should have been labelled more clearly. But these are minor quibbles compared with the quality of what is here presented.

Following on the bones and the muscles, the theme of this volume is the anatomy of the veins, arteries and nerves. Galen had prided himself on his work on the nervous system, as Vesalius somewhat reluctantly acknowledges. He had made some spectacular discoveries, and had conducted a whole range of experiments to see the effects of ligating or cutting the spinal cord at various levels. He had looked carefully at the brains of oxen, taking up again a programme of research first instituted centuries before by the Alexandrian anatomist Erasistratus. But neither Galen nor Vesalius, working without the benefit of modern technology, was wholly accurate or wholly consistent in what he described, and was also bound to miss much. Indeed, it is remarkable how much both managed to get right, even if this was less than in their anatomy of bones and muscles. And, of course, both still viewed the veins, arteries and nerves as three almost separate systems, with different functions. However modern Vesalius might appear in some of his exposition, it must not be forgotten that he did not believe in the circulation of the blood.

There are also signs of haste. Vesalius from now on takes over more and more from Galen, while at the same time attacking those, like Corti, who adhered to every detail of Galen's exposition. He himself cites many of Galen's works, not least *Anatomical procedures* and *On the opinions of Hippocrates and Plato*, but not, as far as I can tell, *On movements hard to explain*, a treatise in which Galen pondered some of the consequences of his anatomical explanations. The reason was probably that this medieval Latin translation was now regarded by the new humanists, of whom Vesalius was one, as belonging to the *Spuria*, and hence to be disregarded in any discussion. Vesalius' omission is unfortunate, for many of the changes Vesalius introduced into the 1555 edition of this book also relate to similar questions that Galen had himself raised in this little tract.

Vesalius' ambivalence towards his predecessor becomes more apparent as the book progresses. His attitude towards Galen's errors becomes harder, yet at the same time he came to depend more and more on what Galen had achieved. A few contemporaries were to accuse Vesalius of impiety and arrogance, but there were also others, Gemusaeus and Matthioli among them, who acknowledged on first reading the *Fabrica* that Vesalius, like his master Sylvius, was a modern Galenist.

Congratulations are once more in order at the completion of one more stage in this great project.

Vivian Nutton,
The Wellcome Trust Centre for
the History of Medicine at UCL

Elisabeth Hsu (ed.), *Innovation in Chinese medicine*, Needham Research Institute Series, No. 3, Cambridge University Press, 2001, pp. xv, 426. £55.00, US$80.00 (hardback 0-521-80068-4)

Innovation in Chinese medicine is the most significant collection of works in English to date in the study of Chinese medical history. Deriving from a 1995 workshop in memory of Lu Gwei-djen (1904–91), who for years was Joseph Needham's principal collaborator on the renowned *Science and Civilisation in China* project, this book of essays by twelve scholars, including several major medical historians, offers readers the chance to explore a broad range of current research in fields related to Chinese medicine.

This book is divided into six parts, each comprising two articles on a related theme. The articles are arranged in chronological order and the themes include *mai* 脈 (channel; vessel; vessel-pulse) and *qi* 氣 in the Western Han, correlative cosmologies, dietetics and pharmacotherapy, the canons revisited in Late Imperial China, medical case histories, and medical rationale in the People's Republic.

One of the innovative notions in this book is to evaluate the ways that *mai* and *qi* were conceptualized as two of the central concepts in

ancient Chinese medical reasoning. Vivienne Lo's survey of recently-unearthed medical manuscripts from Mawangdui (Hunan) and Zhangjiashan (Hubei) reveals that later acumoxa-related theories were indebted to *qi* manipulation in the literature of sexual-cultivation, and also to acupoints represented in the metaphorical language of landscape in related literature. These ideas present distinctive views of the body in early China: one focuses on visual features; the other displays a body landscape mirroring natural topography. Lo's study broadens current views on the early development of acumoxa therapy in the new light of the culture of "nurturing life" (*yangsheng* 養生), i.e., "those techniques broadly aimed at physical cultivation and longevity which formed a part of élite culture during the Western Han period" (p. 21). Meanwhile, Elisabeth Hsu's exploration of "pulse diagnostics" is rather concentrated on an élite physician's twenty-five medical case histories in the second century BCE.

Whereas Hsu's study is supported by the early archetype of medical case histories, Christopher Cullen interestingly proposes that *yi'an* 醫案 as a "new" type of this genre with clearer origins and purposes, was in fact an innovation of the Ming (1368–1644). Not only the number of *yi'an* increased steadily since then. Its compilation also appeared unique—Cullen suggests that *yi'an* may better be comprehended as "case statements" rather than "case histories" because of the structural resemblance to legal case statements. Bridie Andrews indicates further that the genre of case records as clinical narratives was later standardized and modernized in the Republican period (twentieth century) when Chinese medicine encountered challenges from western biomedicine.

The form of medical case histories is certainly not the only aspect of Chinese medicine that has changed in the modern era. Both medical discourses and medical practices have been drastically transformed, partly owing to the newly built government's interventions after 1949. Readers will glean very different perspectives on modern Chinese medicine, the "medicine of revolution" in the 1950s and the "medicine of plurality and synthesis" in the 1990s, from chapters contributed by Kim Taylor and Volker Scheid respectively.

Another innovation that deserves attention is the rise of new medical traditions in Late Imperial China. Marta Hanson demonstrates that the "invention" of the southern medical tradition, *wenbing* 溫病 (warm-factor disorders)—in opposition to the old northern *shanghan* 傷寒 (cold-damage disorders) tradition—was inspired by the reinterpretation of old canons together with regionalism. Likewise, Georges Métailié attempts to prove that one innovative achievement of Li Shizhen's *Bencao gangmu* 本草綱目 (1596 edition) was his re-classification of the entire *materia medica* according to a new logic largely motivated by Confucian *gewu* 格物 (investigation of things) as "a method of observation of the natural world from a moral perspective" (p. 224). Such a naturalistic view of observing "things" stands in contrast to the magico-religious views of iatromancy surveyed by Donald Harper, and also to that of medical numerology discussed by Catherine Despeux.

In general, this book is a valuable collection of case studies of the pathology, aetiology, diagnostics, dietary therapy, drug therapy and medical policies at certain times and places during the long course of Chinese history. Because of the extensive range of topics discussed and the number of technical terms introduced, Elisabeth Hsu's lucid introductions to each chapter provide essential guidelines, especially for readers outside the field of Chinese medical history.

Hsiu-fen Chen,
National Chengchi University,
Taipei, Taiwan

Charlotte A Roberts, Mary E Lewis, and **K Manchester** (eds), *The past and present of leprosy: archaeological, historical, palaeopathological and clinical approaches. Proceedings of the International Congress on the Evolution and Palaeoepidemiology of the*