

In the third part of the book, Linteau deals with the "garden city" phase of urban land development (pp. 185-86). A chapter (pp. 199-221) is devoted to the *politique de grandeur* which was really the outcome of the ideological commitment to "progress and prosperity" which impregnated the thinking of all North American developers of this period. Finally at the outset of World War I, Maisonneuve succumbed to the nation-wide economic crisis and found itself unable to meet its financial commitments, primarily due to an excessive debt burden flowing from this grandiose building period.

The main thesis that Linteau develops is that, contrary to other conflicting statements, the French-Canadian landowner and developer was definitely not a conservative risk-avoiding entrepreneur; rather he was a major component of the urban and suburban development process in Quebec. He joined his land capital with industrial capital and by monopolizing the municipal decision-making process provided the principal driving force that brought about such spectacular growth. Linteau suggests that this mechanism is probably true of other Quebec cities during comparable periods of growth.

In general, this volume presents a balanced treatment of the historical growth process of one major entity, of present-day Montreal. From a geographer's standpoint it would have been interesting to have more information on the social segregation of urban space; but, apparently, for the given time-period detailed information was hard, if not impossible, to find. The book reads well and is extremely interesting to anyone with an urban studies orientation. Some of the descriptive passages tend to be a little repetitive, but this is small criticism compared to the overall value of this work.

Peter M. FOGGIN
Université de Montréal

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E. A. WRIGLEY and R. S. SCHOFIELD. — *The Population History of England 1541-1871*. Cambridge, Massachusetts: Harvard University Press, 1981. Pp. xv, 779.

The Cambridge Group for the History of Population and Social Structure has been assiduously working on the demographic history of England for almost twenty years. During that time they have reported on their progress in articles, collections of essays and the occasional short book. The volume under review represents the climax of their efforts, as well as that of several hundred local historians. It is the most authoritative account we are ever likely to have of what happened to England's population between the sixteenth and nineteenth centuries.

In one respect the book confirms what historians have known for some time: that England's population rose just over sevenfold in those 330 years, from about 3 million to 21.5 million. What is new is the refinement they bring to the figures, drawing to our attention that population did not increase by linear progression, and showing us exactly where in the curve the peaks and valleys occur. What is exciting about this dense and often difficult volume is the manner in which the authors use their findings to refashion our understanding of England's economic and social history.

The authors discern three main phases: 1) from 1541 to 1656 when the population almost doubled, growing at an average rate of over 0.5 percent annually; 2) from 1657 to 1740 when there was a virtual cessation of population growth; and 3) from 1741 when it resumed at an accelerating pace until the 1820s, after which time it tapered off for the balance of the nineteenth century. Growth was never steady: population increased as fast as 1.5 percent a year in the early nineteenth century, while it actually fell by 0.5 percent a year in the mid-seventeenth. The astonishing thing is that despite the periodic famines, plagues, and epidemics, which had largely disappeared by the eighteenth century, mortality, expressed as average life expectancy, improved very little over three centuries. In the later sixteenth century it rose to over forty, then fell to less than thirty a hundred years later. Life expectancy did not reach forty again until the 1830s. The dramatic increase in population that began around 1740 came about not because of declining mortality, but rising fertility. Thus, the argument of McKeown and others who have suggested that declining mortality, due to improved nutrition and public health, brought about the population explosion, can no longer be supported. The birth rate, which rose to a historic peak of over 40 per 1,000 in the decade 1816-25, reflected a fall in the age at marriage and in the proportion who never married. This finding vindicates the shrewd insight of H. J. Habakkuk who twenty years ago advanced the hypothesis that marriage was the key to population in the eighteenth century. Increased nuptiality in turn reflected a long-term increase in real wages, i.e., an improved standard of living.

However, changes in nuptiality and fertility lagged behind changes in the standard of living by about half a century. That apparently is how long it took people to realize collectively that a genuine change in economic circumstances had occurred, and to alter their "fertility strategy" accordingly. There is nothing deterministic in this reconstruction of England's demography. Far from being helplessly buffeted by the invisible hand of fate, people responded in a conscious and disciplined way to real changes in their standard of living. After real wages fell in the later sixteenth century, they reduced the size of their families, chiefly by marrying later. Surprisingly, later marriage did not bring in its train any increase in bastardy; quite the reverse. By the 1650s (under Oliver Cromwell) social discipline was at its tightest, with the illegitimacy rate falling to an historic low of 1.5 percent. The theory that before the age of contraception family limitation can only have been accomplished by widespread resort to infanticide and induced abortion finds no support in this book.

If this line of argument is correct Malthus has been refuted. The English population was not kept under control by the Malthusian "positive checks" of famine, plague, and epidemic. Indeed, the authors are able to demonstrate that poor harvests and high food prices had only a slight impact on aggregate mortality figures. Rather than suffering passively, people took their destiny into their own hands, and employed the "preventive check" of reduced fertility in order to adapt to poorer conditions. Adaptation of course took time, which explains why fertility often went on increasing when real wages were declining. Thus, they argue, the misery of the lower classes around the time of the Napoleonic wars was caused by the contemporary downturn in real wages combined with the continuing high fertility that was a response to the wage levels of over half a century before.

At this stage the authors have joined the standard-of-living-in-the-industrial-revolution debate. From the perspective of more than two hundred years of previous demographic history, they suggest that the immiseration of the lower classes in the late eighteenth and early nineteenth centuries was not so much the consequence of industrialization as of their inability to adapt quickly enough to the decline in real wages that set in after 1740 and lasted till after 1800. Furthermore, it was in the

nineteenth century that England experienced a genuine demographic revolution. Population growth no longer influenced food prices because agricultural production was able to keep pace with population increase, no matter how rapid. Secondly, the rise in real wages no longer produced an increase in nuptiality and fertility. In the 1820s the birth rate embarked on a long-term decline which has continued with only minor interruptions from that day till this.

This is only a bare outline of the book's main argument. There are also fascinating explorations of the impact of temperature and rainfall, the changing age structure, migration, urbanization and disease. Methodologically, the first third of the book is a step-by-step explanation of how the authors developed "robust" final figures from a very imperfect source: the baptismal, marriage, and burial registers of four percent of the parishes of England. In order to derive population totals from the annual flow of vital events, they have pioneered a powerful and sophisticated technique that they label "aggregative back projection". Using nineteenth-century censuses and the age structure and mortality levels revealed by them, they work backwards, assimilating the annual totals of births and deaths supplied by the parish registers to arrive at population totals reaching back to 1541. A forbiddingly difficult appendix describes the mathematical tools that are deployed in this exercise.

This impressive and mainly convincing reconstruction of England's population history has not been achieved without difficulty. It is a pity that no London parishes were included among the 404 that are the foundation of the study. Roger Finlay's *Population and Metropolis* (1981), which demonstrates that valuable results can be obtained from London parish registers, was begun too late to be of use to the authors. However, the steps taken to incorporate London figures into the national data are convincing, and highlight the terrible mortality rate prevailing in the metropolis. Indeed, one of the book's valuable services is to confirm the view that until the end of the nineteenth century cities were much unhealthier places to live in than the country. London's death rate, for example, appears to have exceeded her birth rate until at least 1800.

To determine the standard of living by comparing the Phelps-Brown-Hopkins indexes of wages and prices is a risky business. Not only are the data fragile, suffering from a number of gaps, and based on a very limited number of sources, they take no account of the fact that a large proportion of the English people lived partially or wholly outside the money economy up to 1700. Of this the authors are painfully aware; nevertheless they base what is perhaps their most important argument on a comparison of changing fertility and changing real wages derived from Phelps, Brown and Hopkins. There was of course no alternative to this procedure except the unacceptably arduous one of constructing their own index. Even a new index would not have eliminated the problem of the people who made little or no use of money. Thus the authors are vulnerable to attack, and it is unlikely that the pessimist school in the standard-of-living-in-the-industrial-revolution debate will allow to escape unchallenged their assertion that the apparent decline in real wages between 1740 and 1800 was produced by the two-generation lag in fertility's responding to this decline. That it took a full sixty-five years before fertility followed the decline in real wages makes one suspect that other factors may have contaminated the limpid clarity of the wages/fertility nexus.

While the edifice of the book's argument is bold and clear, its architecture is complex and occasionally obscure. Crucial terms are sometimes left undefined (Gross Reproduction Rate, for example) because they are familiar to professional demographers. Finally, in view of the extensive discussion it has received in other quarters, one might have expected an explicit statement about the evident unimpor-

tance of infanticide and induced abortion in England's demographic history before the late nineteenth century.

These criticisms are not intended to detract from what is by any standard a triumphant achievement. Here is a book that no one interested in the social history of western Europe can ignore. It would be a signal service to students if the authors could produce an abridged paperback version, supplemented by a glossary defining the key technical terms.

Ian GENTLES

Glendon College, York University

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CLAUS-PETER CLASEN. — *Die Augsburger Weber: Leistungen und Krisen des Textilgewerbes um 1600*. Augsburg: Verlag Hieronymus Mühlberger, 1981. Pp. 460.

The weavers of Augsburg helped make their city the principal textile producer in Central Europe from the mid-sixteenth to the mid-seventeenth century. Yet weaving went hand in hand with poverty, a fact ably demonstrated in this detailed study of the industry at the high point of its productive capacity and international fame. Explanation of what he considers an ironic social situation thus becomes one major theme for the author, Claus-Peter Clasen, who is known best for several articles and two books on the history of Anabaptism. That earlier topic brought him quite naturally to the Augsburg City Archives, where he was impressed with the rich collection of sources for an examination of the city's population and social structure. Despite their numerical and general economic importance in the textile centre, however, the Augsburg weavers had scarcely been touched by modern researchers. Hence, Clasen decided to begin what is presumably an even larger project with this monograph on the weavers.

The author has given us as concrete and detailed an analysis of the Augsburg weaving trade as any specialist in early modern economic, industrial, or German urban history would ever desire. There are lacunae in every piece of research, of course, but Clasen inspires confidence that he has unearthed everything the documents will allow us to know about his subject. The book is based almost exclusively on primary sources and represents a kind of assiduous archival research rather uncommon among historians on this side of the Atlantic. But it is also written so closely to its sources and focussed so exclusively on the weavers, without much concern for placing their situation in the broader framework of Augsburg history, let alone of comparative urban or industrial developments in Central Europe, that Clasen's work faces the prospect of being used only by determined specialists who already know much about Augsburg or about premodern industry and wish to draw on this case study for particular information useful for their own purposes. Such a limited audience would be understandable but unfortunate, because the patient reader of this dense, four-hundred-sixty-page volume — even the impatient user only of its excellent indices — can discover a mine of information, both descriptive and analytical, about the lives of ordinary working people in an early modern city.

Clasen discusses a whole range of topics related to his weavers. Not only does he address the old issue of timing local economic decline in the seventeenth century and conclude that an initial faltering in the second decade left the fustian industry remarkably strong until its virtual collapse in the 1630s. He examines family