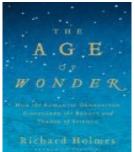
SCIENCE IN WONDERLAND

Book Title:

The age of wonder: How the Romantic generation discovered the beauty and terror of science

Book Cover:



Author: Richard Holmes

ISBN: 978-0007149520

Publisher:

Harper Collins, London. p. 576. Price hardcover ext £25.00*; softcover £9.99* *Book price at time of Review

Review Title: Science in Wonderland

Reviewer: Brian Warner¹

Affiliation: ¹Department of Astronomy, University of Cape Town, Cape Town, South Africa

email: brian.warner@uct.ac.za

Postal address:

Department of Astronomy, University of Cape Town, Private bag X3, Cape Town, Rondebosch 7701, South Africa

How to cite this book review: Warner B. Science in Wonderland. S Afr J Sci. 2010;106(1/2), Art. #109, 1 page. DOI: 10.4102/sajs. v106i1/2.109

This review is available at: http://www.sajs.co.za

© 2010. The Authors. Licensee: OpenJournals Publishing. This work is licensed under the Creative Commons Attribution License. Richard Holmes has written many books on 18th and early-19th century history, largely concerning the romantic poets and writers. Using his comprehensive knowledge of the romantic era to explore the ways creative science engaged with the humanities, Holmes continually demonstrates the extent of their mutual resonance and inspiration as well as how individual genius was recognised in both areas.

The period of 'romantic science', as described by the author, caught the imagination of the public and poets alike through the great voyages of scientific exploration, commencing in 1768, with young Joseph Banks, the naturalist on Captain Cook's first expedition, and ending with Charles Darwin's travels on the *Beagle* in the 1830s. This period was one of celestial, as well as terrestrial exploration, with William Herschel, and his son John, discovering and cataloguing the riches of the heavens. At the same time Humphrey Davy's discoveries in the field of chemistry exposed the structures of a hidden world. The practical applications of scientific inventions, such as Davy's miner's lamp, added to the general belief that science had become humanised and useful, able to solve everyday concerns, rather than remain within the province of inaccessible laboratories.

These wonders were also depicted by artists, such as Joseph Wright of Derby, whose paintings *The Orrery, The Air Pump* and *The Alchemist,* contain such subtly illuminated portrayals of human emotions among the spectators, that they have captivated my attention since I was young. The romantic poets, who were initially deeply inspired by the beauty of nature, were even more enthralled by the wondrous scientific discoveries of their era.



Source: http://dmorth.files.wordpress.com/2009/02/an_experiment_on_a_bird_in_an_air_pump_by_joseph_wright_of_derby_1768.jpg An experiment on a bird in an air pump by Joseph Wright of Derby 1768

The age of wonder is an extraordinary collection of biographies on the principal scientists and their assistants, set in a rich historical framework. These include Banks, Herschel and Davy, as well as accounts of the early history of ballooning and of Mungo Park in Africa, among many others. Holmes also writes about the debate on vitalism, which was of equal concern to both science and literature; the possibility of creating artificial life intrigued Percy Shelley and his wife, Mary. It led Shelley to write essays which mixed science with psychology, and Mary Shelley to create *Dr Frankenstein*.Some leading British scientists were also notable poets, including Erasmus Darwin, Davy and Herschel. The reverse, however, was generally not the case, with the exception of Goethe in Germany. Thus, while very few poets ever contributed to the progress of science, their skilled observations of nature and the human psyche were enhanced by their increased knowledge of the wonders of science. In the modern era, a 'tradition' has grown that claims inaptness between the sciences and the arts, but during the romantic period, this separation into the so-called 'two cultures' had not yet begun and so people were entranced and united by the revelations of how the world was constructed. Perusal of Holmes's book will show how integrated these fields had been two hundred years ago, a state to which they should return.

Holmes's *The age of wonder*, in my opinion, is a masterpiece written in a fast moving and witty style, containing revelations on every page. I was even sad when I had completed it, for I would have loved to see it continue by another fifty years. I cannot recommend it highly enough; if you are a scientist reading this review, then in my experience there is nothing better to inspire a reverence for the work of our predecessors. If, unlikely as it may be, you are reading this as a romantic writer without any interest in science, I believe a new dimension awaits you. And for those, like me, who were bored by the history curriculum in school, you will truly enjoy the new and interesting perspective the book provides on historical and scientific events; indeed, if only history at school could have been this interesting.