advises against including the snail among winged creatures suggests more than it being just an anomaly. The subsequent list of deliberately unpleasant creatures—at least to a citizen of the Roman Empire—only reinforces the point that Galen was writing both a practical manual and a work that could hold its reader through a varied style. Such variety is illustrated by scatological anecdotes (pp. 88–9) and commentaries on classical texts (p. 64). It is surely this literary ability that is the key to how Galen was able to "out-gun" his critics rather than any solution he provided to the "problem of classification" (p. xxi).

Any translator of Galen is in a dilemma as to who will read about ancient medical theorizing. The general reader might shy away from too much unfamiliar detail, whilst the classicist will demand precision. And here lies the rub: a treatise based around an outmoded science will necessarily resist attempts at a flowing translation. It is therefore perhaps not surprising that the first English translation of Galen did not appear until 1916 and then with a caveat about the attempt. Owen Powell discusses all this in his introduction, but, although he states that occasional transliteration is necessary, considerable awkwardness is apparent in such versions as "pottery-skinned animals" (p. 32), "stomachos" (p. 35) and "Strouthian apples" (p. 89) which, with a little adjustment, could have been avoided. Otherwise the translation, which follows the Greek text prepared by Georg Helmreich for the Corpus Medicorum Graecorum, is accurate.

As a physician himself, Powell approaches the text from a practical medical angle. This lends itself to some interesting nosography, for example on elephantiasis (p. 171) and jaundice (p. 178). On the other hand, the culinary side of the work can be brushed aside. Hemp seeds (p. 3) are still very much employed as a food, particularly in sweetmeats as Galen says, whilst poppy seeds (p. 3) are more than just embellishments, not only in Roman cooking with *laterculi* (Plaut. *Poen.* 325–6) but also in modern Austrian cooking with *Mohnstrudel*. The medical angle also results in glosses that are extraneous or too lengthy: for instance there is no

need to explain (p. 176) that Great Alexandria is the city in Egypt. Powell can jar with his comparisons, and the discussion about the language consciousness of the Greek élite at the time of Galen is a case in point: when Galen examines words for their precise meanings, he is not engaged in an equivalent of the recent debate between *katharevousa* and demotic; instead he is searching for linguistic precision to help in the reading earlier texts and for debating with intellectual rivals. A reference to Robert Edlow's excellent *Galen on language and ambiguity* (Leiden, 1977) would have been useful here.

From a relative dearth a few years ago, the growing number of English versions of Galen can only be welcomed. If some translations such as this book treat works already covered, this at least allows for a comparison of translation techniques and affords suggestions as to how to tackle other such texts in the future. And even if his scientific methodology may sometimes elicit a smile, the sociological and cultural ideas that Galen conveys have enormous value for any study of the Roman world at the apogee of its power.

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Andreas Vesalius, On the fabric of the human body. Book III: The veins and arteries. Book IV: The nerves, a translation of De humani corporis fabrica libri septem by William Frank Richardson, in collaboration with John Burd Carman, Novato, CA, Norman Publishing, 2002, pp. xxxiv, 286, illus., US\$250.00 (hardback 0-930405-83-8).

This great scholarly enterprise has now passed half-way, with this translation of Books 3 and 4 of Vesalius' *Fabrica*. The quality of translation, layout and printing remains as high as ever, although, perhaps inevitably, the annotation appears less full than before. Some of Vesalius' opponents can be identified through his rhetoric, and a few more of his borrowings

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.

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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.

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