

Book Reviews

Adrian Desmond, *Huxley: the devil's disciple*, London, Michael Joseph, 1994, pp. xvii, 475, illus., £20.00 (0-7181-3641-1).

Ever since Leonard Huxley published his father's *Life and letters* (1900) and P Chalmers Mitchell wrote *Thomas Henry Huxley* (1900), there has been a steady production of Huxley biographies—one a decade, on average. Most of these are cast in the mould of a traditional historiography, hailing Huxley as the courageous, truth-seeking champion of Darwin's theory of evolution by means of natural selection. Houston Peterson entitled his contribution *Huxley: prophet of science* (1932), and both William Irvine and Cyril Bibby, in their respective Huxley hagiographies, similarly surrounded Huxley's head with the halo of Darwinian sainthood.

More recently, Huxley scholarship has begun to follow a different line. Michael Bartholomew, in a 1975 paper, and Mario di Gregorio in his *T. H. Huxley's place in natural science* (1984), pointed out that Huxley entertained serious doubts about the efficacy of natural selection and for several years kept it out of his own work. Others have drawn attention to the fact that during the 1840s and 1850s Huxley was a fierce critic of evolution, who wrote the most savage of the many negative reviews of Robert Chambers' *Vestiges*. Thus a rather different Huxley has emerged, one to whom Darwin's theory was less a scientific truth than a theory with which to fight a broad-fronted battle for social change and self-advancement. The most iconoclastic of these revisionist studies is Adrian Desmond's *Archetypes and ancestors* (1982) in which the dark side of Huxley's character—scheming, opportunistic, no more saintly than his arch-enemy Richard Owen—is highlighted. The Darwinian prophet of truth appears to have been the Machiavelli of the Victorian evolution debate.

The sub-title of this new study of Huxley, *The devil's disciple*, might suggest that

Desmond has continued his iconoclastic line on Huxley, yet this turns out not to be so. Having previously done a demolition job on Huxley's traditional pedestal, Desmond has now put in place a new one. Instead of a truth-hero, a class-hero is made out of Huxley—a man who came from nowhere, and who in spite of major social disadvantages and the bigotry of the ruling Anglican establishment fought his way to the top of Victorian London. Already in *Archetypes and ancestors*, and more so in *The politics of evolution* (1989), Desmond introduced into the historiography of the nineteenth-century evolution debate the factor of British class polarity: evolution was taken on board by the social underdogs because it seemed to underpin their hopes for a break-up of the social *status quo*, whereas the idea was opposed by the establishment for precisely the same reason.

In *Huxley*, Desmond uses this class-model to maximum advantage, constructing a dramatic narrative that shows a proud and pushy "Tom Huxley", rising from "the dockside slums to the presidency of the 'Parliament of Science', the British Association for the advancement of Science", all the way "hacking at the obstructive Anglican edifice". Desmond offers much new detail based on an extensive study of Huxley's correspondence. The story of Huxley's *Rattlesnake* voyage in particular is recounted with riveting close-ups. During the Sydney stopover, Huxley met his wife-to-be Nettie, and throughout the book, Desmond craftily interweaves their personal relationship with the other, more public threads of Huxley's life.

One can argue that Huxley's background was not as disadvantaged as Desmond indicates, and that the Anglican control of English science was not as strangulating. One can also point out that Desmond's racy and gripping style has been produced at the expense of in-depth discussions of both Huxley's palaeontology and of the secondary literature. Like Desmond's (and Moore's)

Darwin (1991), however, this new Huxley biography is a great read.

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Roger French, *William Harvey's natural philosophy*, Cambridge University Press, 1994, pp. xii, 393, £40.00, \$64.95 (0-521-45535-9).

The reception of Harvey's doctrines of the movement of the heart and of the circulation of blood was the result of a complex interaction of intellectual, political and social factors. As French's book shows, Harvey's views were not simply accepted or rejected; they were interpreted—and often misunderstood—in the light of different philosophical and religious ideas. In university faculties and colleges of physicians, in both Catholic and Protestant countries, the defence of tradition, order and stability was often invoked against Harvey. The story was, however, a complex one and it is the merit of French to give a comprehensive and detailed account of the reception of Harvey's discoveries in England and on the Continent. Early reactions in England were somewhat embarrassing to Harvey, who saw his views defended by Fludd, the Rosicrucian, and attacked by Thomas Winston, censor of the London College of Physicians, a position which Harvey himself had occupied. One of the arguments against Harvey often employed by his opponents was that circulation had no practical significance in medicine. As French argues, Harvey made little attempt to meet this criticism, since he considered his discoveries as part of natural philosophy, rather than of medicine. Philosophical issues became immediately associated with Harvey's discoveries. Ent and Glisson played a prominent part in the production of consensus in England. The former's defence of Harvey became part of his fight for mechanical philosophy—which Harvey never subscribed to. Glisson, as French shows, adopted the theory of circulation, but departed from Harvey's view, as he developed it in connection with the notion of active matter and spirit.

In Holland Harvey's discoveries became an integral part of Cartesian medicine, and, as such, they were contentious. In France Riolan championed the anti-Harvey reaction which prevailed both in Paris and Montpellier. Riolan's changing positions on circulation are thoroughly investigated by French up to Riolan's final partial admission of blood circulation.

Both the German and Italian stages are closely investigated by the author, who aims to understand discussions of circulation in the institutional and religious context. French's analysis is, however, not free of unproved assumptions and oversimplifications. For example, he claims that the Protestant Sennert—whom he styles a “fundamentalist” (p. 226)—reformed medicine, “introduced chemistry in its Paracelsian and Protestant form in Wittenberg” (pp. 224–5), and ruled out Greek learning as pagan. Unfortunately, this interpretation is not correct, since Sennert advocated a moderate position in medicine and natural philosophy, as attested by his well-known *De chymicorum cum Aristotelicis et Galenicis consensu ac dissensu*, which makes it clear that he aimed at reconciling chemistry with Aristotelianism and Galenism. Sennert also criticized Paracelsus and adopted some crucial aspects of Aristotelian philosophy.

In his informative study of Marco Aurelio Severino, the Neapolitan physician who supported Harvey's doctrines, French states that “It was undoubtedly because Severino explicitly denied the truth of Aristotle's natural philosophy that he was unable to publish in Italy” (p. 241). It is true that Severino's *Zootomia democritaea* was not published in that country, but his *Vipera pithia* was published in Padua in 1650 and his *Antiperiatias. Hoc est adversus Aristoteleos* . . . was published in Naples in 1655–1659. One has the impression that French overstates the power of religious control in seventeenth-century Catholic countries, which in fact was not as tight as he asserts. After all the anti-Aristotelian philosopher Patrizi was invited to teach in Rome, and Severino himself was employed by the Neapolitan authorities during the plague.