

Book Reviews

Paul Crook, *Darwinism, war and history: the debate over the biology of war from the 'Origin of species' to the First World War*, Cambridge University Press, 1994, pp. xii, 306, £45.00, \$64.95 (hardback 0-521-44465-9), £18.95, \$27.95 (paperback 0-5214 6645-8).

This important book traces “the manifold implications of Darwin’s theories for the debate over war and peace” (p. 192) up to the end of the First World War. It is generally believed that Darwinism was used to legitimize conflict and aggression, within society as well as between societies, and the beneficent effects of war—as a form of the struggle for life—on the quality of the race. But the author emphasizes “the cultural malleability of Darwinism” (p. 31), which could be accommodated to a surprising diversity of users. “In the debate over the ‘biology of war’, as more generally, Darwinism bred a myriad of diverse doctrines, a plurality of connotations. Complex interactions took place between biological and social domains. Biological theories took on different ideological shadings in differing historical climates” (p. 97). The same theory (but we might well wonder if it was really the same) was appealed to in support of opposed ideologies. Although many pacifists opposed biological determinism, they used biological arguments and analogies no less than their adversaries did. Professor Crook stresses the historical importance of what he calls “the discourse of peace biology”, which grew out of a co-operationist interpretation of Darwin’s holistic ecology. It was a strong and multi-faceted tradition, “always adaptive and resilient” (p. 153), which, unlike biological militarism, owed its persistence to its congruency with entrenched moral culture. However, peace apostles did not hesitate to appeal to the verdict of biology when this suited their case. For peace biology itself was not immune from contradictions and from blending facts and values. Nor was it a monolith. It was often a liberal movement, but

not always or necessarily so: Crook succeeds brilliantly in showing that it could be coupled with racism or a defence of capitalism, elitism and middle-class isolationism. It was torn by a tension between a “naturalistic pacifism” and a “methodological disquiet about biological determinism” (p. 62). There was a gulf, the author rightly says, between the free will and optimistic pacifism of those who asserted the primacy of culture in the modern evolution of man and that of the pessimistic and determinist eugenicists who found war was dysgenic precisely because it had become modernized and industrialized. The “submerged ambivalences and discursive tensions” (p. 153) in peace biology are best illustrated in the author’s treatment of the eugenicists’ attitude to war.

It is the book’s greatest merit to show that there were tensions, contradictions and ambiguities in every strand of opinion, whether the “multivalence of crowd theories” (p. 152) or the ambiguous ideological implications of Mendelism (p. 75), the tensions in economic pacifist literature (p. 103), or the discordances in the doctrines of man’s innate aggressiveness, or the frequent confusion between Darwinism and Lamarckism. Pseudo-biology featured on both sides of the propaganda war. The book shows that there is a “perennial interaction between science and social theory” (p. 174). It ends with an even-handed and perceptive discussion of social Darwinism.

Paradoxical though it may seem, the main criticism that can be levelled against this book addresses one of its merits: the lack of comparison with countries outside the English-speaking world. It was a necessary condition for the success of the research that its scope should be restricted in some way. Confining it to English sources has ensured unity and completeness of treatment, and has enabled the author to marshal a host of books and articles and deal concisely with an enormous number of authors (and, what is more, not all as well-known as Charles Darwin or Herbert Spencer),

but it has also involved a narrowing of the perspective. Few subjects more certainly demand an international perspective than war. To mention only a couple of facts that support this remark, let me remind the reader that: (1) as the aggressive interpretation of Darwinism was often presented as a typical German craze, something more should have been said on Germany at least; (2) there were national differences between the schools of social psychology, as crowds were obviously seen differently in different contexts (and the author himself recognizes that “the politico-cultural context was critical”, p. 152).

But these are not so much strictures on this very important book as appeals for a sequel to it. The author seems to be the right person to give his creature a companion (but he must find a copy-editor who really cares about the proper spelling of foreign names and words).

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André Pichot, *Histoire de la notion de vie*, Paris, Gallimard, 1993, pp. 973, FF 89.00 (2-07-073136-7).

This is a formidable volume, both physically and intellectually. Its nearly 1,000 pages of closely printed text are unrelieved by illustrations, and the book as a whole has the weight and dimensions of the average house brick. But for the reader who is willing to take on the task of studying a work of this magnitude and density, the rewards are significant.

Pichot's approach to the history of theories of life is highly philosophical and would not suit the more sociologically minded historian. But within its chosen framework it presents a sweeping and in places highly original analysis of attempts to answer the question, “What is life?”, throughout the period from antiquity to the present. The discussion is organized chronologically, with chapters devoted to major authors, or to groups of authors related in time and outlook.

Pichot's epistemological analysis is interspersed with extensive passages taken from these authors, with about a third of the text overall being comprised of these well-chosen illustrative extracts. What we have, then, is not only a sustained argument from Pichot but also a valuable anthology of related primary materials (translated into French where this is not the original language).

It is impossible in a brief review to do justice to the complexity of Pichot's argument, but one of his central concerns is to examine historical material in a way that will provide the critical tools needed to assist modern biology in developing its own scientifically adequate concept of the specificity of life. This aim leads Pichot to treat familiar historical figures such as Aristotle, René Descartes and Jean-Baptiste Lamarck in unfamiliar ways. That these three individuals are in fact central to Pichot's account, is clear from the titles he gives to his first seven chapters: ‘Before Aristotle’, ‘Aristotle and life’, ‘After Aristotle’, ‘Before Descartes’, ‘Descartes and mechanism’, ‘After Descartes’, ‘Lamarck and biology’.

Of these three central figures, it is Aristotle and Lamarck who emerge as the most important contributors to the conceptualization of life—Aristotle operating within an idealist metaphysic of eternal and unchanging forms and Lamarck within a materialist metaphysic of time-dependent progressions. From this perspective Galen's work represents a retreat from the comprehensiveness of Aristotle's concept of life, with the Galenic “parcellisation” of the body into quasi-autonomous organs and “faculties” undermining the integrity of the Aristotelian *psyché*. Indeed, for Pichot, Galen's notion of the functioning of organs is already machine-like, despite all its vaunted teleology; for, as Georges Canguilhem pointed out long ago, nothing is more teleological than a machine.

Descartes, typically seen as the founder of the mechanistic view of life, is presented by Pichot as being for the most part a mere translator of Galen's physiology into a different idiom, one that Pichot characterizes as “machine-ism” rather than genuine mechanism.