

to social unrest, writers satirized and exaggerated its causes and effects. The out-of-control robot can be read as a criticism of the efficiency-oriented theories of Frederick Winslow Taylor and the practices of industrialist Henry Ford. So *R.U.R.* (Czechoslovakian writer Karel Čapek's 1920 play, which introduced the term 'robot' to the English language) portrays mass production as alienating at best. In Jack London's post-apocalyptic *The Scarlet Plague* (1912), a race of barbarians descended from San Francisco's brutalized underclass roam the city's devastated remains after the fatal pandemic of 2013. And Charlotte Perkins Gilman's feminist novel *Herland* (1915) imagines an ideal community in which women aren't merely emancipated, but have done away with men altogether.

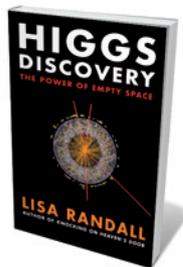
Politics are inevitably part of the mix — this is an era that encompassed the First World War, the Russian revolutions, and the rise of radical left- and right-wing movements. Many sci-fi authors, such as Čapek and Yevgeny Zamyatin, were leftists and liberals. But more conservative authors shared their utopianism and cynicism. For instance, Arthur Conan Doyle, inventor of Sherlock Holmes, wrote a series of ripping yarns starring a Professor Challenger, who discovers surviving dinosaurs, travels to Earth's "sensory cortex" and witnesses the end of life on the planet — all the while making the case for reconciling imagination and intuition with a sceptical scientific method.

Similarly, H. Rider Haggard, who had made his name with *King Solomon's Mines* (1885) and the Quartermain novels of the 1880s, created a disputatious trio in 1919's *When the World Shook* — an idealistic Anglican minister, a sardonic doctor and an adventurer whose world view hovers somewhere in between. Meanwhile, both the leftist London (in *The Scarlet Plague*) and the conservative English poet Edward Shanks (in *The People of the Ruins*) agree that the destruction of modern western society wouldn't be an entirely bad thing.

Fans of Philip K. Dick or Ursula K. Le Guin — writers belonging to what literary theorist Fredric Jameson has termed the "anti-anti-utopian" trend of the late 1960s and early 1970s — will find provocative antecedents here. Reading the dangerous visions of radium-age sci-fi, published in times as volatile as our own, destabilizes everything we take for granted. These books remind us that we need to regard our twenty-first-century forms and norms without sentimentality. ■

Joshua Glenn edits the blog *HiLobrow*, and co-founded *HiLoBooks* to reissue 'radium age' science fiction. *HiLoBooks'* edition of Arthur Conan Doyle's *The Poison Belt* is out now; H. Rider Haggard's *When the World Shook* is published in October. e-mail: jglenn@hilobrow.com

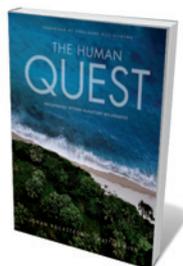
Books in brief



Higgs Discovery: The Power of Empty Space

Lisa Randall BODLEY HEAD 64 pp. £4.99 (2012)

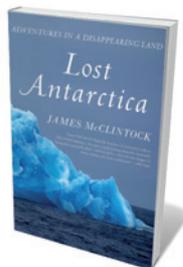
The Higgs bombshell on 4 July rocked the world of physics. In this slim volume, theoretical physicist Lisa Randall analyses the significance and implications of that momentous finding at Switzerland's Large Hadron Collider. She offers clear accounts of the Higgs mechanism and the role and modes of the Higgs's decay; follows the seven-month lead-up to the discovery; and speculates about what it all might mean for other areas of exploration, such as supersymmetry. A lucid, deft and engaging summation of dogged determination and "heroic engineering".



The Human Quest: Prospering Within Planetary Boundaries

Johan Rockström and Mattias Klum STOCKHOLM TEXT 314 pp. \$9.99 (2012)

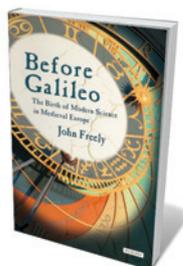
In 2009, Johan Rockström of the Stockholm Resilience Centre and his colleagues set out in *Nature* nine 'planetary boundaries' — numerical limits for processes that affect Earth's capacity to support human life, such as freshwater use and climate change. This lavishly illustrated e-book — with a foreword by former US president Bill Clinton and video clips from photographer Mattias Klum — extends this idea, laying out pressures and tipping points. Paramount among the changes needed, Rockström says, is a big shift in behaviour.



Lost Antarctica: Adventures in a Disappearing Land

James McClintock PALGRAVE MACMILLAN 256 pp. £16.99 (2012)

The sight of 50,000 king penguins on the Crozet Island Archipelago in the early 1980s sparked marine biologist James McClintock's fascination with Antarctic fauna. Now a veteran of the extreme south, McClintock shares the otherworldly wonders unveiled by decades of research. The book is packed with joys, from soft-coral 'trees' that replant themselves to the snoozing Weddell seal, stinking of putrid fish, that the author encountered in a dive hut. Running like a chill current through all is the climate-driven decimation of the ice on which these ecosystems depend.



Before Galileo: The Birth of Modern Science in Medieval Europe

John Freely OVERLOOK PRESS 352 pp. £18.51 (2012)

A thousand years before Galileo, the transmission of knowledge that survived the burning of the ancient Library of Alexandria began. Physicist John Freely traces this "tenuous Ariadne's thread" of classical learning that unspooled from Egypt through Byzantium and the Islamic world, finally emerging as Latin texts. Focusing on the trailblazers through this extraordinary millennium — from Bede, Averroës and al-Khwarizmi to Adelard of Bath, Robert Grosseteste and Roger Bacon — Freely ends with a coda on Copernicus, Kepler, Galileo himself and Newton. Shoulders of giants indeed.



The Scientists: An Epic of Discovery

edited by Andrew Robinson THAMES & HUDSON 304 pp. £24.95 (2012)

The human face of scientific breakthroughs from the sixteenth to the twentieth centuries is spotlighted in this sumptuously illustrated volume. Science writer Andrew Robinson, editing contributions from a stellar team of authors, groups 43 greats into six broad areas: Universe, Earth, Molecules and Matter, Inside the Atom, Life, and Body and Mind. From Alan Turing and Marie Curie to William Harvey and Chandrasekhar Venkata Raman, this is a sampler of the driven, complex, fascinating characters who fomented scientific revolutions.