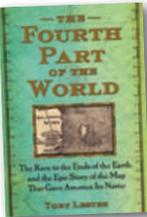


Personal favourites of 2009

Nature invited some of its regular reviewers to name their pick of this year's book publications.



PETER ANSTEY

The Fourth Part of the World
by Toby Lester

Free Press/Profile: 2009.

In this page-turning history of cartography, Toby Lester shows how maps themselves were the real treasure in humankind's quest to discover the shape, size and location of the habitable world, from ancient times to the age of Christopher Columbus and Amerigo Vespucci.

With a journalist's eye for detail and a historian's feel for accuracy, Lester shows how the construction of new maps and the rediscovery of old ones were as important as voyages of discovery by those such as Marco Polo. This is a gripping story of how the charting of the world involved science, politics, theology and courage, culminating in an age when solving the problem of longitude was still a pipe dream. It is a saga about maps, their style, their vision, their structure, their failings and, above all, their secrets.

Peter Anstey teaches early modern philosophy at the University of Otago, Dunedin, New Zealand.



FRANK CLOSE

The Strangest Man: The Hidden Life of Paul Dirac
by Graham Farmelo

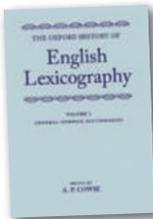
Faber & Faber: 2009.

Among scientists, Paul Dirac is regarded as being in the same league as Albert Einstein. Dirac is renowned for his 1928 prediction of antimatter, as a result of combining Einstein's theory of special relativity with the new quantum mechanics. As this excellent biography by Graham Farmelo shows, Dirac's contributions to science were profound and far-ranging; modern ideas that have their origins in quantum electrodynamics are inspired by his insight. Yet in his home town he was overshadowed by fellow student Archie Leach — film star Cary Grant. On asking at the Bristol Records Office for material about Dirac, Farmelo received the response: "Who?"

Hopefully, *The Strangest Man* has brought greater public awareness of this remarkable scientist. The effortless writing style shows that it is possible to describe profound ideas without compromising scientific integrity or readability. Farmelo also sheds considerable light on Dirac's personality and the circumstances behind it. Several members of the physicist's extended family had acute depression, and

Farmelo makes a strong case that Dirac was autistic. The book makes one realize that great gifts sometimes come at great personal cost.

Frank Close is professor of physics and a fellow at Exeter College, University of Oxford, Oxford, UK.



W. F. BYNUM

The Oxford History of English Lexicography (Volumes I and II)

Edited by A. P. Cowie

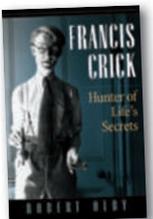
Oxford Univ. Press: 2009.

Indisputably Charles Darwin's year, 2009 was also the

300th anniversary of the birth of Samuel Johnson (1709–84). His *Dictionary of the English Language* (1755) — a milestone in the development of what is now the lingua franca of science — features centrally in my favourite book of this year, *The Oxford History of English Lexicography*. The essays in these two large volumes include pieces on the evolution of specialized dictionaries of science, technology and medicine.

Cowie's authors remind us of the power of correctly used language in communication. Johnson knew many physicians and natural philosophers, so was aware that science deals with nature's material realities. His own job engaged only with the words they used: "Words are the daughters of the earth ... things are the sons of heaven." But, he added significantly, language is "the instrument of science".

W. F. Bynum is professor emeritus of the history of medicine at University College London, UK.



GEORGINA FERRY

Francis Crick: Hunter of Life's Secrets

by Robert Olby

CSHL Press: 2009.

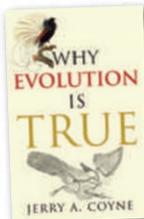
Francis Crick was possibly the greatest biologist of the twentieth century — not bad going for a physicist. Robert Olby's biography is the closest we are likely to get to a definitive account of Crick's life, yet in September it slipped onto the shelves almost unnoticed.

Meticulously documented and well-written, *Francis Crick* retells the story of the discovery of the DNA structure and the cracking of the genetic code. But what did Crick do next? Less well known is his 25-year quest for that elusive prey, the neural basis of consciousness.

Olby knew Crick for almost 40 years, and the book shows respect and admiration for its subject. But it is also dispassionate in revealing a

man of such breathtaking intellectual arrogance that he could dismiss much of philosophy as barren and argue for eugenic policies to control the fertility of the working classes. A useful reminder that rarefied intellectual heights are not necessarily the best vantage point from which to survey the rich landscape of human society.

Georgina Ferry is a writer based in Oxford, UK.



XU XING

Why Evolution is True

by Jerry A. Coyne

Oxford Univ. Press: 2009.

Jerry Coyne's book *Why Evolution is True* demonstrates the validity of evolutionary theory using the latest available data. Coyne is hugely knowledgeable, and an excellent writer. He uses multiple strands of data in such a clear and sometimes humorous way that an open-minded reader can hardly avoid learning a great deal about evolution: from feathered dinosaurs to vestigial organs, and from the unexpressed or fragmented genes present in all life forms to the complex distribution of Earth's flora and fauna.

Xu Xing is a professor at the Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences, Beijing, China.



ELENA CATTANEO

Perché gli scienziati non sono pericolosi (Why Scientists Are Not Dangerous)

by Gilberto Corbellini

Longanesi: 2009.

Medical historian Gilberto Corbellini argues that Italy is, metaphorically, infected with an anti-science virus. He contends that sectors of the political and intellectual establishments believe that society would be better off without scientists. He denounces attempts by the Catholic Church and other forces to limit scientists' freedom to do research. To counter this worrying trend, Corbellini traces the steps that lead to a collective strength based on science and a full embrace of democracy. The book concludes that there is only one condition in which scientists are dangerous: when they stop being scientists, renounce intellectual independence and bow to politics and local lobbies.

Elena Cattaneo is director of the Centre for Stem Cell Research, Department of Pharmacological Sciences, University of Milan, Italy.