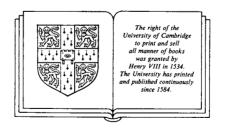
Friends in life and death

The British and Irish Quakers in the demographic transition, 1650–1900

RICHARD T. VANN and DAVID EVERSLEY



CAMBRIDGE UNIVERSITY PRESS

Cambridge New York Port Chester Melbourne Sydney

PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE The Pitt Building, Trumpington Street, Cambridge, United Kingdom

CAMBRIDGE UNIVERSITY PRESS

The Edinburgh Building, Cambridge CB2 2RU, UK 40 West 20th Street, New York NY 10011–4211, USA 477 Williamstown Road, Port Melbourne, VIC 3207, Australia Ruiz de Alarcón 13, 28014 Madrid, Spain Dock House. The Waterfront, Cape Town 8001, South Africa

http://www.cambridge.org

© Cambridge University Press 1992

This book is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 1992 First paperback edition 2002

A catalogue record for this book is available from the British Library

Library of Congress Cataloguing in Publication data
Vann. Richard T.

Friends in life and death: the British and Irish Quakers in the demographic transition, 1650–1900 / Richard T. Vann and David Eversley.

p. cm. – (Cambridge studies in population, economy and society in past time: 17)

Includes bibliographical references and index.

ISBN 0521392012 (hardback)

- 1. Quakers Great Britain History.
- 2. Demographic transition Great Britain.
 - 3. Demographic transition Ireland.
 - beinographic transition fretain
 - ${\bf 4.\ Quakers-Ireland-History.}$
 - 5. Society of Friends History.
- I. Eversley, David Edward Charles. II. Title. III. Series.
 DA125.Q34V36 1991

941'.0088286-dc20 90-21802 CIP

ISBN 0521392012 hardback ISBN 0521526647 paperback

Contents

	List of figures	page xi
	List of tables	xii
	Preface	xvi
	Introduction	1
Ĺ	The quality of the sources	11
2	Characteristics of the sample	32
3	Marriage according to truth	80
1	The fruitfulness of the faithful	129
5	The quality and quantity of life	186
	Conclusion	239
	Bibliography	256
	Index	274

Figures

1.1	Sample page, London Friends register of burials	13
1.2	Regular and irregular marriages, Southwark Monthly	
	Meeting	20
1.3	Estimate of English Quaker population before 1861	23
1.4	Sample family reconstitution form	24
2.1	Distribution of the Society of Friends in England in	
	1851, proportionate to the general population	33
2.2	Distribution of English Quakers, 1700–1709	34
2.3	Distribution by monthly and quarterly meetings within	
	areas	37
2.4	Marriages recorded, Irish family lists and various	
	monthly meetings	39
2.5	Leading monthly meetings, Irish Quakers	40
2.6	Distribution of Irish Friends, by monthly meeting	41
3.1	Seasonality of English Quaker weddings	85
3.2	Seasonality of weddings, 404 English parishes	86
3.3	Mean age at first marriage, Irish, rural English, and	
	(middle colony) American Quakers	95
3.4	Percentage of women ever married cumulated by age at	
	first marriage, Southern English Quakers and 13	
	English parishes	103
3.5	Mean ages at first marriage, British and Irish Quaker	_
	men and women and other groups	106
4.1	Marital fertility, Irish Quaker women and Hutterite	
	women	140
4.2	Age-specific fertility, by ages at marriage, selected ages	
	and periods	154
4.3	Age-specific fertility, groups practicing family limi-	
	tation	172

4A.1	Comparison of age- and duration-specific fertility	
	rates, Southern English and Irish Quakers	181
5.1	Percentage of "clustered" deaths, "crisis" and "non-crisis" years, urban, Irish, and Southern English	
	Quakers	187
5.2	Infant mortality, all British and Irish Quakers, 1675-	·
	1849	190
5.3	Seasonality of deaths from stated causes, London	
	Quaker children, 1675–1795	223
5.4	Seasonality of infant deaths from stated and unstated	
	causes, London Quaker infants, 1 month to 1 year,	
	1670–1709, and children, 1 to 4 years, 1710–1749	224

Tables

2.1	Comparison of data supplied by Quarterly Meeting	
	registers	35
2.2	First marriages by decennial periods, Irish Quakers	
	(except Lisburn)	38
2.3	Distribution of all marriages, by area and cohort	44
2.4	Mean family size (children ever born), Ulster Quakers	53
2.5	Occupational distribution, English Quaker bride-	
	grooms, 1650–1849	70
3.1	Ages at marriage, all British and Irish Quakers	87
3.2	Men's ages at marriage, by regions	88
3.3	Women's ages at marriage, by regions	89
3.4	Husband's age at marriage by wife's age at marriage,	
	English Quakers	91
3.5	Husband's age at marriage by wife's age at marriage,	
	Irish Quakers	92
3.6	Distribution of ages at first marriage in 13 English parishes	101
3.7	Mean ages at first marriage, English Quakers and parish	
	populations	102
3.8	Ages at first marriage, Quakers and British peerage	105
3.9	Definitive celibacy (percentage dying unmarried aged	_
	50 or over)	108
3.10	Duration of marriages	110
3.11	Percentage of all marriages which were remarriages	111
3.12	Ages at marriage by occupational groups, English	
	Quakers	112
3.13	Expectation of life of adults ages 25–29	116
3.14	Mean age of children at marriage, by sex and birth rank	117
3.15	Sex ratio at burial, all British and Irish Quakers except	
	those known to have been under 20 years of age	124

xiv			Li	List of tables		
_						

3.16	Relationship between husbands' and wives' ages at first marriage	126
	Age-specific marital fertility rates, all British and Irish	120
4.1	Quakers	422
4.0	Comparison of fertility, British and Irish Quakers,	132
4.2		
	French Catholics, Québecois, and English parishes	134
4.3	Family size, completed families	137
4.4	Age-specific fertility rates, all marriage ranks	138
4.5	Comparison of fertility, British, Irish, and American	
,	colonial Quakers	141
4.6	Sterility of Quaker marriages	145
ŀ.7	Age-specific fertility of wives, by husbands' age	148
4.8	Wives' age at birth of last child, by age at marriage (com-	
	pleted families only)	151
1.9	Birth intervals, by birth rank, for wives married under	
	age 34	153
ļ.10	Birth intervals, all British and Irish Quakers	158
1.11	Effect of death of previous child on birth interval before	
	conception of next child	169
.12	Children ever born, British and Irish Quaker and British	
	peerage families	173
.1	Quaker infant and child mortality rates by sex and	
	region	193
.2	Infant and child mortality from English parish registers	196
.3	Ages at death of Quaker infants who died in their first	
	year	200
i.4	Child mortality rates (0–14), Quakers and British	
	peerage	203
.5	Infant mortality rates, by rank order of birth	206
5.6	Infant and child mortality rates if next child conceived	
	within two years and all other cases	207
5.7	Reported causes of death, London population covered	,
•	by bills of mortality, 1670–1795	212
5.8	Stated causes of death, by age at death, all London	
•	Quakers	214
5.9	Estimated mortality rates from various causes, London	•
,	Quaker infants and children	218
.10	Estimated life expectancy at birth, British and Irish	
-	Quakers	228
5.11	Life expectancies, exact ages at death known only	229
5.12	Life expectancies, average of "optimistic" and "pessi-	<i>)</i>
<i>)</i>	mistic" assumptions	230
		-)0

	List of tables	xv
5.13	Maternal mortality rates	233
5.14	Stated causes of death, London adult Quakers	234
5.15	Life expectancies in Bristol, c. 1825: the poor, Quakers,	
	and the whole city	237
C.1	Numbers of children per family surviving to age 15	240

Introduction

Why a book on the demography of the British and Irish Quakers? And what kind of book?

We have written this book as a contribution to the social history of Quakerism and to the history of British and Irish populations from the mid seventeenth to the late nineteenth centuries. The context for the former is fairly obvious, but the latter requires some elaboration. We therefore begin with our larger framework, that of the evolution of historical demography in the last twenty-five years.

For the generation which spanned World War II, the explanation of both English and Irish population growth during the century from 1750 to 1850 was fairly clear and uncomplicated, even though there was a latent contradiction between two parts of the explanation. The only evidence that scholars had to work with was estimates of the crude birth and death rates. In England, there was admittedly a rise in the birth rate, attributed to the decline of apprenticeships, greater opportunities for employment in industry or industrial byemployment, and (by some) to the operation of the Poor Laws. All these were supposed to have allowed workers to marry earlier and thus (assuming the absence of family limitation) have larger families. Despite these indications of higher fertility, there was general agreement with the conclusion of G. Talbot Griffith that "the fall in the death rate is a much more striking movement during this period than the rise in the birth rate." Griffith thought that the main reasons for lower mortality were the increased productivity of agriculture resulting from the enclosure movement, which enabled a larger population to be reliably fed; improvement of sanitary and living conditions in the towns; a decline in alcohol consumption; and better medical practice (inoculation against smallpox, safer hospitals, and better midwifery).

¹ G. Talbot Griffith, Population Problems of the Age of Malthus (Cambridge, 1926), 128.

Griffith, in the chapter of his book devoted to Ireland, betrays some embarrassment about the fact that few of the causes at work in England can have operated with anything like the same force in Ireland, and yet the Irish population during this period apparently rose twice as fast as the English. He endorses the view that potato cultivation made possible extensive subdivision of land-holdings and thus very early marriages. But this made Ireland exceptional.

The tranquillity which had settled over the issue of English population increase in the eighteenth century is well illustrated (just as it was being dissipated) in T. S. Ashton's volume in the series which he edited on the economic history of England. Ashton, who declared himself proud that he could write the volume without using any word ending in "ism" - except, as he was reminded, "baptism" - depicted a society where there was no problem which a rising population might create that could not be solved by human (or more precisely English) ingenuity. The increasing population, Ashton thought, was in the view of "informed opinion" the result of the elimination of plague after 1665 and the lower incidence later of famine and disease as greater supplies of food became available. He also recounted, with a wealth of colorful detail, the depressing effects on population of excessive gin drinking. The only factor increasing fertility which he discussed was the possibility that there was a more perfect marriage market in the eighteenth century; if, as he speculated, the area within which marriage partners were sought was expanding during the eighteenth century, more people would have had the opportunity to marry, because imbalances between the genders on the parish level could be evened out in a larger area.3

Without a corresponding increase in productivity, of course, an increased population would have suffered "Asiatic horrors" – the reference here is explicitly to the Irish famine of the 1840s. However, England had not only avoided this fate, but had actually created some homeostatic mechanisms (such as the improvement in food supply, sanitation, medical care, and the widening of marriage horizons) which made increasing industrialization and increasing labor supply into a virtuous circle.

Most of the books on which this serene view of demographic issues rested were published between 1922 and 1926.⁵ The evidence they

² T. S. Ashton, An Economic History of England: The 18th Century (London, 1955), v.

³ Ibid., 2-9.

⁴ T. S. Ashton, The Industrial Revolution 1760-1830 (London, 1948), 161.

⁵ Besides the book of Talbot Griffith cited in n. 1, these were A. M. Carr-Saunders, The Population Problem (Oxford, 1922); M. C. Buer, Health, Wealth and Population in the Early Days of the Industrial Revolution (London, 1926); M. Dorothy George, London Life in the

cited was various series of totals of vital events (from parish registers, bills of mortality, and back projections from the first English census of 1801) supplemented by studies of economic and medical institutions and the writings of contemporaries.

All these authors emphasized – as well they might – the skimpiness of this evidence and the speculative quality of any generalizations that might be drawn from it; but for twenty-five years little more evidence was discovered and no major reinterpretations advanced. When university life was resumed after World War II, however, the consensus about the causes of population growth in the eighteenth century began to break up.

We can, in retrospect, identify three interlocking problems which began to be more and more troublesome. The first, and in a sense the basic one, was that without better techniques of wringing evidence from the vital records of the past, there was no way to move from speculation towards something approaching real knowledge. In particular, the estimates of crude birth and death rates, besides being rough and ready, could never establish whether fertility was really rising or mortality really falling. The reason for this is that crude birth or death rates are sensitive to changes in the age structure of the population as well as to real changes in fertility or mortality. A true rise in fertility would mean that there were more frequent births among women in the age group from 15 to 49; but the crude birth rate might rise even if fertility remained exactly the same, provided there were more women within this age group in the population. Without any means of establishing age-specific fertility or mortality, there was no way to distinguish real effects from artifacts of the changing age structure. Second, the classic problem of the increase in population in the eighteenth century, once the Irish experience was compared with the English, suggested the need for an explanation which was not an ad hoc construction for a single country. Finally, as the scope of demographic investigation expanded to take in historical populations as well as those of the developing world, demographers - and politicians - became interested in how a rapid rise in population eventually slows down or even stops. In other words, they were developing the theory of "demographic transition," or the change from a society with high fertility balanced by high mortality to one

XVIII Century (London, 1925); and A. Redford, Labour Migration in England, 1800–1850 (Manchester, 1926). See the review essay by T. H. Marshall, "The population problem during the Industrial Revolution: a note on the present state of the controversy," Economic History 1 (1929), reprinted in Population in History, ed. D. V. Glass and D. E. C. Eversley (London, 1965), 247–68.

typical of the industrialized countries today, with historically low levels of both fertility and mortality.

The theory of demographic transition has been stated as follows:

That mortality and fertility are so related to urbanization and industrialization that low levels of the vital rates are associated with high levels of modernization; and that high levels of the vital rates are associated with low levels of modernization; and further, that medium levels of modernization will serve to depress mortality more rapidly than fertility.⁶

The claim is thus that as modernization begins, mortality declines first, followed by a decline in fertility until both reach "modern" values. The process was well underway in France by the middle of the nineteenth century; in England it became manifest when "The long period of rapid population growth which had lasted unbroken since the late eighteenth century came to an abrupt end in the second decade of the twentieth century."7 In most discussions, it is the fall in fertility which has appeared to be the key problem. Some scholars proposed theories that fecundability itself had fallen - attributed, rather fancifully, to excessive bicycle riding or affection lavished on poodles, or more plausibly to modern diets and the strains of life in industrial society. 8 In general, though, it appears that modern women should be healthier and better able to conceive and bear children than their forebears; so the reduction in fertility appears to be due largely to deliberate family limitation. Use of contraception is of course widespread in the twentieth century, but deferring the age of marriage was also important in middle-class groups. As N. L. Tranter pointed out, "the English middle classes (and no doubt some skilled lower-class groups too), in their anxiety to grasp the economic and social rewards offered by an industrializing society, had already begun to adopt new and more prudential attitudes towards marriage as early as the 1830s."9

As early as 1950 K. H. Connell drew attention to the oddity of giving opposite explanations for similar population increases in England and Ireland. For one thing, the economies of the two were interlocked (Irish grain production had been regulated by act of the English parliament, Ireland was the chief source of immigrants into England). The received wisdom about both countries should be revised, he suggested; and this meant, for the English historians, reconsidering

⁶ Paul K. Hatt, Nellie Louise Farr, and Eugene Weinstein, "Types of population balance," American Sociological Review 20 (1955), 15.

N. L. Tranter, Population since the Industrial Revolution: The Case of England and Wales (New York, 1973), 97.
 blid., 99-100.
 lbid., 104.

the birth rate, and for the Irish, looking again at the role of the death rate. 10

During the next twenty years of energetic research, historians, economists, sociologists, geographers, and medical doctors produced much new evidence - all of it necessarily partial - and almost as many new theories. The old ones did not die out completely, by any means; for example, David Glass's summary of the question in 1965 concluded that "such evidence as there is at present would lean much more heavily towards lower mortality as an explanation of population growth than towards changes in marriage or fertility."11 But defenders of this position had considerable difficulty in specifying just what mechanism could produce such a result. Thomas McKeown and R. G. Brown cast great doubt on the theory that medical improvements can have made much difference: surgery and midwifery were scarcely better, if not worse; new medicine had little effect; and hospitals "did no good but ... positively did harm." Even inoculation for smallpox, they thought, did not have a substantial effect on national mortality trends. 12 But since they were convinced that increase in the birth rate can not have been significant, they fell back on general improvements in the environment as the only remaining possibility – even though there was little positive evidence for these.

The most enthusiastic partisan of the case for reductions in mortality was Peter Razzell, who had the advantage of identifying the mechanism at work: "Inoculation against smallpox could theoretically explain the whole increase in population, and until other explanations are convincingly documented, it is an explanation which must stand as the best one available."13 On the other hand, the reexamination of the birth rate recommended by Connell was persuading some scholars that the key to the enigma lay there. Like McKeown and Brown, H. J. Habakkuk in 1953 doubted that medical improvements in the eighteenth century can have had much effect in raising the population; but he also questioned that there was a sig-

¹⁰ K. H Connell, "Some unsettled problems in English and Irish population history, 1750-1845," Irish Historical Studies 7 (1951), reprinted in Population in Industrialization, ed. Michael Drake (London, 1969), 30-39.

¹¹ D. V. Glass, "Introduction," in *Population in History*, 15.
12 Thomas McKeown and R. G. Brown, "Medical evidence related to English population changes in the eighteenth century," Population Studies 9 (1955), 119-41, reprinted in Population in Industrialization, 40-72.

¹³ P. E. Razzell, "Population change in eighteenth-century England: a reinterpretation," Economic History Review 2nd ser. 18 (1965), 312-32, reprinted in Population in Industrialization, 128-56.

nificant decline in mortality at all. ¹⁴ Instead, he suggested a scenario in which a variety of effects of industrialization and economic growth impinging on a generation rebounding from high mortality from 1725 to 1729 caused the birth rate to rise significantly.

In pre-industrial conditions, spurts of population increase might occur after a peak of mortality. Even when families were not broken up by the death of one of the parents, fertility probably diminished during the unhealthiest time; but afterwards fewer women were anovulatory because of a recent pregnancy. Fertility was also depressed during high mortality by the deferral of marriage; but afterwards there were opportunities for young people, who could succeed to holdings or occupations made vacant by recent deaths, and so could get married. The rise in marriages made possible by earlier succession to properties could create a surge in population that would still be noticeable a generation later. By 1985 some such account as this had become the classical view of the mechanism whereby population recovers from crises such as last took place, in Britain, in 1725–29 and 1740–41.

That there was an increase of births in the 1740s had already been shown in a local study by David Eversley. ¹⁵ Building on these data, Habakkuk went on to argue that when this large cohort came to marrying age, it did not encounter the checks that tended to trap pre-industrial populations in a negative feedback loop. Instead, harvests were unusually bounteous, wages tended to resist reduction even though labor was now more abundant, and various diseases took less of a toll. This made it possible for the age at first marriage to fall, which not only allowed women to have more children during their married life – a decline of less than two years in age at first marriage would lead to an addition to the annual growth rate of 0.5 percent, he estimates – but also caused the generational rhythm to speed up.

The evidence that this had something to do with industrialization is drawn mostly from the nineteenth century. In 1821 there was a higher ratio of children to women in the industrial counties, and later in the century a high correlation between the proportion of women employed in industry and marriage rates. Habakkuk also quotes contemporaries like Adam Smith and T. R. Malthus who thought that, in Smith's words, "The demand for men, like that for any other

¹⁴ H. J. Habakkuk, "English population in the eighteenth century," Economic History Review 2nd ser. 6 (1953), 117–33.

D. Eversley, "A survey of population in an area of Worcestershire from 1660 to 1850 on the basis of parish registers," *Population Studies* 10 (1957), reprinted (in slightly amended form) in *Population in History*, 394–419.

commodity, necessarily regulates the production of men [used generically]." This would suggest that more vigorous economic activity, not merely industrialization, would cause a rise in wages, enabling earlier marriages. Also, shifts in employment from one sector to another could put more people in milieux where early marriage was easier: for example, agricultural laborers could be deprived of their customary rights during enclosure, or no longer be boarded-in by their employers; and cottage industry carried on by members of the family was replaced, increasingly, by the factory. ¹⁶

Although by 1970 there was a stimulating array of competing theories, conclusive evidence seemed almost as hard as ever to acquire. For example, reliable figures about marital fertility were almost nonexistent, so almost all the speculation about fertility had to work from estimates about age at first marriage and what effect changes in it would have on fertility as a whole. No single source was likely to be entirely satisfactory; and so all the following seemed necessary: (1) further aggregative studies to determine exact local, regional, and national population, both by re-examining parish registers and by using some sort of back-projection from the first censuses;¹⁷ (2) local studies to link changes in population size and composition with economic developments – if possible, drawing a national sample of parishes; (3) studies of subgroups of the population for whom age-specific rates might be derived, again with the project to link these with local economic change; (4) analyses of topics bearing on health and nutrition, such as inoculation and vaccination, the workings of hospitals, possible advances in sanitary engineering, and the production and marketing of foodstuffs. 18 Fortunately, for the first three of these new techniques have been worked out which promise for the first time to produce a body of evidence solid and extensive enough to decide between conflicting interpretations.

Despite the skepticism with which the possibility of making accurate estimates of the national population by back-projection from the censuses had been treated, an ambitious and sophisticated attempt has now been completed (which, incidentally, supports the view which Habakkuk expressed thirty-two years earlier).¹⁹ These projec-

¹⁶ H. J. Habakkuk, Population Growth and Economic Development since 1750 (Leicester, 1971), 26–29, 36–41. In this later work Habakkuk did not deny that there was a fall in mortality in the last two or three decades of the eighteenth century.

¹⁷ Glass, "Introduction," 9, is very skeptical about this particular approach.

¹⁸ See Michael Drake's introduction to Population in Industrialization, 2. Drake did not foresee the possibility of any accurate national figures.

¹⁹ E. A. Wrigley and K. S. Schofield, The Population History of England, 1541–1871: A Reconstruction (Cambridge, Mass., 1981).

tions inevitably require a good deal of weighting the raw data, since they were based on a non-random sample of about 4 percent of the English parishes, with no parishes from London at all.

The technique which makes possible community studies and studies of subgroups of the population is family reconstitution, developed in France in the mid-1950s and introduced to England in two publications of the mid-1960s. In a famous study of Colyton in Devonshire, E. A. Wrigley showed for the first time that substantial variations in marital fertility occurred well before 1800, which might at least in part have been attributable to deliberate family limitation. ²⁰ A year earlier T. H. Hollingsworth had used a kind of family reconstitution (somewhat different in its conventions) to study the demography of the British peerage. Among his significant findings were the first reliable data showing that at least among the peerage mortality did decline in the last part of the eighteenth century. ²¹

The relationship of community and subgroup studies to a massive national aggregative study is like that of a close-up to a panorama. The fine details show up much more clearly, though nothing guarantees that the camera has zoomed in on a spot entirely representative of the whole. But of course there is no reason to make only one close-up; as more communities and subgroups are analyzed in fine detail, not only they but also the panorama will make more sense.

The Quakers are eminently suitable for one close-up. They can provide reliable evidence about most of the problems in population history which have been in dispute since World War II. We believe that their registers were probably kept more accurately and completely than the records of any other contemporary group or country. For the first time, an Irish population can be compared in many demographic aspects with an English one – and since the Irish Quakers were genetically English, the differences in the Irish milieu stand out the more sharply. Similarly, the urban Quakers – in London, Bristol, and Norwich – can be contrasted with those in the rest of the country. For the London Quakers, we know not only infant mortality rates and estimated life expectancies, but also what causes of death were given, so it is possible to make some tentative estimates about the age-specific incidence of fatal smallpox and other diseases.

We know the occupations of most of these Quakers. Though few

²⁰ E. A. Wrigley, "Family limitation in pre-industrial England," Economic History Review 2nd ser. 19 (1966), 82–109.

²¹ T.H. Hollingsworth, The Demography of the British Peerage [Supplement to Population Studies 18 (1965)]; slightly revised figures are presented in Population Studies 32 (Sept. 1977), 323–49.

Quakers could be found in the industrial labor force, they were very prominent in the ranks of industrial and commercial entrepreneurs, as the names of Darby, Gurney, Lloyd, Fry, and Barclay will testify. We can thus see how a sector of the enterprising bourgeoisie experienced the high fertility of the heroic age of industrialization; and since the prolific family histories of the Quakers extend right through the nineteenth century, we can also see them pass through the demographic transition as they voluntarily reduced the size of their families. At the same time, we can look at the Quakers relatively little touched by the Industrial Revolution, those in Ireland (outside Ulster), in the market towns of the English Home Counties, and the remaining rural areas of East Anglia and the North of England.

Finally, our Quakers are not mere silent entries on a family reconstitution form. They were as industrious in writing about themselves as in every other sphere of their lives. Although these autobiographies are meant to detail their ministries and spiritual experiences, they also yield insights into attitudes towards marriage, family life, and death. Individual members of the British peerage are undoubtedly better known, but there is no population whose records have been reconstituted which contains so many people who can speak to us in their own voices.

For all these reasons, we expected the Quaker records to throw a great deal of light on the outstanding points at issue in historical demography. The following chapters will show to what extent they have done so. At no point, however, did we expect that providing an answer valid for the Quakers alone would entitle us to claim that the changes over time demonstrated here, and the differences between regions, could be extrapolated to the rest of the population. We could not even be certain that Quaker demographic patterns were typical of groups with similar socio-economic characteristics: middle-class tradesmen, people who lived in country towns, or those with some scientific knowledge and abstemious habits.

The most we could claim, if our analysis was successful, would be that we have demonstrated a variety of mechanisms whereby changes in nuptiality, fertility, and mortality could be linked to changes in population size, even though we cannot calculate the number of Quakers alive at any particular time or in any one area as a base for vital statistical rates. But though we cannot conclude that the rest of the population of Britain and Ireland behaved as the Quakers did, if we observe certain demographic patterns among the Quakers, and link these to social and economic changes, there is at least a strong possibility that similar linkages could be found in the population at

large, especially in the "middling classes." This is especially so for the last part of the eighteenth century and the first half of the nineteenth, when the assimilation of the Society of Friends to the population in general probably reached its apogee.

Just as the demography of the Quakers cannot be understood without a knowledge of their history, Quakerism cannot be fully understood without a knowledge of their marrying, giving birth, and dving. These were at the core of their social life; they determined the way that generations succeeded one another, renewing the life of the society. None of their "testimonies" – against war, pride, tithes, swearing of oaths - cost Friends nearly so many members as the insistence that Quakers should marry only other Quakers; and no effort was more intense and long-lasting than the care to make every Quaker child a full member of their holy community. These deep concerns have often been studied,22 and at first glance bear no great relationship to statistical series of fertility rates, infant mortality, mean age at first marriage, or the like. But, in fact, as we hope to show, the way the Quakers married, the particular care that they gave their children, and even the effects of their way of life on their length of life can be shown only in these demographic series; and they reveal facets of Quaker life which were previously unknown.

Thus the student of Quakerism needs to know about their demography – but perhaps not as much about it as we have laid out here. Since we have written for two sets of readers which are unlikely to overlap substantially, it may be useful to suggest strategies for reading the book. We hope that readers with primarily demographic interests will be able to pass quickly through any historical detail which does not particularly catch their interest (a stringent measure would be to start with chapter 3). Similarly, we absolve our readers with a primary interest in Quaker social history from the task of perusing every single table – though of course we cannot recommend that they lay down the book at the end of chapter 2. If we have done our job properly, the demography will be interpreted by the history, and the history will be enriched by the demography.

²² See, for example, Arnold Lloyd, Quaker Social History 1669–1736 (London, 1950); Elisabeth Isichei, Victorian Quakerism (London, 1970); and Richard T. Vann, The Social Development of English Quakerism, 1655–1755 (Cambridge, Mass., 1969).