



## The history of astronomy

by Heather Couper & Nigel Henbest

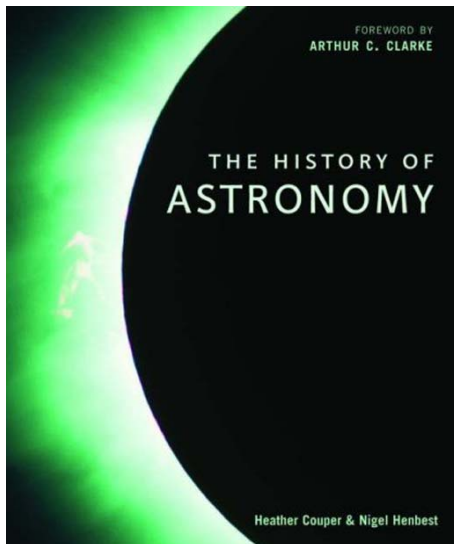
Cassell Illustrated, 2007. ISBN 978-1-84403-570-0. Pp 288 (247x297mm), £30 (hbk).

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

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History of Astronomy: We have very little in the form of recorded information on early man's impression of the heavens, mostly some drawings of eclipses, comets, supernovae such as the Pueblo Petrograph (see below). However, early man was clearly frightened/overwhelmed by the sky. One of the earliest recorded astronomical observations is the Nebra sky disk from northern Europe dating approximately 1,600 BC. Even if we consider some of the stories to be ridiculous, they were, in some sense, our first scientific theories. They also, usually, follow a particular religion, and so this time is characterized by a close marriage of science and religion.

Hellenistic Culture (~500 B.C.) A brief history of astronomy. Credit: NASA/Bill Dunford. Countless generations have looked up at the night sky to observe its twinkling stars and dancing lights. In dark and remote places, before the advent of today's modern metropolises, the shimmering night sky must have looked truly alive. Early days (and nights). Indigenous cultures around the world have long performed astronomical observation with the naked eye, frequently spotting stars, planets, and other celestial phenomena. The work of astronomers Tycho Brahe and Johannes Kepler led to an accurate description of planetary motions and laid the foundation for Isaac Newton's theory of gravitation. This progress dramatically improved humanity's understanding of the universe. History of astronomy. Quite the same Wikipedia. Just better. In some cultures, astronomical data was used for astrological prognostication. Ancient astronomers were able to differentiate between stars and planets, as stars remain relatively fixed over the centuries while planets will move an appreciable amount during a comparatively short time.