women. Each has made crucial contributions. Dame Cicely Saunders, if anyone, is entitled to write about 'The evolution of hospices' because she is certainly the most important single figure in their recent evolution. Instead, she rambles on with a few not very well-chosen words which are a mockery of her powerful incisive writing on this subject elsewhere. Next, Jennifer Beinart, who has written brilliantly on obstetric pain, writes instead on the growth of treatment of intractable pain. Her after-dinner chapter appears to be based on after-dinner chats with John Lloyd. It is not explained why John Lloyd, who is in rude health and very interesting, should not write on the subject himself. Last of the three, Wendy Savage, an obstetrician of considerable importance, writes a chapter entitled 'The management of obstetric pain', instead of Dr Beinart. Needless to say, Mrs Savage writes that the idea of management by other people of a very personal experience is anathema to her. I completely agree with her, but her chapter is at the same time irrelevant and excellent.

I can hardly bear to comment on the other chapters. There is a certain humour in Helen King's, enticingly titled 'The early anodynes: pain in the ancient world'. One has a feeling that she was press-ganged into writing about pains where we do not understand what the ancients were talking about, and nostrums whose contents are unknown, given in unknown dosages, and of unknown efficacy.

There is no doubt that a serious and fascinating book could be written with this title and with these chapter headings. This is not that book. Even these authors could write such a book, but they didn't.

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MARIS A. VINOVSKIS, An "epidemic" of adolescent pregnancy? Some historical and policy considerations. New York and Oxford, Oxford University Press, 1988, 8vo, pp. xix, 284, £22.50.

This book will be of more interest to those concerned with the process of formulating policy in the United States than to historians. It is a collection of essays dealing with the problems of designing, implementing, and evaluating programmes for dealing with adolescent pregnancy. The detailed analysis of the groups involved in federal policy formation is leavened to an extent by a cursory attempt to put adolescent pregnancy in historical perspective. The book does not, however, address the wider issues of the experience of sexuality that the topic raises. For example, although there is a chapter on the young fathers, most of the essays discuss policies designed for "adolescents", without noticing that it is young women who are to be monitored and whose behaviour is to be policed. Vinovskis ignores this point in his discussion of the parental-notification controversy. Since the proponents of notification aimed to ensure that parents were informed when a minor was provided with a prescription birth control drug or device, it is clear that it was the privacy of girls that would be invaded, while boys could still freely purchase non-prescription condoms. Here the historical insight that Vinovskis claims is so valuable in putting current preoccupations into perspective eludes him. Had notification been implemented, it would have continued to uphold the double standard in social policy which feminists have always attacked, most notably in the campaign against the Contagious Diseases Acts in Victorian England.

The book makes a plea for more and better input into public policy by social scientists. The problem is that policy makers are likely to be more concerned with remaining in office than in learning the lessons that history might offer.

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JOHANNES BÜTTNER and CHRISTA HABRICH, Roots of clinical chemistry. A guide through the Historical Exhibition on the occasion of the XIII International Congress of Clinical Chemistry 1987, The Hague, The Netherlands June 28–July 3, 1987, Darmstadt, GIT Verlag, 1987, 4to, pp. 158, illus., [no price stated].

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Book Reviews

Those who attended the International Congress on Clinical Chemistry at The Hague in 1987 saw an exhibition illustrating the development of the subject during the last four centuries. We who missed that opportunity are now more than adequately compensated by this book in which Professor Büttner and Dr Habrich describe all the exhibits, illustrate many of them, and add an extensive commentary.

The eight chapters, arranged in chronological order, correspond to the exhibition’s showcases. Each is devoted to a major landmark in the subject and is centred on a personality who was representative of his age. The earliest figure, Franciscus Dele Bœ Sylvius (1614–72), introduces the chapter entitled ‘Iatrochemical concepts prevail against the ancient humoral theory’; the others are Robert Boyle (1627–91), Antoni van Leeuwenhoek (1632–1723), A. F. Fourcroy (1755–1809), J. F. Heller (1813–71), Otto Folin (1867–1934), D. D. Van Slyke (1883–1971), and L. T. Skeggs (b. 1918), a representative of the early days of mechanized analysis. However, the authors have not merely concentrated on these eight men and they are too modest when they deny, in their preface, that they have demonstrated the continuity of clinical chemistry. They have, in fact, produced a good history of the subject, including numerous references to primary and secondary literature and brief but sound biographical accounts of many scientists; and they show clearly how clinical chemistry emerged as a separate discipline in Germany and Austria in the mid-nineteenth century.

Historians will be familiar with the microscopes of Leeuwenhoek and Hooke, but many pieces of apparatus are probably shown here for the first time. It is very instructive to see, for example, photographs of the four versions of the autoanalyser that Skeggs constructed between 1951 and 1953, and it is to be hoped that other contemporary scientists will be encouraged by his example to preserve the prototypes of their apparatus.

Finally, high praise must be awarded to the typesetters, Typotop of Stuttgart, and the printers, A. Bachmeier of Weihm. Using the resources of modern printing technology they have produced a book in which the text, in two colours, and the illustrations, monochrome and coloured, are splendidly integrated.

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WIEBE E. BIJKER, THOMAS P. HUGHES, and TREVOR PINCH (editors), The social construction of technological systems: new directions in the sociology and history of technology. Cambridge, MA, and London, The MIT Press, 1987, 8vo, pp. xiii, 405, illus., £29.95/$39.95.

The outcome of a workshop held at the University of Twente, the Netherlands, in 1984, this collection of thirteen papers is an important indicator of new directions in the history and sociology of technology. Organized into four sections, the book deals first with new manifestos for the study of technology—Pinch and Bijker’s social constructivist approach, drawing on the sociology of scientific knowledge and the empirical programme of relativism, Hughes’s use of systems metaphor and Michel Callon’s network theory. A second group of papers considers models which might be used to simplify the ‘thick description’ of political, cultural, economic and other factors in which explanation for technological change is to be sought. A third is devoted to detailed empirical case studies, and two final papers explore the relationship between artificial intelligence and the sociology of technology.

The editors provide a perhaps over-optimistic assessment of the degree of convergence between these new approaches. It is a measure of the challenge of the social constructivist position that most contributors, including advocates of network and systems theories, are at pains to define their stance in relation to it. Perplexingly, some appear to consider social constructivism a resource which may be ‘added to’ the historian’s armamentarium.

Two insightful empirical case studies—Bodewitz, Buurma and de Vries on drug regulation, and Yoxen on ultrasound—deal with medical issues. The book should not go unread by any who are trying to think long, hard and resourcefully about the nature of technology.

Ghislaine M. Lawrence
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