cover, US\$80.00, A4.

This is the *Proceedings* of an international conference held in Cheongju, Korea, in July 2002, and it contains many of the papers presented at the conference. Twenty-two of the twenty-nine papers given at the meeting and five of the poster papers are to be found between the covers of this volume. The conference was attended by representatives from twenty-one countries from which papers were given by eighteen.

Following introductory addresses, two commemorative lectures were given, and are published in the *Proceedings*, on “Korean observations of the supernova of AD 1604” by Richard Stephenson and “King Sejong’s sundial, *Angbu Il-gul*” by Nha Il-Seong. Both papers are informative and lay a solid foundation for what may follow in the conference. The editors have divided the papers into the standard eight technical sections generally used for these types of Asian meetings; however the papers also appear to fall into ‘factual’ and ‘speculative’ categories. The former discuss the records of supernovae of AD1604 and AD1054, the location and condition of early astronomical instruments of the region, archives relating to the astronomical history of some countries, and the archives of modern photographic records (some 100,000 held by the CSIRO radio astronomy group). A good example of a speculative paper is Alex Gurshtein’s “Relevant queries in respect of the archaic Chinese sky”, where he suggests the gradual development of the Zodiac from the mythology of the sixth millennium BC.

There are two papers on recent astronomical instrumentation in the region. Alan Batten gives a history of the 72-inch Plaskett telescope in Victoria (Canada), where he summarizes its successes, modernization and rôle model for other instruments. Wayne Orchiston then “... discusses the design, observational programs and subsequent development of the Chris Cross [radio telescope at Fleurs, near Sydney, Australia], before focussing on the closure of the field station and preservation of the remaining elements of this historic radio telescope.” The possibility of early Chinese observations of sun-grazing comets is the subject of a paper by Richard Strom in which he dismisses other suggestions for all but thirteen of the observations considered. The use of modern computer programs in reproducing and creating ancient star maps is an excellent blend of the old and the new, and Oh Gil-Sun’s printouts of some old star charts are very well-depicted in his paper. The longest paper (just 12 pages), by Luisa Pigatto, relates the activities of the Jesuits in Peking during the seventeenth and eighteenth centuries and their rôle in reforming the Chinese calendar, more accurately determining the longitudes of major cities, updating ephemerides, and trying to introduce Catholicism into the country. There are about sixty colour photographs of the conference dispersed throughout the book.

I purposely wrote this review before I read the “Conference Summary” by Richard Strom, and this presents an excellent overview. Would I buy this book? Probably ... but I would strongly recommend it to the librarian of my institution.

John Perdrix

*The European Scientist. Symposium on the Era and Work of Franz Xaver von Zach (1754–1832)*, edited by Lajos G. Balázs, Peter Brosche, Hilmar W. Duerbeck and Endre Zsoldos (Frankfurt am Main, Harri Deutsch), pp. 241 + [3], ISBN 3-8181-1748-5 (paperback), 19.80 Euros.

This delightful book is the proceedings of a symposium that was held in Budapest, Hungary, on 15-17 September 2004 to

celebrate the 250th birthday of Franz Xaver von Zach. It is published in Dick and Duerbeck’s invaluable *Acta Historica Astronomiae* series as Volume 24.

As might be expected given Zach’s prominence in late eighteenth and early nineteenth century international astronomy, there are chapters on his contributions to astronomy (minor planets, transits of Venus, variable stars), his accomplishments in geodesy, his eventful four-year sojourn in England, his travels throughout Europe (when he “... weaved a web of personal relations to such eminent scientists as Volta, Laplace and Herschel.”) and membership of scientific societies, his correspondence with Gauss and Amici, his involvement with the Bavarian Academy of Sciences, his scientific instruments, the three astronomical journals he launched (the contents of which are becoming available through the ADS), and his archival records (which Cunningham is systematic-ally publishing).

But *The European Scientist* ... does more than merely document the achievements of a notable astronomer, for it examines the astronomical ‘scene’ in Europe—and even Jesuit China—at this time, and also looks beyond astronomy. For example, there is a fascinating chapter on the rôle of the Piarist order in developing “the scientific way of thinking” in Hungary. The conference organizers should be commended for adopting this catholic approach (excuse the pun).

I found *The European Scientist* excellent value at just 19.80 Euros, and I recommend it as a good read.

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*Empire and the Sun. Victorian Solar Eclipse Expeditions*, by Alex Soojung-Kim Pang (Stanford, Stanford University Press), pp. [xiv] + 196, ISBN 0-8047-3926-9 (paperback), US\$21.95; also available in cloth (US\$55.00).

Mankind has long been fascinated by total solar eclipses, and even today there are avid amateur astronomers who are only too happy to brand themselves as ‘eclipse-chasers’. However, the nineteenth century was the era *par excellence* of the scientific eclipse expeditions, before solar spectroscopy and later the coronagraph rendered such expensive and opportunistic scientific ventures largely—but not totally—obsolete.

As the subtitle suggests, Alex Pang’s book is mainly about British solar eclipse expeditions that date to the second half of the nineteenth century. Some of these were private ventures, others were organised by the Royal Astronomical Society and/or the Royal Society, and towards the end of the century they were sponsored by the British Astronomical Association.

Although there are long chapters on “Planning Eclipse Expeditions”, “The Experience of Fieldwork”, “Drawing and Photographing the Corona” and “Astrophysics and Imperialism”, this book is much more than a mere astronomical adventure. It also examines “... the rich interplay between science, culture and British imperial society ...” This is the reason that more than half of the 48 pages of Notes at the end of the book have nothing whatsoever to do with astronomy. For some this will be a distinct ‘plus’, but at times—and particularly when I was keen to indulge my passion for solar eclipses—I found it just a little frustrating. I also had trouble accepting RASMN *in lieu* of MNRAS (or simply MN).

Having said that, *Empire and the Sun* is a delightful book and is packed with lots of interesting astronomical information. I can thoroughly recommend it to those with an interest in nineteenth century astronomical history, astronomical expeditions or solar eclipses.

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