



The history of astronomy

by Heather Couper & Nigel Henbest

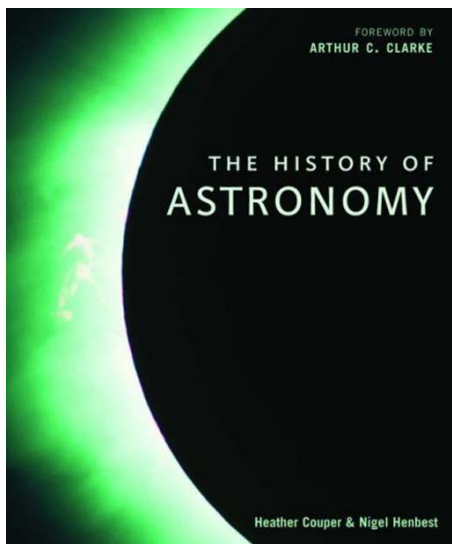
Cassell Illustrated, 2007. ISBN 978-1-84403-570-0. Pp 288 (247x297mm), £30 (hbk).

One of the great joys of the history of astronomy is that it can be treated on many different levels. You can delve deep and immerse yourself in four hundred page tomes on the significance of the observations of the comet of 1577, and you can wallow in a huge three volume set of the letters of John Flamsteed, our first Astronomer Royal, or you can flit briefly and joyfully from highlight to highlight.

Heather Couper and Nigel Henbest adopt the latter approach. They have travelled widely and interviewed many of the key players in recent astronomical and astrophysical history, as well as those who study the development of astronomy over the past few thousand years. The views of the authors and the people they interviewed have then been skilfully knitted together to produce an immensely readable, easily accessible and racy overview of mankind's stumbling attempts to understand the cosmos. From Stonehenge to SETI (the Search for Extraterrestrial Intelligence), and from black holes to Bethlehem's star, little has been overlooked.

Half the page-area in this 285-page book is covered with illustrations, many of which are refreshingly unfamiliar. I specially liked Joseph Haydn conducting *The Creation* (was he really inspired to compose this by peeping through William Herschel's telescope?), and the transit of Venus (a drunken synonymous lady being stretchered off to jail by two rotund policemen!) I leave it to readers to work out the relevance of Richard Burton's Hamlet and the trial scene of Kepler's mother.

I loved this book. It is unpretentious, and uncluttered by source references and extraneous detail. Heather and Nigel always look on the bright side. Astronomy is mysterious, often uncertain but always fun. Old astronomers are fabulous, and the pursuit of astronomical knowledge is clearly one of the greatest scientific adventures. But look-



ing at some of the pictures of famous astronomical scientists, one can often pick up hints of the darker side. I wonder how frustrated Gustav Kirchhoff and Robert Bunsen felt trying to understand spectral lines before the electron had been discovered. Galileo Galilei looks very uncomfortable at his inquisition, moving the Earth from the centre of the cosmos clearly has its consequences; Carl Sagan's furrowed brow underlines just how difficult it is to find extraterrestrial life; and Martin Ryle might just be about to show that the continuous creation theory could not explain the distance between distant galaxies, but this discovery doesn't raise even the hint of a smile.

This book is a 'must read' introduction to an amazing human endeavour, our continuing quest for cosmic understanding. Start here, and then be prepared to spend the rest of your life diving ever deeper into one of the greatest scientific adventures.

Carole Stott

Carole was once in charge of Britain's foremost collection of astronomical instrumentation at the Old Royal Observatory, Greenwich. She now writes professionally in the field of space and astronomy.

This review is copyright © the *Journal* of the British Astronomical Association, www.britastro.org/journal. If you wish to reproduce it, or place it on your own Web page, please contact the Editor: Mrs Hazel McGee, [hazelmcee "at" btinternet.com](mailto:hazelmcee@btinternet.com)

Astronomy - Astronomy - History of astronomy: Astronomy was the first natural science to reach a high level of sophistication and predictive ability, which it achieved already in the second half of the 1st millennium bce. The early quantitative success of astronomy, compared with other natural sciences such as physics, chemistry, biology, and meteorology (which were also cultivated in antiquity but which did not reach the same level of accomplishment), stems from several causes. First, the subject matter of early astronomy had the advantage of stability and simplicity—the Sun, the Moon, the planets.

Covers the history of astronomy from the ancient Greeks through the Big Bang. The Astronomy of the ancient Greeks was linked to mathematics, and Greek astronomers sought to create geometrical models that could imitate the appearance of celestial motions. This tradition originated around the 6th century BCE, with the followers of the mathematician Pythagoras (~580 – 500 BCE). Pythagoras believed that everything was related to mathematics and that through mathematics everything could be predicted and measured in rhythmic patterns or cycles. He placed astronomy as one of the four mathematical arts, the others being arithmetic, geometry and music. While best known for the P Astronomy is the oldest of the natural sciences, dating back to antiquity, with its origins in the religious, mythological, cosmological, calendrical, and astrological beliefs and practices of prehistory: vestiges of these are still found in astrology, a discipline long interwoven with public and governmental astronomy. It was not completely separated in Europe (see astrology and astronomy) during the Copernican Revolution starting in 1543. In some cultures, astronomical data was used for astrological

Ask an Astronomer is run by volunteers in the Astronomy Department at Cornell University. We answer your astronomy questions. Please browse our archive first. The Ask an Astronomer team's favorite links about The History of Astronomy: History of Astronomy links. Many links to lots of different topics in the history of astronomy, from ancient astronomy to the history of aeronautics. Also general history links. The MacTutor History of Mathematics Archive: Biographies of mathematicians, astronomers, physicists, etc. The History of Women in Astronomy: Biographies of famous women astronomers. How to ask a question?