Book Reviews

least partially genetic in origin) should appear with a population frequency far greater than evolutionary theories would permit for conditions so seemingly mal-adaptive (see pp. 130-1). In a subsequent argument that ranges across contemporary theories on the evolution of human sociality and its normal limits, through to discussions of psychopathology, population genetics, game theory, anthropology, sociology and, ultimately psychiatry, Wilson and Cory arrive at the startling conclusion that "neuropathologies of talent" probably possess evolutionary advantages that promote their survival in the population. While these neuropathologies appear, the authors claim, to be (and often are) mismatched to their industrial and post-industrial societies, the advantages conditions like mania or bipolar disorders bring in terms of innovation, creativity, intensity, imagination, ambition and even sexual desire, offset the destructive tendencies that accompany these conditions, such as: self-medication with alcohol and drugs, paranoia, megalomania, and domestic instability. They thus pithily summarize the implications for psychiatry in their penultimate chapter: "It is important that any genetic therapies [should] not assume disease is simply disease. Certain polymorphisms of at least utility are at risk of misguided therapy. Surely other gene systems now notable only as causes of individual disease will come to be seen, in the light of evolutionary epidemiological analysis, as fundamentally salubrious characteristics" (p. 295).

Wilson and Cory's argument is elegant in its simplicity. If their theory is correct, moreover, then it is also easy to see that clinical and cultural perceptions of certain psychiatric diseases would necessarily have to change. The strength of their work is that it does not sink into an unending search for neural structures that might circumscribe normal behaviour and thus explain pathological disorder. Instead, the authors search for genetic aetiologies: hence long and short discussions of Hamilton's Rule, Hardy-Weinberg equilibriums, quasi-Mendelian

genetics, and Hawk/Dove strategies appear with greater frequency than do discussions of the brain and nervous system. This strength, however, also reveals the central weaknesses of the text. Often the links between the many different areas of scientific knowledge are asserted rather than revealed, necessary constructs become black boxes (i.e. reptilian neo-cortex), hypothetical species (i.e. Hawks and Doves) supplement for hard examples, affective states (i.e. ego and empathy) become reified, and the relationship between reductive biological structures (neurotransmitters) and correlative behaviours (affection) assumed obvious and demonstrated. In consequence, like many clinical and scientific works that attempt a general statement, Wilson and Cory's theoretical and empirical treatment, while rich and thoughtful, cannot fully deliver. Thus this work, which, nevertheless, represents a fine attempt at synthesis, may not get the attention it deserves.

> Stephen T Casper, Clarkson University, Potsdam, NY

David Boyd Haycock, Mortal coil: a short history of living longer, New Haven and London, Yale University Press, 2008, pp. xii, 308, illus., £18.99, \$30.00 (hardback 978-0-300-11778-3).

Four centuries ago in western Europe more people died in infancy than at any other age. Those who survived childhood could be expected to live to about today's age of retirement, and a few to eighty or a bit more. Since then death before the age of sixty has become uncommon. The number of centenarians has surged; this year Japan deemed bonuses formerly paid to centenarians no longer affordable. We appear to be on the way to having significant numbers of people live to be 100, even 110, but probably not 120. Judged by an ability to perform physical and mental tasks, old age has receded. This past, projected forward, gives us hope of mentally and physically active years pushing through the eighties for most people.

In every age some branch of learning has imagined much longer lives. Today geneticists and geriatric researchers, and scholars from other fields impressed by their findings, are fashioning their own version of exceedingly long lives, ending at age 150 or even 200. Childhood will remain the same; old age measured by physical capabilities will be compressed; the physical and intellectual attributes of the middle years will be stretched out by decades, even by more than a century.

David Boyd Haycock gives us a history of prolongevity thinking during the last 400 years and of the sources of inspiration for such hopes. Deliberately, without irony, he links the modern expression of this idea, based on science, to past expressions based on the Old Testament and the belief that the patriarchs lived hundreds of years; on hope in the perfectibility of humankind, not just in morality but also in immortality; on the supposed long lives of some individuals who understood secrets about ageing; on the belief that disease would be conquered, leaving people to discover how long their natural lives could be.

Scholars and the curious among the general public will be delighted by this book. Haycock writes engagingly about an intriguing topic, and is always ready to re-seize the reader's attention with a digression or an apt illustration. Indeed historians of science may want to use this book as a text. Haycock knows how to introduce scientists from Bacon, Boyle, Descartes, and Condorcet to Hayflick, Kirkwood, and Walford in ways that fix them in the mind. He knows how to present the serious and still today important parts of their thought even when it is embedded in language that seems merely fantastic, spiritual, credulous, or impenetrable. Undergraduates will discover useful things about how science proceeds when, armed by little more than curiosity, scientists probe the unknown.

In the early parts of this account, prolongevists experimented mostly on themselves. In the twentieth century they began to experiment on volunteers, some from their laboratories and some from the credulous public. To date, their work has had no specifiable effect on human longevity, except for maiming some lives and cutting others short. All the while prolongevists went ahead, always, it seems, lacking any sense of the history of the idea. Until now, when an historian sympathetic to these ideas has arrived.

Major steps forward in knowledge engender confidence that ageing can be understood and manipulated. Most of the time science demands that we sacrifice for these longer lives, for example, not just watching our diet but eating only a fraction of the recommended intake. The persuasive sign that something is afoot will probably lie in steps that extend cancer treatment from management to reversal, cure, or prevention. Haycock is not a sceptic; for him super long lives of perhaps 200 years are a plausible expectation that will be delivered by science now in progress.

> James C Riley, Indiana University

Christopher E Forth and Ana Carden-Coyne (eds), *Cultures of the abdomen: diet, digestion, and fat in the modern world,* Basingstoke and New York, Palgrave Macmillan, 2005, pp. vi, 264, £40.00 (hardback 1-4039-6521-8).

Christopher E Forth and Ana Carden-Coyne rightly assert in their introduction to this edited edition that the abdomen is an area of the body left relatively unexplored by historians of medicine. We have little in the way of a full historiography of matters related to digestion, diet and gastric illness. Yet, as the editors argue, this gaping hole in the literature does not reflect the historical importance placed upon that particular region of the body and its component organs, as well as the significance of the complex relationship between the digestive system and far wider social, cultural and medical discourse. It is