

Book Reviews

Mary Dobson, *Murderous Contagion: A Human History of Disease* (London: Quercus, 2015), pp. 602, £12.99, paperback, ISBN: 978-1-78206-943-0.

Early on in Mary Dobson's rich and engaging *Murderous Contagion* we encounter Samuel Pepys ruminating on a not-much-considered aspect of the Great Plague of London: '[It] is a wonder what will be the fashion after the plague is done, as to periwigs, for nobody will dare to buy any hair for fear of the infection, that it had been cut off people dead of the plague.' Pepys would surely have loved the internet – a medium that might have been made for his omnivorous curiosity and easily diverted attention – and *Murderous Contagion* is a popular history of disease for the age of connectivity and global exchange.

This is a paperback edition of Dobson's *Disease: The Extraordinary Stories Behind History's Deadliest Killers*, originally published in 2007, and now revised with new chapters on ebola, SARS and MERS. Split into four sections – addressing bacterial, parasitic, viral and lifestyle diseases – it contains thirty chapters, each telling the story of a particular condition. Dobson has picked a broad selection of historically significant diseases, alongside major modern killers and the relatively new category of 'Neglected Tropical Diseases' prevalent in the poorest countries.

If *Murderous Contagion* could be said to have a presiding spirit, it is that of Patrick Manson and his ecological approach to tropical disease. Dobson writes with the understanding that we need to draw on perspectives from many different disciplines (history, literature, archaeology, biomedicine, genetics) if we are to have any chance of grasping the complexity of disease and our responses to it. Her handling of these polyphonic (often mutually antagonistic) bodies of scholarship is admirably lucid, bringing a fresh eye and a vivid narrative touch to some very familiar tales.

A major theme in every chapter is the logic and context of discovery, and the transformations of scientific medicine in the late nineteenth and twentieth centuries are the fulcrum around which most of her stories turn. But Dobson is also seeking, as her subtitle suggests, to write a history of humanity, and in most cases her cast of characters goes well beyond a handful of heroic doctors and scientists. In mapping the shifting burden of disease she draws out some of the major themes in global history: human movement, through trade, war, exploration and imperialism; the political and economic instability provoked by epidemics; the profound variations in attitudes and responses across different national contexts; and the intractably reciprocal facts that it is the marginal who are most vulnerable to disease, and that the stigma of being diseased often pushes them further into the margins.

Dobson is especially good on the unintended consequences of biomedical and scientific interventions – DDT and antibiotics, notoriously, but also the striking possibility that in its 'silent phase' HIV may have been spread by the use of unsterilised needles in administering treatments for trypanosomiasis throughout the 1920s and 1930s. She highlights some of the mysteries that continue to resist a scientific solution: the nature of the 'sweating sickness' that struck Europe in the sixteenth century; the pathogen (or pathogens) behind the encephalitis lethargica epidemic of the early twentieth century; the question of why some polio infections result in severe neurological damage while most do not.

Most revealing, and most moving, are her passages on those who suffered, and those who cared for them in the most demanding of circumstances. Set in an abandoned sugarcane plantation on a bend of the Mississippi, Carville was for many years the only leprosarium in the mainland United States. Established in 1894, it was initially run by the Sisters of Charity of St Vincent de Paul, who pioneered new treatments and new attitudes to leprosy – though their patients were not allowed to marry until 1952, and even then could not vote. From the 1930s one patient, Stanley Stein – known as the Carville Crusader – used *The Star*, Carville's in-house newspaper, to raise international awareness of their plight and to campaign for improvements in their status.

This is, as near as possible, an up-to-the-minute history of disease, and the global picture that emerges from *Murderous Contagion* is unsettling. Dobson highlights the persistent problem of sexually transmitted infections, the growing threat of antibiotic resistance, the challenge of climate change – and, though the book is far from a polemic, she makes an urgent political point. In a deeply unequal world, lack of access to basic sanitation and safe drinking water means that the global poor bear the burden of infectious disease. Vaccines, screening programmes and treatment regimes must, she argues, go hand in hand with a concerted effort to lift the bottom billion out of poverty.

Richard Barnett

Independent scholar, London, UK

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Nick Hopwood, *Haeckel's Embryos: Images, Evolution and Fraud* (Chicago, IL: University of Chicago Press, 2015), pp. viii, 388, £31.50, hardback, ISBN: 978-0-226-04694-5.

The first lecture on embryology I attended as an undergraduate remains vivid in my memory. As he began, the professor took a hen's egg from the right-hand pocket of his lab coat and broke it into a dish on the bench in front of him. A few moments later he produced a day-old chick from his left pocket. It ran along the bench, chirping. How, he asked, does the one become the other? I was transfixed. Thomas Hunt Morgan famously described embryos as 'the most fascinating objects in the world of living beings'. He was not wrong.

To Darwin, the embryo was a 'picture, more or less obscured, of the common parent form of each great class of animals'. This conviction was supported by his belief that the embryos of many vertebrates were, at a certain stage, indistinguishable from one another, even by experts. Ernst Haeckel took up this idea, summed up in a memorable aphorism, 'ontogeny recapitulates phylogeny', and ran with it. In his 1868 text, *Natürliche Schöpfungsgeschichte* (Natural History of Creation) Haeckel published a series of drawings of embryos (turtle, chick, dog and human) to illustrate the principle. The similarities are indeed remarkable. Too remarkable altogether, his critics alleged. A controversy shortly began which was to thunder on, episodically, for more than sixty years, Haeckel being accused of failings ranging from pardonable exaggeration to fraud and forgery. He acknowledged that the images were indeed 'schematic', but defended them as consistent with standard scientific practice.

Through much exemplary work in the Haeckel archive, Hopwood has reconstructed the background and production of the images. He exonerates Haeckel, more or less, from the imputation of deliberate fraud. Nevertheless, the resemblances between different animal