

Book Reviews

E. A. WRIGLEY and R. S. SCHOFIELD, *The population history of England 1541–1871. A reconstruction*, London, Edward Arnold, 1981, 8vo, pp. xv, 779, £45.00.

All discussions about the data and mechanisms of demographic change in England from Tudor to Victorian times will be dominated from now on by the massive research of E. A. Wrigley and R. S. Schofield presented in this large volume. It represents over fifteen years' work by the Cambridge group, with much of the data-gathering in the parish registers (upon which the work is almost exclusively based) being sub-contracted to a wide variety of local historians (to whom the book is dedicated). Eventually, 404 sets of parish records were chosen as the sample upon which the national analyses in the book were based, with twelve detailed parish "reconstitutions". The scale of the operation was such that this work will never be repeated – or even checked. Very sophisticated statistical manipulation was then required to offset the well-known shortcomings of ecclesiastical parochial documents in order to convert imperfect records of Anglican baptisms and burials into more reliable comprehensive estimates of national births and deaths. Beyond this again, very sophisticated statistical processing methods were employed (which cannot be elaborated in this review), using the "back projection" methods pioneered by Professor Ronald Lee, based on the 1871 census and life tables to get gross reproduction rates and expectation of life at birth, as well as absolute population numbers, back to 1571. These ratios were chosen to identify fertility and mortality influences most clearly. Despite the original emphasis of the Cambridge group in developing "family reconstitution" techniques, comparatively little of this study depends upon such data. The statistical procedures and cross-checks for reliability are so complex that it is probably fair to say that, in practice, the results will be as difficult to check as the original gathering of the data – certainly the practical possibility of systematic checking will be confined to a handful of expert demographers. This is an unusual phenomenon in economic and social history: only the resources of a research institute, funded long-term by the Social Science Research Council, has made such large-scale research possible.

For such a large volume, the repository of such a mass of data and expertise, the main conclusions can be quickly stated. Total numbers in England rose from 2.8 m. in 1541 to 5.3 m. in 1656, and rose thereafter: to 5.8 m. in 1750, 8.7 m. in 1800, and 21.5 m. in 1871. The cumulative increase after 1686 represented gradually rising rates of growth until 1821 (1686–1730 – 0.17% p.a.; 1730–50 – 0.46% p.a.; 1750–80 – 0.66% p.a.; 1780–1800 – 1.04% p.a.; to a peak in 1820–25 of 1.55% p.a.). The main difference from earlier interpretations lies in the calculation that slow growth began in the 1680s rather than the 1740s (which has already sharply revised assumptions about the rate of growth of agricultural production in the first half of the eighteenth century).

The mechanisms lying behind this rise in numbers are revealed as predominantly operating on fertility levels rather than mortality (net migration was outward throughout the period covered). Both mortality and fertility in England (as in Western Europe more widely) were low by the standards of many other societies; and, given that the rate of change of numbers was also modest, marginal rates of change in mortality and fertility characterized processes of demographic change in England. Until 1751, changes in fertility and mortality are calculated to have had a roughly equal effect upon the increase in numbers; from 1757 to 1871, although mortality continued to improve, movements in fertility had twice the impact on the rate of growth. Thus it is towards the influences upon fertility that attention is concentrated.

One mechanism, accounting for perhaps half the increase in the gross reproduction rate, was the fall in the mean age of first marriage (from 26.5 in 1650–99 to 23.4 in 1800–44 in the case of women) – a statistic gained from the twelve reconstitutions (perhaps small for a national sample, relative to the 404 sets of parish records). Supporting this came a fall in the proportion of the population never marrying (from 25% in the 40–44 age range in the mid-seventeenth century to 6–7% in 1745–91). The mean age at maternity fell from 33 to 31, which gave a prospect of more children and healthier children (although no data are presented to document extensions of the reproductive life-span of women).

The main thrust of the study lies in the elaboration and statistical processing of the parish register data in order to establish these basic demographic mechanisms. As a study in research

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techniques and methodology it has vindicated the parish registers as the prime pre-census record of English demography after two generations of growing doubts about their flaws. Only the very highest technical sophistication has allowed this to be done – and the harvest of further “reconstitutions” is yet to come. Relatively little space, and much less technical sophistication, has gone into the sections of the text which seek to relate demographic mechanisms to their economic, social, and cultural contexts. The principal exercises undertaken are to establish the correlations with the Phelps Brown national indexes of builders’ wages and prices (now rather elderly and frail survivors from the 1950s). These reveal that population pressure pushed up food prices (the positive correlation only being broken after the Napoleonic Wars); that rapid population growth had an adverse effect upon real wages until after 1801; and that marriage rates, with gross reproduction rates and cohort reproduction rates, moved with real wages (the latter only after considerable time-lags).

The Phelps Brown indexes are too crude to bear much weight of this sort (particularly given the time lags of 15–65 years built into the correlations) and this sort of relationship of the demographic variables to context cries out for detailed regional and local analysis. With such deep-seated regional variations in all the relevant parameters in eighteenth-century England (including variations in the rates of population growth), national indexes mask much of the reality and do not prove the best basis for analysis. Consequently, social and economic historians, including historians of medicine, who are particularly concerned with the interrelations between demographic change and its context, will not find many answers to their questions here. Death rates and mortality variations are little regarded: correlations with wheat prices and real wages are poor, which suggests that disease was the main marginal determinant. Short-run fluctuations in death rates were “very largely determined by variations in factors . . . amongst which those determining the prevalence of lethal micro-organisms, though multiform and for the most part unobservable, may have been the most significant” (p. 354).

But little is said in any detail, particularly once the “dismal peaks” produced by main surges of epidemic disease had faded after 1727–30. Again, regional analysis is awaited – and the absence of London from the parishes chosen for the sample must be influential in this regard. Inoculation and vaccination, medicine, hospitals, etc., do not feature in the index. Nor (more surprisingly, perhaps) is there any discussion on the fertility side of the demographic equation of limitation of births within marriage (which was the subject of a famous article by Professor Wrigley in 1966). For historians of medicine, therefore, this most important volume does not answer many of their questions – but it does establish a large agenda for them.

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THE KEYNES PRESS INAUGURAL

WILLIAM NORMAN PICKLES, *Epidemiology in country practice*, with original preface by Major Greenwood and foreword by David Barker, London, Keynes Press (British Medical Association), 1983, 8vo, pp. xvi, 110, £35.00.

RICHARD ASHER, *A sense of Asher. A new miscellany*, selected and introduced by Ruth Holland, 8vo, pp. xv, 97, £35.00.

LORD MOYNIHAN, *Truants. A story of some who deserted medicine yet triumphed*, with a new introduction by Michael Harmer, 8vo, pp. vii, 73, £35.00.

It is difficult to think of anything more fitting, or which would have given greater pleasure to Sir Geoffrey Keynes, than the inception of the Keynes Press, whose aim is to reprint “classics with a medical interest published in the period of Keynes’s life” – which luckily was close on a century. It is probably no coincidence that the first three books to appear were written respectively by a surgeon, a general practitioner, and a physician. Each of the books is published in a limited edition of 300 copies, and each is individually designed with high-quality paper, printing, and binding. Three further volumes are planned for next spring, and the British Medical Association has taken the initiative in founding the Press; the introductory leaflet gives further details of the type-face and paper used. The first three volumes are certainly pearls of book production – but at £35 each they are pearls of some, even if not of great, price – and I am