

separate chapters, and the data presented there are made the basis for further analysis of the social, political and economic context, medical education, and needs and problems which remain for future programmes to address. While conceding the record of improvement in all the countries surveyed, Stephen argues that decisive progress may realistically be expected only when attention is focused on basic health problems, as well as on such underlying factors as poverty and illiteracy. As matters currently stand, many factors combine to undermine commitment to such priorities: among these are rapid population growth and urban expansion, political considerations, the drain of military spending, spiralling health and medical costs, fascination with high-tech medicine and sophisticated high-profile hospitals, and inappropriate medical education and emigration of trained personnel.

While acknowledging the dedicated labours of innumerable skilled physicians and health workers across the Arab world, the book is especially critical of medical and health care as delivered to the patient. For example, community participation is encouraged among peasants accustomed to domination by local vested interests, immunization programmes requiring long-term constant refrigeration facilities are launched in areas without electricity, powerful prescription drugs are grossly misrepresented and often dispensed by untrained clerks, patients are often treated by expatriates with whom they cannot communicate. Repeatedly highlighted is the futility of providing a country with a costly urban-based hospital network and medical profession, when most of that nation's people are peasants living in agrarian hinterlands poorly linked to urban centres. All of these difficulties are well known, and Stephen concludes that it is not a lack of knowledge or information that obstructs real progress toward the Alma Ata goal, but rather the lack of political will to formulate a socio-economic order aiming for equality both within society and between nations (p. 290).

Though not a historical study, Stephen's work is a mine of information on all aspects of the history of medical and health care in the contemporary Arab world. Data have been collected from a wide range of published sources, and much additional information comes from his own field work between 1981 and 1988, and so is here available for the first time. A thorough index would have rendered the rich and varied contents of this book far more accessible (the 3½-page index provided is woefully inadequate), but researchers on the history of medicine in the modern Arab world will nevertheless find this work a very useful research tool.

Readers must bear in mind, however, that the author's field work, as described in his preface, was in fact very limited—no more than two or three weeks in any one country visited. This must surely be insufficient to establish the case for the criticisms he advances in his final chapters, and to some extent his discussion and source material refer to problems of the Third World generally, as opposed to the situation in specific Arab countries. In some cases it is also unclear how the available data can and should be interpreted. As Stephen concedes in his concluding summary (p. 289), statistics lend themselves to image-making and allow for the creation of favourable impressions which seem entirely credible, until first-hand observation of the situation in the field reveals them to be entirely illusory. The truth of the matter is that it is mistaken to view statistics as mere "raw" data, when at practically every level through which such information passes it is very well known that "results" may have a heavy impact on personal careers, the future of favoured programmes, and the image of the regime and nation both at home and abroad. In sum, while data may not be in short supply, there most certainly is a problem of information and knowledge where the interpretation of that data is concerned. Indeed, no small part of the value of Stephen's work lies in its framework for further discussion of precisely such issues as these.

Lawrence I. Conrad, Wellcome Institute

Tractatus simplex de cortice peruuiano: A plain treatise on the Peruvian bark ("The Stanitz Manuscript"): a late seventeenth or early eighteenth century anonymous manuscript account of the Jesuits' bark published in its original Latin text with a translation, introduction, and notes by Saul Jarcho, MD, Boston, The Francis A. Countway Library of Medicine, 1992, pp. vii, 116, illus., \$19.00 (0-88135-176-8).

With this careful edition and translation of a Latin manuscript on the Peruvian bark, now in private possession, Jarcho provides a source that is more relevant to the history of pharmacology

than to the traditional problems in the historiography of its subject. The text, which (as the editor shows) probably derives from medical teaching at Naples around the turn of the seventeenth to the eighteenth century, sheds little new light on the old controversial question of the bark's first introduction into European medicine. Obviously relying on Sebastiano Bado's *Anastasis corticis peruviae* (1663), it repeats the legendary story of the wife of the Spanish viceroy of Peru, the Countess of Chinchon, who is cured from a tertian fever by taking the bark, and gives 1640 as the date of this event. It also displays the contemporary confusion over the drug's botanical origin. Of the four chapters of the manuscript, dealing with the "history", "property or power", correct therapeutic use, and "preparation and administration" of the Peruvian bark, it is chiefly the second that deserves historical attention, because it discusses in detail seventeenth-century theories of the drug's mode of action.

The anonymous author's uncompromising rejection of explanations by Galenic primary qualities (heat and dryness, or—on the contrary—coldness) as well as concepts of occult, antidotal properties is remarkable. Instead, he critically reviews those contemporary theories, which—like that of Thomas Willis—saw the "particles" of the bark interacting with the "fermentations" in the blood, that were thought to cause intermittent and other fevers. Along these lines he develops a theory of his own, which is claimed to rest on clinical observation, but actually is highly speculative. Of interest also is the author's sceptical attitude towards efforts in experimental pharmacology. He questions the clinical transferability of *in vitro* experiments with the bark on freshly drawn animal blood, as described by Jacques Minot (1691), and he similarly doubts the significance of intravenous injections of substances in animals, such as those performed by Giorgio Baglivi.

As recent research of this reviewer has shown, attempts to replace traditional Galenic explanations by new theories, which were based upon observation, experiments, and speculation, also characterized late seventeenth- and eighteenth-century works on opium. The manuscript edited by Jarcho thus seems to reflect—and partly to represent—a more general, progressive tendency in pharmacology around 1700. Apart from such relevance of the text itself, the editor's introduction and annotations are a useful guide to the early primary sources on the Peruvian bark. As for the secondary literature, it is only striking that reference is made to M. L. Duran-Reynals' not always reliable *The fever bark tree* (1946), whereas the critical study of Jaime Jaramillo-Arango (*J. Linn. Soc., Botany*, 1949, 53: 272–309) remains unmentioned.

Andreas-Holger Maehle, Wellcome Institute

JOHN M. RIDDLE, *Quid pro quo: studies in the history of drugs*, Variorum Collected Studies series, Aldershot, Variorum, 1992, pp. xii, 316, £45.00 (0–86078–319–7).

Without the subtitle the reader might excitedly imagine that we have here a monograph on drug substitutes, a desideratum which Professor John Riddle is eminently qualified to provide, but there can be little disappointment in the fact that the volume actually represents a collection of 14 articles, published in the period 1964–1987, to which has been added a previously unprinted paper on 'Methodology of historical drug research'. There is no continuous pagination and errors in the originals, such as the failure to insert Greek names in paper V, remain uncorrected. The author's training in biology, classical history, and pharmacy, which had proved so fruitful in *Dioscorides on pharmacy and medicine* (1985), stamps these articles with an authentic concern for historical research, a pragmatic interest in the efficacy of drugs, and a healthy awareness of the problems of nomenclature, which will render them long indispensable for students of medieval medicine.

Although printed in the order of their first publication, the studies presented here fall thematically into a number of groups. Three (I, II, V) chart the confusion of the aromatic stimulants amber and ambergris, and their appearance amongst the "wonder drugs" of early medieval Europe which were imported from the East as part of an active trade, being more or less unknown to Antiquity, and which also included zedoary, camphor and galingale. Two studies (III, VIII) are concerned with lapidaries (616 MSS recorded) and lithotherapy with a special discussion of Albertus Magnus's *De mineralibus* (c. 1250) and the contribution of his own experience, which admirably complements Dorothy Wyckoff's translation and commentary of 1967. Dioscorides and his influence form the