

Book Reviews

A History of Bubonic Plague in the British Isles, by J. F. D. SHREWSBURY, Cambridge, The University Press, 1970, pp. xii, 662, *illus.*, £8.00.

The influence of epidemics of infectious disease on the history of civilization is one of recurring interest, and one which has yet to be comprehensively studied; indeed until our knowledge of the extent and severity of the individual epidemics has been plotted no true measure of their effects can be made. Professor Shrewsbury in this work has attempted to do just this for bubonic plague. All future historians of medical geography will be indebted to him for the painstaking way in which he has collated a mass of material into a comprehensive narrative. The story of bubonic plague is well told, almost year by year, from the time that it entered the British Isles near Weymouth in 1348, until its mysterious disappearance soon after the 'Great Plague of London' in 1665. Its distribution during the first great wave is traced diocese by diocese. With no records of deaths or burials the only guide to its effects are still the bishops' registers of the induction of the clergy into vacant benefices—parish priests in the fourteenth century seem to have moved from living to living as often as their successors of today—but more frequent inductions than the average are probably of some significance. Dr. Shrewsbury uses the term 'the great pestilence' for this period, pointing out that the modern pseudonym 'the Black Death' was first introduced to English readers by Mrs. Penrose in 1823.

It is Dr. Shrewsbury's thesis that the great pestilence was not so severe as has been stated by other students of the period, and that some of the mortality may have been due to other epidemic diseases such as typhus fever. He bases this thesis on the known behaviour of the modern disease and of the vector. Plague is a summer disease most likely to become epidemic in hot weather and to die out as soon as colder weather forces *Xenopsylla cheopis*, the flea that carries the *Bacillus pestis*, to hibernate. This may be so. Some of Dr. Shrewsbury's other assumptions are more questionable. He states that plague is always worst in the young. Is it not more probable that plague is worst in that part of the population which has not developed immunity? When plague came to the British Isles after what was almost certainly an absence of centuries, would it not have affected young and old alike?

Basing his observations on the habits of the rat flea and of its host the black rat, and assuming that the plague of the great pestilence was invariably bubonic, he is able to show to his own satisfaction that many of the places reputed to have suffered from the epidemic could not have done so. He pours scorn on those whose researches have led them to conclusions different from his own; thus he says of J. C. Cox 'As a disciple of the "Black Death" he seems to be pre-eminent among the writers of the time'. Such expressions as so-and-so 'affirms' or 'opines' occur so often as to make the reader wonder whether the slightly derogatory connotation of these terms is merely an unfortunate quirk of the author.

Of the criteria for judging whether an epidemic was of plague or not, the time of year that it appeared in a district is, says Dr. Shrewsbury, important: he will seldom allow that an outbreak of plague occurred outside the summer months and suggests that those epidemics which had their onset in the winter or even which lingered on into winter were of typhus or typhoid. 'When a parish register shows an excessive number

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of burials in a year and a monthly analysis reveals that more than 50 per cent of them is contributed by any successive three months of the plague season, June to October inclusive, the record is suggestive of an outbreak of bubonic plague in the parish. When more than 66 per cent of the total annual burials occurs in the months of July to September inclusive, the record is almost certainly of an outbreak of bubonic plague'. This is a useful yardstick, but dysentery, infantile diarrhoea, and typhoid are all summer diseases. The louse nestles closely into the body in winter; the more tender flea goes to sleep. An epidemic raged in the autumn of 1447 in Meath, Leinster and Munster 'killing a great number of people including, it is said, 700 priests. This "plague" appears to have been associated with a severe famine, according to a footnote by O'Donovan, in which case it was a composite of dysentery, typhus fever, and relapsing fever in all probability'. This may be so, but sweeping statements of this kind based on little evidence are unconvincing.

In Europe the first great wave of epidemic through a susceptible population appears not to have followed the seasonal pattern that later epidemics showed. Arriving in September in Italy and to the Black Sea coast in December 1347, its spread was slow but inexorable; reaching Paris by June, it arrived in Bristol and the south-west of England by December 1348 spreading thence during succeeding months to London and to Dublin. Dr. Shrewsbury does not admit in dealing with the 'great pestilence' that pneumonic plague occurred—there is no entry for pneumonic plague in the index, although it is mentioned in connexion with the 1625 epidemic. The few clinical descriptions of the Black Death which have survived mention quite specifically that there were two kinds. Guy du Chauliac's description of the outbreak in Avignon is typical of the others and shows him at his best as a clinician. The first type 'lasted two months with continuous fever and spitting of blood, and from this one died in three days. The second lasted for the rest of the period, also with continuous fever but with apostumes and carbuncles on the external parts, principally on the arm-pits and groin. From this one died in five days'. (Quoted in Zeigler, *The Black Death*, 1969, p. 19). The friar minor of the convent of Killarney in Ireland wrote on his death bed 'many died of boils and abscesses, and pustules on their skin and under their armpits; others frantic with pains in their heads and others spitting blood'. (Quoted by Hirst, *The Conquest of the Plague*, 1963, p. 13). Pneumonic plague is almost invariably associated with haemoptysis and is the most fatal of all diseases.

Though it is sometimes possible to disagree with Dr. Shrewsbury's conclusions, the enormous quantity of information that he has gathered on the geographical spread of the disease is most valuable and the most complete description of epidemic plague in the British Isles that has so far been published. As his review passes on to the sixteenth and seventeenth century the material at his disposal becomes more plentiful and he is able to give more detail of the effects of outbreaks of the disease on the population. The introduction of the registration of burials, christenings and marriages in 1538 made the checking of epidemic years more easy. Documentary evidence in state papers and municipal records became increasingly available and more reliable. We read of the often misguided efforts to prevent the spread of epidemics. The prohibition of annual fairs, the engaging of watchmen to prevent people from infected places coming into towns which were free from infection, the appointment of buriers

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and the selection of special burying grounds, the duties of searchers and the segregation of the sick and of contacts in their own houses and the marking of the doors with red crosses, the setting aside of and sometimes the building of huts or special pest-houses, all these are well described. The attempts to provide nurses and watchers for the afflicted and gifts of alms in money and in kind, the appointment by the municipalities of physicians and apothecaries to treat the sick demonstrate the human side of the calamities which so often happened and which were so constantly threatening. The ritual of preventive measures culminating in the Plague Rules of the City of London in 1665 became an accepted part of life. The importance of these measures in bringing to the notice of the nation the need for some degree of control in sanitary matters is not so closely argued. For instance the influence of the plague on the operation of the Poor Laws led in the next century to the rise of the voluntary hospitals. The reason why plague disappeared so rapidly after 1665 was, according to Dr. Shrewsbury, the development of the all-sea trade between Europe and India, which abolished the caravan route for merchandise from the East across Asia Minor and with it the 'rodent pipe-line' for the transit of *P. pestis* from its Indian homeland to the ports of the Levant. The suggestion that the Great Fire of London was responsible is given a categorical denial. Defoe had attributed this theory to certain 'quacking' philosophers.

This work will remain for many years a sourcebook on the epidemics of plague in the British Isles. Dr. Shrewsbury has shown where our knowledge is deficient, and given a wealth of references for those who wish to carry out further inquiries. There is still much to learn.

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Mind, Brain and Adaptation in the Nineteenth Century. Cerebral Localization and its Biological Context from Gall to Ferrier, by ROBERT M. YOUNG, Oxford, Clarendon Press, 1970, pp. xiv, 278, £3.25.

Young follows in his book the development of the relations of mind and brain, that is the history of cerebral localization between Gall and Ferrier, and of the attempts to specify the functions of the brain in the relations between organisms and their environment. He is, like all those who have recently taken up the study of Gall again, rightly surprised by the magnitude of Gall's role in this context. He then surveys on the one hand experimental neurophysiology from Flourens to Broca, Fritsch, Hitzig and Ferrier; on the other hand the road from A. Bain's association psychology through Spencer's evolutionary associationism to Jackson's expanding sensory-motor psychophysiology to the cortex.

This is undoubtedly a very important story, and the book an important and well-written contribution to its history. Unfortunately it is a torso. Apparently the author is not familiar with the German language (German authors are consulted only in translations), and probably for this reason he does not discuss e.g. Herbart (in spite of Herbart's enormous influence on Johannes Mueller, whom Young does analyse), Fries, Beneke, Lotze, Moleschott and other materialists, E. H. Weber, Helmholtz, Fechner, Romberg, Griesinger, Wundt, Ziehen, Flechsig, Wernicke, Edinger, Benedikt, Exner and Mach. He also disregards important secondary work like that of Max Neuberger, while he quotes a simple hack like J. Thorwald. But all this is understandable. The omission of Marshall Hall is not.

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