## Book Reviews

Nelly Tsouyopoulos, Asklepios und die Philosophen: Paradigmawechsel in der Medizin im 19. Jahrhundert, ed. Claudia Wiesemann, Barbara Bröker and Sabine Rogge, Medizin und Philosophie, Band 2, Stuttgart-Bad Cannstatt, frommann-holzboog, 2008, pp. 272, €48.00 (paperback 978-3-7728-1635-2).

This posthumously edited monograph of the Münster philosopher and historian of medicine Nelly Tsouyopoulos (1930–2005) examines one of the key developments in western medicine: the change in the early nineteenth century from humoral theory to the cell theory of the human body. Tsouyopoulos conceptualizes this important change as a paradigm shift in the sense of Thomas Kuhn and also draws upon Michel Foucault's notion of discontinuities in history and upon Ludwik Fleck's "thought collectives" and their different "thought styles".

Building on her earlier studies on Brunonianism and Romantic medicine, in particular on the influence of the Brownian physician Andreas Röschlaub (1768–1835), the author argues that John Brown's system in the late eighteenth century seriously shook the old paradigm by defining life as an organism's power to defend itself against stimuli from the outside. Brunonianism thus overcame the traditional mind-body dualism that had characterized Galenist humoral pathology as well as the medical systems of the Enlightenment period, such as Herman Boerhaave's iatromechanism and Georg Ernst Stahl's animism. Crucial (in the author's view) for the acceptance of the new Brownian understanding of the body, especially in Germany, were Immanuel Kant's criticisms of Cartesian dualism and Friedrich Wilhelm Joseph Schelling's distinction between the defensive and the self-reproductive powers of the living organism. Another key factor in

bringing about the paradigm shift was the socalled "identity principle", i.e. the view. forcefully argued by the Paris clinician François Joseph Victor Broussais and the philosopher Auguste Comte, that there was no ontological difference between life processes in health and disease, or between physiology and pathology. This became the credo of the new Physiological Medicine, which inspired Rudolf Virchow in the 1850s to postulate that cells were the loci and smallest units of life in the body. Moreover, following on from Schelling's interpretation of the humours as a second, inner environment (in addition to the outer environment of Brunonianism), Claude Bernard developed in the late 1850s and 1860s his concept of the "milieu intérieur" as a regulating mediator between the outside world and the organism's cells. This concept, according to Tsouyopoulos, completed the new paradigm.

With her final work Tsouyopoulos has given us an impressive history of ideas, a synthesis of history of medicine and philosophy that has become all too rare nowadays. In the light of some recent secondary literature that has not been considered in this work, such as Hubert Steinke's Irritating experiments: Haller's concept and the European controversy on irritability and sensibility, 1750-90 (Rodopi, 2005) and this reviewer's Drugs on trial: experimental pharmacology and therapeutic innovation in the eighteenth century (Rodopi, 1999), readers might now be inclined to see incipient changes towards modern medicine somewhat earlier in the eighteenth century than Tsouyopoulos did. Nevertheless, she has bequeathed a powerful narrative and historical interpretation that deserves attention beyond a German readership. It should inspire today's historians of medicine to exploit fully the potential of intellectual history and to pay close attention

to the philosophical underpinnings of medical change.

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L S Jacyna, Medicine and modernism: a biography of Sir Henry Head, Science and Culture in the Nineteenth Century Series, London, Pickering & Chatto, 2008, pp. viii, 353, £60.00, \$99.00 (hardback 978-1-85196-907-4).

This is a most interesting and meticulously told biography of the eminent late Victorian and Edwardian English neurologist, Henry Head (1861-1940). Head was a fascinating and in some ways provocative character in the promotion of scientific medicine, but there has been no previous biography or, indeed, proper appreciation of the full range of his life, which was devoted to literature as well as medicine and to a moving relationship with the woman. Ruth Mayhew, who was to be his wife. It is indeed possible, as Stephen Jacyna suggests, that Head's biography gives us more insight than any other comparable "life" into the personal relationship between devotion to science, a medical career and the private world of love of beauty and idealization of a partner who sustained and enriched the latter while, it scarcely needs saying, she eased the arrangements for the former. The biography will, I think, captivate doctors, medical historians and anyone interested in the shift from Victorian to twentieth-century British intellectual culture.

At the centre of the work is the exceptional archive of letters and "Rag Books", or personal books for literary quotations and reflections on all manner of subjects, which Jacyna has drawn on. He has self-consciously shaped what he has to say as a close and veridical narrative derived from the archive and other sources of letters. He has very well organized the material, choosing not to tell a strictly chronological story (though he gradually unfolds the life before the reader)

but arranging chapters thematically, beginning with childhood, then proceeding through "the making of a neurologist" (with significant periods in the universities of Halle and Prague), the establishment of a career as both Harley Street consultant and doctor in "the London", the London Hospital in the city's East End, and his constant struggle to sustain a research interest in nervous physiology, driven by an almost religious ideal of science ("fire from heaven", in Head's words, quoted p. 101). The account of Head's notorious experiment on himself, assisted by W H R Rivers, to study the functional basis of sensation, is extremely clear. Only then do chapters turn to his very extended friendship with Ruth Mayhew, their marriage, the world war and the European world of literature, the theatre and the arts, including Head's own poetry, which was utterly central to their individual lives and to the intimacy of the couple. Finally, the biography has to conclude with Head's Parkinson's disease which touched and rapidly came to dominate the last twenty years of their life together. Head completed his magnum opus, Aphasia and kindred disorders (1926) just before the disease made such work, and indeed any work, impossible. Jacyna's style of writing and scholarship, which shapes the biography closely around the factual record, works well as this record is so rich and evocative of its authors' personal world. His manner deals with emotive matters like Head's anti-Semitism (in some contexts) and his illness with considered calmness. Head appears a brilliant and enormously dedicated scientist, a tenacious modernizer in medicine, an unquestioning elitist in social life, a maker of both professional friends and enemies; and we see a private man enormously informed about the arts and devoted to their cultivation. humanized through a remarkable relationship. All the complexities and contradictions of an engrossing if in ways difficult and arrogant Englishman emerge.

If I have reservations, they are these. Firstly, the biographer is reluctant to make judgments which would help situate Head in