The key to star magnitudes shows a consistent error on all the charts. There are two different circles, both labelled 5·0, where the smaller is intended to be 6·0. This is a trifling problem on the ten large-scale constellation maps, which reach to magnitude 6·5, but more confusing on the monthly maps which show stars only as faint as magnitude 5·5, while the key extends to 6·5.

A 23-cm planisphere for latitude +52° is included, which, like the monthly star maps, shows the ecliptic. There is no further help in finding the planets on a particular date. This is a substantial defect as planets frequently break up the patterns of the constellations and confuse attempts at star identification by beginners.

The book is printed on high-quality, glossy paper which enhances the many fine colour pictures and should prove a benefit to observers who consult it outdoors on damp evenings. — DEREK JONES.

The Cosmic Century: A History of Astrophysics and Cosmology, by Malcolm S. Longair (Cambridge University Press), 2006. Pp. 545, 25·5 × 18 cm. Price £35/$60 (hardbound; ISBN 0 521 47436 1).

You do not often read a book and think "Gosh, this will change things". Sifting through the library of astronomical history over the last hundred years or so this might have been said of *A Popular History of Astronomy during the Nineteenth Century* by Agnes M. Clerke (Adam & Charles Black, Edinburgh, 1885), *Astronomy of the 20th Century* by Otto Struve and Velta Zebergs (The Macmillan Company, New York, 1962), and *Cosmic Discovery* by Martin Harwit (The Harvester Press, Brighton, 1981), but of little else. I predict that Longair's *The Cosmic Century* will be added to this trio. It is fresh, authoritative, thorough, and insightful. It approaches the subject from a different angle. We are not confronted by the historian, philosopher, or sociologist pontificating about what they think astronomers were up to. We are presented with the views of someone who appreciates what it is like to be at the back end of a large telescope gazing at a mysterious object, or confronted with the physical interpretation of a tricky data set. We are getting an insider's view, and the understanding and appreciation of the scientific methodology leaps from every page.

The reader quickly realizes that Longair is a fan of history. He is convinced that today's researchers into astrophysics and cosmology will benefit hugely by studying how advances were made in the past. The history of these sciences provides a real physical insight into the intellectual infrastructure.

The Cosmic Century starts with the breakthrough in astrophysics produced by the measurement of stellar distances and the interpretation of stellar spectra. We then read how physicists were welcomed into the subject and how they revealed why stars radiate and how they evolve. Then, looking back to the period between 1900 and 1939, we are shown how the imperfect knowledge of our galactic home was transformed into a Universe consisting of a multitude of galaxies, expanding under the influence of General Relativity. The mid-20th Century then witnessed the huge extension of the wavelength window, the optical astronomer being joined by investigators of radio, infra-red, UV, X-ray, and gamma-ray emissions. Longair then considers the importance of the exotics. Black holes, supernovae, active galactic nuclei, and gamma-ray bursters all vie for attention. Finally we are treated to the history of cosmology, replete with steady states, inflation, the Hubble constant, density parameters, structure, microwave backgrounds, and dark matter.