

Book Reviews

smallpox thanks to an exemplary vaccination campaign, Dr. Derrick Baxby, himself no mean student of poxviruses, had added yet another volume to the literature on Jenner's vaccine.

If one approaches this latest account with some apprehension one soon settles down to read it with unmitigated pleasure. Dr. Baxby's attempt to trace the origin of vaccinia virus is thorough; it is also readable, objective, and eminently fair to Jenner and to all the other participants in the early struggles to establish vaccination as a universally acceptable method. In thirteen chapters, Dr. Baxby takes his readers through the subject of vaccination and the necessary background material of clinical details of smallpox, early attempts to combat the ravages of the disease, and Edward Jenner's personal and educational background, in particular his relationship to his friend and mentor, John Hunter, who died five years before Jenner published his initial *Inquiry into the causes and effects of the variolae vaccinae*.

But Dr. Baxby is not content just to fill in the background and give us a reasonable up-to-date version of the old story. His sober account of variolation and vaccination, of the achievements and controversies and personalities of nearly two centuries on the road to the eradication of smallpox, is a vehicle for an intriguing and wholly original theory of the origin of the protagonist of the eradication saga. Dr. Baxby believes, on the basis of a mixture of research and conjecture, that none of the possible origins so far suggested for vaccinia virus makes real sense. He has good reasons for opposing even the most attractive of the hypotheses previously put forward, that vaccinia virus might have been the result of hybridization of smallpox and cowpox viruses in the early years of vaccinations carried out within Woodville's Smallpox Hospital. He also has an equally attractive and inspired alternative to offer. He believes that the surviving closely related strains of vaccinia virus may be descendants of the now extinct virus of horsepox, bearing in mind that Jenner himself thought that his cowpox originated in the horse, although he also introduced the unfortunate and confusing concept of "grease".

It is a theory which is unlikely ever to be tested, in spite of the rapid advance of structural analyses of proteins and of DNA at the molecular level, since horsepox disappeared at the beginning of the present century. Dr. Baxby concludes that the origin of the vaccine virus which provided the means for the first planned eradication of a virus disease worldwide may remain forever a mystery. We may add that his contribution, although supplying yet another facet to the mystery, and supported only by the most tenuous of circumstantial evidence, nevertheless offers a beguiling fresh possibility for those who enjoy conjecture in this area, with the added bonus of a refreshingly complete and fair summing-up of the tangled history of Jenner, his friends and foes, and the orthopoxviruses which united and divided them.

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ABRAHAM M. LILIENFELD (editor), *Times, places, and persons. Aspects of the history of epidemiology*, Baltimore, Md., and London, Johns Hopkins University Press, 1980, 8vo, pp. x, 155, £5.50 (paperback).

The Preface of this volume, the fourth of the Henry E. Sigerist Supplements to the *Bulletin of the History of Medicine*, cogently notes that interest in the historical development of a scientific discipline is one mark of its maturation. Given in 1978 at a Conference on the History of Epidemiology, these seven papers reflect this phenomenon in epidemiology as well as some of the problems inherent in organizing the past through methodological and conceptual categories that are defined by contemporary disciplinary boundaries. These loosely connected essays examine such diverse topics as yellow fever in early nineteenth-century Baltimore and late nineteenth-century Cuba, the eradication of smallpox and pellagra, William Farr's statistical thought and influence, the impact of Pierre Louis' teachings on epidemiology, and the limitations of the germ theory "paradigm" for aetiological thinking.

Victor Hilts's essay is a particularly useful examination of statistical investigations into the laws of disease in the second half of the nineteenth century. The best piece of the collection is John Eyler's study of the origins of William Farr's epidemiology in the 1830s; yet this essay

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says little that Eyler did not later include in his excellent intellectual biography of Farr, *Victorian social medicine* (1980). Several of the other essays also review ground substantially covered elsewhere in print. Each paper is accompanied by a discussion that the organizers of the conference self-consciously designed to further the exchange of professional perspectives by having an epidemiologist comment on each historian's paper and vice versa. This is an intriguing and promising strategy, yet the discussions stand more as unrelated, independent essays than as critical analyses of the main articles. Some of the discussions, notably Caroline Hannaway's perceptive analysis of the statistical approach to disease in France from the late eighteenth through the early nineteenth century, are, nevertheless, among this book's most valuable contributions.

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JEAN ASTRUC, *Traité des maladies des enfants*, facsimile of the 1747 ed., with introduction by Samuel Kottek, Geneva, Editions Slatkine, 1980, 8vo, pp. [xii], 438, S.Fr. 100.00.

Jean Astruc (1684–1766) epitomizes the medical professor of the French classical period. A native of Languedoc, graduate of the renowned medical school at Montpellier, professor at Toulouse and Montpellier, Astruc ascended to Paris in 1731 to become professor of medicine at the Collège Royal, and in 1743, he was received into the Paris Faculty of Medicine. Astruc was a prolific and extremely erudite writer, as well known for a pioneer contribution to biblical exegesis as for massive medical treatises on venereal diseases and diseases of women. Pedantic and polemical, Astruc did not hesitate to make theoretical pronouncements on subjects where he had slight practical experience nor to lend his argumentative skills to the cause of the Paris medical faculty when it sought to maintain the “subordination” of surgeons.

The treatise on children's diseases provides a vivid, richly detailed picture of official paediatrics during an era immediately preceding medical reforms in this field and the well-known liberal views of Jean-Jacques Rousseau. The present manuscript of 1747, published for the first time in French, is one of several deriving from students' notes taken at Astruc's course at the Collège Royal. A pirated English edition was published in 1746.

In the foreword, Astruc discusses delivery and care of the newborn, including traditional swaddling practices, the midwives' practice of moulding the head (of which he does not disapprove), precautions against the development of left-handedness, the choice of a wet-nurse, and weaning. Astruc urges respect for regional variations in these practices (*Il faut se conformer à l'usage du pays*). He then considers some twenty-eight diseases of children, beginning with skin diseases, followed by those of dentition, the head, chest, abdomen, and extremities. For most ailments, Astruc presents a definition, brief history, causes, symptoms, diagnosis, prognosis, and treatment.

Astruc's notions of disease reflect ancient humoral ideas overlain and interpenetrated by modern theories and discoveries. Thus the lymph is implicated in the pathogenesis of scrofula and rickets; epilepsy is caused by a disorder in the flow and distribution of animal spirits, but this in turn results from a specific anatomical and mechanical lesion – an irregular contraction of the arteries of the dura mater. Iatrochemical causes, in the form of “bad ferments”, make their presence felt in thrush and rickets. Thrush, an ailment “very poorly described by the Greeks and Arabs”, illustrates Astruc's belief in multiple causes operating at different levels. While the fundamental cause of thrush is the “acrimony of the humour which nourishes the hair”, this may result from faulty regimen or from contaminated food as well as from “bad ferments”; alternatively, external causes, such as contagion by contact with clothes containing thrush corpuscles, contagion at a distance (which can lead to epidemics throughout a hospital), or simply dirt alone can cause thrush. Rickets may be the expression of a “degenerated pox”, and “excited scrofulous virus”, or a disorder in one of the environmental factors or “non-naturals”.

Astruc confidently presents his own views on controversial points, such as how rickets brings