

## Book Reviews

devote so much of the text to initially amusing but gratuitous and eventually tedious recitations of what the author regards as bizarre therapeutic agents. We hear far too much about such remedies as crocodile dung, dried earthworms, and mummy powder. The overall effect is to trivialize the question why, for example, a practice like bloodletting persisted in use for so long. The reader is invited to smile at past ignorance more than to ask what made such therapies—odd to our eyes—meaningful to healers and sufferers alike.

*A history of medicine* may well entertain students, but it is unlikely to bring them the deeper and more lasting exhilaration of historical understanding. Despite their shortcomings, Andrew Wear's edited collection *Medicine in society* (1991) and even Erwin Ackerknecht's *Short history of medicine* (1955; revised edition 1968) offer much sturdier narrative frameworks upon which instructors and students can lean.

John Harley Warner, Yale University

MARQUE-LUISA MIRINGOFF, *The social costs of genetic welfare*, New Brunswick, NJ, Rutgers University Press, 1991, pp. xvii, 210, \$35.00 (hardback, 0-8135-1706-0), \$12.95 (paperback, 0-8135-1707-9).

The New Genetics is very topical. Considerable resources are being expended on a project to map the genetic structure that makes us what we are and the technological achievements seem to increase day by day. But in practical terms, what the technology has produced is not the ability to change human genetic material by sophisticated intervention, but by the rather more basic, and old-fashioned, technique of removing "impaired" material from the genetic pool. This latter approach has become possible as the ability to identify certain gene carriers has improved: this leads to the possibility of either selective abortion or persuading against reproduction. For example, it is now possible to screen a population for cystic fibrosis gene carriers, identify the one in two hundred who carry the gene, and advise them that if they reproduce with someone with a similar genetic make-up one in four of their children is likely to have the disease. But should this be done? And at what economic, psychological and social cost? And if for cystic fibrosis, what about other diseases? These are the real dilemmas of the new genetics.

But there is another strand to examining the psychosocial implications of the new genetics and that is the literature—mainly popular—which talks wildly of the possibility of engineering our own futures. This book belongs to that genre. It ignores virtually completely the current problems associated with the possibilities of genetic screening and instead addresses hypothetical futures. But as it deals with speculation it is rather light on evidence; indeed, the book's idea of "evidence" seems to be to quote someone else's opinions. For example, a certain Linda Bullard is quoted approvingly, "If the present trend continues, genetic engineering will soon permeate every facet of human activity. . .". Wow! To which the author adds "Few doubt the momentous changes that are to come". Few? Do not imagine for a moment that this claim—and hundreds like them in the book—is supported by a shred of evidence. This is exclusively argument by hearsay: if enough people write about it and cite each other it must be true.

The book is an embarrassment to those social scientists concerned to develop a proper research basis for the social impact of the new genetics. Perhaps you might like some science fiction written in the style of the *Reader's Digest*, but you will learn nothing about the social aspects of the New Genetics from this book.

David Armstrong, Guy's Hospital, London

ADA ROMAINE-DAVIS, *John Gibbon and his heart-lung machine*, Philadelphia, University of Pennsylvania Press, 1992, pp. xxii, 251, illus., £35.00 (0-8122-3073-6).

Here is an account of the inventor as great man that contains much to interest more sociologically minded historians of technology and medicine. Ada Romaine-Davis seeks her insights into the invention of the machine that became the basis of modern cardiac surgery largely in the character and immediate, often family, circumstances of its inventor, the thoracic surgeon John Gibbon. The

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dust jacket accurately summarizes the main argument of the book: Gibbon was a “stubborn, persevering, single-minded genius, whose determination . . . resulted in the one thing essential for sustained progress in heart surgery”. Romaine-Davis’ chronological account, beginning with Gibbon’s birth and early years, culminates in the first successful use of his pump oxygenator on a human patient in 1953. The book does not end there. Several topics which might have been expected to amplify her account of the machine’s development are rather curiously added on at the end. These include, for example, a chapter on ‘Support for medical research, 1930–1950’. These short chapters do not, by and large, make up for the relative neglect of matters financial and institutional elsewhere in the book. However, Romaine-Davis’ meticulously detailed style provides readers who may not find her analysis to their liking with some fascinating material. There is an account, for example, by Gibbon’s wife, who assisted him throughout the early years, of the daily routine of the laboratory in the 1930s. The work entailed endless animal experiments. (Later in the book the author provides a chapter entitled ‘In support of animal research’.) We also learn something of the collaboration with IBM, who provided a team of engineers to build Gibbon’s first machines, and, in passing, of F. D. Dodrill’s team in Detroit who were similarly assisted by engineers from General Motors. This led one visitor to remark that Gibbon’s machine “looked a little like a computer, and the machine in Detroit like a car motor”. There is a wealth of technical detail in this account but Gibbon’s approach is not fully contextualized amongst those of others working on the same problem, some of whom reached quite different solutions (notably controlled hypothermia). Overall, the book leads one to conclude that the relationship between biography and the history of a technology is, at best, a tangential one.

Ghislaine Lawrence, The Science Museum, London

GERRIT BOS (ed.), *Qustā Ibn Lūqā’s medical regime for the pilgrims to Mecca: the Risāla fi tadbīr safar al-ḥajj*, Islamic Philosophy, Theology and Science, texts and Studies, vol. 11, Leiden and New York, E. J. Brill, 1992. pp. 184, Gld 100.00, \$57.25 (90–04–09541–1).

Gerrit Bos has produced an excellent edition, translation and detailed commentary on the treatise of Qustā ibn Lūqā (c. 820–912 AD) on medical problems and precautions to be taken by Muslim pilgrims to Mecca. Bos has supplied an introduction, including a brief discussion of the author and the genre of the “health guides for the traveller”, and Arabic and English indices of terms and names and glossary of *materia medica*.

The thrust of Bos’s argument, substantiated in the opinion of the present writer, is that Ibn Lūqā was familiar with Hippocrates and Galen and derived significant portions of his material, especially the discussion of the parasite *dracunculus medinensis* (the guinea worm), from the Byzantine Paul of Aegina, with whom Rhazes (d. 925) and other Arab physicians were conversant. If the translation of Greek texts into Arabic, especially from the ninth century, allowed Islamic medical writers direct access to Galenic medicine, Ibn Lūqā’s treatise exemplifies a less direct method of transfer.

Ibn Lūqā suggests the traveller needs a general knowledge of a regimen for “resting, eating, drinking, sleeping and sexual intercourse”, of types of fatigue and their cures, of diseases caused by “the winds” and their cures, and of vermin and their bites. The pilgrim to Mecca in particular needs knowledge of the water and improvement of contaminated water, of “expedients” to quench thirst, of “prophylaxis against . . . *dracunculus medinensis* and haemorrhoids”, and of snakes and snake bites (p. 19).

In a treatise ostensibly dealing with Hijazi *materia medica*, specifically Hijazi medical phenomena are few, however. Ibn Lūqā characterizes only the guinea worm as especially associated with the region. Unmentioned is the water of the Zamzam well in Mecca, which the fourth Shi‘i Iman Zayn al-‘Abidin (d. 712 or 713) was said to have described as useful for pains in the spleen,<sup>1</sup> or

<sup>1</sup> *Islamic Medical Wisdom. The Tibb al-A‘imma*, Batool Ispahany (transl.), Andrew J. Newman (ed.), London, The Muhammadi Trust, 1991, p. 25.