

FAMILY DISPERSAL IN RURAL ENGLAND: HEREFORDSHIRE, 1700-1871

by

KATHERINE JOAN LACK

A thesis submitted to The University of Birmingham

for the degree of

DOCTOR OF PHILOSOPHY

**School of History and Cultures
College of Arts and Law
The University of Birmingham
March 2012**

UNIVERSITY OF
BIRMINGHAM

University of Birmingham Research Archive

e-theses repository

This unpublished thesis/dissertation is copyright of the author and/or third parties. The intellectual property rights of the author or third parties in respect of this work are as defined by The Copyright Designs and Patents Act 1988 or as modified by any successor legislation.

Any use made of information contained in this thesis/dissertation must be in accordance with that legislation and must be properly acknowledged. Further distribution or reproduction in any format is prohibited without the permission of the copyright holder.

ABSTRACT

This thesis tested a methodology for tracing eighteenth- and nineteenth-century migrants, based on the Cambridge Group reconstitution methods. It began with a sample from Whitbourne parish in the under-researched county of Herefordshire, investigating the effect of regional urbanisation and industrialisation on migration choices. Longitudinal family dispersal patterns were traced, and comparisons were made with studies in other regions. The method focused on out-migration, setting spatial mobility in its wider context, and increasing its representativeness by incorporating additional search strategies for less visible groups, including married women. A high tracing rate was achieved, and the method is proposed as a viable tool for analysing migration from small rural parishes which are considered unsuitable for conventional reconstitution studies.

The west midlands industrial areas were not apparently a destination for this population until the second quarter of the nineteenth century, but there were early migrants to Worcester, London, and later to Cheltenham, Cheshire and elsewhere, especially for domestic service and urban service trades. Some familial trends were observable, and others related to land holding, occupation and geographical propinquity. Marriage and dependent children did not prevent migration, but literacy and transport networks were found to be strongly associated with occupational options and distances moved.

To Mother

1924-2011

ACKNOWLEDGEMENTS

This study was funded by a Research Studentship from the Economic and Social Research Council.

I would like to pay tribute to my supervisor, Dr Leonard Schwarz, for his unfailing support and enthusiasm during this research project.

In the course of innumerable visits to their archives, I have been helped by the good offices of the staff and volunteers at the Family History Branch of the Worcestershire Record Office, the Herefordshire County Record Office and the Bromyard and District Local History Society. I have also benefited from the kindness of the staff of the Nottingham Record Office, the Dorchester Archives and the Cheltenham Local History Library. The Birmingham and Midland Society for Genealogy and Heraldry have made available to me copies of their transcript of the Clifton upon Teme and Lower Sapey registers, and a data-base of their Greater Birmingham Marriage Index, the Herefordshire Family History Society gave me access to the civil registers for Whitbourne, while the Economic and Social Data Service provided Michael Turner's transcript of the 1801 Parochial Crop Returns.

Dr Matt Edwards and Dr Sylvia Gill have been a source of considerable solidarity, and my husband Paul has made it all possible.

CONTENTS

	<i>page</i>
CHAPTER ONE: INTRODUCTION	1
1.1 General Introduction	1
1.2 Definitions	5
1.3 Migration and Population Mobility	6
1.4 The Research Area	14
CHAPTER TWO: CONTEXT	16
2.1 Introduction	16
2.2 The Research Period	16
2.3 The Law and Population Mobility	18
2.3.i. The Poor Laws	18
2.3.ii. Apprenticeship	24
2.4 Regional Differences and the Need for Local Studies	25
2.4.i. The Impact of London	25
2.4.ii. Regional Variations	27
2.4.iii. Variations at County and Registration District Level	31
2.4.iv. Differences at the Parochial Level	34
2.4.v. Summary	35
2.5 Herefordshire	35
2.6 The Agricultural Context and Other Employment Options, from a Herefordshire Perspective	38
2.6.i. Farm Service, Wages and Payments in Kind	38
2.6.ii. Crops	47
2.6.iii. Enclosure	53
2.6.iv. Women's and Children's Employment	55
2.7 The Disease and Dearth Context	57
2.7.i. The Weather and Harvests	57
2.7.ii. Disease and Epidemics in the Region	58
2.8 The Urbanisation of the West Midlands	61
2.9 Transport	67
2.9.i. Roads	67
2.9.ii. Water Transport	70
2.9.iii. Railways	73
2.10 Conclusion. Herefordshire Out-migration: Problem and Context	74

CHAPTER THREE: THE SAMPLE PARISH	82
3.1 Introduction	82
3.2 The Geographical Context	82
3.3 Agriculture and Occupations	85
3.4 Population	92
3.5 Baptisms <i>versus</i> Burials	96
3.6 Mortality	98
3.6.i. Crude Death Rate	99
3.6.ii. Childhood Mortality	101
3.6.iii. Life Expectancy	105
3.7 Age at First Marriage	107
3.8 Conclusion	111
 CHAPTER FOUR: METHODOLOGY	 113
4.1 Introduction to the Research Questions	113
4.2 Research Position	116
4.3 The Family Reconstitution Method	121
4.3.i. Methodological Outline	121
4.3.ii. Limitations of Family Reconstitution for Migration Studies	125
4.3.iii. Implications of Moving Beyond the Parish Boundaries	128
4.4 The Sample	132
4.5 The Sources: Potential and Pitfalls	136
4.6 Methodological Implications of Different Methods of Analysis	145
4.7 Constructing the Data-base	149
4.8 Two Worked Examples	161
4.8.i. Minimising False Linkages	161
4.8.ii. Confirming Improbable Linkages	163
4.9 Summary	165
 CHAPTER FIVE: RESULTS	 166
5.1 Introduction	166
5.2 Migration Between Baptism and Marriage	171
5.2.i. Exogamy <i>versus</i> Baptism to Marriage Distance	171
5.2.ii. Method	174
5.2.iii. Exogamy and Marriage Horizons in the Whitbourne Sample	176
5.2.iv. Baptism to Marriage Distances for Whitbourne Marriages of Non-native Whitbourne Descendants	182
5.2.v. Changes in Baptism to Marriage Distances by Marriage Cohort	183
5.2.v. a. 1700-1812	184
5.2.v. b. 1813-1836	186
5.2.v. c. 1837-1850	188
5.2.v. d. 1851-1871	190
5.2.vi. Male Baptism to Marriage Distances, by Occupation	193

5.2.vii. Literacy and Baptism to Marriage Distances	198
5.2.vii. a. Introduction	198
5.2.vii. b. Whitbourne Literacy in Context	201
5.2.vii. c. Analysis	203
5.2.viii. Conclusion: Migration Between Baptism and Marriage	207
5.3 Migration over Whole Life: Baptism to Burial	207
5.3.i. Method	207
5.3.ii. Whole Life Migration According to Baptism Cohort	208
5.3.ii. a. Cohort 1700-1709	209
5.3.ii. b. Cohorts 1710-1749	210
5.3.ii. c. Cohorts 1750-1809	210
5.3.iii. Whole Life Migration According to Year of Death	213
5.3.iv. Whole Life Migration from Whitbourne by Area of Destination	215
5.3.iv. a. Migration from Whitbourne by Baptism Cohort	216
5.3.iv. b. Migration from Whitbourne by Decade of Death	220
5.3.v. Whole Life Migration of Second Generation Whitbourne Descendants	224
5.3.vi. Whole Life Migration Distance and Year of Death	228
5.3.vii. The Effect of Literacy on Whole Life Migration	229
5.3.viii. The Effect of Marriage on Whole Life Migration	231
5.3.viii. a. Net Effect	231
5.3.viii. b. The Effect of Family Size	233
5.3.ix. The Effect of Male Occupation on Whole Life Migration	234
5.3.ix. a. Whole Life Migration and Occupation: Married Men, All Baptism Places	235
5.3.ix. b. Whole Life Migration and Occupation: All Men and All Baptism Places	238
5.4 Migration from Baptism to Place of Residence in 1871	240
5.4.i. Method and Methodological Commentary	240
5.4.ii. Net Migration According to Individual Characteristics	243
5.4.iii. Known Migrants and Derivation of Potential Migrants	244
5.4.iv. Out-migration of Whitbourne Natives, by Area of Destination	247
5.4.v. Migration of Second Generation Whitbourne Descendants	255
5.5 Spatial Patterns of Long-distance Out-migration	260
5.6 The Role of Kin and Acquaintances in Long-distance Migration	263
5.6.i. Parent-child Effects	263
5.6.ii. Kin and Acquaintances	264
5.6.iii. Migration Overseas	267
5.7 Conclusion	271

CHAPTER SIX: DISCUSSION	272
6.1 Overview	272
6.1.i. Migrants <i>versus</i> Non-migrants	275
6.1.ii. Distances	281
6.1.iii. Return Migration	284
6.2 Spatial Factors: Employment Opportunities and Priorities	286
6.2.i. Whitbourne in the Context of East Herefordshire and West Worcestershire	287
6.2.ii. Worcester	293
6.2.ii. a. Introduction	293
6.2.ii. b. Worcester as a Migration Destination	294
6.2.iii. London	295
6.2.iv. Cheltenham	298
6.2.v. Birmingham and the Black Country	299
6.2.vi. Cheshire and Lancashire	304
6.2.vii. Overseas	305
6.3 Personal Social Capital	307
6.3.i. Gender	307
6.3.ii. Land Holding	309
6.3.iii. Life-cycle Stage, Family Size and Social Networks	311
6.3.iv. Occupation	317
6.3.v. Intergenerational Effects	322
6.3.vi. Literacy	323
CHAPTER SEVEN: CONCLUSION	330
7.1 Introduction	330
7.2 Methodological Assessment	332
7.3 Evaluation and Summary of Findings	334
BIBLIOGRAPHY	343
APPENDIX: ACCESS 'DESCENDANTS' DATA-BASE	

MAPS

	<i>page</i>
Figure 3.1: The Parish of Whitbourne, Herefordshire	84
Figure 5.20: The Parishes of the Whitbourne Area	217

GRAPHS

	<i>page</i>
Figure 2.1: Acreage of Oats in the 1801 Crop Returns, and County Rainfall	49
Figure 2.2: Herefordshire-born Individuals in Leigh, Worcestershire, in 1851	78
Figure 2.3: Herefordshire-born Individuals in Claines Suburb, Worcester, in 1851	79
Figure 2.4: Herefordshire-born Individuals in Cheltenham, in 1851	80
Figure 3.2: Employment in Whitbourne in 1851, Age 10 and Over	90
Figure 3.3: Employment in Whitbourne in 1851, Age 5-9	92
Figure 3.4: Early Population Estimates for some Herefordshire Parishes	98
Figure 3.5: Age at First Marriage, 1700-1750	109
Figure 3.6: Age at First Marriage, 1750-1799	109
Figure 3.7: Age at First Marriage, 1800-1849	110
Figure 3.8: Age at First Marriage, 1850-1871	110
Figure 5.1: Whitbourne Marriages of Whitbourne Natives to Non-native Spouses	181
Figure 5.2: Distance from Baptism to Marriage for Whitbourne Descendants, 1700-1812	185
Figure 5.3: Distance from Baptism of Spouse to Marriage, 1700-1812	185
Figure 5.4: Distances from Baptisms to Marriage, 1700-1812	186
Figure 5.5: Distance from Baptism to Marriage for Whitbourne Descendants, 1813-1836	187
Figure 5.6: Distance from Baptism of Spouse to Marriage, 1813-1836	187
Figure 5.7: Distances from Baptisms to Marriage, 1813-1836	188
Figure 5.8: Distance from Baptism to Marriage for Whitbourne Descendants, 1837-1850	189
Figure 5.9: Distance from Baptism of Spouse to Marriage, 1837-1850	189
Figure 5.10: Distances from Baptisms to Marriage, 1837-1850	190
Figure 5.11: Distance from Baptism to Marriage for Whitbourne Descendants, 1851-1871	191
Figure 5.12: Distance from Baptism of Spouse to Marriage, 1851-1871	192
Figure 5.13: Distances from Baptisms to Marriage, 1851-1871	192
Figure 5.14: Distances from Baptism to Marriage for Men, by Occupation, 1700-1812	196
Figure 5.15: Distances from Baptism to Marriage for Men, by Occupation, 1813-1836	197
Figure 5.16: Distances from Baptism to Marriage for Men, by Occupation, 1837-1850	197
Figure 5.17: Distances from Baptism to Marriage for Men, by Occupation, 1851-1871	198
Figure 5.18: Signature Illiteracy at Marriage	202
Figure 5.19: Signature Illiteracy at Marriage for Whitbourne, Herefordshire and Worcestershire, 1761-1871	203
Figure 5.21: Residence at Death of Whitbourne Natives, Baptism Cohorts 1700-1749	218
Figure 5.22: Residence at Death of Whitbourne Natives, Baptism Cohorts 1750-1769	218

Figure 5.23: Residence at Death of Whitbourne Natives, Baptism Cohorts 1770-1789	219
Figure 5.24: Residence at Death of Whitbourne Natives, Baptism Cohorts 1790-1809	219
Figure 5.25: Residence at Death of Whitbourne Natives, Death Years 1710-1812	221
Figure 5.26: Residence at Death of Whitbourne Natives, Death Years 1813-1836	222
Figure 5.27: Residence at Death of Whitbourne Natives, Death Years 1837-1850	222
Figure 5.28: Residence at Death of Whitbourne Natives, Death Years 1851-1871	223
Figure 5.29: Residence at Death of Non-Whitbourne Natives, Death Years 1813-1836	225
Figure 5.30: Residence at Death of Non-Whitbourne Natives, Death Years 1837-1850	226
Figure 5.31: Residence at Death of Non-Whitbourne Natives, Death Years 1851-1871	226
Figure 5.32: Distribution of Family Size Among Whitbourne Descendants, Parental Baptism 1689-1859	234
Figure 5.33: Baptism to Burial Distances by Occupation, for Men Married before 1813	237
Figure 5.34: Baptism to Burial Distances by Occupation, for Men Married after 1812	238
Figure 5.35: Baptism to Burial Distances by Occupation, for Men Deceased before 1851	239
Figure 5.36: Baptism to Burial Distances by Occupation, for Men Deceased after 1850	240
Figure 5.37: Residence in 1871 of Whitbourne Natives, Baptism Cohort 1790-1809	251
Figure 5.38: Residence in 1871 of Whitbourne Natives, Baptism Cohort 1810-1829	251
Figure 5.39: Residence in 1871 of Whitbourne Natives, Baptism Cohort 1830-1839	252
Figure 5.40: Residence in 1871 of Whitbourne Natives, Baptism Cohort 1840-1849	252
Figure 5.41: Residence in 1871 of Whitbourne Natives, Baptism Cohort 1850-1859	253
Figure 5.42: Residence in 1871 of Non-native Whitbourne Descendants, Baptism Cohort 1790-1809	258
Figure 5.43: Residence in 1871 of Non-native Whitbourne Descendants, Baptism Cohort 1810-1829	258
Figure 5.44: Residence in 1871 of Non-native Whitbourne Descendants, Baptism Cohort 1830-1839	259
Figure 5.45: Residence in 1871 of Non-native Whitbourne Descendants, Baptism Cohort 1840-1849	259
Figure 5.46: Residence in 1871 of Non-native Whitbourne Descendants, Baptism Cohort 1850-1859	260

TABLES

	<i>page</i>
Table 2.1: Summary of the Characteristics of the Adult Agricultural Labour Force for Selected Counties, in 1851	30
Table 2.2: Average Wages for Sample Populations from Selected Areas, from 1771-1775 and 1816-1820	31
Table 2.3: County Growth Rates, 1600-1801	32
Table 2.4: Herefordshire in Context: Agricultural Employment and Population	39
Table 2.5: Male Agricultural Employees in Some Rural Counties in 1871	41
Table 2.6: Comparative Real Wages of Agricultural Labourers	45
Table 2.7: Arable Crops in Some Rural Counties in the 1801 Crop Returns	48
Table 2.8: Land Use and Livestock on Holdings of 20 Acres and Above, in the 1871 Crop Return	52
Table 2.9: Deaths from Asiatic Cholera in Nineteenth-century Epidemics	61
Table 2.10: Prices for an Outside Seat from Worcester, 1794 and 1840	70
Table 2.11: Charges for Travel from Worcester by Water and Road, in 1794	71
Table 2.12: Herefordshire Population Change in Context	75
Table 2.13: Location of People Born in Herefordshire, in the 1851 Census	77
Table 3.1: Area and Population of Some Parishes in Broxash Hundred, 1831	85
Table 3.2: Distribution of Arable Crops in Whitbourne, Compared with Herefordshire, Worcestershire and Shropshire, 1801	86
Table 3.3: Calculation of Parish Population from Crude Marriage Rate	95
Table 3.4: Estimated Net Migration, Whitbourne 1700-1871	97
Table 3.5: Civil Death Registrations and Parish Burials, Whitbourne 1837-1865	100
Table 3.6: Crude Death Rate for Whitbourne during the Census Period	101
Table 3.7: Childhood Mortality and Parental Birthplace, 1700-1871	102
Table 3.8: Infant Mortality Rates per Thousand, from Civil Registration Data	104
Table 3.9: Mean Life Expectancy at Birth for Whitbourne Descendants	106
Table 3.10: National Life Expectancy, as Calculated by the Cambridge Group using Two Different Methods	106
Table 3.11: Age at First Marriage of Whitbourne Descendants, by Year of Marriage	108
Table 4.1: Population Size Distributions in 1811	116
Table 4.2: The Whitbourne-baptised Initial Sample	134
Table 4.3: Eighteenth-century Land Ownership as a Guide to Socio-economic Grouping in Whitbourne	135
Table 4.4: Comparison of Baptisms and Civil Registration of Births, Whitbourne, 1838-1871	139
Table 4.5: Male Christian Name Frequencies, per thousand Herefordshire marriages recorded	157
Table 4.6: Female Christian Name Frequencies, per thousand Herefordshire marriages recorded	158

Table 5.1: Exogamous Marriages in Whitbourne Registers, in Sample Decades	177
Table 5.2: Areas of Residence of Exogamous Marriage Partners	179
Table 5.3: Whitbourne Marriages of Natives with Spouse Baptised over 23 km away	182
Table 5.4: Marriages of Non-native Whitbourne Descendants in Whitbourne	183
Table 5.5: Marriages of All Whitbourne Descendants, by Period of Marriage	184
Table 5.6: Numbers of Whitbourne-descended Men with Known Occupational Data, Married in each Time Period	195
Table 5.7: Distances Moved Before Marriage, 1837-50, According to Parental Literacy	205
Table 5.8: Additional Long-distance Baptism to Marriage Migration and Literacy Data	206
Table 5.9: Baptisms per Decade, in Two Data Tables	209
Table 5.10: Known Migrants, 1750-1809, All Baptism Places	211
Table 5.11: Derivation of Potential Male Migrants, 1750-1809, All Baptism Places	212
Table 5.12: Deaths per Decade and Known Migrants, All Baptism Places	214
Table 5.13: Percentage of Whitbourne Natives who also Died There, by Baptism Cohort	216
Table 5.14: Non-natives who were Buried in Whitbourne	227
Table 5.15: Urban and More Distant Areas of Death of Natives of Whitbourne, Compared with Non-native Descendants	228
Table 5.16: Summary of Baptism to Death Distances for Whitbourne Descendants, According to Year of Death	229
Table 5.17: Influence of Literacy on Baptism to Death Distance	231
Table 5.18: Comparison of Baptism to Marriage and Baptism to Death Distances in Four Baptism Cohorts	233
Table 5.19: Overall Tracing Rate per Decade	242
Table 5.20: Distance from Place of Baptism to Place of Abode in 1871, According to Various Individual Characteristics	244
Table 5.21: Known Migrants from All Baptism Places, Baptism Cohorts 1790 to 1859, for those Still Alive in 1871	245
Table 5.22: Derivation of Potential Male Migrants, 1790-1871	246
Table 5.23: Populations of the Parishes in Areas 1 to 5, in 1871	249
Table 5.24: Percentages of Whitbourne Natives Traced to Different Areas in 1871	254
Table 5.25 a: Outlier Migrants who Died before 1871	261
Table 5.25 b: Outlier Migrants Still Alive in 1871	261
Table 5.26: Individuals found in Area 13 (Cheshire and Lancashire) in 1871	263

ABBREVIATIONS

BDLHC	Bromyard and District Local History Centre
BMSGH	Birmingham and Midland Society for Genealogy and Heraldry
CDR	Crude Death Rate
CEB	Census Enumerator's Book
CMR	Crude Marriage Rate
HRO	Herefordshire County Record Office
IMR	Infant Mortality Rate
PCC	Prerogative Court of Canterbury
Salop	Shropshire
uid	unique identifier
WRO	Worcestershire County Record Office

CHAPTER ONE: INTRODUCTION

1.1 General Introduction

Following ground-breaking studies including those by Constant, Lawton and Tranter,¹ it is now widely accepted that life for the mass of the population of England in the past was not typified by self-contained and self-perpetuating villages, but rather that even in the medieval and early-modern periods there were significant numbers of mobile individuals, communities and social groups. By 1979, Clark was able to assert that ‘Physical mobility had a profound and pervasive effect on early modern society. Its central role in the demographic matrix is increasingly clear.’²

It is now also recognised that this mobility had important consequences for economic and social development through the ‘long industrial revolution,’ as far back as the early-modern period.³ Zelinsky saw mobility as one of the main strands of the transition to modernity, together with informational, demographic, occupational and technological changes, but Berg has gone further, citing the movement of skilled technicians and labour as a fundamental prerequisite for industrialisation.⁴ The research position in several disciplines has moved from

¹ A. Constant, ‘The Geographical Background of Inter-Village Population Movements in Northamptonshire and Huntingdonshire, 1754-1943’, *Geography* 33 (1948): 78-88; R. Lawton, ‘Population Movements in the West Midlands 1841-1861’, *Geography* 43 (1958): 164-77; N. Tranter, ‘Population and Social Structure in a Bedfordshire Parish: The Cardington Listings of Inhabitants, 1782’, *Population Studies* 21 (1967): 261-82

² P. Clark, ‘Migration in England During the Late Seventeenth and Early Eighteenth Centuries’, *Past and Present* 83 (1979): 57-90, p. 57

³ Christopher Dyer, ed., *The Self-Contained Village: The Social History of Rural Communities, 1250-1900* (Hatfield: University of Hertfordshire Press, 2007); Robert Woods, *The Population History of Britain in the Nineteenth Century* (Cambridge: Cambridge University Press, 1995), p. 20; see also Shaw-Taylor, L. and E.A. Wrigley, ‘The Occupational Structure of England, c. 1750-1871: A Preliminary Report,’ (2008), at www-hpss.geog.cam.ac.uk/research/projects/occupations, first accessed December 2011

⁴ Maxine Berg, ‘The Genesis of ‘Useful Knowledge’’, *History of Science* 45 (2007): 123-33, p. 130; Wilbur Zelinsky, ‘The Hypothesis of the Mobility Transition’, *Geographical Review* 61 (1971): 219-49

viewing geographical mobility as the exception or as a barrier to study of populations,⁵ to an acknowledgement that this mobility was a core characteristic of England in the early modern as well as the modern period,⁶ although some still crave an immobile population.⁷ Whyte, *pace* Wrigley, listed ‘the three basic demographic variables: fertility, mortality and migration’.⁸

The quantification and analysis of migration at the detailed and local level is, however, still in its early stages, and some regions of England have been the subjects of much more investigation than others.⁹ The parish of Colyton in Devon has been well researched,¹⁰ while parts of East Anglia and the south east of England, and more recently Hertfordshire with its link to the Local Population Studies Society, have also been studied in some depth. It has recently been argued that this ‘cinderella’ subject should be prioritised.¹¹

Geographical, or spatial, mobility impinges on most disciplines within social and economic history, from urbanisation, labour supply and transport to agricultural history and Poor Law administration. Consequently there is a wide-ranging literature associated with it, conceived and written from diverse disciplinary backgrounds and research epistemologies, and covering

⁵ J.D. Chambers, ‘The Vale of Trent 1670-1800. A Regional Study of Economic Change’, *Economic History Review* Supplement 3 (1957): 1-63

⁶ Jan de Vries, *European Urbanisation, 1500-1800* (London: Methuen and Co Ltd, 1984), p. 199

⁷ Peter Razzell, ‘Infant Mortality in London, 1538-1850: A Methodological Study’, *Local Population Studies* 87 (2011): 45-64, p. 53

⁸ Ian Whyte, *Migration and Society in Britain, 1550-1830* (Social History in Perspective; Basingstoke: Macmillan Press, 2000), p.1; compare: ‘reconstitution is in essence the systematic assemblage and articulation of information about the life histories of families . . . The basic data are simple and stark. Life consists only of birth, marriage and death.’ E. Anthony Wrigley et al., *English Population History from Family Reconstitution, 1580-1837* (Cambridge: Cambridge University Press, 1997), p. 12

⁹ Pamela Sharpe, ‘Population and Society, 1700-1840’ in *1540-1840*, vol. 2, ed. Peter Clark (The Cambridge Urban History of Britain; Cambridge: Cambridge University Press, 2000): 491-528, pp. 491 and 527

¹⁰ Eleven papers on this one parish are cited in Wrigley et al., *English Population History . . . 1580-1837*

¹¹ Richard M Smith, ‘Linking the Local and the General in Population History: Prioritising Migration’, *Local Population Studies* 81 (2008): 9-10

several centuries. The historiographical outlines of this literature will be introduced in this introductory chapter, but specific areas will be discussed at relevant points of the thesis.

Three broad issues can be noted initially. Firstly, English social legislation, from the medieval limitations on movement of serfs onwards, operated on the premise that the mass of the population was, or should be, tied to their parish or manor of birth. Legislators have however also been acutely aware of the extent and potential of population mobility, as revealed by the title of the 1572 'Act for the Punishment of Vagabondes and for the Relief of the Poor and Impotent.' This early modern perception of poverty, and the poor themselves, as a problem to be controlled by preventing mobility, confronted the fact that the able-bodied poor, and anyone desiring a change or increase in employment, had powers of agency which included the option of migration. Evidence from medieval court records shows that from as early as the thirteenth century, some manors were facing significant out-migration.¹² There was for centuries a tension between the ambitions of the law and the reality for those who encountered it, either as the recipients of its action or as its enforcers. This has resulted in numerous sources relating to the operation of these laws, and especially to the disjunction between actual and 'legal' places of residence. There is evidence that contemporaries were themselves aware of this conflict between law and practice, and the tension has to some extent spilled over into the current historiography.¹³

¹² R. K Field, 'Migration in the Later Middle Ages: The Case of the Hampton Lovett Villeins', *Midland History* 8 (1983): 29-48; Christopher Dyer, 'Were Late Medieval English Villages 'Self-Contained'?' in *The Self-Contained Village: The Social History of Rural Communities, 1250-1900*, ed. Christopher Dyer (Hatfield: University of Hertfordshire Press, 2007): 6-27

¹³ Roger Wells, 'Migration, the Law, and Parochial Policy in Eighteenth and Early Nineteenth-Century Southern England', *Southern History* 15 (1993): 86-139

Secondly, studies of population mobility have been of two types: most have looked at a selected population at a particular point in time, mainly in the census period but also in the few earlier parish enumerations, while some longitudinal studies extend over one or more decades or very occasionally over whole lifetimes.¹⁴ Very little is known about how migration patterns develop over multi-generational time, nor in general about the pre-census period. Using census material usually provides information about in-migration rather than out-migration.

Thirdly, the building blocks from which the modern understanding of English demography is constructed are very largely derived from single-parish data, which are only measurements (as distinct from adjusted estimates) of the lives of the immobile segment of the population. Most studies of mobility have also been restricted to one or occasionally a small group of parishes. One notable exception is a marriage register study in a substantial part of eighteenth-century Shropshire.¹⁵

¹⁴ See for example D. R. Mills and K. Schurer, 'Migration and Population Turnover' in *Local Communities in the Victorian Census Enumerators' Books*, ed. Dennis Mills and Kevin Schurer (Local Population Studies Supplements; Oxford: Leopard's Head Press Ltd, 1996): 218-28; Colin Pooley and Jean Turnbull, *Migration and Mobility in Britain since the Eighteenth Century* (London: University College London Press, 1998); Audrey Perkyns, 'Migration and Mobility in Six Kentish Parishes, 1851-1881', *Local Population Studies* 63 (1999): 30-70; Christopher French, 'Persistence in a Local Community: Kingston Upon Thames, 1851-1891', *Local Population Studies* 81 (2008): 18-36

¹⁵ William John Edwards, *Marriage and Mobility 1754-1810: An Examination of the Anglican Marriage Registers of Selected Shropshire Parishes* (Queen Mary College, University of London, unpublished PhD thesis, 1979)

1.2 Definitions

The term ‘migration’ has been used in many ways, sometimes including seasonal or other temporary migration for employment,¹⁶ or at the other extreme only looking at permanent changes of residence. It can be taken as net movement made over a lifetime, or as encompassing the sum of all measurable movements, approximating to gross migration. Between these extremes are a range of possible definitions, including or excluding such categories as vagrants, commercial travellers and itinerant workers.

For the purposes of the present study, the following terminology will be used:

family dispersal – geographical scattering of family members, including illegitimate children, from their birthplace and over multi-generational time;

migration, migrant – geographical change of habitual residence, if this change involved a relocation over a parish boundary (habitual being defined as any length of time such that it appears in the sources used, but excluding specific references for example to individuals as ‘visitor’ in a census return where they are known to have soon returned to their previous residence);

out-migration, out-migrant – migration out of the parish of baptism (or parish of birth where baptismal parish is not known);

in-migration, in-migrant – migration into a parish including a ‘return migration’ to the parish of baptism or birth for individuals previously resident in another parish;

emigration, emigrant – migration involving leaving the United Kingdom as then constituted.

¹⁶ E. J. T. Collins, ‘Migrant Labour in British Agriculture in the Nineteenth Century’, *Economic History Review* 29 (1976): 38-59; T.M. Devine, ‘Temporary Migration and the Scottish Highlands in the Nineteenth Century’, *Economic History Review* 32 (1979): 344-59

This is intended to be a practical and workable system given the sources to be used, rather than an economic or socially-defined one. A limitation is that, for example, a woman would be classified as a migrant if she were born and habitually lived in the Black Country but had a child which according to the baptism registers and census returns had been born in rural Herefordshire, even though more detailed evidence might show that this birth had occurred while the mother was employed for a few weeks in hop-picking.

1.3 Migration and Population Mobility

It has been known for centuries that cities relied on migration from rural areas to fuel population growth, and this subject tended to dominate early research. John Graunt noted in 1662 that London was rapidly repopulated after the 1603 and 1625 plagues, which killed an estimated 15% of the population: ‘the City hath been re-peopled, let the mortality do what it will’.¹⁷ Writing in the 1760s, Arthur Young commented on the stream of migrants to the cities of Britain: ‘Young men and women in the country fix their eye on London as the last stage of their hope . . . The number of young women that fly there is incredible.’¹⁸ One of the earliest known systematic indicators of this phenomenon is the Bedfordshire listing of 80% of the households of Cardington in 1782, which shows that a fifth of all parish offspring who

¹⁷ John Graunt, *Natural and Political Observations upon the Bills of Mortality* (London, 1662), cited in John Wareing, ‘Migration to London and Transatlantic Emigration of Indentured Servants, 1683-1775’, *Journal of Historical Geography* 7 (1981): 356-78

¹⁸ Arthur Young, *The Farmer’s Letters to the People of England* (Dublin, 1768), pp. 340-341, cited in Bridget Hill, ‘Rural-Urban Migration of Women and Their Employment in Towns’, *Rural History* 5 (1994): 185-94

were no longer resident in the parish had migrated to London, 70 km distant, even though Bedford was only 4 km away.¹⁹

Although urban areas mostly grew through migration the mortality rates of such migrants were high, as proposed formally by Malthus in 1803.²⁰ Mortality rates can be estimated using a variety of sources, notably the somewhat problematic London Bills of Mortality from 1728-1830, which give age and cause of death for all Anglicans buried within the city of London. Precise results differ, but there is evidence that compared with rural areas, urban life expectancy was low, and infant mortality (IMR) was high, especially in the later eighteenth century.²¹ In 1843, Farr used the 1841 census and civil registration of births and deaths to show that for example the IMR in Manchester and Liverpool was over twice that for Surrey, and life expectancy at one year old was sixteen years less; for London his figures showed an IMR one third higher than for Surrey, and life expectancy at one year old seven years less.²² In 1873, Francis Galton commented dramatically on what he took to be the necessarily harmful effect of this phenomenon on the stock of England, since he believed that ‘the more energetic of our race, and therefore those whose breed is the most valuable to our nation, are attracted from the country to our towns,’ a proposition to which we will return.²³

¹⁹ Tranter, ‘Population and Social Structure . . . The Cardington Listings’; R. S Schofield, ‘Age-Specific Mobility in an Eighteenth-Century Rural English Parish’, *Annales de Démographie Historique, Paris* (1971): 261-74

²⁰ Malthus’ second edition (1803) “An Essay on the Principles of Population”, cited in Woods, *The Population History of Britain in the Nineteenth Century*, p. 1

²¹ Jeremy Boulton and Leonard Schwarz, ‘Yet Another Inquiry into the Trustworthiness of Eighteenth-Century London’s Bills of Mortality’, *Local Population Studies* 85 (2010): 28-45

²² R. Woods, ‘Mortality in Eighteenth-Century London: A New Look at the Bills’, *Local Population Studies* 77 (2006): 12-23, especially Table 1; see also E. Anthony Wrigley, ‘No Death without Birth: The Implications of English Mortality in the Early Modern Period’ in *Problems and Methods in the History of Medicine*, ed. R. Porter and A. Wear (London: Croom Helm, 1987): 351-66

²³ ‘The Relative Supplies from Town and Country Families to the Population of Future Generations.’ *Journal of the Royal Statistical Society* 36 (1873), p. 19, cited in John Saville, *Rural Depopulation in England and Wales, 1851-1951* (London: Routledge and Kegan Paul, 1957), pp. 125-26

High urban mortality rates mean that in-migration must be correspondingly greater, if the city continues to grow. Some time ago, Wrigley proposed a simple model for London's growth in the early modern period. In summary, assuming its population was half a million in 1700, net in-migration to London needed to be about 8,000 per annum to achieve the observed growth rate over the century.²⁴ Many sources support this general picture, and together they indicate that such in-migration to the capital was already well-established by the eighteenth century. For example 74% of deponents in a seventeenth-century sample came from beyond London and the Home Counties: 10% gave Devon as their birthplace, while one came from Herefordshire.²⁵ Whether the urban area was a new industrial centre like nineteenth-century Preston,²⁶ or eighteenth-century Westminster with its insatiable demand for domestic servants,²⁷ most additional population came not from natural increase but from in-migration.

The period in which this research project is set witnessed accelerating migration from rural to urban areas. In the early eighteenth century, London accounted for 10% of England's population, and there were only thirty towns with more than 5,000 inhabitants, among which was Bristol with 20,000. By 1851, half the population was in towns with over 20,000 inhabitants, and although Bristol had mushroomed to 137,000, it was far outstripped by Glasgow and Liverpool. Even by the 1801 census, the new industrial centres were established; the population of Manchester was 84,000, Liverpool 77,500 and Birmingham 73,500.

²⁴ E.A Wrigley, 'A Simple Model of London's Importance in Changing English Society and Economy, 1650-1750', *Past and Present* 37 (1967): 44-70, p. 46

²⁵ David Cressey, 'Occupations, Migration and Literacy in East London, 1580-1640', *Local Population Studies* 5 (1970): 53-60

²⁶ Michael Anderson, *Family Structure in Nineteenth-Century Lancashire* (Cambridge: Cambridge University Press, 1971)

²⁷ Leonard Schwarz, 'Hanoverian London: The Making of a Service Town', *Proceedings of the British Academy* 107 (2001): 93-110

Nevertheless, it is misleading to see migration in terms of a simple rural *versus* urban dichotomy, as implied by many early observers,²⁸ not least because this tends to equate ‘rural’ with static, traditional and sedentary:

. . . we must abandon the emphasis on *the* countryside and *the* city; these were places of population exchange within a region. Within this region, people had common origins, information and traditions of migration. Consequently, the best alternative is to view migration in terms of migration *systems*.²⁹

Migration took place within rural areas, within cities, and from urban to more rural areas. Different social groupings, in the broadest sense, migrated in different ways along a variety of paths and networks. Cultural changes in time and space affected who moved and how they did so, and exchanges between urban and rural areas may have taken place for centuries before the urbanisation phase classically associated with the industrial revolution. Rural life was more complex and migration decisions were far more nuanced than the simple models imply.³⁰

Kin networks and long-term traditions of connections between towns and their hinterlands mean that moves between rural and urban environments should not be seen in isolation. Many incomers from the countryside were not entering an alien culture, and the process of migration might be better understood as being ‘embedded in systems of family, politics, religion,

²⁸ D. B. Grigg, ‘E. G. Ravenstein and the ‘Laws of Migration’ in *Time, Family and Community: Perspectives on Family and Community History*, ed. Michael Drake (Oxford: Oxford University Press and Blackwell, 1994): 147-64

²⁹ Leslie Page Moch, *Paths to the City: Regional Migration in Nineteenth-Century France* (Beverly Hills, London and New Delhi: Sage Publications, 1983), pp. 24-25

³⁰ James H Jackson and Leslie Page Moch, ‘Migration and the Social History of Modern Europe’ in *Time, Family and Community: Perspectives on Family and Community History*, ed. Michael Drake (Oxford: Oxford University Press and Blackwell, 1994): 181-98

education, and sociability.’³¹ Clark and Souden have expressed this in terms of ‘mental migration distance,’ a refinement of simpler measurements based on linear distance alone, drawing attention to individual motivations in migration, including such factors as cultural change and social cost, as well as purely economic considerations.³²

There is something of a divergence in the literature between accounts of migration as stemming primarily from poverty, and explorations of population movement as a response to opportunity, although this dichotomy is perhaps more a result of differing social and political ontologies among researchers than a fundamental discontinuity among the historical migrants. Radically disparate research standpoints are the norm, but migration for family survival, life-cycle migration of adolescents and ‘betterment’ changes of employment, could be seen as part of a spectrum of motivations.

At one extreme, migrants were sometimes from the bottom of the social scale. Those defined as vagrants were often highly mobile: early-modern cases from Herefordshire have been traced to Salisbury, the West Country and the Home Counties.³³ In 1902, Rowntree proposed that at times of peak economic need in the life-cycle of the poor (early adolescence, young families with an excess of dependent children over earners, old age, childhood if orphaned), there was an increased tendency to migrate to urban areas.³⁴ Some migration was undoubtedly driven by need, and sometimes it was encouraged or actively assisted by the Poor Law authorities, as in the 1830s schemes encouraging translocation from East Anglia and the east

³¹ Anderson, *Family Structure*, p. 191

³² Peter Clark and David Souden, ‘Introduction’ in *Migration and Society in Early Modern England*, ed. Peter Clark and David Souden (London: Hutchinson, 1987): 11-48

³³ Paul A Slack, ‘Vagrants and Vagrancy in England, 1598-1664’, *Economic History Review* 27 (1974): 360-79

³⁴ B. S. Rowntree, *Poverty: A Study of Town Life* (London: 1902), p. 137, cited in Barry Reay, *Rural England: Labouring Lives in the Nineteenth Century* (Basingstoke: Palgrave Macmillan, 2004), p. 85

midlands to the textile districts of Lancashire and Yorkshire,³⁵ or the distant placement of parish apprentices.³⁶

In many cases, however, those who left their birthplace were endowed with significant social capital. A completed apprenticeship conferred a settlement,³⁷ and in the mid eighteenth century, half of London's apprentices came from outside the metropolis, with an average distance travelled of over 100 km.³⁸ Adult migrants might possess well-developed and relevant skill-sets,³⁹ and the most skilled often came from furthest away, even from overseas.⁴⁰ Although many studies have found that the majority of moves were short, typically less than 20 km, specialist industries encouraged long-distance migration; for example of 1,000 men employed by the railway company in Brighton in 1861, over half were engineers, boilermakers and other skilled workmen, mostly born in Lancashire, Cheshire, Northumberland and Durham.⁴¹

The nineteenth-century statistician Ravenstein used birthplace data from the 1871 and 1881 British censuses to produce his eleven Laws of Migration. These can be summarised as follows:

³⁵ Ibid. p. 86

³⁶ Katrina Honeyman, 'The Poor Law, the Parish Apprentice, and the Textile Industries in the North of England, 1780-1830', *Northern History* 44 (2007): 115-40

³⁷ Joan Lane, *Apprenticeship in Warwickshire, 1700-1834* (Unpublished PhD thesis, University of Birmingham, 1977); K. J. Smith and N. J. Williams, ed., *Warwickshire Apprentices and Their Masters, 1710-1760*, vol. XXIX (Dugdale Society; Oxford: Oxford University Press, 1975); John Patten, 'Patterns of Migration and Movement of Labour to Three Pre-Industrial East Anglian Towns', *Journal of Historical Geography* 2 (1976): 111-29; Graham Ullathorne, 'Migration from Derbyshire to Hallamshire: The Evidence of the Cutlers' Company Records, 1624 to 1814', *Northern History* 41 (2004): 81-109

³⁸ John Wareing, 'Changes in the Geographical Distribution of the Recruitment of Apprentices to the London Companies, 1486-1750', *Journal of Historical Geography* 6 (1980): 241-49

³⁹ Jason Long, 'Rural-Urban Migration and Socioeconomic Mobility in Victorian Britain', *Journal of Economic History* 65 (2005): 1-35

⁴⁰ William Turner, 'Patterns of Migration of Textile Workers into Accrington in the Early Nineteenth Century', *Local Population Studies* 30 (1983): 28-34

⁴¹ June A. Sheppard, 'The Provenance of Brighton's Railway Workers, 1841-1861', *Local Population Studies* 72 (2004): 16-33

1. Most migrants move only short distances.
2. Migration proceeds step by step.
3. Migrants going long distances usually go to one of the great centres of commerce or industry.
4. Each current of migration produces a compensating counter-current.
5. The natives of towns are less migratory than those of rural areas.
6. Females are more migratory than males within the county of their birth, but males more frequently migrate further.
7. Most migrants are adults; families rarely migrate outside their county of birth.
8. Large towns grow more by migration than by natural increase.
9. Migration increases in volume as industries and commerce develop and transport improves.
10. The major direction of migration is from agricultural areas to centres of industry and commerce.
11. The major causes of migration are economic.⁴²

Ravenstein was a man of his time, and while some of his Laws (notably 1, 3, 4, 7 and 8), have received support from modern studies, others were inevitably influenced by contemporary trends. Some were over-dependent on the aggregative and county-based nature of his data, while others, notably 2 and 5, are difficult to analyse and are dependant on the definitions used. There are certainly both gender- and occupation-based variations in mobility, and migration has repeatedly been shown to operate selectively rather than at random, but other motivations than economic ones play a part, although they can be harder to test, while concepts of 'social capital' frame many modern interpretations. Furthermore, local factors and

⁴² Grigg, 'E. G. Ravenstein and the 'Laws of Migration''

special cases in both time and place, for example Irish migration to England in the 1840s and 1850s (Anderson found that 14% of migrants to Preston in 1851 were from Ireland⁴³), can overturn more normative patterns.

That there was net migration from rural to urban areas in the eighteenth and nineteenth centuries is undisputed. For those individuals who did not make a permanent move from countryside to town, however, the picture is complex, and in most places there was not absolute population decline until the late nineteenth century. The rural population was characterised by mobility: the National Sample of the 1851 census reveals that a third of rural migrants were at least 25 km from their birth-place.⁴⁴ Some of this can perhaps be attributed to 'step-wise' migration as proposed by Ravenstein, a movement in the direction of an urban centre, but another major component might equally be the cultural norm for women to move to live in their husband's parish. There are many possible contributing factors, as conceded by Chambers in his seminal regional population study of the Vale of Trent. He concluded that mobility was noticeable by the eighteenth century, and explored some potential influences which have been taken up by subsequent scholars, including literacy levels, exogamy, occupation, fluctuations in agricultural and industrial fortunes, and transport.⁴⁵

High migration rates have been found in rural studies based in a range of places and periods from medieval to modern. Church court witness statements from 1650-1750 reveal a minority of individuals moving long distances, but 60% of the sample of 285 had moved at least once; professionals and those in the food and drink trades were the most mobile, and yeomen the

⁴³ Anderson, *Family Structure*, p. 37.

⁴⁴ Michael Anderson, 'The Social Implications of Demographic Change' in *People and Their Environment*, ed. F. M. L. Thompson (The Cambridge Social History of Britain 1750-1950; Cambridge: Cambridge University Press, 1990): 1-70

⁴⁵ Chambers, 'The Vale of Trent'

most sedentary.⁴⁶ Yorkshire baptism registers at the turn of the nineteenth century have exposed mobility patterns among young families, among whom farmers were the least mobile, labourers moved within about 30 km, and many tradesmen moved further.⁴⁷ In-migrants are sometimes found to have been more mobile than locals, women were often more mobile than men, and domestic servants were often the most mobile group.⁴⁸

1.4 The Research Area

Despite increasing agreement about overall patterns of historical mobility, there are clear differences both regionally and through time. Migration within and from some parts of England, to say nothing of the rest of the United Kingdom, is still poorly understood.

Local population historians have made significant contributions . . . particularly using the enumerator schedules . . . but there is much to be done, particularly for earlier periods, if we are to understand . . . [the] enormous regional variations in growth rates over the course of the eighteenth and nineteenth centuries.⁴⁹

The present study therefore seeks to develop a methodology which extends the classic Family Reconstitution, as developed in England by the Cambridge Group for the History of Population and Social Structure (hereafter the Cambridge Group), well beyond the boundaries

⁴⁶ Peter Clark, 'Migration in England During the Late Seventeenth and Early Eighteenth Centuries' in *Migration and Society in Early Modern England*, ed. Peter Clark and David Souden (London: Hutchinson, 1987): 213-52

⁴⁷ Moira Long and Bessie Maltby, 'Personal Mobility in Three West Riding Parishes, 1777-1812', *Local Population Studies* 24 (1980): 13-25

⁴⁸ Bogusia Wojciechowska, 'Brenchley: A Study of Migratory Movements in a Mid Nineteenth-Century Rural Parish', *Local Population Studies* 41 (1988): 28-40

⁴⁹ Smith, 'Linking the Local and the General', p. 10

of the parish which forms its starting point and into subsequent generations, to enable a reliable exploration of the factors affecting migration destinations among different subsections of a sample population. A parish in Herefordshire, a county hitherto largely unexplored by social historians and almost untapped by demographers,⁵⁰ forms the basis for the study, to enable comparisons to be made with other, better-researched areas. Herefordshire itself is in a seldom-studied region of England, and although it is close to the modern West Midlands conurbation and is historically both deeply rural and known to have experienced early out-migration, it is not known whether, and if so when, its migrants were drawn to these urbanising districts. By building up a data-base of the migration-paths of eighteenth- and early nineteenth-century migrants, some insights can be gained into the contribution which Herefordshire made to the growth of its urban neighbours.

The sample parish, Whitbourne (see further, Chapter 3) is a classic Herefordshire parish with scattered hamlets and farms, but had an eighteenth- and nineteenth-century population large enough for some statistical analysis (see further, Chapter 4). It has well-preserved parish registers and other records from the seventeenth century onwards. A turnpike ran through the parish, but no canals were built in the vicinity and the railway only reached it in the 1870s, after the end-point of the study. Whitbourne thus offered a superficial stability through the research period, within which migration could be studied.

⁵⁰ Of the 404 parishes used in the initial Cambridge Group analyses, six were in Herefordshire, compared for example with twenty-eight in Bedfordshire and twenty-nine in Suffolk: E. Anthony Wrigley and Roger S. Schofield, *The Population History of England. 1541-1871. A Reconstruction* (Cambridge: Cambridge University Press, 1989; tr. from 1981, Edward Arnold, London), pp. 485-89

CHAPTER 2: CONTEXT

2.1 Introduction

This study takes a sample of the population of one Herefordshire parish, and traces them and their descendants between 1700 and 1871. This chapter investigates the extent of regional variation in this period, and explores the context for population mobility, with particular reference to rural Herefordshire, in terms of the prevailing legal constraints, employment opportunities and transport options.

2.2 The Research Period

The starting date of the study was chosen to avoid the aftermath of the Civil War and Commonwealth, which is thought to have been a period of substantial under-registration of baptisms, marriages and burials (perhaps over 15%),¹ as well as a time of widespread social disruption. Some 80,000 men were on the roads after the conflict,² with potentially important but unquantified impact on early-modern migration patterns. The sample parish itself changed hands during the Civil War, and the Earl of Essex's army marched and counter-marched along

¹ E. Anthony Wrigley and Roger S. Schofield, *The Population History of England. 1541-1871. A Reconstruction* (Cambridge: Cambridge University Press, 1989; tr. from 1981, Edward Arnold, London), p. 76; see also E. A. Wrigley, 'Rickman Revisited: The Population Growth Rates of English Counties in the Early Modern Period', *Economic History Review* 62 (2009): 711-35

² R.A. Leeson, *Travelling Brothers: The Six Centuries' Road from Craft Fellowship to Trade Unionism* (London: Granada, 1979), p. 71

its highway.³ The end point corresponds to the building of a railway through the parish, with the potential for an abrupt change in mobility patterns.

The research period encompasses the central phase of the industrial revolution. Socially, it includes the establishment of the Settlement Acts through the New Poor Laws to the 1870 Education Act with its potential impact on child labour. Agriculturally, it includes enclosures, the 'Agricultural Revolution', the acceptance of potatoes as a staple of the English diet, and several phases of prosperity and depression. Transport developed from the early Turnpike era via the canals to the flowering of the railways. Demographically, the population of England increased from an estimated 5,200,000 to 21,500,000, and that of Herefordshire grew from approximately 68,000 to 125,500.⁴

Several significant wars during this period caused considerable displacement of the population. The Napoleonic Wars were the most disruptive, involving perhaps an eighth of the male workforce directly or indirectly, according to one estimate,⁵ and over a third of a million servicemen were demobilised shortly thereafter (3% of the national population). This followed the discharge of 130,000 (2% of the population) in 1783 after the American wars, and 70,000 (1%) at the end of the War of the Austrian Succession in 1749. These men were expected to make their way home, and allowances were in principle made for them as they did so; they were, for example, exempted from the vagrancy laws against begging. It is not known

³ Edward Heath-Agnew, *Roundhead to Royalist. A Biography of Col. John Birch 1615-1691* (Hereford: Express Logic Ltd, 1977)

⁴ Wrigley and Schofield, *The Population History of England 1541-1871* ; E. A Wrigley, 'English County Populations in the Later Eighteenth Century', *Economic History Review* 60 (2007): 35-69, p. 529; Enumeration Abstract for the County of Herefordshire, 1871, vol I p. 136, www.histpop.org, first accessed October 2010

⁵ K. D. M. Snell, *Annals of the Labouring Poor: Social Change and Agrarian England, 1660-1900* (Cambridge: Cambridge University Press, 1985), p. 315

how many found work in places other than their native districts,⁶ but it has been noted that there was a high rate of abandonment of wives and children in war years.⁷

This was still a time of relatively low emigration from England. Although the 1840s saw an estimated 75,000 migrate from Scotland to England, and 700,000 from Ireland to Great Britain between 1780 and 1844, with another million leaving Ireland between 1845 and 1850, emigration from England was only about 0.15% per decade from 1750 to 1850, most of whom were in the armed forces.⁸ By the third quarter of the nineteenth century, however, emigration and service abroad was more common, introducing additional complexities to the study of internal migration.

2.3 The Law and Population Mobility

2.3.i. The Poor Laws

Several parts of the Poor Laws impinged directly on mobility and migration.

By the late seventeenth century, attention increasingly focused on the legal definitions and consequences of settlement rights, stemming from the 'home' parish's responsibility for

⁶ D. Hay, 'War, Dearth and Theft in the Eighteenth Century: The Record of the English Courts', *Past and Present* 95 (1982): 117-60

⁷ Snell, *Annals of the Labouring Poor*, p. 362

⁸ Michael Anderson, *Population Change in North-Western Europe, 1750-1850* (Studies in Economic and Social History; London: Macmillan Education, 1988), pp. 27-28

payment of poor relief.⁹ There had been various eligibility criteria during the sixteenth century, from parish of birth (implying minimal migration) to the parish of residence in the last twelve months (which could be controlled by restricting house building). The Settlement Act of 1662 overtly acknowledged the mobility of potential paupers; it regularised many local variations, and defined claimants for poor relief in terms of the parish in which they had been resident for forty days without challenge, or in which they occupied property valued at £10 or more annual rent. If an individual had neither of these ‘settlement qualifications’, they could be forcibly removed from the parish if they were deemed liable to become eligible for poor relief.

The Amended Settlement Acts of 1685 and 1692 shifted the onus of informing the parish about in-migration onto the migrants themselves, with the sanction that failure to give notice in writing would mean that settlement could not be obtained. The legislators perhaps underestimated the implications of widespread migrant illiteracy, as well as the obvious dilemma faced by an in-migrant on the edge of poverty; the modified law is considered by some scholars to have inhibited movement of surplus labour to areas of demand.¹⁰

The 1692 Act included new definitions of ‘settlement’, among which were payment of parish rates, service for a year as a parish official, completing an indentured apprenticeship of at least 40 days, and obtaining an annual hire in the parish. This was followed by a slightly more rigorous approach in a 1697 Act, enabling parishes to issue settlement certificates for their inhabitants, acknowledging parochial responsibility for poor relief *in absentia*. In theory, this

⁹ M. J. Daunton, *Progress and Poverty: An Economic and Social History of Britain 1700-1850* (Oxford: Oxford University Press, 1995), pp. 460-63; Paul A. Fideler, *Social Welfare in Pre-Industrial England. The Old Poor Law Tradition* (Basingstoke: Palgrave Macmillan, 2006), pp. 139-40

¹⁰ K D M Snell, *Parish and Belonging: Community, Identity and Welfare in England and Wales, 1700-1950* (Cambridge: Cambridge University Press, 2006), especially p. 68

protected migrant workers and freed them to travel in search of work, especially if they armed themselves, as increasing numbers did, with a prophylactic settlement certificate which conferred ‘irremovability’ from their new place of residence. In practice, even the absence of a certificate did not guarantee the easy removal of a migrant sojourner, but the concept implicitly acknowledged that significant numbers of the able-bodied were legitimately moving from their parish of settlement to seek work. In 1795, the distinction between certified and uncertified migrants was ended for all but unmarried mothers, preventing forced removals until relief had been applied for. Thenceforth, the law acknowledged that a mobile able-bodied workforce was a *fait accompli*.

Scholarly opinion is somewhat divided on the effect of the Settlement Laws on both poor relief and mobility. The Malthusian view of the Settlement Laws was that they tended to increase dependency, inhibit initiative and increase population, but some modern case studies contradict this view.¹¹ Taylor was one of the first to investigate their impact, and took a broadly positive view, which is shared by much modern scholarship, considering that such a system was necessary in order to ensure that relief was given; he also noted that the surviving documents mostly refer to those cases where removal was threatened or actually took place, and so represent only a fraction of the impact of the legislation. Taylor suggested that ‘. . . the Settlement Law was not the vine that choked but the trellis that supported . . .’, although he conceded that it presented particular problems for the illiterate, those who were suddenly bereaved or became ill or unemployed, and that it was open to abuse by harsh parish officers.¹² Depending on local attitudes, the Settlement Laws could contribute to keeping

¹¹ James P. Huzel, ‘The Demographic Impact of the Old Poor Law: More Reflexions on Malthus’, *Economic History Review* 33 (1980): 367-81

¹² J. S. Taylor, ‘The Impact of Pauper Settlement 1691-1834’, *Past and Present* 73 (1976): 42-74, especially p. 59

poor rates ungenerously low in parishes approximating to the archetypal 'close' model,¹³ or could protect the settled poor from indigent incomers. The varied evidence available is sometimes taken to indicate that migrants could be protected, but in other cases it has been proposed that certification and removal were used proactively to control and restrict migration.¹⁴

During the eighteenth century, many parishes began sending out-parish allowances to their paupers rather than receiving them back. The alternative involved a relatively high cost for the parish intending to remove a pauper, between three and seven shillings for an examination in the late eighteenth century, and several pounds for a removal, depending on distances and the legal fees charged, and consequently recourse to the law may not have been undertaken lightly.¹⁵ Recent research suggests that the out-parish relief system worked well.¹⁶

Assuming that a settlement examination was directly correlated with an examinee's 'need', and therefore with availability of work, Snell has found patterns of fewer examinations of men in the arable east between May and late September, suggestive of relatively full employment, while women changed from an eighteenth-century pattern similar to men to an early nineteenth-century pattern of under-employment in all but the spring. In the more

¹³ D. R. Mills, *Lord and Peasant in Nineteenth-Century Britain* (London: Croom Helm, 1980), pp. 56-72; B.A. Holderness, 'Open' and 'Close' Parishes in England in the Eighteenth and Nineteenth Centuries', *Agricultural History Review* 20 (1972): 126-39; David Spencer, 'Reformulating the 'Closed' Parish Thesis: Associations, Interests, and Interaction', *Journal of Historical Geography* 26 (2000): 83-98

¹⁴ Norma Landau, 'The Laws of Settlement and the Surveillance of Immigration in Eighteenth-Century Kent', *Continuity and Change* 3 (1988): 391-420; K. D. M. Snell, 'Pauper Settlement and the Right to Poor Relief in England and Wales', *Continuity and Change* 6 (1991): 375-415; Roger Wells, 'Migration, the Law, and Parochial Policy in Eighteenth and Early Nineteenth-Century Southern England', *Southern History* 15 (1993): 86-139

¹⁵ Snell, *Annals of the Labouring Poor*, pp. 20-40

¹⁶ Steven King, 'It Is Impossible for Our Vestry to Judge His Case into Perfection from Here'; Managing the Distance Dimensions of Poor Relief, 1800-40', *Rural History* 16 (2005): 161-89; Steven King, 'Pauper Letters as a Source', *Family and Community History* 10 (2007): 167-70

pastoral west, including the Welsh Marches, he found almost no annual cycle for women, while for men there were more cases between November and February and fewer between June and October during haymaking and harvest. Together, this could indicate that settlement examinations occurred when migrants actually or imminently became chargeable, at slack periods in the agricultural year, and that there was a significant migrant workforce.¹⁷

Selective application of the settlement laws has been inferred in several studies, with evidence that tenant farmers and craftsmen were more likely to be accepted in a new parish than relatively unskilled or poorer labourers. An extreme west midlands case, Handsworth parish, refused poor relief to non-settled applicants in the early years of the Napoleonic Wars.¹⁸ Data from Oxfordshire from 1750 to 1834 suggest that the laws were used in distinct ways: for the fit and young a settlement certificate could be a passport to the wider labour market; the elderly and sick were seldom granted certificates; married men and those with families were more likely to be removed. Overall, there seems to have been a complex approach, monitoring and controlling the balance between labour mobility and chargeability,¹⁹ and it is a possibility that this complexity influenced some migrants' decision-making.

Several sections of the Poor Law Amendment Act (1834) were particularly relevant to migration: it was made easier to relocate paupers to places where work was available; it allowed payment of emigration expenses to the colonies; and new regulations were brought in for apprenticeships.²⁰ A year's hiring was abolished as a head of settlement, and settlement increasingly became hereditary for the poorest, even though many settlements were derived

¹⁷ Snell, *Annals of the Labouring Poor*, pp. 38-48

¹⁸ Wells, 'Migration, the Law, and Parochial Policy', pp. 100-103

¹⁹ Byung Khun Song, 'Agrarian Policies on Pauper Settlement and Migration, Oxfordshire 1750-1834', *Continuity and Change* 13 (1998): 363-89

²⁰ Anthony Brundage, *The English Poor Laws, 1700-1930* (Basingstoke: Palgrave Macmillan, 2002), p. 66

from hirings under the Old Poor Law. For those people most vulnerable to unemployment, the New Poor Law might thus be supposed in theory to have initially inhibited labour mobility, reduced pauper powers of agency and prolonged residence in the parish of settlement.²¹

In 1834, an estimated 82,000 English 'settled poor' were living outside their own parishes, at some financial and administrative cost to the parishes. Rothersthorpe, a small Northamptonshire parish, conducted a survey of its numerous paupers in 1826, arranging for them all to be visited and investigated; eleven of these households were located in Birmingham.²² Such paupers continued to be paid for by their parish of settlement until 1846, when the New Poor Law was modified to grant irremovability to those with five years' residence, incidentally cutting a tie with their ancestral migration path. This lifted a burden from many rural parishes, shifting the onus for payment towards urban areas. In 1865 the Union Chargeability Act gave further assistance to poorer parishes, both rural and urban, sharing the costs between the members of each Poor Law Union.²³ The net effect of the changes to the Poor Laws in the late eighteenth and early nineteenth centuries was thus to increase mobility, until 1876 when residence was for most people equivalent to parish of settlement.²⁴

The New Poor Law may have had one unintended restrictive effect on migration, by raising the age at which boys left home for work. Snell detected an increase in these ages from 1835, and linked it to the change from the Old Poor Law system whereby a boy's earnings were

²¹ Snell, *Annals of the Labouring Poor*, p. 80

²² King, 'Pauper Letters as a Source'

²³ Brundage, *The English Poor Laws*, pp. 103-108

²⁴ Snell, *Parish and Belonging*, p. 119

deducted from parental allowances once his wages exceeded his allowance, to the New Poor Law arrangement of pooling family income.²⁵

2.3.ii. Apprenticeship

Apprenticeship was an opportunity for and cause of mobility, but simultaneously imposed restrictions on the individuals concerned. The 1563 Statute of Apprentices codified apprenticeship laws for sixty-one named trades, imposing a standard seven years' rule or service until age twenty-one, followed by journeyman status until age twenty-four. Young men (and some women) could travel long distances for indentures, and a completed apprenticeship gave settlement rights. The system persisted into the nineteenth century in some trades. By the late eighteenth century, however, it was in decline, and many agricultural labourers were learning additional trades such as brick-making, carpentry and tailoring on an informal basis, trades which they could take up as needed to supplement their income.²⁶

The Statute of 1563 failed in the longer term to control unofficial industry, leading to a general division between closely-regulated urban crafts in ancient towns, and more flexible or unregulated rural training and new-town industry, where workers could be freer, but where masters could take advantage of their employees, keeping down wages and taking on excessive numbers of apprentices at the expense of journeymen. This in turn may have led to a drift of rural craft workers to certain urban areas, some seeking freedom, others for protection.²⁷ The market towns of Dudley, Wolverhampton, Stourbridge and Birmingham,

²⁵ *Annals of the Labouring Poor*, p. 327-28

²⁶ C.R. Dobson, *Masters and Journeymen. A Prehistory of Industrial Relations, 1717-1800* (London: Croom Helm, 1980)

²⁷ Leeson, *Travelling Brothers*, pp. 62-65

together with dozens of villages around them, all began their modern expansion in this way. Traditional manorial courts, customary constraints and craft regulations all failed to stem development, as did the prohibitions of the Old Poor Laws.²⁸

2.4 Regional Differences and the Need for Local Studies

England in the early-modern period was far from monochrome, with variation in cultural and economic life at regional, local and even parochial levels. Some of this diversity was due to underlying agricultural, climatic or landholding differences, others to the interplay of transport links, proximity to markets, or a multitude of micro-level characteristics. All these in turn impinged on the acquisition of personal social capital in the form of varying skills and information sets, and influenced its value either to promote mobility or to enable the holder to remain in the place of birth when others were obliged to move away. Some discussion of these regional variations is a prerequisite for an investigation of the mobility of a particular population sample.

2.4.i . The Impact of London

Nationally, the dominant size of London has had a profound impact on migration opportunities. From a population of about 600,000 in 1700, the city grew, largely by in-

²⁸ Marie B. Rowlands, 'Continuity and Change in an Industrialising Society: The Case of the West Midlands Industries' in *Regions and Industries: A Perspective on the Industrial Revolution in Britain*, ed. Pat Hudson (Cambridge: Cambridge University Press, 1989): 103-31

migration, to perhaps 750,000 by 1750 and to 950,000 at the 1801 census, by which time it was the largest city in Europe and probably in the world.²⁹

With over 10% of the population of England throughout the eighteenth century, London was the hub of the developing national transport network of mail roads and turnpikes, while cross-routes in areas remote from the capital were only upgraded later. This development seems to have been at the expense of the medieval system of a more even national coverage of roads.³⁰ Availability of posting horses at regular intervals on the routes to the capital was a crucial factor, allowing relatively quick journey times for the Royal Mail Coach even in the early seventeenth century. The associated posting inns allowed the development of a commercial coaching system, as well as being foci for the spread of information. The Royal Mail routes, therefore, tended to channel people and information to and from London, taking priority over more local centres.³¹

In the early-modern period, coach travel was a costly option, but by the eighteenth century the main routes were being turnpiked and by 1715, 216 towns were linked to London by privately-run stage coaches, which in turn encouraged the growth of cheaper local carriers. Nearly 350 such carriers, for both passengers and goods, offered services to London in 1690, increasing to over a thousand by 1838.³²

²⁹ E.A Wrigley, 'A Simple Model of London's Importance in Changing English Society and Economy, 1650-1750', *Past and Present* 37 (1967): 44-70; Peter Clark, *European Cities and Towns, 400-2000* (Oxford and New York: Oxford University Press, 2009): 121-31

³⁰ Brian Paul Hindle, 'The Road Network of Medieval England and Wales', *Journal of Historical Geography* 2 (1976): 207-21

³¹ Mark Brayshay et al., 'Knowledge, Nationhood and Governance: The Speed of the Royal Post in Early-Modern England', *Journal of Historical Geography* 24 (1998): 265-88

³² Daunton, *Progress and Poverty*, pp. 305-308

By 1851, London's population had reached 2.7 million (16% of the English total) and in 1871 it was 3.9 million (18%).³³ By then, other major urban areas were attracting migrants in large numbers, but the capital continued to draw in huge quantities of both food and migrants, many of the latter for domestic service, with substantial in-migration of late-teens of both sexes but especially young women.³⁴

2.4.ii. Regional Variations

Despite the dominance of London, the impact of other regional variations should not be overlooked. 'It is well not to confine our picture of social life in England to the south-east of the country.'³⁵ The well-known north-west *versus* south-east divide in Britain affects everything from climate and agriculture to industrial development. In the context of the present study, these regional differences may also have affected mobility patterns through their impact on, for example, employment opportunities, agricultural customs, Poor Law administration and even demographic characteristics.

It is unsafe to assume that all parts of Britain, or even England, behaved in same way, even demographically, as has been discovered for eighteenth-century Wessex.³⁶ It has been suggested, for example, that some rural areas may have tended to maintain high levels of fecundity until the later nineteenth century because people were aware of the tradition of out-

³³ Clark, *European Cities*, p. 225

³⁴ Leonard Schwarz, 'Hanoverian London: The Making of a Service Town', *Proceedings of the British Academy* 107 (2001): 93-110

³⁵ Gwyneth Nair, *Highley: The Development of a Community, 1550-1880* (Oxford: Blackwell, 1988), p. 4

³⁶ S. Jackson, 'Population Change in the Somerset-Wiltshire Border Area, 1701-1800: A Regional Demographic Study', *Southern History* 7 (1985): 119-44

migration of young people from these areas.³⁷ Much of the Cambridge Group's work has been concentrated in eastern and southern England, as Levine has discussed and as the Cambridge Group themselves note: their more recent synthesis based on twenty-six parishes included none from major cities, nine from East Anglia and the east midlands and, notably, six in Devon.³⁸

It has been argued that there was a regional difference in poor relief management, which ran deeper than whether or not to adopt the Speenhamland system,³⁹ and this, too, affected migration. In the eighteenth century, the south-eastern counties were more affluent, with vestiges of earlier proto-industrial wealth creation in cottage industries and the ancient iron working of the Weald,⁴⁰ together with an agricultural economy increasingly directed to meeting the needs of London. But by the early nineteenth century, the north and west had developed the factory system, and its industrial and commercial expansion was dominating the southern counties and drawing in some longer-distance migrants. This transition imposed a severe strain on the old, parish-based poor relief systems, and contributed to the reform of the Poor Laws and the move away from the parish as the unit of responsibility. Work on the situation in nineteenth-century Preston bears this out. Poor relief was probably seen as an undesirable last resort in Lancashire, and so the county had very low official pauperism rates,

³⁷ Richard Lawton, 'Regional Population Trends in England and Wales, 1750-1971' in *Regional Demographic Development*, ed. John Hobcraft and Philip Rees (London: Croom Helm, 1977): 29-70

³⁸ E. Anthony Wrigley et al., *English Population History from Family Reconstitution, 1580-1837* (Cambridge: Cambridge University Press, 1997); David Levine, 'Sampling History: The English Population', *Journal of Interdisciplinary History* 28 (1998): 605-32, p. 30

³⁹ Steven King, *Poverty and Welfare in England, 1700 - 1850. A Regional Perspective* (Manchester University Press, 2000)

⁴⁰ R. A Pelham, 'The West Midland Iron Industry and the American Market in the Eighteenth Century', *University of Birmingham Historical Journal* 2 (1949): 141-62

but instead it had strong early development of Friendly Societies and Burial Insurance Societies.⁴¹

The contrast between the predominantly pastoral north-west and the more arable south-east is underlain by differing histories of the transition from an open, common-land agricultural system to enclosed agriculture. This phase of development has wide-ranging consequences for many aspects of rural life. In Cambridgeshire, Huntingdonshire, Northamptonshire and Oxfordshire, for example, over half the land was enclosed by Act of Parliament (whether private or under the later General Acts), compared with only 4% of the area of Herefordshire, Shropshire and Monmouthshire⁴² (see section 2.6.iii.).

It has been proposed that even in medieval England there was a basic distinction between relatively stable woodland communities and more mobile arable ones, even if the woodland parishes were on major lines of communication.⁴³ This fits with what is known about annual cycles of employment opportunities in the two environments, although this is far from demonstrating a causal link. There is also a problem of the opaqueness of the sources; for example Welsh drovers have a long tradition of movement through the historically well-wooded Marches counties, but seldom occur in manorial records en route to the markets. There is, however, evidence to support the picture of substantial mobility in the east of England from the sixteenth century, with only about a quarter of men and under half of

⁴¹ Michael Anderson, *Family Structure in Nineteenth-Century Lancashire* (Cambridge: Cambridge University Press, 1971), pp. 137-76

⁴² G. E. Mingay, *Parliamentary Enclosure in England. An Introduction to Its Causes, Incidence and Impact, 1750-1850* (London and New York: Longman, 1997), pp. 16-17

⁴³ Christopher Dyer, 'Were Late Medieval English Villages 'Self-Contained'?' in *The Self-Contained Village: The Social History of Rural Communities, 1250-1900*, ed. Christopher Dyer (Hatfield: University of Hertfordshire Press, 2007): 6-27, p. 21

women in their twenties still resident in their parish of birth; by age sixty, only about 5% remained in their native parishes.⁴⁴

Many regional studies of this type are now available, but there is still a tendency in the literature to draw 'national' conclusions from regional samples. Herefordshire is almost never used, and the Welsh Marches rarely so.⁴⁵ Yet there were major regional variations in many aspects of life. For example, the numbers of children stated to be in employment in the 1851 census returns: whatever the merits of the data, some differences are apparent, with the proportion of children aged five to nine in employment varying from 0.2% (boys) and 0.1% (girls) in the East Riding, to 11.9% (boys) and 21.5% (girls) in Bedfordshire. For boys of this age, the main employment nationally was in agriculture, while for girls it was lace and straw plait making. The equivalent figures for Herefordshire were 1.5% (boys) and 0.3% (girls).⁴⁶ There were also big differences in the adult agricultural labour force in 1851, as indicated in **Table 2.1** and **Table 2.2**.

Table 2.1: Summary of Characteristics of the Adult Agricultural Labour Force for Selected Counties, in 1851

county	% of total male agricultural labourers who were listed as Farm Servants	average number of labourers per farmer	% of total agricultural labourers who were women
Bedfordshire	3.3	13.0	0.2
Essex	3.3	11.5	1.2
Suffolk	6.3	8.7	0.9
Herefordshire	18.7	5.5	5.7

Data summarised from Snell, *Annals of the Labouring Poor*, pp. 96-97.

⁴⁴ Jane Whittle, 'Population Mobility in Rural Norfolk among Landholders and Others, C. 1440- C. 1600' in *The Self-Contained Village: The Social History of Rural Communities, 1250-1900*, ed. Christopher Dyer (Hatfield: University of Hertfordshire Press, 2007): 28-45

⁴⁵ One rare example of the use of a Herefordshire parish in a comparative study is in an analysis of in-migration, which included Canon Pyon in 1851: D. R. Mills and K. Schurer, 'Migration and Population Turnover' in *Local Communities in the Victorian Census Enumerators' Books*, ed. Dennis Mills and Kevin Schurer (Local Population Studies Supplements; Oxford: Leopard's Head Press Ltd, 1996): 218-28

⁴⁶ H. Cunningham, 'The Employment and Unemployment of Children in England C. 1680-1851', *Past and Present* 126 (1990): 115-50

Table 2.2: Average Wages for Sample Populations from Selected Areas, from 1771-1775 and 1816-1820. Pounds Sterling per Annum

Area	1771-1775				1816-1820			
	average wage (men)	N	average wage (women)	N	average wage (men)	N	average wage (women)	N
Western¹	5.26	8	2.91	6	8.28	20	6.08	74
London and Middlesex	8.0	7	2.84	10	15.01	7	11.22	6
Suffolk	4.81	27	3.35	10	5.67	17	5.31	8
Eastern²	4.38	12	2.31	5	5.32	15	4.03	7

Data from settlement examinations, in Snell, *Annals of the Labouring Poor*, pp. 411-417.

1. Western counties = Monmouthshire, Herefordshire, Worcestershire, Shropshire, Glamorgan, Brecon, Gloucestershire.

2. Eastern counties = Cambridgeshire, Bedfordshire, Huntingdonshire, Northamptonshire.

Although the small sample sizes, uneven data sources and factors including differential survival of Farm Service mean that these figures are not definitive, the regional patterns do persist. Of particular note are the contrast between west and east, and the high London wages.

Mean age at leaving home in a sample of settlement examinations also varied regionally: both boys and girls began agricultural work younger in west and south-west England (including Herefordshire) than in the east and midlands, but children in the west began apprenticeships older than their eastern counterparts. These differences may have been more extreme for girls than boys: western female agricultural labourers began work two years younger, and began apprenticeships (although numbers of these were low) a year older than in the east.⁴⁷

2.4.iii. Variations at County and Registration District Level

The county is often the unit for historical analyses, partly because of the county-based archive and data systems available. While seeing a county as a unified system has its dangers, there

⁴⁷ Snell, *Annals of the Labouring Poor*, pp. 320-26

also seem to have been significant differences between them. There were, for example, differing attitudes to poor relief, perhaps associated with the state of the labour market and landholding patterns. Herefordshire was relatively generous with outdoor relief compared with, for example, Hertfordshire, where more was given via Workhouses.⁴⁸

County population totals have been published for each census year since 1801, and estimates can be made for the seventeenth and eighteenth centuries.⁴⁹ These show some wide variations of growth, which must be attributable to either differential birth:death ratios or to migration, or possibly to some endemic inaccuracies of historical record-keeping. The data for some English counties is given in **Table 2.3**.

Table 2.3: County Growth Rates (%), 1600-1801

County	1600-1700	1700-1750	1750-1801	1600-1801
Middlesex	184.4 ¹	111.9	145.9	301.1
Staffordshire	146.4	131.3	168.9	324.7
Worcestershire	141.4	116.9	132.6	219.2
Shropshire	140.1	122.9	132.9	228.8
Warwickshire	132.1	151.5 ²	163.0	326.1
Lancashire	126.6	136.4	221.7 ³	382.7 ⁴
Devon	123.6	90.7	121.3	136.1
Rutland	121.1	95.2	128.5	148.1
Bedfordshire	115.2	105.9	124.6	152.0
Suffolk	113.8	104.7	134.3	160.0
Herefordshire	108.5	109.2	125.1	148.2
England	125.2	113.7	146.4	208.4

Data from Wrigley, 'Rickman Revisited,' p. 723, Table 4.

Data for different counties can be compared with each other in a given time period, but the data for 1600-1700 is not directly comparable with the other columns, since it relates to a longer time period.

1-4: these county totals represent the maximum growth of any county in England for the respective periods.

Among the significant points in this table are the early growth of Middlesex, the later growth of Lancashire and the West Midlands (especially Warwickshire and Staffordshire), the

⁴⁸ King, *Poverty and Welfare* ; Nigel Goose, 'Poverty, Old Age and Gender in Nineteenth-Century England: The Case of Hertfordshire', *Continuity and Change* 20 (2005): 351-84

⁴⁹ Wrigley, 'English County Populations in the Later Eighteenth Century'; Wrigley, 'Rickman Revisited'

relative decline of the East Midlands and, most notably in the present context, the consistently slow growth of Herefordshire at below the national average.

From 1841, more detailed census information is available and aggregate data on net migration can be investigated, as Ravenstein did when developing his Laws of Migration in the 1870s and as others have done since. For example Lawton demonstrated that although rapidly growing areas tended to attract a disproportionate number of young adults, the growth points were themselves very unstable, with population moving from older industrial areas, such as the Black Country, to the South East, Birmingham and the East Midlands by the late nineteenth century. But, as Lawton concedes, without detailed studies of individual rather than aggregate migration patterns, and some indication of gross migration, the information will only be sketchy at best.⁵⁰

At a more detailed level, published aggregate census and registration data can be used to explore the migration patterns behind simple net population change, since the decadal difference between registration district births and deaths subtracted from the change in population over the decade equals net migration. Expressed as an equation:

$$\text{migration}_{1851-1861} = (\text{pop.}_{1861} - \text{pop.}_{1851}) - (\text{births}_{1851-1861} - \text{deaths}_{1851-1861}).$$
 Using this technique for the decade 1851-1861, Hinde found that there was net out-migration in four selected rural areas in Norfolk, Shropshire, Derbyshire and Yorkshire, but the population dynamics were quite distinctive. In agricultural Central Norfolk out-migration was highest, and the parishes experienced a slight fall in population; migration from the mixed-economy Derbyshire and Yorkshire districts was only half the Norfolk rate per capita and was more

⁵⁰ R. Lawton, 'Population Movements in the West Midlands 1841-1861', *Geography* 43 (1958): 164-77; R. Lawton, 'Population Changes in England and Wales in the Later Nineteenth Century: An Analysis of Trends by Registration Districts', *Transactions of the Institute of British Geographers* 44 (1968): 55-74

than offset by natural increase. There were few in-comers to the Norfolk parishes, but in the Derbyshire parishes there were enough to produce a slight population increase.⁵¹

The same study found gender-based migration differences which were explained in terms of regional employment patterns. The 'high farming' area of Norfolk had an outflow of young men, with young women coming in, maybe as domestic servants; the Shropshire district had a similar pattern for women as Norfolk, but some in-migration of young men, perhaps because of survival of Farm Service; the Derbyshire White Peak area experienced an influx of men, perhaps because of railway construction; while the Yorkshire moorland and valley parishes of Nidderdale had an inflow of younger females, probably for work in the flax mills.⁵²

2.4. iv. Differences at the Parochial Level

One of the most important studies of differences between individual parishes remains that by Spufford, who compared three parishes in Cambridgeshire from the sixteenth to the early eighteenth centuries and found marked differences in landholding, husbandry and responses to years of dearth, all of which impacted on migration. In a parish on the Isle of Ely, fifteen acres with the accompanying fenland rights represented a substantial holding, so more than one son could expect to inherit land and establish a family, but on the chalk land most holdings had been consolidated by the early eighteenth century, leaving three quarters of the population landless or with less than two acres.⁵³ This is a salient reminder of the need to

⁵¹ Andrew Hinde, 'The Use of Nineteenth-Century Census Data to Investigate Local Migration', *Local Population Studies* 73 (2004): 8-28

⁵² Ibid.

⁵³ M. Spufford, *Contrasting Communities: English Villagers in the Sixteenth and Seventeenth Centuries* (Cambridge: Cambridge University Press, 1974), passim

consider not only differences between regions, but between individual settlements, and to avoid generalisations drawn from too few examples.

More recently, Hudson and King have looked at the populations of two textile townships in the West Riding from 1780 to 1830, tracing their differing responses to industrialisation in relation to their pre-existing attributes. Their project began with family reconstitution work, linked to wider social and economic criteria, and showed that superficially similar settlements can have different demographic frameworks and development patterns. Within the two townships, differences between sub-sets of the populations were also discernible, relating not only to occupation but also to demographic and migration trends.⁵⁴

2.4.v. Summary

In conclusion, the cultural milieu of England presents a far from uniform face, not only through time but also spatially. London has for centuries had an impact far beyond its locality, and the regions, counties and individual settlements have had distinctive characteristics, affecting the lives of their inhabitants, not least in their tendency and ability to migrate.

2.5 Herefordshire

In Wales, Scotland and Ireland, county population decline was a commonplace after 1841, but in England this effect was delayed.⁵⁵ Between 1871 and 1891, six English counties had net

⁵⁴ Pat Hudson and Steve King, 'Two Textile Townships, C. 1660-1820: A Comparative Demographic Analysis', *Economic History Review* 53 (2000): 706-41

⁵⁵ Michael Anderson, 'The Social Implications of Demographic Change' in *People and Their Environment*, ed. F. M. L. Thompson (The Cambridge Social History of Britain 1750-1950; Cambridge: Cambridge University Press, 1990): 1-70

population decline: Rutland and Huntingdonshire, Cornwall and Dorset, and Shropshire and Herefordshire,⁵⁶ and of these, Herefordshire is one of the least studied. The county has some unusual features, and although it is close to the modern West Midlands conurbation, it is not known if this was the destination for its migrants, or indeed if the apparent out-migration was in fact due to other causes.

For the majority of counties, it is obvious on which side of the north-west/south-east divide they lie, but this is not the case for Herefordshire. The county is frequently categorised as North, sometimes as South, and most often it is grouped with the West Midlands although it never saw any of the industrialisation experienced by large areas of Staffordshire, Warwickshire, Worcestershire and Shropshire. An 1896 Royal Commission noted that ‘it is in the Welsh counties that the rural depopulation has assumed the most notable proportions, and with the Welsh counties may be classed the border counties of Herefordshire and Shropshire.’⁵⁷

Rather than relying on county boundaries to define research areas, Phythian-Adams has proposed using ‘cultural provinces,’ based broadly on the principal rivers. But here, too, eastern Herefordshire is uncomfortably placed, at the junction of the ‘Severn Estuary’ and the ‘Severn-Avon’ provinces. One advantage of this approach is that it acknowledges the importance of communities at the boundaries of such provinces, and the role of towns on major roads that cross them, and it also encourages sub-division into localities. The use of persistent surnames and core families can be a guide to ‘local societies’ both geographically

⁵⁶ British Census Enumeration Abstracts, www.histpop.org

⁵⁷ Report of the Royal Commission on Land in Wales and Monmouthshire (1896, c. 8221, para 32), cited in John Saville, *Rural Depopulation in England and Wales, 1851-1951* (London: Routledge and Kegan Paul, 1957), p. 52

and temporally, although these localities will have different geographical extents for different strata of society.⁵⁸ These ideas are of obvious relevance to the use of family reconstitution in migration studies.

Herefordshire is part of a swathe of land from Cheshire down to Dorset, which is typified above all by having no simple definitions that encompass it. 'These landscapes are taken for granted, and we do not have a single agreed term to describe them.'⁵⁹ Leland in the sixteenth century called it 'corn, grass and wood' land, and that is still essentially true.⁶⁰ Herefordshire is characterised by straggling villages and scattered hamlets, irregular shaped fields resulting from the scarcity of parliamentary enclosure, heavy but fertile soils, moderate rainfall, numerous small rivers and a mild climate.

There is abundant evidence for a high population density in the county in the past, from the numerous Iron Age hill forts to the accumulation of many feet of river sediment above Roman levels, indicative of land clearance, with the frequent presence of medieval ridge and furrow under later stands of woodland. Associated with these features, and in contrast to the classic 'champion' corn country further east, early-modern Herefordshire was characterised by extensive commons and woods for grazing and fuel, a legacy of the medieval period which seems to have arisen through a balance between lords taking measures to protect their woodlands, while peasants strove to maintain their commoners' rights. In Woolhope, for example, 46 peasants in 1308 were feeding 387 pigs, suggesting there was a flourishing local

⁵⁸ Charles Phythian-Adams, 'Introduction: An Agenda for English Local History' in *Societies, Cultures and Kinship, 1580-1850. Cultural Provinces and English Local History*, ed. Charles Phythian-Adams (Leicester: Leicester University Press, 1993): 1-23

⁵⁹ Christopher Dyer, 'Woodlands and Wood-Pasture in Western England' in *The English Rural Landscape*, ed. Joan Thirsk (Oxford: Oxford University Press, 2000): 97-121, p. 97

⁶⁰ John Chandler, *John Leland's Itinerary: Travels in Tudor England* (second edn; Stroud: Sutton, 1998), pp. 222 and 226

market economy.⁶¹ Enclosures began in the late medieval period, typically by agreement, and the opportunities for significant wealth-accumulation during this time of low population led to a spate of substantial half-timbered house building, examples of which survive today. Despite some engrossment, the arrival of the cash economy and the challenges of new crops, mixed agriculture cushioned most yeomen into the eighteenth century. Holdings under fifteen acres with commoners' rights remained frequent and Herefordshire was exporting cider, hops and flax by 1700.

2.6 The Agricultural Context and Other Employment Options, From a Herefordshire Perspective

2.6.i. Farm Service, Wages and Payments in Kind

Herefordshire was, and remains, one of England's most rural counties, as shown in **Table 2.4**.

By 1871, the percentage of men aged twenty and over who were engaged in agriculture in Herefordshire was still 43%, compared with the average for the West Midlands counties (defined in the census as Gloucestershire, Herefordshire, Shropshire, Staffordshire, Warwickshire and Worcestershire) which had fallen to 19%.⁶²

⁶¹ Dyer, 'Woodlands and Wood-Pasture in Western England' , p. 111

⁶² Census for 1871, Population Abstracts, Volume III, Division VI, pp. 283, 303 and 306, www.histpop.org

Table 2.4: Herefordshire in Context: Agricultural Employment and Population

county	acres (000)	% men age 20+ in agriculture 1831	county population estimate 1761	county population 1871	persons per acre 1871
Bedfords	296	59.3	53,000	146,000	0.49
Lincs	1,768	56.9	182,000	437,000	0.25
Herefds	533	55.9	82,000	125,000	0.23
Rutland	95	55.9	16,000	22,000	0.23
Hunts	230	55.5	35,000	64,000	0.28
Essex	1,055	55.3	201,000	466,000	0.44
Bucks	467	54.5	97,000	176,000	0.38
Cambs	525	54.3	79,000	187,000	0.36
Suffolk	950	54.2	176,000	349,000	0.37
Wilts	859	50.5	183,000	257,000	0.30
Yorks NR	1,362	50.5	138,000	293,000	0.22
Salop	841	41.2	142,000	248,000	0.29
Worcs	472	35.0	123,000	339,000	0.72
Glos	805	28.1	215,000	535,000	0.66

Data from the Census Enumeration Abstracts for 1831 and 1871. Wrigley and Schofield note the inaccuracies of the early census returns, but they conclude that the 1801 national total is reduced by only 0.05%, which is considered to be an acceptable margin for present purposes.⁶³ Population for 1761 is based on the calculations of Rickman, as reassessed by Wrigley.⁶⁴

1. The first eleven counties are the most rural English counties, measured by percentage of the male population age 20 and over employed in agriculture according to the 1831 census, the earliest for which information is available. The other three are the English counties adjoining Herefordshire.

The designation of Herefordshire as a ‘mixed agricultural’ county in the early-modern period fits with Kussmaul’s analysis of marriage seasonality, which she extended to include six Herefordshire parishes and two on the Worcestershire border. Whereas her seventy-five East Anglian parishes had marriage frequency peaks at the end of the agricultural hiring year in October, after harvest, the Herefordshire examples were different. The towns of Bromyard and Ledbury showed no seasonality, suggesting either minimal influence of agricultural employment, a mixed agricultural base, or possibly relatively high women’s wages and employment, obscuring the influence of annual male hirings; the small town of Wigmore maintained a ‘pastoral’ type marriage peak in early summer throughout the research period

⁶³ Wrigley and Schofield, *The Population History of England 1541-1871*, pp. 122-25 and 588-96

⁶⁴ Wrigley, ‘English County Populations in the Later Eighteenth Century’; see also Wrigley, ‘Rickman Revisited’

1561-1820; the three rural parishes had varying peaks or no clear pattern, but tended to become more pastoral over time. Indeed, the over-riding impression for Herefordshire and western Worcestershire was of a diversity of marriage peaks and hence no dominant agricultural type in male employment.⁶⁵

Kussmaul's marriage seasonality technique was originally designed to explore the annual hire of male farm workers, and especially the decline in male Farm Service. Although this decline is now generally agreed to have been exaggerated, Farm Service is still thought to have decreased in the south and east of England by the mid nineteenth century, with longer-term persistence elsewhere, even into the 1880s.⁶⁶ It may have survived in pockets in the south-east, but this is hard to quantify because of imprecise workforce descriptions in censuses.⁶⁷ There is nonetheless evidence for a cline of increasing persistence of Farm Service from south-east to north-west, and Herefordshire falls towards its upper end as shown in **Table 2.5**.

⁶⁵ Ann Kussmaul, *A General View of the Rural Economy of England 1538-1840* (Cambridge: Cambridge University Press, 1990), pp. 182-94

⁶⁶ P. R. A. Hinde, 'Household Structure, Marriage and the Institution of Service in Nineteenth-Century Rural England', *Local Population Studies* 35 (1985): 43-51; Donald Woodward, 'Early Modern Servants in Husbandry Revisited', *Agricultural History Review* 48 (2000): 141-50

⁶⁷ Richard Anthony, 'Farm Servant Vs Agricultural Labourer, 1870-1914: A Commentary on Howkins', *Agricultural History Review* 43 (1995): 61-64; Alun Howkins, 'Farm Servant Vs Agricultural Labourer, 1870-1914: A Reply to Richard Anthony', *Agricultural History Review* 43 (1995): 65-66; A.J. Gritt, 'The Census and the Servant: A Reassessment of the Decline and Distribution of Farm Service in Early Nineteenth-Century England', *Economic History Review* 53 (2000): 84-106; Nigel Goose, 'Farm Service, Seasonal Unemployment and Casual Labour in Mid Nineteenth-Century England', *Agricultural History Review* 54 (2006): 274-303; Alun Howkins and Nicola Verdon, 'Adaptable and Sustainable? Male Farm Service and the Agricultural Labour Force in Midland and Southern England, C. 1850-1925', *Economic History Review* 61 (2008): 467-95

Table 2.5: Male Agricultural Employees in Some Rural Counties in 1871

county	acres (000s)	county population 1871	number of waged male agricultural labourers (1)	number of indoor male farm servants (2)	(2) as a percentage of (1) + (2)
Bedfordshire	296	146,000	15,936	401	2.5
Lincolnshire	1,768	437,000	37,169	8,605	18.8
Herefordshire	533	125,000	9,285	2,539	21.5
Rutland	95	22,000	2,285	227	9.0
Huntingdonshire	230	64,000	8,254	165	2.0
Essex	1,055	466,000	44,005	125	0.3
Buckinghamshire	467	176,000	15,819	744	4.5
Cambridgeshire	525	187,000	22,301	731	3.2
Suffolk	950	349,000	38,856	233	0.6
Wiltshire	859	257,000	24,016	350	1.4
Yorks NR	1,362	293,000	8,526	6,688	44.0
Shropshire	841	248,000	14,233	5,818	29.0
Worcestershire	472	339,000	12,802	1,273	9.0
Gloucestershire	805	535,000	19,288	1,298	6.3

Data from 1871 Census for England and Wales, vol. III, Population Abstracts, Occupations of the People, 'Occupations of Males at Different Periods of Age.'

1. The first eleven counties are the most rural English counties, measured by percentage of the male population aged twenty and over employed in agriculture according to the 1831 census, the earliest for which information is available. The other three are the English counties adjoining Herefordshire.
2. Comparative data for Wales is not available.

Hiring Fairs, for both farm and domestic servants, also persisted in Herefordshire into the late nineteenth century, facilitating short-distance migration of single men and women to new employment. At Bromyard, the market town closest to the sample parish of Whitbourne, traditional 'Mop Fairs' were still held on May 1st and September 29th in the 1860s, and in the twelve Marches and Welsh counties covered by the *Hereford Times*, fifteen annual Hiring Fairs were still advertised at the end of the research period.⁶⁸ In Yorkshire, too, Farm Service and Hiring Fairs continued long after they had ceased to function elsewhere.⁶⁹

⁶⁸ The *Hereford Times* specifically records that there were others, but they were not advertised, for want of accurate information

⁶⁹ Gary Moses, 'Rustic and Rude': Hiring Fairs and Their Critics in East Yorkshire C. 1850-1875', *Rural History* 7 (1996): 151-75; Gary Moses, 'Reshaping Rural Culture? The Church of England and Hiring Fairs in the East Riding of Yorkshire C. 1850-80', *Rural History* 13 (2002): 61-84

Agricultural wages for men were relatively low in Herefordshire, but they are only a small part of the picture. An assessment of rural employment also has to include wage differentials, regularity of employment, payments in kind, production from gardens and common land, and women's and children's work.

There is a tendency in some of the literature to assume that craft workers were skilled while agricultural labourers and 'labourers' were virtually synonymous. In reality, there is evidence from wage levels that there were varied agricultural skill levels, not simply a progression by age or increased strength on maturity. Thus in Herefordshire in 1794, basic wages were a shilling a day, but hedge laying was paid at between 4d. and 6d. a perch (seven yards, or 6.5 metres) and an expert might lay three perches a day, thereby earning up to 18d. a day. In season, men could be paid between twelve and eighteen shillings a week for selecting, cutting and stripping coppice wood for hop poles, and pail and hurdle makers could earn even more than this, year-round.⁷⁰ Linking occupations as given in census returns to farm wage books shows that the more skilled farm workers were not only paid higher wages but also tended to be more fully employed: on one Staffordshire estate in 1848-9, the forty-eight year old shepherd and the twenty-seven year old blacksmith were paid 3s. a day and worked a full year, including some Sundays, while the 'extra labourers' were paid 2s. a day, the same as the regular labourers, but might only be employed for two or three months a year. Agricultural skill-sets could allow rural to urban migrants to find comparable employment in urban environments.⁷¹

⁷⁰ John Clark, *General View of the Agriculture of the County of Hereford. Drawn up for the Consideration of the Board of Agriculture* (London: The Board of Agriculture, 1794), pp. 29-32

⁷¹ Chiaki Yamamoto, 'Two Labour Markets in Nineteenth-Century English Agriculture: The Trentham Home Farm, Staffordshire', *Rural History* 15 (2004): 89-116; Joyce Burnette, 'How Skilled Were English Agricultural

Herefordshire's agricultural wages recovered faster than in most counties following the introduction of the New Poor Law. Direct comparisons are of limited use, but contemporary data shows Bedfordshire men's wages reducing from 10/3 a week in 1833 to 9/- in 1850, Essex from 10/9 to 8/-, Suffolk from 10/2 to 7/-, while in Herefordshire the figures were 8/6 in 1833, 8/- in 1837 and back to 8/5 in 1850.⁷²

There were also seasonal variations. According to an 1804 Report, Herefordshire agricultural wages averaged six shillings a week in winter, seven shillings in summer (for a longer day), but harvest wages were nearly double this. Indoor servants were all found, and at the end of the year were paid ten to twelve guineas for a waggoner, eight to ten guineas for a cattle man, six to seven guineas for a dairy maid, compared with two to three guineas for an under maid. The Report concluded that a man working as a labourer could not earn enough from his wages alone to support a wife and four children, because of the increase in prices during the Napoleonic Wars. Wheat, peas, butter, cheese, chickens, pigeons and malt, for instance, had trebled in price since 1760 at Hereford market, and the price of coal had doubled, although bacon pigs had reduced from four shillings a pound to only sixpence halfpenny.⁷³

A further complication was that Herefordshire also had relatively generous payments in kind. In southern England, it is probable that food ceased to form part of the normal wage by the late eighteenth century or perhaps earlier, but in Herefordshire this practice continued into the

Labourers in the Early Nineteenth Century?' *Economic History Review* 59 (2006): 688-716; Gwyneth Nair and David Poyner, 'The Flight from the Land? Rural Migration in South-East Shropshire in the Late Nineteenth Century', *Rural History* 17 (2006): 167-86

⁷² Snell, *Annals of the Labouring Poor*, p. 130

⁷³ John Duncumb, *General View of the Agriculture of the County of Hereford; Drawn up for the Consideration of the Board of Agriculture and Internal Improvement* (London: Board of Agriculture, 1805)

nineteenth century. The 1804 Report found that agricultural labourers were still given drink and two meals daily. In 1869-1870, standard weekly agricultural wages for men were reported as only nine to ten shillings in the winter, eleven to twelve shillings in the spring and early summer, with the possibility of up to two shillings extra for specific tasks, but this was still supplemented by two or three quarts of cider daily, sometimes a cottage rent free or at a reduced price, and free milk, firewood or coals as appropriate, and substantial quantities of bacon. Waggoners typically earned a shilling more, and had more perquisites: in Hereford Union they 'usually . . . have ten stone of bacon at Christmas.' In Worcestershire, by contrast, only shepherds and waggoners might get a cottage rent free, although men were allowed one or two quarts of beer or cider daily, and in Lincolnshire, although wages were higher (twelve shillings to fourteen shillings for men in winter), there were few perquisites, and often only the waggoner was allowed beer. These differences might be significant: the Union Guardian who completed the Return for Shifnal, in Shropshire, calculated that the allowances of a cottage and garden, 10 roods of potato ground and two quarts of beer daily, increased the value of a man's wage from eleven shillings and sixpence to seventeen shillings and sixpence.⁷⁴

Most regions had a pattern of high harvest wages, slightly depressed winter wages, and a minor peak for the hay harvest, although this relates mainly to day or weekly hire and piece work, and was muted by employment of labourers on an annual contract. The war-time price increases were partly compensated for by wage rises: the Herefordshire Reports to the Board of Agriculture give day labourers' wages in 1805 as a shilling a week more than in 1794.⁷⁵

⁷⁴ Report on Agricultural Labourers' Earnings. Return of the Average Rate of Weekly Earnings of Agricultural Labourers in the Unions of England and Wales. (1871), pp. 8-12, www.parlpapers.chadwyck.co.uk, first accessed July 2009

⁷⁵ Clark, *General View*, p. 29; Duncumb, *General View*

One modern index (**Table 2.6**) suggests that real wages for male agricultural labourers in the ‘south western’ counties, including Herefordshire, declined gradually through the eighteenth century and increased again from about 1820, although using big regional divisions blurs local distinctions. In the north of England, by contrast, real agricultural wages rose consistently, a phenomenon usually attributed to competition with industrial employment.⁷⁶ If wages were a major factor triggering migration, one might expect to find out-migration of the agricultural workforce of the south and west during the Napoleonic Wars.

Table 2.6: Comparative Real Wages of Agricultural Labourers

decade	South West	North	Midlands	South East
1700-09	120	86	109	107
1710-19	116	81	105	98
1720-29	123	76	109	99
1730-39	137	113	121	109
1740-49	135	106	120	109
1750-59	110	106	107	97
1760-69	109	106	105	98
1770-79	100	100	100	100
1780-89	99	103	116	106
1790-99	93	101	114	102
1800-09	97	102	109	87
1810-19	91	113	127	91
1820-29	112	153	146	103
1830-39	118	166	154	109
1840-49	125	173	161	111
1850-59	136	197	164	115
1860-69	143	204	165	115

Data from Gregory Clark, ‘Farm Wages and Living Standards’, Table 9 p. 496. Base line of 100 set at 1770-1779.

County groupings:

South west = Cornwall, Devon, Dorset, Gloucestershire, Herefordshire, Monmouthshire, Shropshire, Somerset, Wiltshire, Worcestershire;

North = Cheshire, Cumberland, Durham, Lancashire, Northumberland, Westmorland, Yorkshire;

Midlands = Bedfordshire, Berkshire, Buckinghamshire, Derbyshire, Huntingdonshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire, Oxfordshire, Rutland, Staffordshire, Warwickshire;

South east = Cambridgeshire, Essex, Hampshire, Hertfordshire, Kent, Middlesex, Norfolk, Suffolk, Surrey, Sussex.

⁷⁶ Gregory Clark, ‘Farm Wages and Living Standards in the Industrial Revolution: England, 1670-1869’, *Economic History Review* 54 (2001): 477-505

The impact of the Napoleonic Wars on Herefordshire is hard to assess, coinciding as they did with increasing population, industrialisation, changes to crops and farming methods, and also several disastrous harvests. Duncumb, writing in 1805, considered that the county population was ‘so much thinned by the levies and operations of war, that the farmer in particular has but little opportunity of selection’ of employees. He also thought that hops, which were prevalent in the east of the county, were becoming more common, and ‘potatoes are gaining ground every year: near towns in particular, they are found a very profitable crop, by sale in the market; and in all situations when plentiful they are applied to fatten pigs with great success: they are generally boiled for this purpose.’⁷⁷

Potatoes did become more widespread at this time, their cultivation spreading gradually south during the war and helping to supplement grain in years of poor harvest, notably 1796, 1804, 1809 and 1810. The absorption of up to half a million men in the war machine, at home and abroad, may have been linked to the rise in agricultural wages which helped to offset the big price rises: by 1811, weekly wages for men in western Herefordshire were reported to be twelve shillings, and up to fifteen shillings in 1812. This in turn encouraged the development of labour-saving machinery, including threshing machines, first patented in 1784.⁷⁸ But there were other factors: the higher wages in south Herefordshire than the north-east of the county from the 1830s, have been attributed to competition from the iron and coal industries of Glamorgan.⁷⁹

⁷⁷ Duncumb, *General View*, pp. 149 and 66

⁷⁸ A. H. John, ‘Farming in Wartime: 1793-1815’ in *Land, Labour and Population in the Industrial Revolution. Essays Presented to J. D. Chambers*, ed. E. L. Jones and G. E. Mingay (London: Edward Arnold Ltd, 1967): 28-47

⁷⁹ Arthur Redford and W. H Chaloner, *Labour Migration in England, 1800-1850* (2nd edn; Manchester: Manchester University Press, 1964), p. 69

2.6.ii. Crops

The National Crop Return of 1801, although only surviving in part, gives an indication of the national distribution of arable crops, excluding those grown in gardens. The data was collected by parish incumbents, and returned via their dioceses.⁸⁰ **Table 2.7** summarises the Crop Returns for some counties, showing the extent to which Herefordshire was a mixed farming county, with only a quarter of its area arable, but nearly half of that as wheat. Far from being a rural backwater, the county's good soils and climate were producing high-value crops. Duncumb recorded that in 1804 wheat was sold in Hereford market for 10/6 a bushel, whereas oats only fetched 4/-, being grown mainly in the west of the county, and barley 6/-. Apple and pear orchards, pasture, hops and woodland (an acre of hops required 2,000 poles) made up the remainder of the agricultural land.⁸¹ Overall, the 1801 Returns suggest that Herefordshire and Worcestershire had broadly similar arable crops in 1801, and agricultural skill-bases were likely to be readily transferable.

⁸⁰ M. Turner, 'Arable in England and Wales: Estimates from the 1801 Crop Returns', *Journal of Historical Geography* 7 (1981): 291-302

⁸¹ Duncumb, *General View*, pp. 140 and 151

Table 2.7: Arable Crops in Some Rural Counties in the 1801 Crop Return

county	% of the county with a Crop Return	% area under arable	% of known arable acreage recorded which was under each arable crop							
			wheat	barley	oat	rye and maslin	potato	turnip and rape	pea and bean	other
Beds	68.9	33.7	32.3	20.4	17.3	1.9	0.9	6.9	20.1	0.2
Lincs	76.5	20.8	23.5	21.4	22.6	1.3	1.9	19.1	10.1	0.1
Herefd	56.0	22.3	44.6	20.0	9.9	0.6	2.4	6.3	16.1	0.1
Rutlnd	79.3	26.6	20.8	32.2	17.9	0.6	1.0	12.8	14.3	0.4
Hunts	6.7	30.1	36.8	18.4	18.1	0.8	0.1	4.5	21.3	-
Essex	49.6	37.5	40.5	16.5	19.5	0.9	1.7	5.5	15.3	0.1
Bucks	60.8	25.8	37.6	17.3	16.8	0.2	0.3	4.4	23.2	0.2
Cambs	33.0	33.2	26.0	22.4	34.0	1.6	0.8	4.1	10.4	0.7
Suffolk	0.8	65.1	34.8	27.8	10.4	0.1	0.6	11.3	15.0	-
Wilts	47.5	23.1	39.4	28.7	15.8	0.4	1.6	5.8	8.2	0.1
Yorks NR	50.2	18.3	26.9	8.7	38.0	2.6	3.2	14.5	6.1	-
Salop	58.3	20.7	38.8	22.5	21.6	1.0	1.6	6.8	7.6	0.1
Worcs	81.2	27.5	42.0	19.1	10.1	1.4	1.4	7.4	18.5	0.1
Gloucs	77.9	23.6	36.1	24.6	14.9	0.2	1.8	9.8	12.3	0.3
Radnor	67.1	7.4	20.6	18.8	40.2	5.6	4.8	3.7	6.3	-
Breckn	75.5	9.1	25.3	25.7	34.7	0.8	2.7	2.6	8.2	-
Mon	37.0	11.4	41.9	23.4	19.8	0.1	2.8	4.4	7.6	-

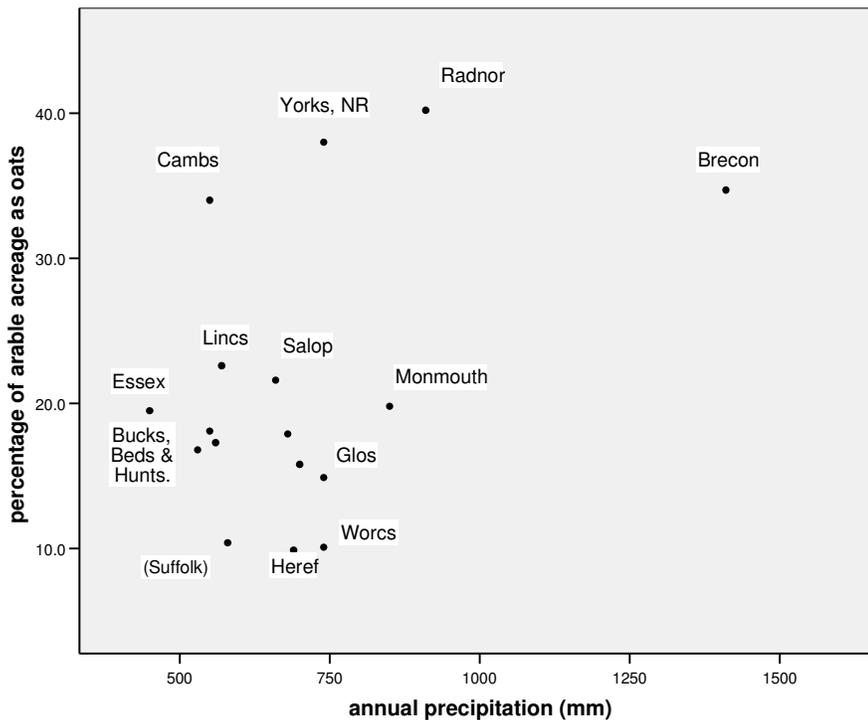
Data adapted from Turner, 'Arable in England and Wales', Table 2, pp. 296-97.

1. The first eleven counties are the most rural English counties, measured by percentage of the male population age twenty and over who were employed in agriculture according to the 1831 census, the earliest for which information is available. The other six are the counties adjoining Herefordshire.
2. Maslin (or blendings) was an intercropping of rye and wheat, which by 1801 was largely confined to Shropshire and the north of England.

The small non-random sample from Huntingdonshire and Suffolk means that the results from these counties are unreliable. The picture is also complicated by the climatic cline from north-west to south-east, most notably in its effects on oat production: annual precipitation in Breconshire, for example, is about 1400 mm and in the North Riding about 750 mm, but in Essex only 450 mm. This may however lead to an insight into communication links between different parts of the country, which in turn has direct relevance to migration. Oats tolerate wetter climates than does wheat, but by the turn of the nineteenth century there was increasing demand for oats in urban areas reliant for motive power on horses. East Anglia is known to have supplied both London and Manchester with grain, by canal, and even East Riding

potatoes went to London during the Napoleonic Wars.⁸² **Figure 2.1** shows the tendency for wetter western counties to have a high acreage of oats, and counties with somewhat lower precipitation, such as Herefordshire, Worcestershire and Gloucestershire, to grow less. But superimposed on this, counties near London and especially those feeding onto the Great North Road, have unexpectedly high oat acreage for their climate. There is also a high oat acreage in Gloucestershire, which may have been supplying Bristol, which was still almost as populous as Birmingham. Much of the oats for Birmingham in 1801 may have been from two more urbanised counties: Warwickshire (19.4% of the county's recorded arable acreage, annual precipitation 610 mm) and Staffordshire (35.3%, precipitation 780 mm).⁸³ These patterns, too, may relate to the development of transport and trade networks, as will be discussed below.

Figure 2.1: Acreage of Oats in the 1801 Crop Returns, and County Rainfall



Meteorological Office data for the second half of the twentieth century, for the best-fit recording stations.⁸⁴

⁸² John, 'Farming in Wartime: 1793-1815'

⁸³ Turner, 'Arable in England and Wales', p. 296

⁸⁴ www.metoffice.gov.uk/climate/uk, first accessed September 2011, and individual recording stations

The other salient feature of the 1801 Crop Returns is the distribution of potatoes, although their acreage is certainly underestimated, since many incumbents noted quantities of them in small plots and gardens.⁸⁵ Potatoes were still a relative novelty in the south east, but these data support Duncumb's evidence that Herefordshire had already embraced the crop, with important consequences for the poor.

Evidence to the 1834 Poor Laws Commission suggested that by then potatoes were as important as bread in Herefordshire,⁸⁶ and their susceptibility to frost caused problems in the hard winters of 1838 and 1839. In Worcester during January and February 1838, a soup charity supplied 1600 quarts of root vegetable and beef soup (made using peas, barley, rice and sago) twice weekly at a heavily subsidised charge of a penny for a loaf and a quart of soup: 'The Severn and Canal are frozen over, and navigation is entirely at a stand. The poor boatmen are going round soliciting alms, and the almost exploded custom of morris-dancing has been revived in our streets.' The following winter was equally severe, affecting day labourers the most: 'the unprecedented . . . bad weather seems to have paralysed all outdoor occupations, and destroyed immense quantities of potatoes, now a most important article of food to the labouring classes.'⁸⁷

In blight years, especially 1845 to 1848, there is evidence for real hardship among Herefordshire day labourers. By February 1848, soup kitchens in Hereford were operating, selling over ten thousand quart portions a day at a penny a quart, which the paper attributed to 'the poor potato crop and the intense coldness of the weather.' This should be seen in the

⁸⁵ Turner, 'Arable in England and Wales' p. 293

⁸⁶ J. Phillip Dodd, 'Herefordshire Agriculture in the Mid-Nineteenth Century', *Transactions of the Woolhope Naturalists Field Club* 43 (1980): 203-22, p. 220

⁸⁷ *Berrows Worcester Journal*, January and February 1838; *Hereford Journal*, 18th December 1839

context of the situation in 1816 and 1817, years of very poor grain harvests, when prices were at a historic high (in London in 1816, wheat averaged 66% more than in 1815; malting barley was up by 86% and oats by 65%).⁸⁸ The Hereford Bread Assizes in June 1817 fixed the weight of a shilling loaf at 2 lb. 6 oz., compared with November 1834 when it was 7 lb. 13 oz. At 1817 prices, a family of four needed fourteen shillings a week for bread alone. With such seasonal variation in wheat prices, a successful potato crop from a garden or other small plot offered an important safety cushion.⁸⁹

The Agricultural Returns for 1871 offer a summary of the situation at the end of the research period. They relate chiefly to holdings of twenty acres and over, but give information on a wider range of agricultural enterprises, as shown in **Table 2.8**. Herefordshire commercial agriculture in 1871 was still characterised by a substantial acreage of hops, orchards and woodlands. Radnorshire and Lincolnshire both had a much higher density of sheep, although in Radnor they were on upland pastures while in Lincolnshire there was more turnip feed.⁹⁰ There is no reason to suppose from this data that an agricultural worker from Herefordshire would lack the expertise needed to find comparable employment in Worcestershire, but this might have been a consideration if migrating to Lincolnshire, for example.

⁸⁸ Peter M Solar and Jan Tore Klovland, 'New Series for Agricultural Prices in London, 1770-1914', *Economic History Review* 64 (2011): 72-87

⁸⁹ Timothy Shakesheff, *Rural Conflict, Crime and Protest. Herefordshire, 1800-1860* (Woodbridge: Boydell Press, 2003), pp. 43-48

⁹⁰ Clark, *General View*, p. 26

**Table 2.8: Land Use and Livestock on Holdings of 20 Acres and Above,
in the 1871 Crop Return**

county	% of county which was under each land use				
	Herefords	Worcs	Salop	Radnor	Lincoln
leys	7.0	7.2	9.6	5.5	9.2
permanent pasture ¹	40.8	37.1	41.5	34.9	23.0
wheat	11.5	14.6	10.4	2.7	17.2
barley	4.3	4.5	6.7	2.0	8.7
oats	2.3	1.6	3.2	4.7	5.9
rye	0.1	0.2	0.3	0.1	0.1
beans	1.6	4.5	0.6	<0.1	1.8
peas	1.7	2.6	1.1	0.1	1.4
potatoes	0.6	1.5	0.8	0.6	2.7
root crops and rape	6.9	6.2	7.6	2.6	11.0
flax	<0.1	<0.1	<0.1	-	0.1
hops	1.1	0.6	<0.1	-	<0.1
orchards	3.9	2.4	0.6	0.2	0.2
productive woodland	6.5	3.5	3.6	3.1	2.0
other land use ²	11.7	13.5	14.0	43.5	16.7
	numbers of livestock per acre in county				
agricultural horses	0.03	0.04	0.03	0.03	0.03
cattle	0.13	0.13	0.16	0.10	0.10
sheep	0.59	0.45	0.55	1.03	0.84
pigs	0.06	0.10	0.09	0.03	0.07

Data derived from The 1871 Agricultural Returns, *passim*.

1. Permanent pasture excludes upland pastures, hence the relatively low figure for Radnor.

2. Other land use: urban areas, parkland, wastes, hill pastures, other crops and all holdings under 20 acres.

This tells only part of the story, however. An appendix to the Returns gives a brief summary for holdings of five to twenty acres. In Herefordshire there were 3,800 such holdings, and in Worcestershire 4,300, both averaging six acres and comprising 4.2% of the area of Herefordshire and 5.6% of Worcestershire. About two thirds of this land was permanent pasture, and in Herefordshire supported 1,300 horses, 3,800 cattle, 13,000 sheep and 6,800 pigs. This stocking rate of pigs, 0.3 per acre and an average of almost two per holding, indicates their importance to small farmers.⁹¹

⁹¹ Agricultural Returns for Great Britain, 1871, pp. 21-22, www.parlpapers.chadwyck.co.uk

2.6.iii. Enclosure

One notable feature of Herefordshire is the rarity of Parliamentary enclosure, over 90% of the open fields and 95% of the common wastes having been enclosed piecemeal.⁹² This is of relevance to migration both directly, through its impact on employment opportunities, and also indirectly as a commentary on the social structure, since enclosure required consent from the owners of the majority of the affected land, and this was a county noted for large numbers of small holdings. This effect has been noted in the south midlands, where Tudor enclosures in villages with few freeholders led to depopulation or settlement desertion, but not where freeholders were more numerous.⁹³ Enclosure by agreement may have been more likely in regions like Herefordshire with multiple open fields, each with relatively few farmers with rights in them, rather than the three or four fields of the classic 'Midland System' with more farmers using each.⁹⁴ Herefordshire examples of multiple small open fields include the forty-six fields at Marden described in 1819, thirteen at Much Cowarne in 1826 and nine at Humber in 1855, all in the north-east of the county.⁹⁵

Some enclosures in the county certainly occurred early, but the 1794 Report estimated that there were still 20,000 acres of commons (nearly 4% of the county by area), and that some of the best arable land remained in open fields.⁹⁶ The 1874 Report on Commons and Open Fields showed Herefordshire with 10,000 acres of commons and 2,000 in open fields. Much of the intervening enclosure of commons occurred under General Acts after 1844, including 600

⁹² Mingay, *Parliamentary Enclosure in England*, pp. 160-61

⁹³ Robert C Allen, *Enclosure and the Yeoman* (Oxford: Clarendon Press, 1992), pp. 45-47

⁹⁴ J. A. Yelling, *Common Field and Enclosure in England 1450-1850* (London: Macmillan, 1977), pp. 43, 77-94

⁹⁵ W.E. Tate, 'A Hand List of English Enclosure Acts and Awards. Part 15: Herefordshire', *Transactions of the Woolhope Naturalists Field Club* (1941): 183-94

⁹⁶ Clark, *General View*, p. 27

acres in Cusop, 500 acres in Kington, and almost 500 acres in Dorstone, all in the west of the county, and four smaller enclosures totalling 348 acres in parishes in the north-east, between 1849 and 1862.⁹⁷

There has been a substantial literature on the effects of enclosure of both open fields and commons on the labouring poor, including the extent to which it caused out-migration, since the late eighteenth century when the debate was crystallised by the gulf between liberal social commentators and the ‘improving’ ambitions of the Board of Agriculture. While open field enclosure may overall have had a relatively minor effect, modern opinion tends to see the loss of commoners’ rights as more serious, depriving households of fuel, pannage, grazing and other traditional rights, depending on locality (see further, sections 3.7 and 6.2.i). Keeping two cows could double the effective income of an agricultural labourer, but the loss of access to a communal bull, even if a household was allocated enough land to keep cattle, made the enterprise untenable. Where and when the use of commons was widespread, the consequences might be profound, as John Clark clearly hoped in 1794: ‘The farmers in this county are often at a loss for labourers: the inclosure of the wastes would increase the number of hands for labour, by removing the means of subsisting in idleness.’⁹⁸

⁹⁷ Tate, ‘English Enclosure Acts and Awards: Herefordshire’, p. 186 ff

⁹⁸ Clark, *General View*, p.28; Jane Humphries, ‘Enclosures, Common Rights, and Women: The Proletarianization of Families in the Late Eighteenth and Early Nineteenth Centuries’, *Journal of Economic History* 1 (1990): 23-31; Mingay, *Parliamentary Enclosure in England*; R J Moore-Colyer, ‘The Small Land Occupier in East Northamptonshire, Ca. 1650-1850’, *Midland History* 23 (1998): 84-104; Leigh Shaw-Taylor, ‘Labourers, Cows, Common Rights and Parliamentary Enclosure: The Evidence of Contemporary Comment C. 1760-1810’, *Past and Present* 171 (2001): 95-126; Leigh Shaw-Taylor, ‘Parliamentary Enclosure and the Emergence of an English Agricultural Proletariat’, *Journal of Economic History* 61 (2001): 640-62; Elaine S Tan, ‘the Bull Is Half the Herd’: Property Rights and Enclosures in England, 1750-1850’, *Explorations in Economic History* 39 (2002): 470-89; Steve Hindle, ‘“Not by Bread Only”? Common Right, Parish Relief and Endowed Charity in a Forest Economy, C. 1600-1800’ in *The Poor in England 1700-1850. An Economy of Makeshifts*, ed. Steven King, and Tomkins, Alannah (Manchester: Manchester University Press, 2003): 39-75

2.6.iv. Women's and Children's Employment

Women's agricultural wages fell in the century to 1850, until they were about half those for men, so total family income was not directly related to men's wages, the basis for standard indices of real wages.⁹⁹ There was also regional variation in the amount of farm work done by women, with more in the north of England and least in the south-east, and there is evidence for a gradual change towards women being employed more casually.¹⁰⁰

However, the situation in the Welsh Marches may have been unusual. Women's real wages held up relatively well, particularly during the Napoleonic Wars, and there is evidence that women were less prone to seasonal unemployment than further east.¹⁰¹ A study linking three Gloucestershire farm account books with the 1871 census returns has shown the dangers of over-reliance on census listings: ten agricultural labourers' wives who were listed with 'no occupation,' worked an average of 134 days plus piecework (approaching half a full year's work) on the same farms as their husbands, while the four women listed as labourers (mostly on one farm) worked an average of forty-eight days plus piece work; even a young wife returned as 'charwoman' did three days farm work.¹⁰² In Herefordshire, women were still significantly involved in agriculture in 1871; their daily wages were just under half those of men (plus a daily quart of cider), although when tying hops during the growing season they were paid extra. In Worcestershire, women were then said to be less employed than formerly,

⁹⁹ Clark, 'Farm Wages and Living Standards'

¹⁰⁰ K. D. M. Snell, 'Agricultural Seasonal Unemployment, the Standard of Living, and Women's Work in the South and East, 1690-1860', *Economic History Review* 34 (1981): 407-37; Joyce Burnette, 'Labourers at the Oakes: Changes in the Demand for Female Day-Labourers at a Farm near Sheffield During the Agricultural Revolution', *Journal of Economic History* 59 (1999): 41-67; Joyce Burnette, 'The Wages and Employment of Female Day-Labourers in English Agriculture, 1740-1850', *Economic History Review* 57 (2004): 664-90

¹⁰¹ Snell, *Annals of the Labouring Poor*, pp. 40-49

¹⁰² C. Miller, 'The Hidden Workforce: Female Field Workers in Gloucestershire, 1870-1901', *Southern History* 6 (1984): 139-55

and mainly at harvest, when they were allowed a quart of beer or cider daily if using a threshing machine. Children's wages were up to 50% higher in Herefordshire than in Worcestershire, although there was wide variation according to age.¹⁰³

Analysing employment opportunities for women in a county as rural as Herefordshire in the eighteenth and early nineteenth centuries is complex. The gradual decline in agricultural employment could be attributed to a variety of factors, including the rising population leading to preferential employment of men; mechanisation, with attendant changes in available work; and diversification of other employment options for women.¹⁰⁴ Insofar as married women were less likely to do farm work than spinsters, it might also have been linked to the reduction in the mean age at first marriage of women (from about twenty-six to about twenty-three), and the reduction in the number of women who never married (from about 20% to perhaps 10%).¹⁰⁵ Nationwide, there were many opportunities for women's employment in domestic service, with 11% of females aged over ten listed as such in the 1851 census,¹⁰⁶ while regional cottage industries offered work which while sometimes incompatible with farm labouring, could be very remunerative.¹⁰⁷ In eastern Herefordshire, as to a lesser extent near Woodstock and Yeovil, glove out-working provided employment for many women. In 1851, there were

¹⁰³ Report on Agricultural Labourers' Earnings. Return of the Average Rate of Weekly Earnings of Agricultural Labourers in the Unions of England and Wales. (1871), pp. 8-12, www.parlpapers.chadwyck.co.uk

¹⁰⁴ Snell, *Annals of the Labouring Poor*, p. 312

¹⁰⁵ Wrigley et al., *English Population History . . . 1580-1837*, pp. 134 and 195

¹⁰⁶ Peter Mathias, *The First Industrial Nation: An Economic History of Britain 1700-1914* (2nd edn; London: Methuen, 1983), p. 239

¹⁰⁷ Pamela Sharpe, 'Literally Spinsters: A New Interpretation of Local Economy and Demography in Colyton in the Seventeenth and Eighteenth Centuries', *Economic History Review* 44 (1991): 46-65; Pamela Sharpe, 'The Women's Harvest: Straw-Plaiting and the Representation of Labouring Women's Employment, C. 1793-1885', *Rural History* 5 (1994): 129-42; Bridget Hill, 'Rural-Urban Migration of Women and Their Employment in Towns', *Rural History* 5 (1994): 185-94; Barry Reay, *Rural England: Labouring Lives in the Nineteenth Century* (Basingstoke: Palgrave Macmillan, 2004), pp. 62-63

635 male glove-workers in Worcester, and for every man employed, five women out-workers were needed, many of whom lived outside the city.¹⁰⁸

2.7 The Disease and Dearth Context

2.7.i. The Weather and Harvests

Wheat prices remained critical to the wellbeing of the English rural labouring classes, for whom cereal-based staples represented half of their normal expenditure,¹⁰⁹ until the last decades of the research period. Prices were sometimes high enough to cause real hardship, usually associated with cold wet summers and hard winters.¹¹⁰ There were famines, with excess of mortality over births especially in urban areas, in 1707-1709 and again in 1766 when there were nation-wide grain riots and unrest, and 1794-1795 has been described as a ‘crippling dearth’ in the arable counties of the south and east, leading to the introduction of the Speenhamland relief system, based on family size and the price of bread.¹¹¹ Only the first of these three episodes affected mortality in the research parish.¹¹²

High grain prices were not the only causes of hardship among the poorer elements of society.

A hard winter such as those in the late 1830s could lead to widespread unemployment among

¹⁰⁸ D C Lyes, *The Leather Glove Industry of Worcester in the Nineteenth Century* (Worcester: Worcester City Council, 1973)

¹⁰⁹ Clark, ‘Farm Wages and Living Standards’, p. 493

¹¹⁰ J.D. Chambers, ‘The Vale of Trent 1670-1800. A Regional Study of Economic Change’, *Economic History Review* Supplement 3 (1957): 1-63; C Creighton et al., *A History of Epidemics in Britain: From the Extinction of the Plague to the Present Time*, vol. 2 (2 vols.; second edn; London: Frank Cass and Co Ltd, 1965; tr. from 1894)

¹¹¹ Fideler, *Social Welfare*, p. 178

¹¹² Whitbourne parish registers show an excess of burials over baptisms from 1707 to 1715

day labourers, and the problem could be exacerbated by other factors such as the coincidence between large-scale demobilisation in 1783 and the last of a run of poor harvests. This caused an estimated one in five families to fall below the literal bread-line of being able to afford wheat and nothing else, although this measure takes no account of home production or a switch to oats or other cheaper foods.¹¹³ In an area of small family holdings and a relatively small waged labouring class such as Herefordshire (Table 2.1), however, the rural population might be more disadvantaged by low market prices for their cash crops, reducing profits and leading to increased farm vacancies. The ideal combination of good productivity, moderate prices and a living wage for labourers was perhaps seldom achieved.

2.7.ii. Disease and Epidemics in the Region

Many diseases affected the eighteenth- and early nineteenth-century population, but while some were endemic and ubiquitous, others showed temporal and spatial patterns which may relate more immediately to migration, both directly and in methodological terms by affecting the chances of tracing individual migrants.¹¹⁴

Typhus fever, spread by lice, was a recurring feature of life throughout the research period, in both urban areas and in poor rural housing,¹¹⁵ often killing country people within days of their arrival in towns. There was a major outbreak in Worcester and other towns and adjacent villages in 1741. Between 1751 and 1757, it returned, together with cattle disease and a very bad harvest. That outbreak was especially severe in Kidderminster in 1756, where the weavers

¹¹³ Hay, 'War, Dearth and Theft'

¹¹⁴ unless otherwise stated, the source for this section is Creighton et al., *A History of Epidemics*, passim

¹¹⁵ Mary J Dobson, *Contours of Death and Disease in Early Modern England* (Cambridge: Cambridge University Press, 1997), p. 462

lived in densely-packed housing in a flood-prone area by the River Stour, but it lingered in the surrounding countryside to the end of 1757. In the dearth of 1799-1802, in 1816-1819 and in 1837, typhus was again severe, although increasingly an urban phenomenon. There were seventy-five typhus deaths recorded in Birmingham in the last six months of 1837, fifty-four in Dudley, forty-five in Wolverhampton and fifty-three in Abergavenny. It ceased to be a major threat after the 1860s, with cheaper food and improvements in public hygiene.

Smallpox was especially common in cities, and like typhus was a notorious killer of recent rural in-migrants, particularly adults.¹¹⁶ 1722-1723 was a severe smallpox year nationwide: in Kempsey, a small village near Worcester, there were seventy-three cases and fifteen deaths. Many of the early experiments with inoculation were done in the southern Welsh Marches, with treatment offered in Hereford from 1768.¹¹⁷ Jenner, in Gloucestershire, pioneered the use of cowpox from the 1790s, and the *Hereford Times* of 10th May 1809 reported the first free vaccinations for the poor of the city.¹¹⁸ The last major outbreak in rural areas was 1837-40, and there was a minor outbreak in 1871-1872, with just thirty-four deaths in Herefordshire (0.3 per thousand people in the county, compared with 1.6 per thousand in Worcestershire and 5.1 in Staffordshire).

Influenza was often associated with typhus, and the worst outbreaks in the study period were in 1743, 1755, 1781-1782, 1803 and 1833. The main casualties were the urban elderly. The 1833 epidemic was Europe-wide, and in Birmingham it peaked in May 1833, where there was

¹¹⁶ Pamela Sharpe, 'Population and Society, 1700-1840' in *1540-1840*, vol. 2, ed. Peter Clark (The Cambridge Urban History of Britain; Cambridge: Cambridge University Press, 2000): 491-528, pp. 506 and 508

¹¹⁷ Jane Adams, 'Combating Smallpox in Nineteenth-Century Herefordshire' in *Newsletter of the Friends of Hereford Record Office* (Hereford: 2011): 5-7

¹¹⁸ A. W Langford, 'Some Herefordshire Medical History', *Transactions of the Woolhope Naturalists' Field Club* 36 (1958): 56-65

a doubling of burials compared with May 1832. Two further outbreaks, in 1837 and 1847-1848, were also predominantly urban phenomena, with few child fatalities.

The 1830s also saw the arrival of Asiatic cholera in Britain. The disease reached London in spring 1832, adding to the causes of high urban mortality. Death tolls in this first epidemic varied widely between counties, with 930 in Gloucestershire (630 in Bristol, 123 in Gloucester, 76 in Tewkesbury), 580 in Worcestershire (277 in Dudley, 79 in Worcester, 67 in Kidderminster, 63 in Droitwich), but none recorded at all in Herefordshire. Birmingham and Cheltenham also escaped (**Table 2.9**). The worst affected west midlands county was Staffordshire, with 1,870 fatalities, and Bilston suffered most. The first cases in the Black Country were at Dudley in early June, reputedly spread by travelling German broom-sellers. By mid-July, cholera was established at Tipton, and soon reached Bilston where there were normally about 26 burials a month in summer; in August 1832 there were 651 cholera deaths, with a further 1,900 non-fatal cases. Other epicentres were Tipton (281 deaths), Dudley (277), Sedgley (231), Wolverhampton (193) and Kingswinford (83).

A second cholera epidemic reached London in late summer 1849, causing about 14,000 deaths there. In Gloucestershire there were 1,465 fatalities (591 in Bristol, 119 in Gloucester and 59 in Tewkesbury), 432 in Worcestershire (314 in Stourbridge), 775 in Monmouthshire (438 in Abergavenny, 246 in Newport and 69 in Pontypool), but just one case in Herefordshire. Later cholera outbreaks were mitigated by improvements to urban water supplies.

Table 2.9: Deaths from Asiatic Cholera in Nineteenth-century Epidemics

county	cholera deaths per thousand population, in major epidemics			
	1831-32	1849	1854	1866
Devon	3.8	4.2	0.3	0.9
Gloucestershire	2.4	3.5	0.6	0.01
Worcestershire	2.7	1.7	0.4	0.2
Monmouthshire	0.2	4.1	0.1	1.0
Staffordshire	4.6	4.4	0.6	0.05
Shropshire	0.7	1.3	0.05	0.05
Herefordshire	0.00	0.01	0.01	0.01

County population totals are from the nearest census.

At the end of the research period, after the era of major urban epidemics, the death rate in Birmingham was 25.82 per thousand, only 3% above the national rate, and pulmonary tuberculosis was the single largest recorded killer, followed by diarrhoea and dysentery and then 'violence'. Children under one year old were prone to die of diarrhoea in the summer, linked both to contaminated food and milk, and also to the use of public wells. Birmingham was significantly healthier than Liverpool or Manchester, although differences between parishes and wards greatly exceeded crude differences between cities.¹¹⁹

2.8 The Urbanisation of the West Midlands

The nearest large centre of population to the sample parish of Whitbourne is Worcester, a cathedral city and wool town on the River Severn, the trade artery of the region. Worcester's population at the Civil War was about 9,000, in 1801 it was still only 11,350, and 21,250 in

¹¹⁹ Robert Woods, 'Mortality and Sanitary Conditions in The "Best Governed City in the World" - Birmingham, 1870-1910', *Journal of Historical Geography* 4 (1978): 35-56

1841, by which time it was a cultural and leisure centre, with a china works and major gloving industry.¹²⁰

By contrast, the west midlands urban areas began their expansion as small ‘manufacturing villages’ on and near the South Staffordshire coalfield, with easy access to iron stone, brick clay and limestone, together with fast streams for power; despite the absence of immediate transport routes, these facilitated early industrialisation.¹²¹ Several towns grew to regional prominence, especially Birmingham which reached a population of about 9,000 by 1720, 23,000 in 1750 and 42,000 in 1778; and Wolverhampton with about 7,500 in 1751, while its chapelry of Bilston grew from 1,000 in 1700 to some 5,000 in 1767.¹²² The national population meanwhile only grew by about 13% from 1701 to 1751. Seventeenth-century inventory evidence suggests that there was early specialisation among the metal-workers who predominated in the industrial base: the more rural villages made scythes and other tools; other parishes made locks, bits or nails. Birmingham began to develop as a residential and sales area for the wealthier ironmasters, with workshops concentrated in nearby Deritend and Digbeth. By the Restoration, the region was already exporting metal-ware to London and the American Colonies, encouraging improvements in the transport network and further population growth.¹²³

By the early eighteenth century the old dual economy was disappearing and it was becoming rare for a metal-worker to have more than a few acres of land under crops, although there

¹²⁰ Ian Roy and Stephen Porter, ‘The Population of Worcester in 1646’, *Local Population Studies* 28 (1982): 32-43; Census Enumeration Abstracts for Herefordshire, 1801 and 1841, www.histpop.org

¹²¹ Peter M Jones, *Industrial Enlightenment: Science, Technology and Culture in Birmingham and the West Midlands, 1760-1820* (Manchester and New York: Manchester University Press, 2008), pp. 23-28

¹²² Rowlands, ‘Continuity and Change in an Industrialising Society’ ; Eric Hopkins, ‘The Birmingham Economy During the Revolutionary and Napoleonic Wars, 1793-1815’, *Midland History* 23 (1998): 105-20

¹²³ Marie B. Rowlands, *Masters and Men in the West Midland Metalware Trades before the Industrial Revolution* (Manchester: Manchester University Press, 1975), pp. 20-26

were still significant areas of rough unenclosed wastes for grazing. Some parishes specialised in agricultural-related work, for example the heavy horse breeders of Oldswinford, and the scythe-grinders and blacksmiths of Bellbroughton and Chaddesley Corbett, where one commentator said that in 1787 10,000 dozen scythes were being made annually.¹²⁴

Early migrants to the industrialising parishes are not easy to trace, not least because the eighteenth-century parish registers for both Birmingham and Wolverhampton are notoriously incomplete. Between 1686 and 1757, 1,300 immigrants were registered in Birmingham's surviving settlement certificates, about half from Warwickshire, Worcestershire and Staffordshire, but some from as far as Lancashire, Dorset and Devon. Tradesmen, craftsmen and capitalists were attracted from near and far, and associated with them were apprentices.¹²⁵

Eight hundred apprenticeships were registered in Birmingham alone between 1710 and 1760, a third of the total for Warwickshire. From the later eighteenth century, many Warwickshire-bound apprentices were paupers, and there is evidence for them being sent into the West Midlands area from all over England, up until 1834. The higher status crafts, requiring higher premiums, also attracted some long-distance apprentices; for example of thirteen apprentice watchmakers, five came from London, five from Leicestershire and the others from Worcestershire, Cheshire and Lancashire. Herefordshire only contributed two apprentices between 1710 and 1760, one chemist and one for small metalware. This latter, John

¹²⁴ Waldron Hill, 'The Foley Scrapbooks' (Worcester: Worcester Record Office WRO A. 3762, 1787): vol 1, p. 94a; Pauline Frost, 'Yeomen and Metalsmiths: Livestock in the Dual Economy in South Staffordshire 1560-1720', *Agricultural History Review* 29 (1981): 29-41

¹²⁵ R. A. Pelham, 'The Immigrant Population of Birmingham, 1686-1726', *Transactions of the Birmingham Archaeological Society* 61 (1937): 45-82; Michael J. Wise, 'Birmingham and Its Trade Relations in the Early Eighteenth Century', *University of Birmingham Historical Journal* 2 (1949): 53-79; A. Parton, 'Poor-Law Settlement Certificates and Migration to and from Birmingham, 1726-57', *Local Population Studies* 38 (1987): 23-29

Chamberlaine of Humber, was indentured in 1721, at a premium of £25.¹²⁶ By contrast, Gloucestershire sent six early apprentices.¹²⁷

From 1801 to 1831, the South Staffordshire coalfield population more than doubled, with new housing on the heaths and wastes and in the once-agricultural parishes of Wombourne and Northfield. The population of Birmingham (now beginning to encompass neighbouring townships and parishes) grew to 74,000 in 1801 and 183,000 in 1841, largely driven by immigration. An 1826 visitor noted ‘The place is so much changed since I was last here four years since. The noise and dirt of industry lies all around . . .’¹²⁸ Demand for housing increased demand for nails and other domestic goods, further stimulating growth in the Black Country iron industries.¹²⁹ By the end of the Napoleonic Wars, eight major roads and over 300 km of canals linked Birmingham to its hinterland and powered its further growth.

A crucial requirement for non-random migration is a good information supply. Before improved transport accelerated its flow, the chapmen who toured the country selling small items under licence may have played an important role (2,500 such licences were issued in the first year, 1696/7, alone), disseminating information among their customers and the wider communities of which they were a part.¹³⁰ Later networks included the regular links between towns and their suppliers, of both raw materials and food, and commercial travellers. One Birmingham ironmonger and wholesale factor’s papers from 1719-1720 show him travelling

¹²⁶ K. J. Smith and N. J. Williams, ed., *Warwickshire Apprentices and Their Masters, 1710-1760*, vol. XXIX (Dugdale Society; Oxford: Oxford University Press, 1975)

¹²⁷ Joan Lane, *Apprenticeship in Warwickshire, 1700-1834* (Unpublished PhD Thesis, University of Birmingham, 1977), pp. 185-86

¹²⁸ King, ‘Pauper Letters as a Source’, p. 170

¹²⁹ Eric Hopkins, *Birmingham: The First Manufacturing Town in the World, 1760-1840* (London: Weidenfeld and Nicholson, 1989); Gordon E Cherry, *Birmingham: A Study in Geography, History and Planning* (Chichester: John Wiley and Sons, 1994)

¹³⁰ Daunton, *Progress and Poverty*, pp. 331-32

east to Grantham, Holbeach and St Ives,¹³¹ while between 1805 and 1815 a Wolverhampton hardware firm used travellers on twice-yearly circuits encompassing Ulverston, Kendal, Doncaster, Leeds, Welshpool and Oswestry, selling to over 500 regular retail and wholesale customers.¹³²

Another source of information was the newspapers. *Aris's Gazette*, the first Birmingham paper, was established in 1741, using agencies in Shrewsbury, Bridgnorth, Worcester, Leominster, Warwick and Wolverhampton, where advertisements could be placed. The advertisements for the first full year of production suggest a circulation as far as Hereford, Welshpool, Wem, Newcastle-under-Lyme, Derby, Leicester, Stratford on Avon and Evesham, although competition with *The Berrows Worcester Journal*, established in 1690, may have limited the use made of *Aris's* in Worcestershire.¹³³ This agrees with evidence from the *Berrows*, which offered the option of placing advertisements with the men delivering the newspapers or at agencies including those in Stratford and Shrewsbury. In 1741/2, *Berrows* advertisements suggest that it circulated from Wem to Bromyard and Kingswinford to Stratford and Tewkesbury, but less frequently in Wolverhampton, Birmingham and Halesowen.¹³⁴

As the industrial areas grew, so did employment opportunities, often at attractive-sounding wages; for example in the 1770's small metal ware industry, girls aged seven to twelve might earn 1s.4d. weekly; girls over twelve, 4s.8d., and men and boys over twelve could earn seven shillings to forty-two shillings, depending on experience, specialism and speed, since most

¹³¹ Wise, 'Birmingham and Its Trade Relations'

¹³² Andrew Popp, 'From Town to Town: How Commercial Travel Connected Manufacturers and Markets During the Industrial Revolution', *Journal of Historical Geography* 35 (2009): 642-67

¹³³ Wise, 'Birmingham and Its Trade Relations', p. 74

¹³⁴ *The Berrows Worcester Journal* Jan 22nd 1741/2 to 31st December 1742; WRO

was piece work. There was also employment for women and younger children, including nail-making, light brass-casting work, or at home using treadle hammers.¹³⁵

However, as noted above, wages need setting in the context of both regularity of employment and the cost of living. The 1834 Rural Queries for Worcestershire reported that the women of Claines, a Worcester suburb, who used to help keep their families well above the bread-line by earning six shillings a week gloving, were now reputedly earning two or three shillings at best, since ‘free trade ruined it.’ This reduction of income meant that a family with four dependent children and a husband on basic labourer’s wages was no longer able to pay any of its rent.¹³⁶

In urban areas, rent, fuel and some foodstuffs were expensive. In 1842, a three-room court house off Bromsgrove Street in Birmingham was three shillings a week, sharing privies and a brew-house in the small communal yard.¹³⁷ Black Country ‘Workhouse Ale’ was 1s.5d. a gallon in the 1840s, while agricultural labourers in Herefordshire could expect half a gallon a day in addition to wages, and many had cottages rent free. Manufacturing work depended on orders, and there were frequent periods of high unemployment. When there was work, it could be eighty hours a week in the metal workshops, but it has been estimated that in 1841, for example, 20% of the adult male population of Bilston were earning less than the subsistence wage. Conversely, as already discussed, early census data on the proportion of women and children at work is not reliable. If a general labourer’s wife and two children were fully employed, family income would have exceeded the subsistence level, although not necessarily

¹³⁵ Rowlands, *Masters and Men in the West Midland Metalware Trades* , p. 159

¹³⁶ Commission of Inquiry into the Administration . . . of the Poor Laws, Appendix B 1: Answers to Rural Queries. 1834, p. 582, www.parlpapers.chadwyck.co.uk

¹³⁷ Hopkins, *Birmingham: The First Manufacturing Town* , p. 123

by a wide margin. Other ways of supplementing income were limited in built up areas. Eggs were expensive and there is little evidence for the keeping of chickens, while in an 1837 survey of 2,193 households in West Bromwich, 192 kept a pig (to the annoyance of the sanitary inspectors) and just eight had a cow. There were few allotments or gardens. Wages varied greatly according to occupation, age and skills: iron-puddlers earned half the pay of a furnace-man, while building workers were relatively well paid and had few periods of slack employment.¹³⁸

2.9 Transport

2.9.i. Roads

Roads were the most versatile option for passenger transport, even allowing for their notoriously bad condition under the Statute Labour laws. From the late seventeenth century, turnpiking began and by 1750 there was a rudimentary national road network from London, including most of the way to Birmingham via Oxford (with a branch to Worcester), to Hereford via Gloucester and, a rare early example of a route not feeding into London, the ancient Salt Way from Droitwich to Worcester which was turnpiked in 1714 and extended to Bromsgrove in 1726 to bring in coal for the brine workings, to supply which it was claimed thirty coal wagons a day came in during the 1740s.¹³⁹

¹³⁸ George J. Barnsby, 'The Standard of Living in the Black Country During the Nineteenth Century', *Economic History Review* 24 (1971): 220-39

¹³⁹ Cited in William Albert, *The Turnpike Road System in England, 1663-1840* (Cambridge: Cambridge University Press, 1972), p. 47

Short sections of the roads near Ledbury, Worcester, Tewkesbury, Leominster, Hereford and Ross were turnpiked in the first half of the eighteenth century, as were many in the Black Country, and this was followed by other sections near Ludlow, Shrewsbury, Bridgnorth, Bromyard, Bewdley, Stourbridge and Kidderminster by 1800. These Severn and Wye Valley roads were among the first to be improved beyond the London-oriented arteries, because they carried such heavy goods from an early date. The arterial routes were also extended, including the road from Brecon through Leominster, Bromyard and Worcester and thence to London, which was completed by 1770. These changes coincided with a key period of transition in the Industrial Revolution, and their role in facilitating the movement of both goods and people is crucial.

With these improved roads, travel became much quicker for those who could pay, and the flow of information also speeded up, while land carriage became cheaper in real terms. Coach travel in particular became far quicker: London to Shrewsbury took three and a half days in 1753, and only one and a half in 1772; Worcester to London took just twelve hours in 1811.¹⁴⁰

Options for travel were defined by cost, location, distance, and purpose. Short journeys to market towns could use a local carrier, although many people probably walked; on arterial routes there was a choice of fast or slow coach; between other places, journeys were more problematic, and must often have involved either an initial journey to a nearby centre, haphazard cross-country travel, or private hire for the affluent. Prices varied greatly: a coach from rural south Staffordshire to Manchester was six times the carrier's fee.¹⁴¹ The volume of

¹⁴⁰ Ibid. , pp. 168-84

¹⁴¹ Redford and Chaloner, *Labour Migration in England* , p. 95

road traffic, for both goods and passengers, increased dramatically during the eighteenth century, perhaps ten-fold between 1765 and 1796. At the same time, there was an increase in the variety of cheaper travel options, including slower vehicles, limited luggage allowances, and seats on the roof or with the luggage.¹⁴²

In 1794, a stage coach from Worcester to Bath cost a guinea, or twelve shillings outside; to London it was a pound on the Mail or 'Greyhound' but eighteen shillings on 'Old Fly.' Coaches to Bath and Chester ran three days a week; the Birmingham service from Worcester was daily; and there were several coaches to London each day. By 1820 there was a choice of daily services from Worcester to destinations including Birmingham, Hereford, Leominster via Bromyard, Bristol, Bath and Cheltenham.¹⁴³

By 1840, Mail coaches ran to Worcester daily from Leominster via Bromyard, and thence to all parts of the country. Local services from Worcester included omnibuses to Clifton upon Teme, Abberley, Evesham and Malvern, and carriers for Clifton upon Teme, Malvern, Upton, Whitbourne and Bromyard. Railways were by then beginning to compete with the roads, and companies advertised competitive journey times: fourteen hours by (slow) night coach to London, thirteen hours to Carmarthen, Bath via Cheltenham and Stroud in eight hours, Bristol in six and a half hours direct. Many fares were also reduced in real terms, as shown in **Table 2.10**.

¹⁴² Albert, *The Turnpike Road System* ; William Albert, 'The Turnpike Trusts' in *Transport in the Industrial Revolution*, ed. Derek Aldcroft and Michael Freeman (Manchester: Manchester University Press, 1983): 31-63; John A Chartres and Gerard L Turnbull, 'Road Transport' in *Transport in the Industrial Revolution*, ed. Derek Aldcroft and Michael Freeman (Manchester: Manchester University Press, 1983): 64-99

¹⁴³ Anon, *The Worcester Royal Directory for the Year 1794* (Worcester: J Grundy, 1794); S Lewis, *Worcestershire General and Commercial Directory, 1820* (Worcester: S. Lewis, 1820)

Table 2.10: Prices for an Outside Seat from Worcester, 1794 and 1840¹⁴⁴

destination	miles from Worcester	charge for outside seat on stage coach in 1794	charge for outside seat on stage coach in 1840
Bath	67	12s	15s
Birmingham	26	4s	6s, 4s or 3s
Bromyard	13	3s	3s
Chester	84	15s	20s
Gloucester	29	6s	7s
London	111	18s	14s
Shrewsbury	47	8s 6d	15s
Upton	10	1s 6d	1s 6d

Data from the 1794 *Worcester Royal Directory*, Bentley's 1840 . . . *Directory of Worcestershire*, volume I part ii, and Haywood's *Directory of . . . Worcester for 1840*.

2.9. ii. Water Transport

Water transport defined many early lines of communication in the region. The two dozen mid eighteenth-century Worcestershire apprentices to Warwickshire were drawn exclusively from parishes east of the River Severn, mostly on navigable rivers or in towns.¹⁴⁵ A study of migrants from Highley in Shropshire also found evidence for early use of the Severn, with some financial dealings extending to Worcester and Tewkesbury and two sixteenth-century men serving as Bristol apprentices.¹⁴⁶

The River Severn was navigable for almost 240 km, and was one of the busiest commercial rivers in Europe in the eighteenth century. Until the canal age, the main port for the west midlands was Wribbenhall, opposite Bewdley, and once the Thames became navigable up to Lechlade, traffic passed to London via Gloucester and the overland route to Lechlade.

¹⁴⁴ Anon, *Worcester Royal Directory 1794*; J Bentley, *Bentley's History, Gazetteer and Directory of Worcestershire, Vol 1 Part Ii: Worcester* (Birmingham: J Bentley, 1840); R Haywood, *Haywood's Directory of the City and Borough of Worcester for the Year 1840* (Worcester: R Haywood, 1840)

¹⁴⁵ Smith and Williams, ed., *Warwickshire Apprentices*

¹⁴⁶ Nair, *Highley*, pp. 59-63

The greater efficiency of water transport compared with road haulage relates chiefly to goods, but nevertheless water traffic did affect migration, partly because there was some passenger trade, but more especially because of its effect on the development of industries and urban areas. The rates charged by Worcester watermen (**Table 2.11**) show that it was an inexpensive option where available.

Table 2.11: Charges for Travel from Worcester by Water and Road, in 1794

destination	km from Worcester	charge by watermen	charge for outside seat on stage coach
Bewdley	24	1s	-
Bridgenorth	49	1s 6d	4s 8d
Gloucester	46	1s 6d	6s
Kempsey	7	6d	-
Shrewsbury	75	5s	8s 6d
Stourport	19	9d	-
Tewkesbury	26	1s	3s 6d
Upton	16	9d	1s 6d

Data from the 1794 *Worcester Royal Directory*, pp. 88-89.

In 1772, the Stafford and Worcester canal connected the Trent and Mersey network to the Severn at Stourport, with a link to the Birmingham Canal, and these routes became profitable for goods transport immediately, so that by the early nineteenth century, Stourport was taking over from Wribbenhall as the hub for local water transport. In March 1771 the Droitwich canal opened, bringing salt 11 km down to the Severn, and an additional canal linking Worcester and an extended Droitwich Canal to Birmingham via Tardebigge was completed in two stages, finally opening through its full length in 1815.¹⁴⁷ Until then, carriers ran services from the end of the canal at Tardebigge Wharfe, with a passenger service from Alvechurch to

¹⁴⁷ R. A Pelham, 'The Worcester and Birmingham Canal', *University of Birmingham Historical Journal* 5 (1955): 60-82

Birmingham.¹⁴⁸ Despite the huge costs of raising the canal over 120 m from the Severn to Birmingham, it rapidly became profitable, paying its first dividend in six years. Meanwhile, navigation on the lower Severn was greatly improved, with passenger steamboats operating from Worcester to Gloucester in under five hours from 1814.¹⁴⁹

Birmingham was further linked north to Liverpool by the Junction Canal via Chester to Ellesmere Port, shortening the journey to the Mersey by 32 km and thirty locks compared with the older route along the Trent and Mersey. From Ellesmere Port, passenger boats went to Liverpool, for 6d. for the cheapest ticket.

In Herefordshire itself, the only canal to be completed was the Herefordshire and Gloucestershire, first mooted in 1774 and opened in two stages, finally connecting the Severn to the Wye in 1845.¹⁵⁰ In 1844, twice-weekly boats began running from Withington, just short of Hereford, to Birmingham via the Worcester and Birmingham Canal, but by 1882 the Ledbury to Hereford section was already disused, after competition from the railways. The Leominster canal, undertaken to join central Herefordshire with the Severn, taking out agricultural produce and encouraging the development of industry, was completed almost to Leominster, but was never linked to the Severn, and so it only served local demand, chiefly moving coal from the small Mamble mines.¹⁵¹

¹⁴⁸ In 1808, Thomas Sherratt advertised journeys from Birmingham to Worcester via Tardebigge and thence overland, every weekday, taking 36 hours for the trip: *Berrows Worcester Journal*, 18th May, 1808, cited in Charles Hadfield, *The Canals of the West Midlands* (2nd edn; Newton Abbot: David and Charles, 1969)

¹⁴⁹ *Ibid.*

¹⁵⁰ Daunton, *Progress and Poverty*, pp. 288-90

¹⁵¹ Charles Hadfield, *The Canals of South Wales and the Border* (2nd edn; Newton Abbot: David and Charles, 1967)

2.9.iii. Railways

Competition from railways for goods and passengers began in the 1830s, with lines opening from Birmingham to Warrington and London. In 1840, there were several trains a day to London via Coventry and Rugby (cheapest tickets were a pound to London), to Derby (five shillings), and to Liverpool and Manchester (eleven shillings).¹⁵² The Birmingham and Gloucester line opened in 1840, with passenger services from Spetchley, near Worcester, to Birmingham, Bromsgrove, Cheltenham and Gloucester. Worcester itself joined the railway network in 1852, and its London line opened in 1854.¹⁵³

There was no railway in northern Herefordshire in the present research period. The Worcester, Bromyard and Leominster Railway was incorporated in 1861 but only reached the county boundary in 1874, a completed distance of 13 km. Seventeen kilometres to the north, in Worcestershire, the Shrewsbury, Hereford and Tenbury Railway opened in 1861, using the route of the defunct canal, and linked up with the line from Bewdley in 1864 to provide the nearest alternative route towards the north-east. Twenty six kilometres to the west, the Shrewsbury and Hereford line, built 1848-1854, connected the Welsh and Marches routes to the national network.¹⁵⁴

It has been suggested that railways did not initially contribute directly to migration, merely to a decrease in parochialism, but in the period to 1850 over half their gross receipts came from

¹⁵² Bentley, *Bentley's History, Gazetteer and Directory of Worcestershire, Vol 1 Part Ii: Worcester*

¹⁵³ Rex Christiansen, *Thames and Severn*, vol. 13 (A Regional History of the Railways of Great Britain; Newton Abbot: David and Charles, 1981); P. J Long and W. V Awdry, *The Birmingham and Gloucester Railway* (Gloucester: Allan Sutton, 1987)

¹⁵⁴ Christiansen, *Thames and Severn* , pp. 103-18

passengers not freight.¹⁵⁵ The railway employees, some 100,000 nationwide by 1851, were themselves often migrants, and navvies continued their peripatetic lifestyle.¹⁵⁶

2.10 Conclusion: Herefordshire Out-migration: Problem and Context

Unusually among the rural counties, Herefordshire's population growth was modest during the research period. In contrast, the population of Bedfordshire and Lincolnshire almost kept pace with national growth until the mid nineteenth century, and Cambridgeshire even exceeded it in 1801-1841. Thereafter, several east midlands counties experienced relative stagnation to 1871 (**Table 2.12**). Unless it suffered unusually high mortality rates, Herefordshire appears to have been a county from which significant numbers of people were migrating, from at least as early as the eighteenth century.

¹⁵⁵ Saville, *Rural Depopulation*, p. 9

¹⁵⁶ June A. Sheppard, 'The Provenance of Brighton's Railway Workers, 1841-1861', *Local Population Studies* 72 (2004): 16-33

Table 2.12: Herefordshire Population Change in Context

county	county population estimate 1761	county population 1871	% population change		
			1761-1801	1801 -41	1841 -71
Bedfords	53,000	146,000	24.9	69.5	30.2
Lincs	182,000	437,000	20.0	63.3	22.6
Herefds	82,000	125,000	13.9	3.5	29.9
Rutland	16,000	22,000	8.3	35.3	-0.05
Hunts	35,000	64,000	11.1	41.4	14.7
Essex	201,000	466,000	17.9	35.5	45.4
Bucks	97,000	176,000	15.9	23.0	27.2
Camb	79,000	187,000	18.8	81.5	10.2
Suffolk	176,000	349,000	24.8	43.0	10.9
Wilts	183,000	257,000	5.9	25.0	5.9
Yorks NR	138,000	293,000	19.6	12.5	57.5
Salop	142,000	248,000	26.3	35.2	2.7
Worcs	123,000	339,000	19.4	56.9	47.1
Glos	215,000	535,000	22.2	50.8	35.2
% population change in England			37.4	71.4	43.3

Data from Census Enumeration Abstracts for 1801, 1831, 1841 and 1871. Wrigley and Schofield note the inaccuracies of the early census returns, but they conclude that the 1801 national total is reduced by only 0.05%, which is considered to be an acceptable margin for present purposes.¹⁵⁷ Population for 1761 is based on the calculations of Rickman, as reassessed by Wrigley.¹⁵⁸

1. The first eleven counties are the most rural English counties, measured by percentage of the male population age twenty and over employed in agriculture according to the 1831 census, the earliest for which information is available. The remaining three are the English counties adjoining Herefordshire.
2. English total population data exclude Monmouthshire.

An initial, albeit crude, exploration of this migration can identify the places in 1851 which had inhabitants with a place of birth in Herefordshire. This is an unsuitable method for precise analyses below county level, for three major reasons: place names become increasingly unrecognisable the further a person has migrated; many migrants show only a county of birth; and the Ancestry¹⁵⁹ records which it uses have many parish of birth transcription errors. Even at county level there are problems, especially because of confusion between Herefordshire and Hertfordshire. The data collected for Hertfordshire, Buckinghamshire and Bedfordshire

¹⁵⁷ Wrigley and Schofield, *The Population History of England 1541-1871*, pp. 122-25 and 588-96

¹⁵⁸ Wrigley, 'English County Populations in the Later Eighteenth Century'; but see also Wrigley, 'Rickman Revisited'

¹⁵⁹ www.Ancestry.co.uk, first accessed October 2007

were therefore checked and corrected for this source of error where possible, based on unique place-name evidence. Some other obvious errors in the CEBs, such as one individual recorded as born in Shrewsbury, Herefordshire, who was living in Essex in 1851, have been eliminated, as have some conspicuous transcription errors. Despite these shortcomings of both data and method, the remaining errors are perhaps sufficiently randomised for **Table 2.13** to be indicative of the extent of migration from Herefordshire by the mid nineteenth century.

Prominent among these results are the presence of Herefordshire natives in every county of England and Wales, and the large numbers found in Gloucestershire, Monmouthshire, Middlesex and Worcestershire, compared with relatively few in Lancashire, Yorkshire and even Staffordshire and Warwickshire.

A first indication of the profile of these migrants can be obtained from analysing the population of individual parishes, although to all the errors mentioned above, one must now add those caused by unchecked census material. **Figures 2.2 to 2.4** show the Herefordshire-born populations of three parishes.

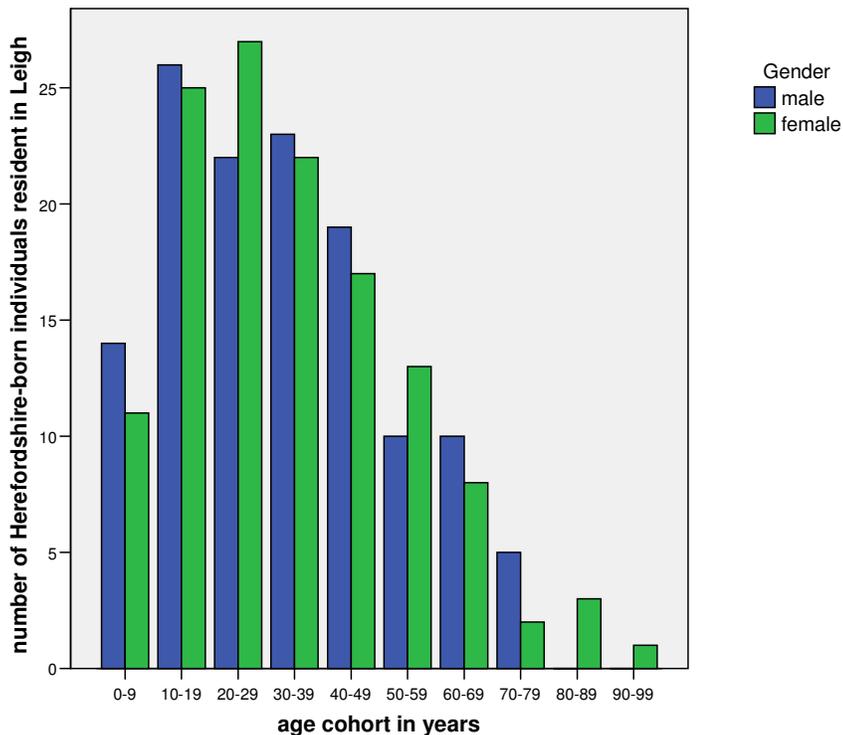
Table 2.13: Location of People Born in Herefordshire, in the 1851 Census

county	number of Herefordshire natives	examples of Herefordshire-born populations
Bedfordshire	63	Bedford 22
Berkshire	160	Reading 23, Windsor 18
Buckinghamshire	76	
Cambridgeshire	59	Cambridge 19
Cheshire	210	Chester 24, Stockport 10
Cornwall	49	
Cumberland	26	
Derbyshire	94	Derby 30
Devon	224	Plymouth 12
Dorset	84	
Durham	69	Bishopwearmouth 7
Essex	243	
Gloucestershire	5,287	Cheltenham 519, Bristol 345, Gloucester 158
Hampshire	245	Portsmouth 19, Southampton 10
Hertfordshire	89	
Huntingdonshire	26	Huntingdon 9
Kent	582	Woolwich 41, Greenwich 39
Lancashire	453	Liverpool 90, Manchester 6
Leicestershire	99	Leicester 12
Lincolnshire	123	
Middlesex	5,753	
Norfolk	82	
Northamptonshire	111	
Northumberland	22	
Nottinghamshire	90	
Oxfordshire	147	
Rutland	12	Oakham 5
Shropshire	3,111	Ludlow 324, Shrewsbury 61
Somerset	458	
Staffordshire	2,096	Kingswinford 277, West Bromwich 247, Tipton 151, Sedgley 109, Bilston 80, Walsall 67, Kinver 58
Suffolk	89	Ipswich 15, Bury St Edmunds 6
Surrey	1,410	
Sussex	255	Brighton 51
Warwickshire	2,590	Birmingham parishes 643
Westmorland	18	
Wiltshire	112	Salisbury 16
Worcestershire	7,969	Kidderminster 531, Claines 395, Leigh 258, Worcester 255, Stourbridge 119, Dudley 60
Yorkshire	331	Leeds 29, Sheffield 16
England	32917	
Anglesey	3	
Breconshire	1,708	Llanely 472, Hay 313, Llangattock 205, Brecon 50
Caernarvonshire	8	Bangor 4
Cardiganshire	31	Aberystwyth 12, Cardigan 4
Carmarthenshire	68	
Denbighshire	37	
Flintshire	12	
Glamorganshire	595	Merthyr Tydfil 166, Swansea 50, Cardiff 45
Merionethshire	3	
Monmouthshire	4,774	Monmouth 492, Abergavenny 289, Grosmont 192, Llanvihangel Crucorney 96, Chepstow 76
Montgomeryshire	70	Montgomery 12
Pembrokeshire	43	Tenby 10, Pembroke 6
Radnorshire	2,396	Presteigne 283, Staunton on Arrow 265, Bradnor 154, Clyro 150, Evenjobb 55, Knighton 45
Wales	9,748	
England and Wales	42,665	
Herefordshire in 1851	57,400	

Data compiled from the Ancestry database, pre-transcribed from CEBs, www.Ancestry.co.uk

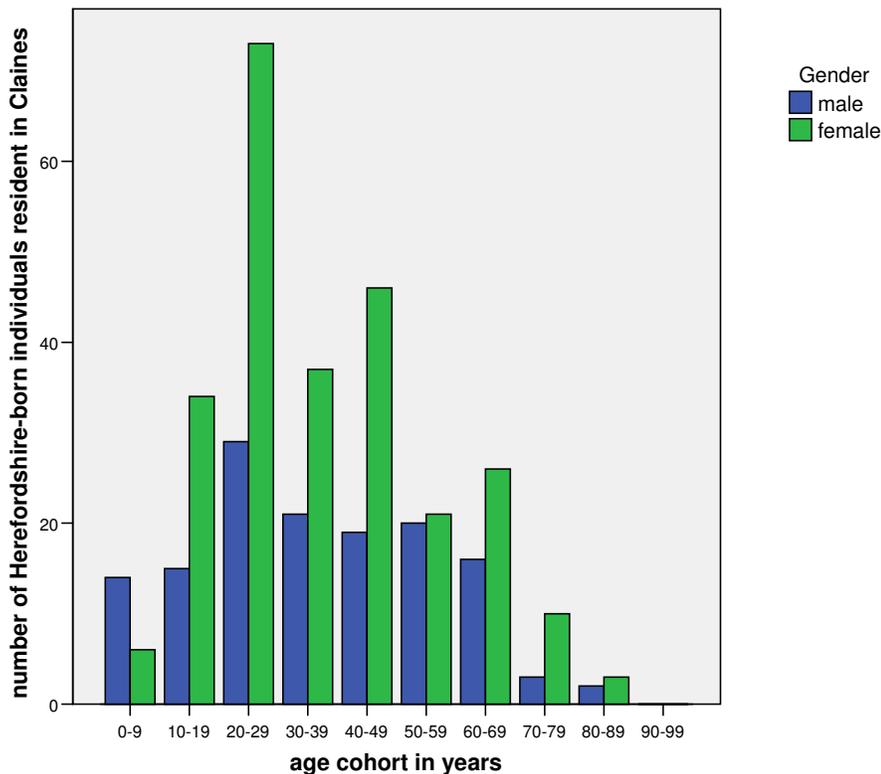
Leigh (**Figure 2.2**), a large rural parish in west Worcestershire with a population of 2,342 in 1851, had 129 male and 129 female Herefordshire natives. Their age profile suggests that many had arrived while single or recently married, since there are more in each of the decadal cohorts from ten to forty-nine than there are children under ten. In-migration of longer-established family units might be expected to have brought in more Herefordshire-born children. These proportions, with twenty-five children under ten compared with forty-nine women aged between twenty and thirty-nine, a ratio of only 0.51 compared with a ratio of 1.63 for the whole parish population, fit with the results of many migration studies, with a preponderance of mobile young adults. Nevertheless there were some child-migrants, and furthermore it is impossible to be sure that the young adults in Leigh in 1851 did migrate independently, rather than cross the county boundary between ten and thirty years previously, while still resident with their birth-family.

Figure 2.2: Herefordshire-born Individuals in Leigh, Worcestershire, in 1851



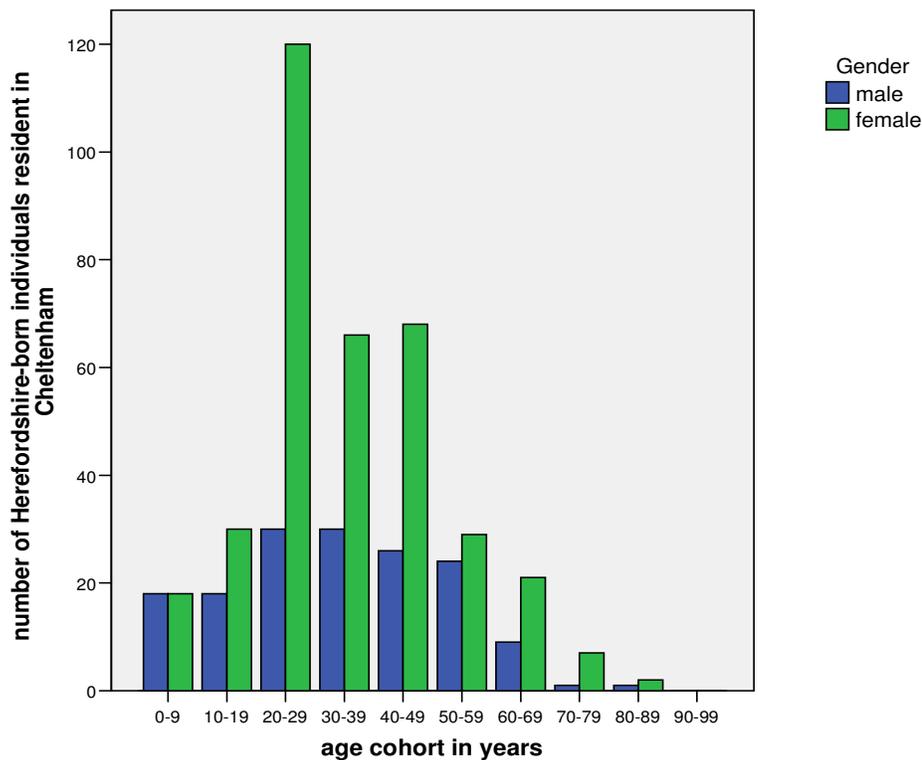
Claines (**Figure 2.3**), an urbanising parish north of Worcester with a population of 6,819 in 1851, had different gender profiles, with 118 Herefordshire-born men but 256 Herefordshire women. Despite the rapid expansion of Worcester, with associated opportunities for male employment, young Herefordshire women either had been attracted there in larger numbers than men for twenty years or more, or male mortality was much higher, or else the parish also attracted some middle-aged women. The pronounced spike for women aged twenty to twenty-nine could mean that the parish had become much more attractive as a migration destination since about 1840, or that women used it primarily as a life-cycle destination for early adulthood.

Figure 2.3: Herefordshire-born Individuals in Claines Suburb, Worcester, in 1851



Cheltenham (**Figure 2.4**) had the most extreme in-migrant profile. Some Herefordshire men had migrated there, perhaps from the early nineteenth century, but the gender imbalance is suggestive of Herefordshire women finding work in domestic service, as the town's population expanded from 3,076 in 1801 to 35,051 in 1851. This fits with the scarcity of children under ten, while the distinct change at the age fifty to fifty-nine cohort might either be because older women were less able to find employment in Cheltenham or that few Herefordshire women entered domestic service there before about 1820.

Figure 2.4: Herefordshire-born Individuals in Cheltenham, in 1851



These graphs, leaving aside their inherent inaccuracies, cannot test these propositions, nor can they fill in more detail. They cannot for example reveal at what age people migrated; whether the shortage of Herefordshire-born children is exacerbated by pre-existing families being

broken up by migration; whether these migrants later returned to Herefordshire; which Herefordshire people were most prone to migrate. Fundamentally, they reveal little about migration before census night in 1851.

The remainder of this thesis aims to develop a method by which some of these questions can be addressed.

CHAPTER THREE: THE SAMPLE PARISH

3.1 Introduction

The sample parish of Whitbourne is located in north-eastern Herefordshire, on the Worcestershire border, eleven miles west of Worcester and immediately to the north-east of Bromyard, its market town. This chapter describes the geography and agriculture of the parish, and the employment and demographic profiles of its occupants in the research period.

3.2 The Geographical Context

Whitbourne's eastern boundary is largely defined by the River Teme and one of its tributaries (**Figure 3.1**). To the west, the boundary with Bromyard and its townships runs over the unenclosed Bringsty Common, which is crossed by the old coach road from London via Worcester to Leominster, Brecon and Aberystwyth.

The parish is well-watered, averaging 770 mm rain per annum. Whitbourne Brook and the Sapey Brook with its tributaries both flow into the River Teme within the parish. In addition to the water and power these supplied, there were substantial areas of water meadows along the Teme. The rich, deep soils of the parish are ideally suited to mixed agriculture. They derive from the Bromyard series of reddish brown siltstone overlying coarser Old Red Sandstone and are predominantly a clay loam, but everywhere that floods naturally, or where

water could be channelled artificially, has been further enhanced by the addition of thick deposits of fertile silts.¹

From the River Teme, the land rises sharply up wooded slopes to a height of 90 m, then drops down to Whitbourne Brook before rising again to the central undulating bowl of the parish at approximately 60 m. To the south on Bringsty Common and north on the Tedstone Delamere boundary, the land rises to 120 m. The steeper slopes are predominantly wooded, but even here there is often evidence of old ridge and furrow, indicative of additional arable acreage in the past.²

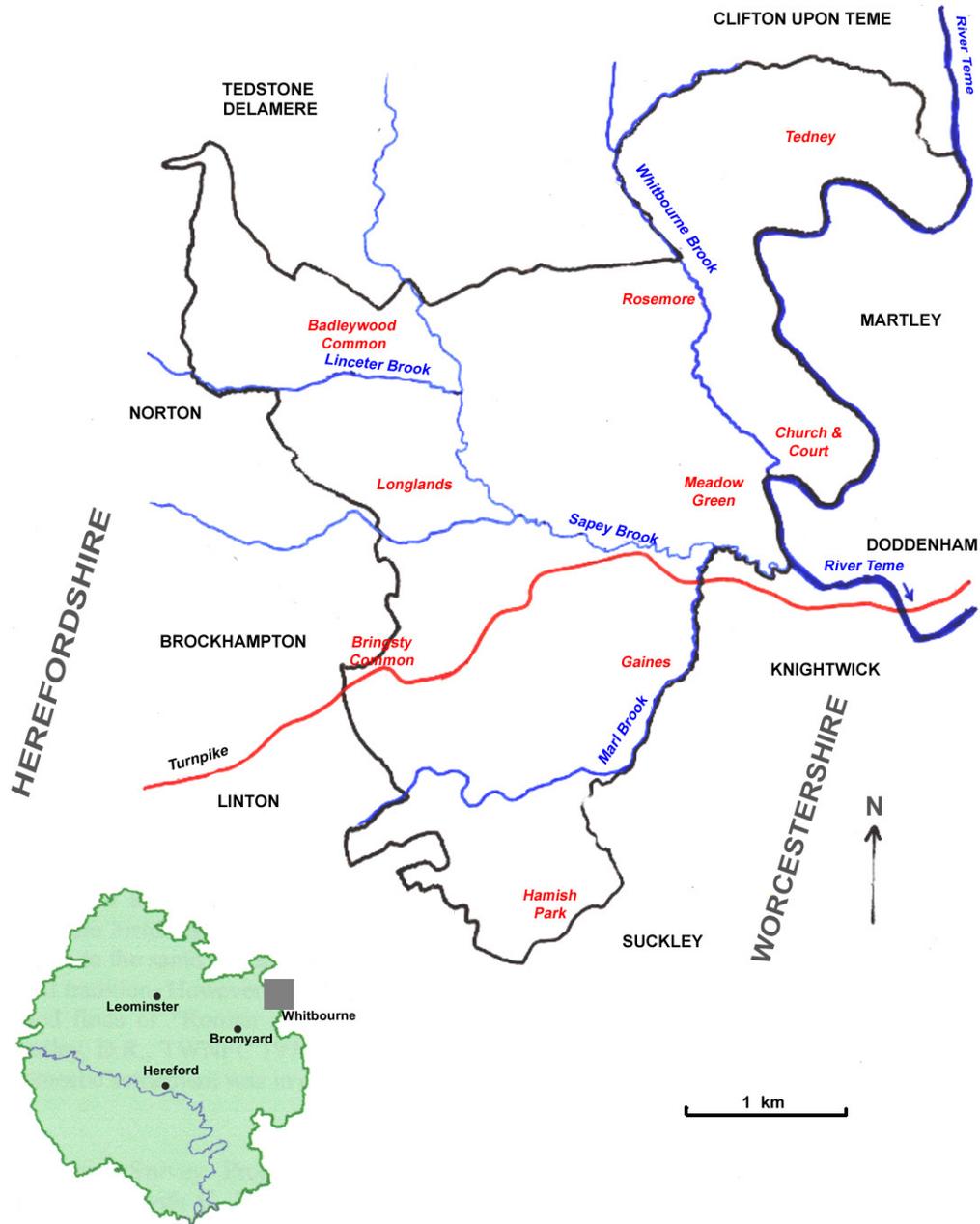
The lanes in the core of the parish formed a circuit of approximately 3 km, encompassing the Church, Meadow Green and Rosemore, with branches north up to Clifton upon Teme and the Sapeys, to the west up towards Tedstone Delamere via Badleywood Common, and south to the main road and on to the southern extremity of the parish. A lane to the east led past the Church to the site of a ferry and a ford over the Teme. Apart from the more densely settled area near the church, the houses were in scattered hamlets, farms and individual cottages on the commons.³

¹ Tim Hoverd, 'Whitbourne: The Archaeology of a Herefordshire Village' in *Herefordshire Archaeology Reports* (Hereford: Herefordshire Archaeology Service, 2006), p. 5

² *Ibid.* , p. 20

³ Whitbourne Tithe Map, 1838. HRO

Figure 3.1: The Parish of Whitbourne, Herefordshire



Redrawn from the 1838 Tithe Map. HRO

Whitbourne was the eighth largest by area of the twenty-seven parishes of Broxash Hundred, and the fourth most populous in 1831 (**Table 3.1**). Its population density was the greatest in the Hundred, equal to that of Bromyard and its townships and to the small parish of Sutton St Nicholas. The population of Bromyard town itself in 1831 was only 1,434.

Table 3.1: Area and Population of Some Parishes in Broxash Hundred, 1831

	acres	population	population density: persons per acre
eight largest parishes by area:			
Bromyard with Brockhampton, Linton, Norton and Winslow	9,310	3,051	0.33
Bodenham	5,530	998	0.18
Pencombe	4,490	521	0.12
Marden with Amberley	4,330	921	0.21
Avenbury	3,140	344	0.11
Withington with Preston-Wynne	3,120	723	0.23
Much Cowarne	2,970	573	0.19
Whitbourne	2,700	899	0.33
smallest parish by area: Bredenbury	540	54	0.10
equal most densely populated parish: Sutton St Nicholas	720	234	0.33
least densely populated parish: Wolferlow	1,560	134	0.09
Total for Whole Hundred	61,290	11,781	0.19

Data from the 1831 Census Enumeration Abstract, Part 1 p. 228.⁴

3.3 Agriculture and Occupations

Four sources shed significant light on nineteenth-century Whitbourne: the parish-based Crop Returns of 1801, the Tithes Apportionment of 1839, the censuses, and the more detailed later Crop Returns, beginning in 1866. The Land Tax records from 1777 to 1831 also give some information about land holding. The value and limitations of these and other sources used in this study are discussed further in Chapter Four.

⁴ www.histpop.org, first accessed October 2010

Table 3.2 gives the 1801 crop returns for Whitbourne, compared with Herefordshire and two neighbouring counties. The high proportion of wheat, the low acreage of the much less valuable barley, high acreage of turnips and rape which were used as winter feeding supplements for livestock, relatively high percentage of the still novel potato crop, and the 6.8 percent of other crops (not specified in the 1801 return, but which certainly included hops, since these occupied 400 acres in 1807⁵), all suggest that in 1801 Whitbourne was a parish with a number of forward-looking and commercially-inclined farmers.

Table 3.2: Distribution of Arable Crops in Whitbourne, Compared with Herefordshire, Worcestershire and Shropshire, 1801

county	% of county covered by Crop Returns	% area under arable	% of known arable acreage recorded which was under each arable crop							
			wheat	barley	oat	rye ¹	potato	turnip and rape	pea and bean	hop etc.
Herefd	56.0	22.3	44.6	20.0	9.9	0.6	2.4	6.3	16.1	0.1
Salop	58.3	20.7	38.8	22.5	21.6	1.0	1.6	6.8	7.6	0.1
Worcs	81.2	27.5	42.0	19.1	10.1	1.4	1.4	7.4	18.5	0.1
Whitbourne		22.0	52.1	6.5	5.7	-	4.4	11.6	12.9	6.8

County data adapted from Turner, 'Arable in England and Wales' Table 2, pp. 296-7; Whitbourne data from Turner's electronic data-set.⁶

1. Includes maslin (or blendings), an intercropping of rye and wheat, which by 1801 was largely confined to Shropshire and the north of England.

The parish Tithe Apportionment of 1839 details land holdings as well as major crop divisions.

There were five estates over 150 acres, the largest of which was Gaines, with 751 acres, which had been owned and occupied by the Freeman family since the late seventeenth

⁵ Jean Hopkinson, ed., *A Pocketful of Hops: Hop Growing in the Bromyard Area* (Bromyard: The Bromyard and District Local History Society, 1988), p. 160

⁶ M. Turner, 'Arable in England and Wales: Estimates from the 1801 Crop Returns', *Journal of Historical Geography* 7 (1981): 291-302; M. Turner, *Crop Returns for England, 1801* [computer file], Colchester, Essex: UK Data Archive [distributor], May 2005. SN: 5156. www.Esds.ac.uk/aandp, first accessed May 2011

century. John Freeman (1802-1870) also owned 305 acres in the neighbouring parish of Stanford Bishop and was the nearest thing to a 'county' landowner in Whitbourne. Most of the large estates had relatively little land in hand, so there were also about twenty substantial tenant farms, the largest of which, John Hodges' at Upper Tedney and James Twinberrow's near Gaines House, were themselves about 200 acres. Below these in scale there were nine farms between twenty-five and 150 acres, including the glebe of thirty-five acres, and thirteen holdings between five and twenty-five acres. There were also over fifty smallholdings, some with only a fraction of an acre. Four-fifths of the holdings below twenty five acres were owner-occupiers, in part or in whole, including five of a quarter of an acre, effectively a cottage garden, and nine more with under an acre. The disproportionate value of these small plots of land in a parish which had retained its commons, and the political effect they might have upon parish decision-making, could be crucial, and their existence in Whitbourne in the 1830s may have been of significance for the life-choices of its population (see further in Chapter Six).⁷

The parish in 1839 still included 161 acres of common grazing, and 'the right of depasturing on these Commons is exercised by the whole of the lands in the Parish . . .'⁸ There were 1,150 acres of meadow and pasture, with cider orchards on many of the permanent pastures, 330 acres of woodland, mostly coppice, 153 acres of hops, and 1,050 of various arable crops, or over a third of the parish acreage, a significant increase compared with 1801.

⁷ B.A. Holderness, 'Open' and 'Close' Parishes in England in the Eighteenth and Nineteenth Centuries', *Agricultural History Review* 20 (1972): 126-39; K. Wrightson, *Earthly Necessities: Economic Lives in Early Modern Britain* (New Haven and London: Yale University Press, 2000), p. 314

⁸ Whitbourne Tithe Apportionment, HRO, f. 41

The 1866 Crop Returns exclude hops and woodland, which comprised 39% of the parish; they list 1165 acres of grass of which ninety-eight acres was leys, thirty-one acres fallow, forty-one of tares and vetches, seventy-nine acres of mangolds, swedes and turnips, potatoes twelve acres, peas twenty-seven, beans 124, oats thirteen, barley sixty-six and wheat 299 acres. The returns also listed 285 cattle, 225 pigs and 679 sheep.⁹

Despite their difficulties as a source, parish Land Tax records show something of land-holding in the parish before the Tithe Apportionment.¹⁰ In 1792, for example, there were items relating to 46 different owners, of whom all but six can be identified with some confidence in the parish registers, indicating not only a wide land-ownership base but also a preponderance of local residents.

Apart from incidental evidence, chiefly in parish registers and probate records, occupational information is restricted to the census period. **Figures 3.2 and 3.3** summarise this data for 1851, the first year for which it is available, excluding designated visitors, in nineteen categories, as follows:

Occupational Codes for men and women

0 = not stated, including wife, child or other relation

1 = yeoman or farmer, regardless of acreage e.g. 'proprietor and farmer of 5 acres'

2 = agricultural labourer or employee, and unspecified labourer, including bailiff, gamekeeper

3 = Farm Servant

4 = domestic servant, including lodge keeper, nurse, laundress if resident with other servants

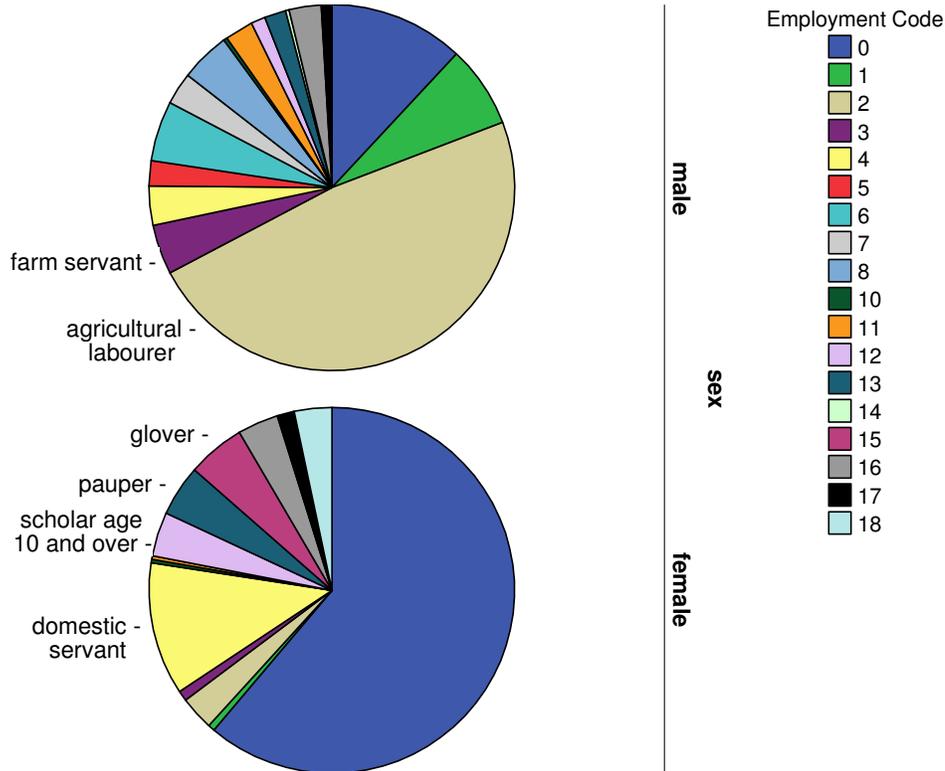
5 = domestic or other gardener

⁹ MAF 68/243 20935, The National Archives; cited in Phyllis Williams, *Whitbourne, a Bishop's Manor* (Whitbourne: Published by the Author, 1979), p. 64

¹⁰ Roy Douglas, *Taxation in Britain since 1660* (Basingstoke: Macmillan, 1999)

- 6 = wood working trades: carpenter, cooper, wheelwright
- 7 = tailor or shoemaker, including those also listed as agricultural labourer
- 8 = mason or bricklayer, including their labourers
- 9 = interior building trades: painter, plasterer, glazier etc. (none at this census)
- 10 = shopkeeper, innkeeper
- 11 = blacksmith, haulier, and one 'kneedle-maker' not specified as a visitor
- 12 = scholar including those educated at home
- 13 = pauper, regardless of former occupation. One instance of pauper AND agricultural labourer is included under code 2
- 14 = retired, or formerly, agricultural labourer
- 15 = glover
- 16 = Rector, gentleman, annuitant, landed proprietor (even if only of a few acres)
- 17 = school teacher, governess, postal employee, printer
- 18 = dressmaker, seamstress, charwoman, laundress if not living as servant.

Figure 3.2: Employment in Whitbourne in 1851, Age 10 and Over (N = 650)



Of the men, 88% had an occupation listed, 48% being agricultural labourers; a further 4.5% were Farm Servants and 7% farmers, a total of almost 60% of males over nine years of age listed as in agriculture. Another 5% were in wood-working trades (seventeen individuals), 4% masons or bricklayers, 2.5% were blacksmiths and hauliers (seven individuals, plus the anomalous kneedle-maker). Domestic service accounted for 3.5% of men and a further 2 % (seven) were gardeners.

The situation for women was rather different, although obscured by the 61% with no employment given. Ten individuals (3%) were described as agricultural labourers and a further three women were Farm Servants. Almost 12% of women were listed in domestic service, slightly above the national average, 4% were scholars (thirteen girls, compared with

only four boys aged ten and over) and five women were teachers or governesses. Women were also glovers (seventeen individuals, 5%), and dressmakers, laundry and char women (eleven individuals, 3%).

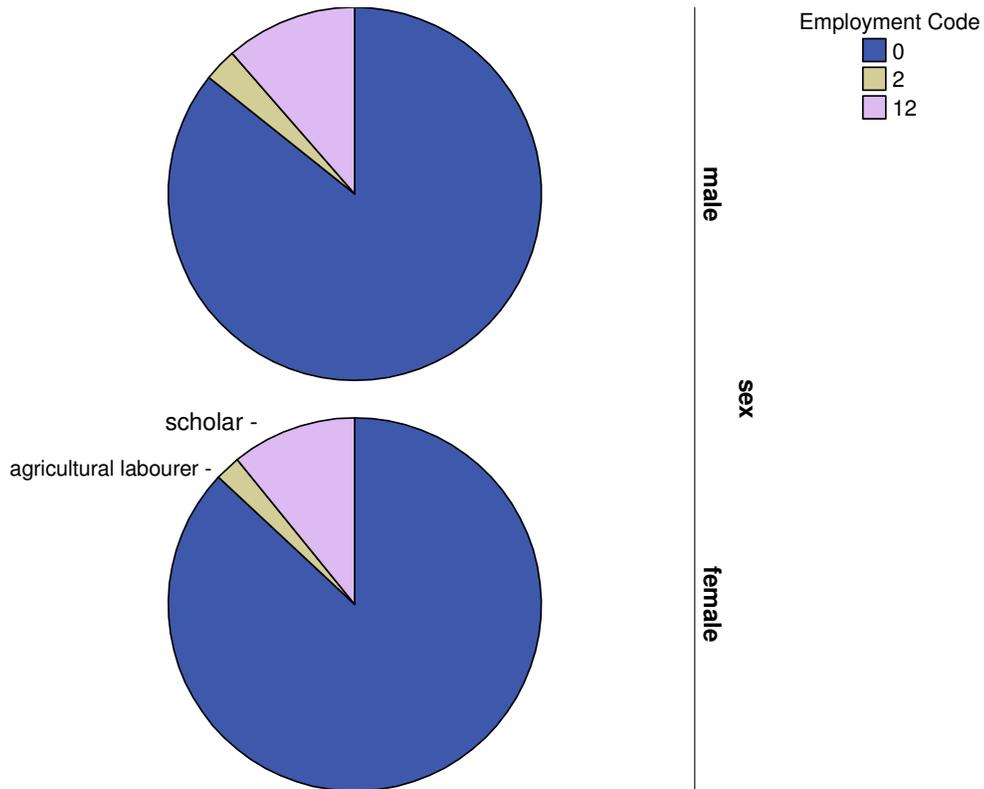
The national summary of the agricultural workforce in 1851 gives a figure of 18.7% male Farm Servants in Herefordshire as a whole, compared with only 9% in Whitbourne (see also Table 2.5). This may be because the smallholdings were relying on family labour. The figure of 4% of women employed in agriculture, even with the majority of the population not described, is much closer to the high county average of 5.7% (Table 2.1).

There were both men and women listed as paupers in Whitbourne in 1851, fifteen women and six men (3.2% of the population aged ten and over), in addition to one man shown as both pauper and agricultural labourer. One woman was described as pauper idiot, one man a lame pauper, otherwise there is no commentary in the census returns.

Most of the children aged between five and ten had no listed occupation (**Figure 3.3**). One boy and one girl were employed in agriculture, and five girls and four boys were listed as scholars. These latter were not exclusively from the most affluent households, but included children of labourers and carpenters. In all, eighteen girls and eight boys were designated scholars, of whom twelve (ten girls) were being educated at home. The parochial charity school had been founded in 1797, ‘. . . for the education of the poor of the parish . . . or such other parish or district as might be agreed upon . . .’ and was entirely supported by voluntary

donations.¹¹ Low children's employment rates were characteristic of Herefordshire, as we have seen (section 2.4.ii).

Figure 3.3: Employment in Whitbourne in 1851, Age 5-9 (N = 81)



3.4 Population

Deriving population figures for a parish before the census period is a prerequisite for setting a base line for measuring migration, but the accuracy of the results is limited by the nature of the sources used and the multiplier chosen to convert their data to represent the whole population. For the beginning of the present research period, there are two very different main

¹¹ Report of the Commissioners Appointed . . . Inquiries Concerning Charities in England and Wales, 1837-1838. Part II, Herefordshire, pp. 156-158, cited in Williams, *Whitbourne, a Bishop's Manor*, p. 123, www.parlpapers.chadwyck.co.uk, first accessed July 2009

sources, namely the Hearth Tax for 1671 and the Compton Census of 1676. The 1671 Hearth Tax returns for the Whitbourne area are in good condition and legible, whereas many for Worcestershire are poor and cannot be dated with confidence. Only a dozen Compton Census returns are missing for Herefordshire, and Whitbourne is not one of these.

The 1671 Hearth Tax lists 109 households in Whitbourne, including exemptions from the tax, and so should in theory represent the whole parish. There is some debate over the best multiplier for relating rural English household numbers to total population.¹² Starting from the late seventeenth-century calculations of Gregory King, it has been suggested that a multiplier of 4.3 may be a good average for England outside London, but a figure anywhere between 3.7 and 5.2 could be acceptable.¹³ Although household structures in the nineteenth century were perhaps quite different from those two hundred years earlier, the early censuses of Whitbourne produce similar figures, with multipliers ranging from highs of 5.42 and 5.38 (censuses 1801 and 1871) to lows of 4.59 and 4.63 (1851 and 1841). An 'average' multiplier of 4.7 would convert the 109 Hearth Tax households to a total population of 512.

The 1676 Compton Census of communicants, which theoretically represents the population aged sixteen and over, gives a round figure of 300 for Whitbourne, with no recorded papists or non-conformists.¹⁴ Leaving aside the possibility that this was just an approximation, which it may be since this was a year when the parish had a new rector, there remains the question of a multiplier. Gregory King concluded that 41% of the English population in the last decade of

¹² Peter Laslett, *The World We Have Lost, Further Explored* (3rd edn; London: Methuen, 1983), pp. 64-69

¹³ Tom Arkell, 'A Method for Estimating Population Totals from the Compton Census Returns' in *Surveying the People: The Interpretation and Use of Document Sources for the Study of Population in the Later Seventeenth Century*, ed. Kevin Schurer and Tom Arkell (Oxford: Leopard's Head Press, 1992): 97-116; Tom Arkell, 'Illuminations and Distortions: Gregory King's Scheme Calculated for the Year 1688 and the Social Structure of Later Stuart England', *Economic History Review* 59 (2006): 32-69

¹⁴ Anne Whiteman and Mary Clapinson, ed., *The Compton Census of 1676: A Critical Edition* (Records of Social and Economic History, N.S.; London: Oxford University Press for The British Academy, 1986), p. 172

the seventeenth century was under sixteen, and several isolated sources support this: two rural parish censuses of 1684 and 1701 give similar results; in Buckfastleigh, Devon in 1698 the figure was 35%; a detailed analysis of twelve parishes in St Asaph diocese between 1685 and 1690 found between 31% and 46% with a mean of 35.5%; Archdeacon Palmer of Peterborough assumed 33% when compiling his Compton returns; Wrigley and Schofield's calculations using back projection suggest a figure of about 31%.¹⁵ Using a proportion of 40%, equivalent to a multiplier of 1.67, would give an estimate of the 1676 Whitbourne population of 500, which is very similar to the Hearth Tax estimate above.

For the eighteenth century, population estimates can be calculated from crude marriage rate per head of population (CMR) and the known population at a given point, a method developed by Rickman in the late nineteenth century and recently modified by Wrigley¹⁶ (**Table 3.3**). The method is limited by several unknown variables, notably the proportion of non-marriers, reliability of the early censuses used as the base-line, proportion and speed of remarriage, and numbers of extra-parochial marriages with a subsequent return to the parish. With these provisos, a CMR for 1821 (used because 1801 is thought by some to be inaccurate, and in Whitbourne the 1811 census may also be unreliable since it seems to give anomalous results) is calculated using population (821) and mean annual numbers of marriages in the parish for a 13 year period centred on the census year (3.9):-

$$\text{cmr}_{1821} = 3.9 / 821 \times 1000 = 4.7.$$

Then, assuming a constant marriage rate, which is by no means assured,

¹⁵ E. Anthony Wrigley and Roger S. Schofield, *The Population History of England. 1541-1871. A Reconstruction* (Cambridge: Cambridge University Press, 1989; tr. from 1981, Edward Arnold, London); Arkell, 'A Method for Estimating Population Totals from the Compton Census Returns', pp. 35 and 570

¹⁶ E. A Wrigley, 'English County Populations in the Later Eighteenth Century', *Economic History Review* 60 (2007): 35-69; see also E. A Wrigley, 'Rickman Revisited: The Population Growth Rates of English Counties in the Early Modern Period', *Economic History Review* 62 (2009): 711-35

population_{year x} = average annual marriage rate x 1000 / cmr₁₈₂₁.

Table 3.3: Calculation of Parish Population from Crude Marriage Rate₁₈₂₁

	1761	1771	1781	1791	1801	1811	1821
population from census	-	-	-	-	770	787	821
no. marriages in 13 year period (years -5 to +7)	50	68	74	62	53	50	51
average annual no. marriages	3.85	5.23	5.69	4.77	4.08	3.85	3.93
no. 'single remarriers' weddings	9	7	15	7	5	2	0
no. 'double remarriers' weddings	2	4	3	2	1	2	1
therefore total no. people remarrying	13	15	21	11	7	6	2
% remarriers	26%	22%	28%	18%	13%	12%	4%
corrected average annual marriages (rounded up) ¹	43 / 13 = 3.3	60 / 13 = 4.6	63 / 13 = 4.8	56 / 13 = 4.3	49 / 13 = 3.8	47 / 13 = 3.6	50 / 13 = 3.9
estimated population using cmr₁₈₂₁	702	979	1021	915	809	766	(821)

1. Derived by deducting half the number of re-marriers from total number of marriages.

Although the results for the early nineteenth century seem encouraging, these figures should be treated with some caution, not least because the further back into the eighteenth century one moves, the more social and economic differences may exist: poor relief, population mobility, marriage age, proportion never marrying, life expectancy, and so on. Nevertheless, there are some potentially interesting features here. First, there seems to be a fall in remarriage, from the high point in 1781. Is this a demographic effect, or due to increased out-migration of widows and widowers, or simply a result of changing conventions of accuracy

when completing marriage certificates? There is also an apparent population peak in the 1781 decade. Is this caused by in-migration, or a change in fecundity of the existing population, or a reduction of out-migration? A superficial review of the parish registers indicates that several large families first appeared in the parish at this time: Bradburn and Gomery (both 1750s), Soley (1760s), Lloyd and Bullock (1770s) and Caswell (1790s), so in-migration may indeed have been a dominant feature of parish demographics.

3.5 Baptisms *versus* Burials

A comparison between population estimates and the differences between baptisms and burials gives an indication of net population movement, although this method is subject to many limitations (see further, Chapters 4 and 5).

Table 3.4 summarises this information for Whitbourne during the research period, with all dates converted to New Style. Decades end on 31st December, and for the census period the population data is assumed, for simplicity, to equal that at the preceding end of year. Thus the 1851 census figure is assumed to be the same as the population on 31st December 1850.

This table suggests that Whitbourne experienced increasing population growth in the eighteenth century, followed by a sudden switch to out-migration, despite a generally stable population, in the first half of the nineteenth century. There were apparently three extreme peaks of out-migration, at the end of the eighteenth century and again in the 1830s and 1860s. The first of these coincides with a dramatic increase in the number of recorded baptisms (up

by 45% on the previous decade). The last decade with an excess of burials, the 1720s, was also a period of nationwide high mortality,¹⁷ and is also paralleled in an aggregate study of twelve parishes in the south-east of England.¹⁸ By contrast, although the frosts and potato blight of the 1830s and 1840s caused real hardship, this was not reflected in decadal excess of burials in Whitbourne.

Table 3.4: Estimated Net Migration, Whitbourne 1700-1871

decade	baptisms	burials	baptisms minus burials	population estimate	estimated net out-migration per decade since last population estimate ⁴
1691-1700	107	123	-16	500 ¹	
1701-1710	146	120	26		(-19)
1711-1720	140	130	10		(-19)
1721-1730	127	181	-54		(-19)
1731-1740	153	128	25		(-19)
1741-1750	150	108	42		(-19)
1751-1760	161	106	55	702 ²	$(88-(702-500))/6 = -19$
1761-1770	176	120	56	979 ²	-221
1771-1780	194	163	31	1021 ²	- 11
1781-1790	194	149	45	915 ²	+151
1791-1800	282	144	138	770 ³	+283
1801-1810	243	138	105	787 ³	+ 88
1811-1820	235	154	81	821 ³	+ 47
1821-1830	275	179	96	899 ³	+ 18
1831-1840	258	137	121	825 ³	+195
1841-1850	209	153	56	826 ³	+ 57
1851-1860	241	165	76	891 ³	+ 11
1861-1870	233	157	76	856 ³	+111

1. Estimate based on Compton Census and Hearth Tax for 1670s.

2. Estimate based on Crude Marriage Rate calculations.

3. Census data.

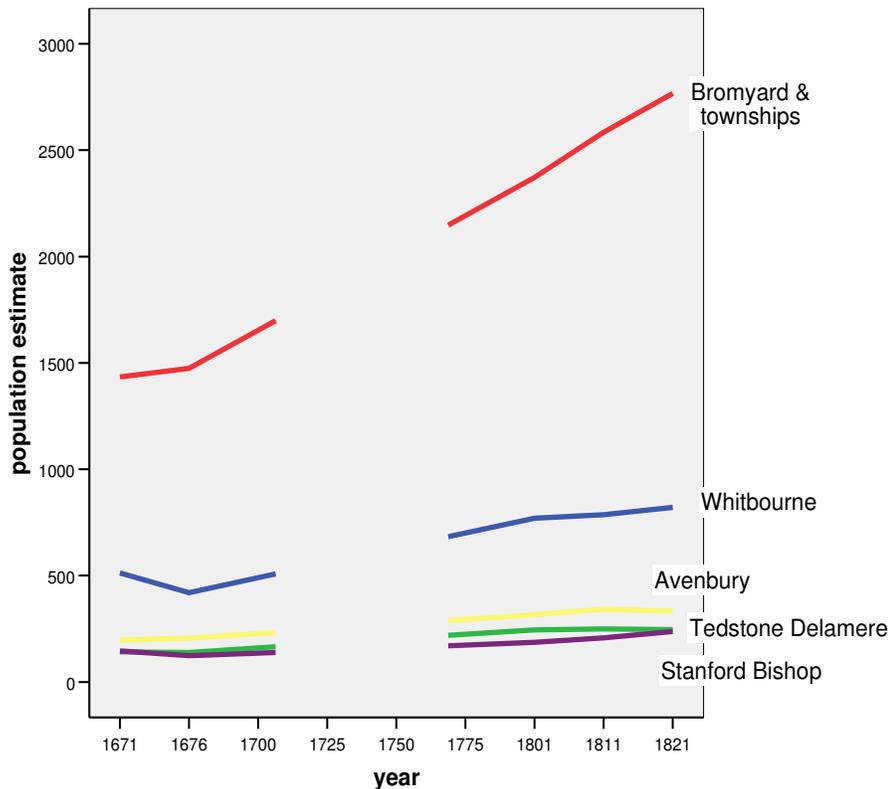
4. Calculated as cumulative change in (baptisms minus burials) minus change in population per decade since the last population estimate.

¹⁷ Wrigley and Schofield, *The Population History of England 1541-1871*, pp. 332-42

¹⁸ Mary J Dobson, *Contours of Death and Disease in Early Modern England* (Cambridge: Cambridge University Press, 1997), p. 98

Some smaller neighbouring Herefordshire parishes were apparently growing less than Whitbourne during the eighteenth century (**Figure 3.4**), either because of higher mortality or because they lacked the same in-migration. Bromyard and its townships meanwhile seem to have been expanding faster.

Figure 3.4: Early Population Estimates for some Herefordshire Parishes



3.6 Mortality

Three main statistics together give an indication of mortality, namely Crude Death Rate (CDR), Infant Mortality Rate (IMR) and Life Expectancy. A comparison of these statistics with national data may give an indication of the relative situation in the sample parish.

3. 6. i. Crude Death Rate

Expressed as a percentage, or per thousand, of the total population in a given year, this is most easily estimated during the census period (making it subject to the inherent weaknesses of census data), and it also assumes that net migration is zero, which clearly was seldom the case for Whitbourne. The following calculations are based on decadal averages. CDR is, however, more reliable than Crude Birth Rate, because the latter is confounded by definitions of still births, and by non-baptised infants. Wrigley and Schofield suggest that the correction factor should almost always be correspondingly small, from a low of 1.01-1.02 for 1700-1780 to a high of 1.31 for 1811-1821.¹⁹ In Whitbourne there were no alternatives to the Anglican graveyard, but even so, in addition to out-migrations, some deaths of parishioners will not have appeared in the burial register for reasons which include burials in adjacent parishes, especially Tedstone Delamere and Bromyard; occasional long-distance transport of corpses for burial elsewhere; imperfect record-keeping; and the problems associated with classifying neo-natal deaths (there is, for example, a civil death registration for Whitbourne which gives age as 1 minute). The change in recommended correction factors over time assumes increasing unreliability of the burial registers in the early nineteenth century, but for Whitbourne, the parish burial registers and civil death registrations have quite similar totals, as shown in **Table 3.5**.

¹⁹ Wrigley and Schofield, *The Population History of England 1541-1871* , pp. 138-39

Table 3.5: Civil Death Registrations and Parish Burials, Whitbourne 1837-1865

period	civil death registrations	burials
July 1837 - December 1845	118	129
January 1846 - December 1855	147	150
January 1856 - December 1865	152	155

The slight surplus in the burial registers suggests that either civil registration was sometimes omitted, or there was some persistent irregularity in the burial register, for example an unrecorded tradition of burials from outside the parish. Since this disparity decreases with time, the former seems more likely. This comparison suggests that in Whitbourne the burial registers continue to be a valid guide to mortality into the mid-nineteenth century. In view of this, the following calculations of CDR use a compromise correction factor of 1.15, the national figure recommended for the turn of the nineteenth century.²⁰

Table 3.6 shows the calculation of parish CDR, and suggests that mortality was almost always lower in Whitbourne than the national figures propose. However Whitbourne's population was growing more slowly than the national population, perhaps largely due to out-migration, and this affects apparent mortality rates.

²⁰ Ibid. , p. 139

Table 3.6: Crude Death Rate (CDR) for Whitbourne during the Census Period

period	population at census in centre of period (1)	no. burials registered in ten year period (2)	corr. factor (3)	CDR= $\frac{(2) \times (3) \times 100}{(1)}$	estimated national CDR for the census year ²¹
1796-1805	770	146	1.15	21.8	28.1
1806-15	787	138	1.15	20.2	26.5
1816-25	821	178	1.15	24.9 ¹	23.4
1826-35	899	163	1.15	20.9	22.5
1836-45	824	153	1.15	21.4	22.0
1846-55	826	150	1.15	20.9 ²	22.1
1856-65	891	155	1.15	20.0 ³	21.6

1. Whitbourne had above average mortality in 1820, 1824 and 1825.

2. Above average mortality in the potato blight year 1848 is masked by reduced burial numbers in subsequent years.

3. The parish population in 1861 was raised, and death rate perhaps reduced, by the influx of a young adult male workforce associated with the construction of Whitbourne Hall in 1860-62.

3. 6. ii. Childhood Mortality

Childhood mortality is arguably a better statistic to use to assess the health of a parish, since it is less affected by out-migration and it relates in part to maternal well-being as well as to children.²² The calculations can be based on either completed traced families or registrations of all births and deaths. Both methods have been used here.

A comparison between infant (under one) and childhood (under five) mortality of Whitbourne-ancestry children, according to whether the parents were born in Whitbourne or elsewhere²³ (**Table 3.7**), enabled a preliminary assessment of the possible benefits of living in

²¹ Ibid. , pp. 534-35

²² Pamela Sharpe, 'Population and Society, 1700-1840' in *1540-1840*, vol. 2, ed. Peter Clark (The Cambridge Urban History of Britain; Cambridge: Cambridge University Press, 2000): 491-528; Chris Galley and Nicola Shelton, 'Bridging the Gap: Determining Long-Term Changes in Infant Mortality in Pre-Registration England and Wales', *Population Studies* 55 (2001): 65-77

²³ The data-base from which this information is taken (see further in Chapter 4) was set up in such a way that if both parents are of 'Whitbourne stock', the children and all other data are attached to the father, to avoid duplication

Whitbourne. Parental birthplace was used rather than children's because of mobility during child-bearing years.

Table 3.7: Childhood Mortality and Parental Birthplace, 1700-1871

parental birth place	no. of families	total children	mean no. children per family	deaths before age 1 (%)	all deaths before age 5 (%)
Whitbourne	164	1008	6.15	61 (60.5)	105 (104.2)
not Whitbourne	54	271	5.02	18 (66.4)	34 (125.5)
Total	218	1279	5.87	79 (61.8)	139 (108.7)

The data-set (see Chapters Four and Five) included only five 'full' families of Whitbourne descent born in urban areas (in Worcester, the Black Country and the nineteenth-century Birmingham urban area), because of methodological constraints on tracing families in urban areas and ensuring that all children have been found. Consequently, the data could not be subdivided to look at the possible effects of an urban environment, although this was included in the 'non-Whitbourne' category. This was also a limitation on identification of families who were resident in rural areas other than Whitbourne, and may partly explain the smaller family size for 'non-Whitbourne' families, despite the rigorous method which was designed to include only fully-recorded families. Other factors which may be contributing to this effect are later age at marriage for out-migrants, and an early but untraced death of a parent. In this context, it is important to note that these are only 'completed families' in the sense of all children having been traced, not in the sense of both parents surviving to maternal age fifty,²⁴ so they cannot strictly be used for external demographic comparisons.

²⁴ Wrigley and Schofield, *The Population History of England 1541-1871*, p. 359

Although there was reduced childhood mortality in Whitbourne families compared with those no longer resident in the parish, this effect was not statistically significant, although it might have become significant with a larger sample.²⁵

Using the civil registration data gives an IMR for the whole parish from 1838 onwards, and **Table 3.8** compares the Whitbourne figures with other rural and urban parishes, using quinquennia for Whitbourne to give large enough sample size, and single years for the comparative data. Number of registered live births in Whitbourne averaged 116 per quinquennium during these thirty years.

These results confirm the low IMR for Whitbourne at the beginning of civil registration, when it was about half that for the whole of Bromyard district and also better than the wider surrounding rural districts. The three urban areas had a broadly constant IMR, but whereas the rural areas as a whole improved during this time, Whitbourne's IMR increased from the mid 1850s. Although still a relatively healthy place, the parish had apparently deteriorated markedly in this respect by the end of the research period, and was close to the national average of 154‰ for 1851-1875.²⁶ This may have impacted on migration decisions.

²⁵ Pearson Chi-Square 0.157, close to the 10% level

²⁶ Robert Woods, *The Population History of Britain in the Nineteenth Century* (Cambridge: Cambridge University Press, 1995), pp. 16-17

Table 3.8: Infant Mortality Rates per Thousand, from Civil Registration Data

	1839-1843	1844-1848	1849-1853	1854-1858	1859-1863	1864-1868
Whitbourne	72.2	93.5	81.1	112.0	150.8	149.6
	1851		1861		1871	
Bromyard district (including Whitbourne)	153.1		121.1		102.9	
Bromyard, Weobley and Leominster districts	131.7		127.3		121.2	
Tenbury, Martley and Upton districts (Worcs.)	128.5		116.7		115.4	
Worcester city	170.7		157.9		188.5	
Dudley	197.1		167.8		170.1	
Birmingham	198.4		173.3		195.1	

Data for Whitbourne from transcriptions of the quarterly returns by the Herefordshire Family History Society. Data for Herefordshire, Worcestershire and Warwickshire districts derived from the Annual Reports of the Registrar General, www.histpop.org.uk

The Whitbourne IMR from completed families, and that for the beginning of civil registration, are much lower than the national figures proposed by the Cambridge Group. While infant mortality rates in England were ‘never high by the standards of many pre-industrial communities or . . . those widely prevalent in Europe in the nineteenth century’, their parish reconstitution data for 1680-1749 averaged 190‰, 1750-1789 averaged 160‰ and 1790-1837 averaged 140‰.²⁷ Their results for individual parishes found minimum IMRs in the parishes of Bridford and Hartland of 92‰ and 94‰ respectively in the early eighteenth century; in the early nineteenth century Hartland was the lowest, at 80‰, comparable to the early Whitbourne figures but still above them.²⁸ Similarly, the national figures derived from reconstitutions give childhood mortality to age five as 317‰ for 1700-24 and 250‰ for 1825-1837, while for Hartland childhood mortality was 170‰ in 1675-1749 and 164‰ in 1838-1844.²⁹ A study of three rural Essex parishes has found an IMR of 138‰ in 1800-1849, rising to 164 in 1850-1880 and so mirroring the pattern in Whitbourne. Other research has linked

²⁷ E. Anthony Wrigley et al., *English Population History from Family Reconstitution, 1580-1837* (Cambridge: Cambridge University Press, 1997), pp. 214 ff

²⁸ *Ibid.*, pp. 270-71

²⁹ *Ibid.*, p. 262

IMR to a combination of geographical situation, parental occupation and parish size, with lows in sparsely-populated upland parishes of under 70‰ and highs of over 250‰ in marshland and riverine locations.³⁰ However, although the IMR was 82.5‰ in late eighteenth-century Ilkley, this fell to just 48.5 during the twenty-four years when the parish was using the more detailed Dade Registers, highlighting the need for caution in interpreting early IMR figures, especially those derived from registers rather than from family reconstitution.³¹

3.6.iii. Life Expectancy

Table 3.9 shows mean life expectancy from birth (e_0) for all Whitbourne-descendants traced during the present research, subdivided according to whether or not they were both baptised and buried in the parish, as an approximate division into migrants and non-migrants. Although there was little difference between the longevity of the two groups of individuals, there is a trend towards increasing life expectancy at birth, through time, and **Table 3.10** shows that life expectancy for Whitbourne descendants was substantially higher than for the national sample used by the Cambridge Group, whether based on reconstitutions or back projection methods.

³⁰ Dobson, *Contours of Death and Disease*, pp. 167-83

³¹ Claire Jarvis, 'The Reconstitution of Nineteenth-Century Rural Communities', *Local Population Studies* 51 (1993): 46-53; Alysa Levene, 'What Can Dade Registers Tell Us About Infant Mortality in the Late Eighteenth Century?' *Local Population Studies* 76 (2006): 31-42

Table 3.9: Mean Life Expectancy at Birth (e_0) for Whitbourne Descendants

year of birth	e_0	st. dev	N
All individuals			
before 1725	42.40	31.15	20
1725-49	42.50	29.50	24
1750-74	50.86	25.25	64
1775-99	52.28	27.70	132
Total N			240
Those baptised & buried Whitbourne			
before 1725	39.01	31.91	15
1725-49	39.75	28.72	16
1750-74	48.30	27.01	43
1775-99	45.79	30.43	53
Total N			127

Table 3.10: National Life Expectancy, as Calculated by the Cambridge Group using Two Different Methods³²

FRF data		back projection results	
period	e_0	period	e_0
1700-09	37.3	1699-1748	34.2
1710-19	35.8		
1720-29	35.2		
1730-39	36.6		
1740-49	37.3		
1750-59	42.1	1749-98	36.2
1760-69	39.0		
1770-79	39.4		
1780-89	39.2		
1790-99	41.7		
1800-09	44.8	1799-1833	38.6

In conclusion, CDR, IMR and life expectancy data all indicate that the Whitbourne population may have been longer lived during the research period than the national averages suggest.

³² Wrigley et al., *English Population History . . . 1580-1837*, pp. 295 and 520

3.7 Age at First Marriage

Age at marriage is a key component of demography since it is closely related to fecundity. It is also linked to a range of economic factors including women's employment, and may interact with migration either positively (for example stimulating migration for work to support an increasing family size) or negatively (perhaps through a reduction of mobility at the end of the life-cycle phase of Farm Service).

In the following analysis, all cases have been checked as far as reasonably possible to ensure that the data relates only to first marriages.

Table 3.11 summarises all traced first marriages of Whitbourne descendants, in four time periods according to year of marriage, and includes a comparison with the national figures proposed by the Cambridge Group and those from a study of early nineteenth-century marriages in rural Essex.³³ The Whitbourne results were not very close to the national or Essex sample figures, and rather than showing a decline in marriage age with time, the measures of average age at first marriage for Whitbourne all remained relatively constant through the research period, especially for women. There was, however, an increase in the range of first marriage ages up to the early nineteenth century, and a reduction in the minimum age for marriage of women, as shown in **Figures 3.5 to 3.8**. This range is not apparent from a reliance on the mean alone.

³³ Jarvis, 'The Reconstitution of Nineteenth-Century Rural Communities'

Table 3.11: Age at First Marriage of Whitbourne Descendants, by Year of Marriage

	1700-1749		1750-1799		1800-1849		1850-1871	
	male	female	male	female	male	female	male	female
N	8	9	53	37	117	86	87	81
median	24.5	23	26	22	25	24	26	23
mode	23 & 26	25	23	18	23	21	26	23
maximum	27	29	47	37	57	47	40	41
minimum	19	19	19	17	18	17	19	16
mean	24.13	23.56	26.98	23.22	26.47	25.33	26.91	24.52
standard deviation	2.532	2.877	6.219	5.10	6.544	5.816	4.874	4.882
coeff. of variation	10.5%	12.2%	23.1%	22.0%	24.7%	23.0%	23.8%	23.8%
national mean¹	27.5	26.2	26.4	24.9	25.3	23.4	-	-
Essex sample²	-	-	-	-	24.9 N=149	22.3 N=154		

1. National means are from Wrigley and Schofield, *The Population History of England*, p. 255.

2. Essex sample is from Jarvis 'The Reconstitution of Nineteenth-Century Rural Communities.'

These graphs also highlight the divergence between the mean and mode, associated with a skew in the data, especially for women, which was at its most extreme in the late eighteenth century when the most common age for marriage was eighteen. This may indicate the presence of two sub-populations, or a change in geographical mobility through time with, for example, more women moving for employment before marriage, or both. Another piece of research, in Kent, produced similar mean ages as the Cambridge Group, but gave age distributions similar to this Whitbourne data, only phased slightly later. For example in 1800-1834, almost 40% of the brides in the three Kent parishes (total population about 3,000) were aged fifteen to nineteen, falling to just 18% by 1865-1880.³⁴

³⁴ Barry Reay, 'Before the Transition: Fertility in English Villages, 1800-1880', *Continuity and Change* 9 (1994): 91-120

Figure 3.5: Age at First Marriage, 1700-1750

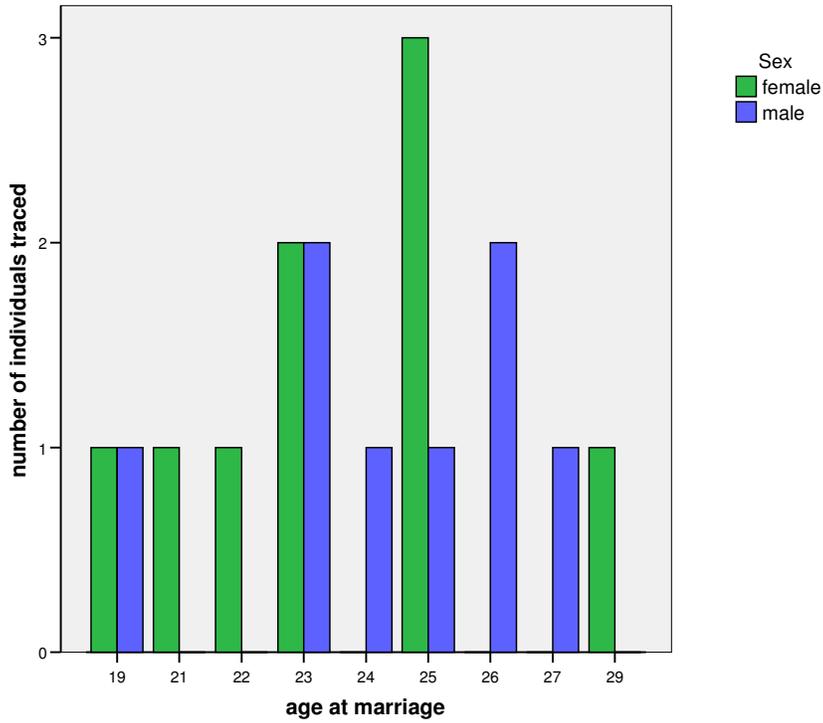


Figure 3.6: Age at First Marriage, 1750-1799

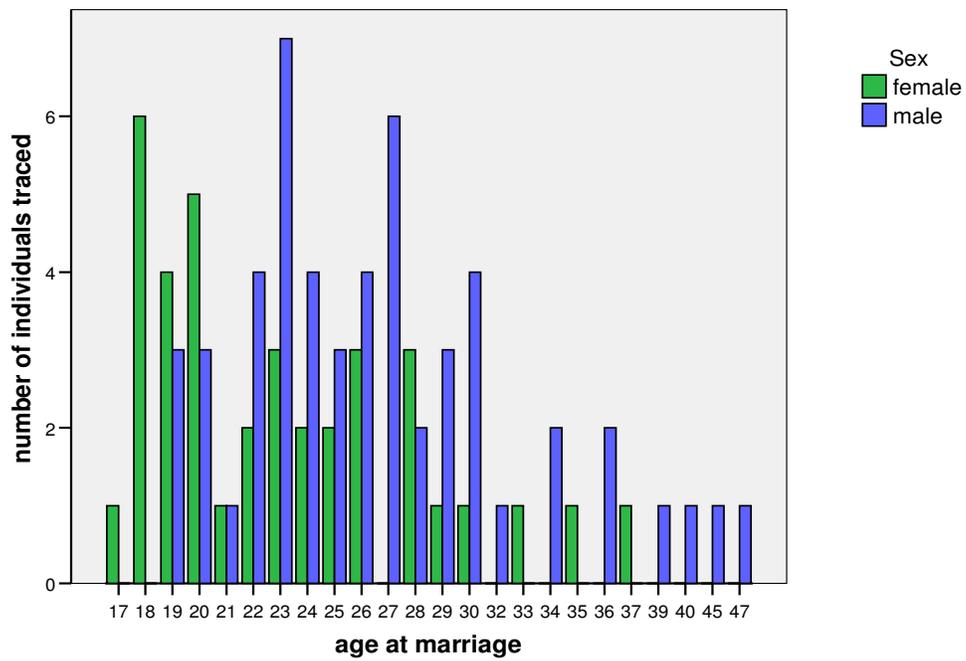


Figure 3.7: Age at First Marriage, 1800-1849

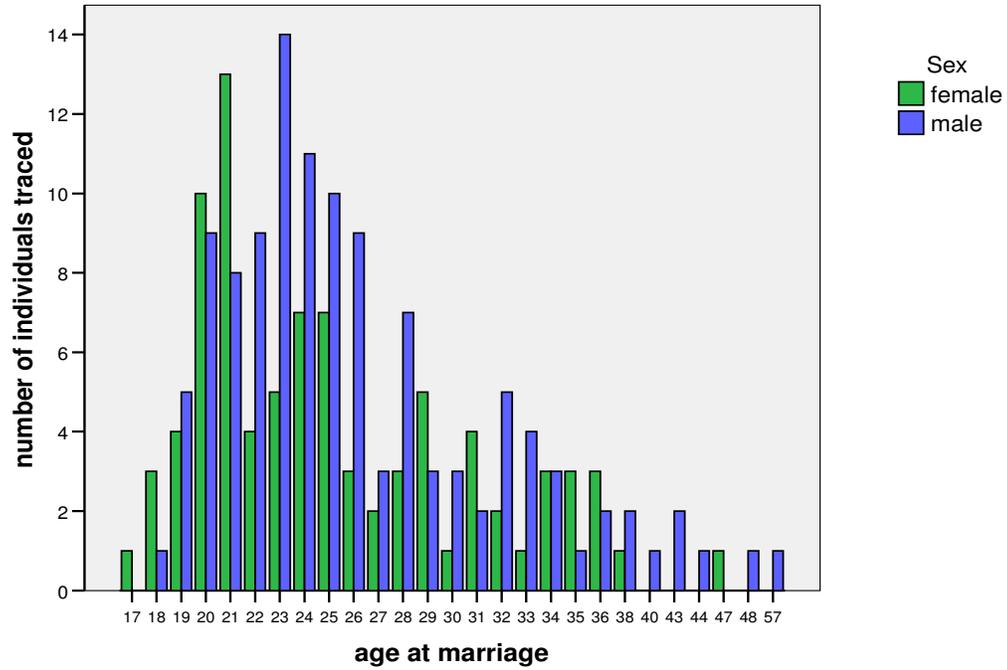
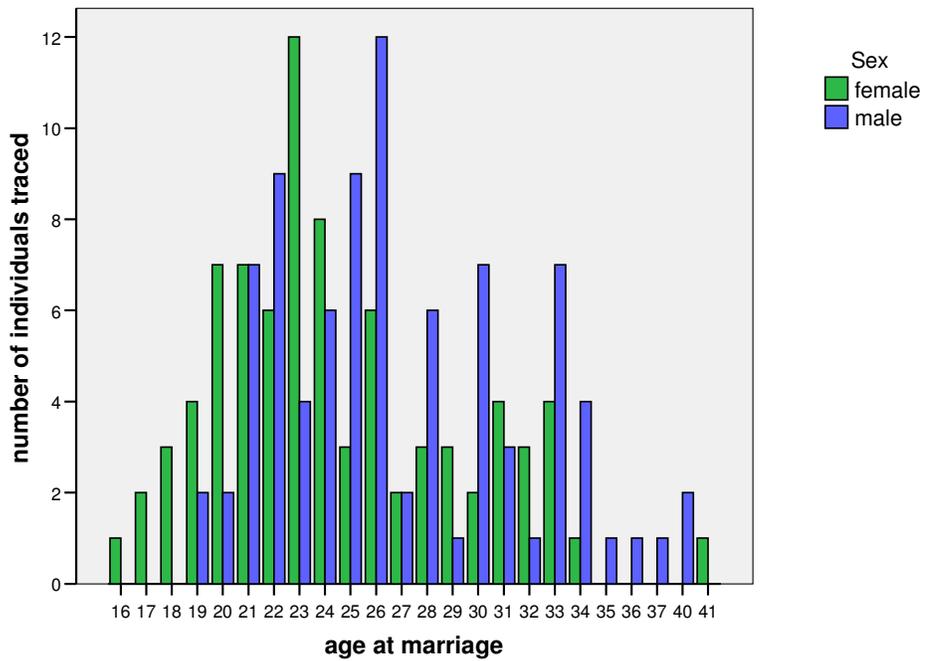


Figure 3.8: Age at First Marriage, 1850-1871



3.8 Conclusion

Although it was one of the larger parishes of rural Herefordshire, and so provides a big enough data-base, early-modern Whitbourne's population was not far from the national mean, being 770 in 1801 and 787 in 1811.³⁵ This is similar to that of a randomly selected group of 286 English parishes used by the Cambridge Group, which had a mean size of 871 in 1811, and in marked contrast to the mean of 1916 for their 404-parish sample.³⁶ Despite the distinctive features of the parish and its locality, Whitbourne was arguably a 'typical' village at least in respect of its population size.

Whitbourne is in an area not previously used for family reconstitution or migration studies. It included unenclosed commons and a large number of small owner-occupied holdings, and offered a variety of employment including for women. It was in an area of mixed agriculture cushioned against the extremes of weather and markets, and in a county which avoided many of the ravages of eighteenth- and nineteenth-century epidemics. Although there were no railways nearby until the end of the research period, the parish was connected to Worcester by a coach road, and thence by river and road to a variety of destinations.

Preliminary demographic explorations in this chapter have pointed to a high eighteenth- and early nineteenth-century population density, resulting partly from in-migration but also from natural growth. Life expectancy was above average, and infant mortality was very low until the mid nineteenth century when it abruptly deteriorated. Age at first marriage was above all varied. The preponderance of in-migration to Whitbourne appears to have switched to

³⁵ www.histpop.org

³⁶ Wrigley and Schofield, *The Population History of England 1541-1871*, pp. 40-49 and 485-89

substantial out-migration, with pronounced peaks in the late eighteenth century, the 1830s and from the 1860s.

CHAPTER FOUR: METHODOLOGY

4.1 Introduction to the Research Questions

Casual investigation of spatial mobility in the nineteenth century is now relatively easy using on-line census records, by comparing the place of birth of successive children in a family unit, or tracing the supposed dispersal of these children at successive censuses, and this has encouraged many amateur family historians to explore the migrations of their ancestors. The reliability of these researches is unfortunately not always easy to assess, nor is it certain how representative of the wider population the traced individuals are. Cumulative analysis of this material can, however, yield surprising results, such as the suggestion that for many socio-economic groups there was little change in migration distances from the mid eighteenth century until the late nineteenth century, and it was only after World War One that patterns began to change significantly.¹

By combining a parish reconstitution study, of the kind developed by the Cambridge Group, with a rigorous analysis of the migration patterns of those who left the parish, the present study aims to develop and test a reliable method for detailed out-migration research. It aims to explore the responses of any socio-economic sub-sections identified, and to investigate some representative case studies. It will be based on life histories, but the data will be derived from a standard method and will start from the population of a single parish. The advantage of this approach is its potential for high levels of accuracy, using rigorous built-in tests against false linkages; a disadvantage is the time needed to accumulate a large enough data-base for

¹ Colin Pooley and Jean Turnbull, *Migration and Mobility in Britain since the Eighteenth Century* (London: University College London Press, 1998), pp. 65 and 68

aggregative analysis, because the method may exclude many possible but unproven linkages. The methodological foundation offers an example of the systems that can now be developed to investigate the detail of out-migration in specific locations.

The initial cluster of questions to be addressed concern the migration pattern from the parish: what familial, gender, age, cultural, occupational or other factors can be identified, which correlate with whether individuals moved or stayed? If they moved, where did they go and were they prone to return? Did these patterns change with time? Underlying this is a more fundamental question: is it possible to assess whether men and women in the eighteenth and nineteenth centuries aspired to leave Whitbourne, or to remain there?

Secondly, there are questions relating to the particular parish chosen for this project, including its relationship to the work of the Cambridge Group. Being aggregative in nature and demographic in purpose, their work has used relatively large parishes, with an average population of about 2,000.² The demographic outlines of Whitbourne population described in Chapter Three suggest that there were differences between it and the national data proposed by the Cambridge Group. Whitbourne is of interest in other ways, notably in the persistence of its substantial acreage of unenclosed common land, available to the whole parish population, and this and other characteristics may have influenced migration patterns.

Thirdly, the project investigates a sample population from a region under-represented by both demographic and migration studies. Of the twenty-six parishes in the 1997 Cambridge Group

² E. Anthony Wrigley et al., *English Population History from Family Reconstitution, 1580-1837* (Cambridge: Cambridge University Press, 1997), p. 20; E. Anthony Wrigley and Roger S. Schofield, *The Population History of England. 1541-1871. A Reconstruction* (Cambridge: Cambridge University Press, 1989; tr. from 1981, Edward Arnold, London), pp. 40-49 and 485-89

study, six were in Devon and five in East Anglia, with no parishes from the Welsh Marches (Gloucestershire, Worcestershire, Herefordshire, Shropshire or Cheshire), while their earlier much larger sample contained twenty-eight from Bedfordshire (over 20% of the parishes in the county), fifteen from Dorset and seventy-nine from East Anglia. Similarly Razzell, in his critique of aspects of the Cambridge Group's methodology, used a sample of parishes whose registers had already been published, including nine from Buckinghamshire (20% of his sample).³ This regional selectivity may introduce bias to the results obtained, through any of the regional variations of climate, agriculture, diet, employment, mortality, vernacular architecture and so on, and it is desirable that this should be counterbalanced with studies based in other areas. Few detailed studies have investigated the influence of specific local factors on migration patterns, and those which are available demonstrate that migration could vary considerably between different communities.⁴

Although the first Cambridge Group sample of 404 parishes contained six Herefordshire parishes, these were atypical. In an overwhelmingly rural county of small scattered hamlets and few towns, three of the six were market towns, and their average population in 1811 was 976. By contrast, the parishes of Broxash Hundred, which includes Whitbourne, averaged 328.

³ Peter Razzell, *Essays in English Population History* (London: Caliban Books, 1994), pp. 91-94, revised and reprinted from P. E. Razzell, 'The Evaluation of Baptism as a Form of Birth Registration through Cross-Matching Census and Parish Registration Data: A Study in Methodology', *Population Studies* 26 (1972): 121-46

⁴ Bernard Deacon, 'Communities, Families and Migration: Some Evidence from Cornwall', *Family and Community History* 10 (2007): 49-60

Table 4.1: Population Size Distributions in 1811

No. of inhabitants	Selected sample (Cambridge Group) (% parishes)	Random sample (Cambridge Group) (% parishes)	Broxash, Radlow and Upper Doddingtree Hundreds ¹ (% parishes)
0-399	13	58	69
400-749	14	16	21
750-1499	34	16	7
1500-2499	19	3	1.5
2500-5000	15	5	1.5
5000 +	6	3	0
Mean size	1916	871	358
No. townships or parishes in sample	404	286	81

National data from Wrigley and Schofield, *The Population History of England 1541-1871*, p. 49, Welsh Marches data from the 1811 Census Enumeration Abstract.⁵

1. These are the three Hundreds surrounding Whitbourne; two in Herefordshire and one in Worcestershire, and they include Ledbury, an exceptionally large Herefordshire market town (population 3,136 in 1811), 24 km from Whitbourne.

Fourthly, the project seeks evidence for the regional impact of the urbanising West Midlands: if and when Herefordshire people migrated there, how far its influence extended, and whether any causal factors can be proposed.

4.2 Research Position

Studies of migration vary widely in their approach, premises, disciplinary background and of course the time period and sources used. Demographers, geographers, social historians, economists and others each have their own agenda and methodology, and consequently there is no one agreed framework.

The fundamental premise of this project is that a substantial but unknown proportion of the population was mobile or prone to migration throughout the research period, even though this

⁵ www.histpop.org, first accessed October 2010

migration cannot be measured directly. The legal framework intended to inhibit and control personal mobility provides tools for the modern researcher in the form of documentary trails of varying detail which can help to trace some individuals, but even in the best case this only yields an approximate outline of actual migration patterns. Known (net) individual migration is only a proportion of total (gross) individual migration. In the worst case, a long-lived eighteenth-century individual may only have baptism and burial records, with no indication of intermediate migrations; additional detail derives from decennial personal information in nineteenth-century censuses; the best case might also include places of marriage and residence at the birth of successive children, which for a woman would supply a more complete picture.

A second axiom on which this research is based is that most individuals, including those at the lower levels of society, had some powers of agency and could form their own migration routes and 'communities'. The mechanisms involved may be opaque, but this autonomy is assumed to be an important factor in migration. The research framework must therefore be comprehensive enough to capture indicators of these powers where possible. One example is that the relatively cheap watermen's fares from Worcester (Table 2.11) may have facilitated migration of less-prosperous individuals.

Related to this is a third principle, namely that the parish did not constitute the boundary of social and community life, despite remaining the fundamental legal and religious unit until the mid nineteenth century. This view has important consequences for the choice of methods to be employed, and an emphasis on it highlights some of the differences between this and other research. As such, it will be explored further, below.

The underlying assumptions of this project are positivist, in that it aspires to uncover information about individuals which can then be used to detect trends and perhaps make predictions about how given people in the past might have behaved. But the project sits on the edge of several research positions, which require some elaboration in order to interpret its results and maximise its findings. Above all, the project is not genuinely positivist, because the assignment of linkages between different pieces of data to construct a given life-history is entirely dependent on the validity of the method of linkage used. If baptism A is falsely linked to burial B of a same-name individual, the migration pattern derived is spurious, and the research has interfered in the historical reality beneath the sources. This problem occurs to some extent in all historical research, but especially so when it depends on making connections between single-point sources with minimal supporting narrative texts.

The results cannot be fully objective, and instead are limited by the inevitability of some element of subjective application of the linkage method used. This in turn means that the method has had to be developed to be as rigorous and replicable as possible, to minimise this subjectivity. The earlier in historical time a false linkage is made, the longer the error persists and multiplies through any descendants. A limiting factor in this process is that for many of the individuals concerned there is very little information available, and hence the underlying reality is predominantly derived and understood from the lives of those individuals about whom more is known. These tend to be the better off (including landowners) or the otherwise atypical (for example mothers of illegitimate children), and perceptions about them may bias the interpretation of their world.

As a consequence of the above, the project is framed in a critical realist style, aiming to collect and analyse hard data, but then allowing for its interpretation in the light of additional parameters, because of an acceptance that not everything has been revealed by the main data-set. 'Explanation depends . . . on identifying causal mechanisms and how they work, and discovering if they have been activated and under what conditions.'⁶

Similarly, there are no simple research questions, and the hypotheses that are put forward are generally two-tailed. Thus the effect of 'literacy' (however defined) might either have been to enable individuals to obtain promotions and to remain in the locality, near their support networks of kin and friends, or alternatively to facilitate desired long-distance migration. Or, in this example, the over-riding determinant might not have been literacy at all, but stature (not an entirely fanciful notion, given the contrasting requirements for agricultural and some urban employment), which cannot be measured using the sources available for this project.⁷ In this respect, the project has links with grounded theory principles, avoiding setting out the detailed objectives until the data has been collected.

The project combines a quantitative base with qualitative case-study work. Many migration studies are wholly quantitative and aggregative, but it is well-known that the mean can obscure more than it reveals, as the Whitbourne data on age at first marriage in Chapter Three demonstrate. This project not only asks a standard set of questions about the lives of its base population, but mines them and those of their descendants for any further material that can be obtained, within the specific parameters of the research aims. Some individuals therefore

⁶ Jonathan Grix, *The Foundations of Research* (Basingstoke: Palgrave Macmillan, 2004), p. 87

⁷ See in this context, Jane Humphries and Timothy Leunig, 'Was Dick Whittington Taller Than Those He Left Behind? Anthropometric Measures, Migration and the Quality of Life in Early Nineteenth-Century London', *Explorations in Economic History* 46 (2009): 120-31

become much more rounded than others, with information from a range of sources, and these can be used to exemplify or counter the mean behavioural patterns of their social group.

The research method has been designed to be non-random in two ways. First, the family groupings chosen for the sample were chosen to be representative of a cross-section of the population of Whitbourne, and whole family groupings, or 'tribes', were chosen rather than individual family units, so any trends in the wider kin-groups could be observed. Secondly, and following on from the above discussion of the exploratory approach used, more time has been devoted to tracing women than men, because women are harder to find in the historical record and social research tends to yield less information on them.

Although not overtly feminist, this project assumes that women may have had distinctive migration patterns and therefore that there is a need to seek out their generally smaller historical footprint. This project consciously rejects the traditional patrilineal research bias, and adopts a 'gender-conscious historical perspective.'⁸ Descriptions of some research systems overlook or minimise this problem, which may affect the results obtained. Thus using surname as a guide to family stability or mobility, or to investigate migration between parishes, only relates reliably to the married male part of the adult population unless men and women are assumed to migrate in identical ways.⁹ Women who marry are even harder to trace than their spinster or male contemporaries, because of customary surname change on marriage. Consequently, many researchers have elected to omit women, for instance one early

⁸ Di Cooper and Moira Donald, 'Households and 'Hidden' Kin in Early Nineteenth-Century England: Four Case-Studies in Suburban Exeter, 1821-1861', *Continuity and Change* 10 (1995): 257-78, p. 259

⁹ David Souden and Gabriel Lasker, 'Biological Inter-Relationships between Parishes in East Kent: An Analysis of Marriage Duty Act Returns for 1705', *Local Population Studies* 21 (1978): 30-39; Grace Wyatt, 'Population Change and Stability in a Cheshire Parish During the Eighteenth Century', *Local Population Studies* 43 (1989): 47-54

migration study traced some sons of people in a Warwickshire Marriage Duty listing, but not daughters.¹⁰ More surprising perhaps, and again presumably stemming from an androcentric world view, is the failure to make a connection between the legal pattern of a wife taking her legal settlement from her husband's parish and every exogamous marriage consequently involving the risk of the migration of a woman to a new parish. This factor alone means that approaching half the adult population was at risk of migration in rural areas with small parishes.

4.3 The Family Reconstitution Method

4.3.i. Methodological Outline

Although the present study is neither demographic nor confined to one parish, it uses as its methodological starting point the technique of Family Reconstitution, first designed in France,¹¹ and adapted and developed by the Cambridge Group, beginning with Colyton, Devon.¹² The technique involves a detailed analysis of the parish registers of baptisms, marriages and deaths and the 'nominal [name] linkage' or identification of each person in turn in terms of their parents' marriage, their own baptism, marriage and death, and the baptism of any children they may have had. In principle, this enables the researcher to build up a database of reconstituted lives, from which information about the population can be extracted. The

¹⁰ Philip Styles, 'A Census of a Warwickshire Village in 1698' in *Studies in Seventeenth-Century West Midlands History* (Kineton: The Roundwood Press, 1978): 90-107

¹¹ L. Henry, *Anciennes Familles Genevoises. Etudes Démographique: Xvie-Xxe Siècles* (Paris: 1956)

¹² E. Anthony Wrigley, 'Family Limitation in Pre-Industrial England', *Economic History Review* 19 (1966): 82-109; E. Anthony Wrigley, 'Mortality in Pre-Industrial England: The Example of Colyton, Devon, over Three Centuries', *Daedalus* 97 (1968): 546-80

methods used, and the precautions necessary, have been explored and described in detail elsewhere.¹³

Many of the limitations of the technique, which restrict the immediate usefulness or reliability of the data obtained, are inherent in the nature of the sources used. Parish registers offer a uniquely valuable source which covers almost the whole country back to 1600 or earlier, but they are of uncertain reliability.¹⁴ Material obtained from parishes with the more detailed late eighteenth-century 'Dade' style registers indicates that some information, notably a proportion of the neo-natal deaths, may be omitted from many conventional registers.¹⁵ Use of the same Christian name for two or more still-living siblings complicates mortality calculations.¹⁶ The age at which infants were baptised has proved to be a particular problem, affecting calculations of birth intervals between successive children in a family, the proportion of women who were pregnant at marriage, and, of particular relevance for

¹³ E. A. Wrigley, 'Family Reconstitution' in *An Introduction to English Historical Demography from the Sixteenth to the Nineteenth Century*, ed. D. E. C. Eversley et al. (London: Weidenfeld and Nicolson, 1966): 96-159; Ian Winchester, 'The Linkage of Historical Records by Man and Computer: Techniques and Problems', *Journal of Interdisciplinary History* 1 (1970): 107-24; E. Anthony Wrigley, ed., *Identifying People in the Past* (London: Edward Arnold, 1973); Claire Jarvis, 'The Reconstitution of Nineteenth-Century Rural Communities', *Local Population Studies* 51 (1993): 46-53; Pamela Sharpe, 'Women's Names: Some Problems for Reconstitution Analysis', *Local Population Studies* 59 (1997): 60-61; E. Anthony Wrigley, 'How Reliable Is Our Knowledge of the Demographic Characteristics of the English Population in the Early Modern Period?' *The Historical Journal* 40 (1997): 571-95; Susannah Ottaway, and Williams, Samantha, 'Reconstructing the Life-Cycle Experience of Poverty in the Time of the Old Poor Law', *Archives* 23 (1998): 19-29; Richard T. Vann, 'Unnatural Infertility, or, Whatever Happened in Colyton? Some Reflections on *English Population History from Family Reconstitution 1580-1837*', *Continuity and Change* 14 (1999): 91-104; Peter Tilley, 'Creating Life Histories and Family Trees from Nineteenth-Century Census Records, Parish Registers and Other Sources', *Local Population Studies* 68 (2002): 63-81; J. Hudson, 'Parish Population Reconstruction in Stonehouse, Gloucestershire: An Experiment Using Wrigley and Schofield's Correction Factors', *Local Population Studies* 77 (2006): 24-41

¹⁴ P. Razzell, 'Evaluating the Same-Name Technique as a Way of Measuring Burial Register Reliability in England', *Local Population Studies* 64 (2000): 8-22; Karen Cullen, 'Baptism to Marriage Ratios and the Reliability of Late Seventeenth-Century Scottish Parish Registers', *Local Population Studies* 76 (2006): 15-30

¹⁵ Roger Bellingham, 'Dade Parish Registers', *Local Population Studies* 73 (2004): 51-60; Alys Levene, 'What Can Dade Registers Tell Us About Infant Mortality in the Late Eighteenth Century?' *Local Population Studies* 76 (2006): 31-42

¹⁶ Razzell, 'Evaluating the Same-Name Technique'; Chris Galley et al., 'Living Same-Name Siblings and British Historical Demography', *Local Population Studies* 86 (2011): 15-36; Chris Galley et al., 'Living Same-Name Siblings and English Historical Demography: A Reply to Peter Razzell', *Local Population Studies* 87 (2011): 70-77; Peter Razzell, 'Living Same-Name Siblings in England, 1439-1851', *Local Population Studies* 87 (2011): 65-69

migration studies, the chance that an infant would be moved to another parish before baptism.¹⁷ Ease of tracing marriages is very different before and after the 1754 Marriage Act, and further depends on whether the marriage took place in ‘the right church’.¹⁸ Eighteenth- and nineteenth-century English populations, both rural and urban, are now believed to have moved between parishes much more than those in France, for whom the family reconstitution technique was originally designed, and hence a single-parish English reconstitution usually recaptures a relatively low percentage of the population for even one generation, while studies on longer-term trends are rare.¹⁹ Vital information for childhood is obtained in more cases than mature whole-life data.²⁰ With these varying levels of reconstitution for different subsections of a population, questions of sampling bias become relevant, and this problem has not yet been adequately resolved.

Some reconstitution work extends into the census era, but although the census is superficially a good source, it has many limitations: comparison with other documentary evidence and from internal cross-checking shows that it is an imperfect representation of the situation even on census nights. This partly results from the limited infrastructure available for early censuses (the staff were only employed temporarily, and given little training) and because they were designed for public health and actuarial purposes, not for the wider demographic

¹⁷ Stephen Dewhurst, and Hinde, Andrew, ‘Age at Baptism in Rural Hampshire in the Second Half of the Nineteenth Century’, *Local Population Studies* 57 (1996): 72-75; Michael J. Saxby, ‘Age at Baptism in the Parish of St Nicholas, Pevensey, 1761-1800’, *Local Population Studies* 61 (1998): 57-59; Anthony Poole, ‘Baptismal Delay: Some Implications from the Parish Registers of Cranbrook and Surrounding Parishes in the Kentish Weald’, *Local Population Studies* 65 (2000): 9-28; Michael J. Saxby, ‘Ages at Baptism in the Parish of All Saints, Sudbury, 1809-1828: A New Approach to Their Interpretation’, *Local Population Studies* 70 (2003): 49-56; Alan Wright, ‘Birth-Baptism Intervals in Whickham Parish, County Durham C. 1770-1820’, *Local Population Studies* 71 (2003): 81-87; John Perkins, ‘Birth-Baptism Intervals in 68 Lancashire Parishes, 1646-1917’, *Local Population Studies* 85 (2010): 11-27

¹⁸ Rebecca Probert and Liam D’Arcy Brown, ‘The Impact of the Clandestine Marriages Act: Three Case-Studies in Conformity’, *Continuity and Change* 23 (2008): 309-30

¹⁹ E. Anthony Wrigley, ‘The Effect of Migration on the Estimation of Marriage Age in Family Reconstitution Studies’, *Population Studies* 48 (1994): 81-97

²⁰ Steven Ruggles, ‘The Limitations of English Family Reconstitution: *English Population History from Family Reconstitution, 1580-1837*’, *Continuity and Change* 14 (1999): 105-30, pp. 114-15

and social purposes to which they are now applied. There are also more general problems associated with collecting census data, but whereas the level of error is known for modern censuses (for example 2.75% of houses in Inner London were inadvertently omitted in 1981²¹), this remains a matter of informed guesswork for the nineteenth century.²² In essence, the information they contain is a biased and partial reflection of the population they measure.²³ In 1851, a particular problem may have arisen because the census was held on Mothering Sunday, when many young working people are believed to have made a point of visiting their parental home. No attempt seems yet to have been made to address the problem of how this might affect the geographical distribution of young single people in that census.²⁴

There are numerous overviews of the difficulties and scope of reconstitution studies,²⁵ the more penetrating of which stress the potential such work has for releasing invaluable information but with the caveat that the results, however tempting, require contextualising and interpretation. Laslett has gone further, warning specifically of the great dangers inherent in any quantitative analysis that does not pay attention to issues of statistical significance and reliability.²⁶

²¹ Edward Higgs, *Making Sense of the Census Revisited. Census Records for England and Wales, 1801-1901* (London: Institute of Historical Research, 2005) p. 117

²² Audrey Perkyns, 'Age Checkability and Accuracy in the Census of Six Kentish Parishes 1851-1881', *Local Population Studies* 50 (1993): 19-38

²³ Higgs, *Making Sense of the Census Revisited*, passim; P. M. Tillott, 'Sources of Inaccuracy in the 1851 and 1861 Censuses' in *Nineteenth-Century Society. Essays in the Use of Quantitative Methods for the Study of Social Data*, ed. E. Anthony Wrigley (Cambridge: Cambridge University Press, 1972): 82-133

²⁴ Michael Anderson, 'Mis-Specification of Servant Occupations in the 1851 Census: A Problem Revisited', *Local Population Studies* 60 (1998): 58-64

²⁵ For example *Population Change in North-Western Europe, 1750-1850* (Studies in Economic and Social History; London: Macmillan Education, 1988); Razzell, *Essays in English Population History*; Wrigley, 'How Reliable Is Our Knowledge'

²⁶ P. Laslett, 'Signifying Nothing: Traditional History, Local History, Statistics and Computing', *History and Computing* 11 (1999): 129-34

4.3.ii. Limitations of Family Reconstitution for Migration Studies

As long ago as 1973, Wrigley acknowledged the dangers of introducing hidden bias into reconstitutions if particular segments of a population were more mobile and therefore less often linked.²⁷ Reconstitution is always vulnerable to the consequences of population mobility, focusing as it does on demographic parameters measurable in one Anglican parish. Even with the use of 'ghost' records, for events inferred to have taken place before immigration, such as the baptism of a child later buried in the parish under scrutiny, it is not possible to predict all the events occurring in a family before their arrival.

The extent of bias inherent in a given demographic parameter depends on the number of years required to generate it. Thus 'completed family size' requires up to thirty-five years of baptism data and a total of fifty years to include the birth of the mother, whereas infant mortality only needs one year. The potential impact of mobility is clearly far greater for the former than for the latter, and if people remain in a parish for too short a time, they may be invisible in a reconstitution. This leads to the problem of 'the reconstitutable minority' (typically about one third of the parish population) upon whose lives the generalisations are constructed. In reality, this proportion varies according to the demographic factors concerned, so that between two thirds and about nine tenths of the population is excluded from the various calculations, which are consequently based on a series of overlapping sub-sections of the population.²⁸

²⁷ E. Anthony Wrigley, 'Introduction' in *Identifying People in the Past*, ed. E. Anthony Wrigley (London: Edward Arnold, 1973): 1-16, p. 15

²⁸ Ruggles, 'The Limitations of English Family Reconstitution', especially pp. 114 -19

Using one Anglican parish as the basic unit for a reconstitution is flawed insofar as parochial boundaries are porous, and for many families all that may be available is a few baptism registrations. Some critics of the Cambridge Group have noted that this is a key weakness of the system, because of its assumption that those whose data is incomplete fit the same demographic model as the reconstitutable minority for that particular parameter. It may for instance be unsafe to assume that the non-mobile minority in a parish married at the same age as those who moved away, in particular domestic and farm servants.²⁹ Late-marriers and people living into extreme old age may both be selected against in reconstitution studies, and so the classic Cambridge Group methodology may effectively censor migrants.³⁰ The reconstitution technique may not only be based on a non-representative sample, but population mobility may also affect the results it yields.³¹

These debates have tended to focus on marriage age, since individuals who marry late are more likely to have already migrated and so be lost to the reconstitution. Life history data from seventeenth-century ecclesiastical court records make it possible to include out-migrants, and in one study of twenty-six parishes women were on average almost three years older at first marriage than the age indicated by using the 'home' parish registers alone.³² In aggregated studies, whether national or single-parish, the difference in marriage age between 'movers' and 'stayers' may be hidden because out-migrants are matched by in-comers,³³ but

²⁹ Peter Razzell, 'The Growth of Population in Eighteenth-Century England: A Critical Reappraisal', *Journal of Economic History* 53 (1993): 743-71

³⁰ Ruggles, 'The Limitations of English Family Reconstitution'

³¹ Michael Anderson, *Approaches to the History of the Western Family, 1500-1914* (Cambridge: Cambridge University Press, 1980), pp. 14-21; M. A. Jonker and A. W. van der Vaart, 'Correcting Missing-Data Bias in Historical Demography', *Population Studies* 61 (2007): 99-113

³² Steven Ruggles, 'Migration, Marriage and Mortality: Correcting Sources of Bias in English Family Reconstitutions', *Population Studies* 46 (1992): 507-22

³³ Wrigley, 'The Effect of Migration on the Estimation of Marriage Age'; Wrigley, 'How Reliable Is Our Knowledge'

in nominal studies this will not be of assistance: a named out-migrant cannot be replaced in the data-base by an in-comer.

Even with a high reconstitution rate there may be a bias in the unreconstituted segment. For example a study of an urban Massachusetts population, linking census and civil registration data from 1790 to 1850, which achieved a linkage rate of about 70%, still found some sociological differences: the missing families were smaller, less likely to be in agriculture and were more transient through the sample towns than the majority of the population, and these differences were sometimes statistically significant.³⁴

Turning the above debate on its head, and with the proviso that parish registers are not a completely reliable source (for reasons including their changing use over time, customs such as transport of corpses for burial, and baptism of the first-born in an 'ancestral' parish),³⁵ the missing data in a register-based reconstitution can be a useful guide to population mobility. For example it can be confirmed that smaller parishes have higher rates of exogamy, generally associated with subsequent in-migration of women. Other patterns may relate to changes in the Settlement Laws, or to land-holding and occupational characteristics.³⁶

³⁴ Susan L. Norton, 'The Vital Question: Are Reconstituted Families Representative of the General Population?' in *Genealogical Demography*, ed. Bennett Dyke and Warren T. Morrill (New York: Academic Press, 1980): 11-22

³⁵ Keith D. M. Snell, 'Parish Registration and the Study of Labour Mobility', *Local Population Studies* 33 (1984): 29-43

³⁶ David Souden, 'Movers and Stayers in Family Reconstitution Populations', *Local Population Studies* 33 (1984): 11-28

4.3.iii. Implications of Moving Beyond the Parish Boundaries

Marshall has highlighted the dangers of focussing on single parishes, and the need to place them in their social and regional context. He noted that “‘communities’ tend to lie in the eye and methodology of the beholder,” and suggested that ‘social area’ may be a more suitable term.³⁷ Similarly, Reay cautioned that ‘parish is merely a useful means of classification . . . we should not mistake such usage for a declaration of community identity.’³⁸ It is tempting to base cultural history on separate parishes, because they were the local administrative unit and they remained the basis for the production and preservation of primary population records: baptisms, marriages, burials and censuses. But this is both limiting and overly prescriptive, tending to focus ‘migration’ on changes of residence involving crossing parish boundaries, and obscuring smaller and larger units.³⁹ The concept of parish as community is ‘based more on institutional fiat than on cultural meanings;’ community was partially elective or imagined, having different meanings for different people and groups.⁴⁰ County and diocesan boundaries can be equally irrelevant for most aspects of social history, but they too define access to sources. As Marshall says, ‘. . . we do not really know how often people were in contact . . .’ and this is one of the fundamental constraints in migration studies.⁴¹

Migration studies facilitate a broadening of the context in which parish populations are seen, and can challenge the very idea that families or individuals ‘belonged’ to a particular

³⁷ J. D. Marshall, *The Tyranny of the Discrete. A Discussion of the Problems of Local History in England* (Aldershot: Scholar Press, 1997), pp. 69-71

³⁸ Barry Reay, *Microhistories: Demography, Society and Culture in Rural England, 1800-1930* (Cambridge: Cambridge University Press, 1996), p. 13

³⁹ Pooley and Turnbull, *Migration and Mobility in Britain since the Eighteenth Century*, p. 8

⁴⁰ Colin Jones, ‘Some Recent Trends in the History of Charity’ in *Charity, Self-Interest and Welfare in the English Past*, ed. Martin Daunt (London: University College London Press, 1996): 51-63; see also David Fletcher, ‘The Parish Boundary: A Social Phenomenon in Hanoverian England’, *Rural History* 14 (2003): 177-96

⁴¹ Marshall, *The Tyranny of the Discrete*, especially pp. 66 and 69

Anglican parish in more than a legal sense. To cite one example from the present research, Thomas Clark was baptised in Whitbourne in 1759, the third of seven children of a yeoman farmer. After his baptism, he disappears from the parish registers. He married in the adjacent market town, and his will names two married daughters, both of whom were baptised in Tedstone Delamere, just to the north, although the 1851 census gives their place of birth as Whitbourne. The will names a property in Whitbourne and none in Tedstone, but Thomas was buried in Tedstone, being described in the register there as ‘from Whitbourne’. One of the two sons-in-law came from Tedstone, and all Thomas’s grandchildren were baptised there, but after his death, the two daughters and their husbands moved to Whitbourne and remained there for many years.⁴² To what extent would it be appropriate to describe these families as ‘belonging’ to Whitbourne?

This question has been addressed in a study comparing the numbers of vital events recorded anomalously in the registers of four parishes which meet at a crossroads on Watling Street. Substantial evidence was found for porosity of parochial boundaries: for no vital event were ‘home’ registrations more than 60% of the total.⁴³

An extension of this approach is to analyse the migration patterns within groups of parishes. Ideally, this involves some exploration of how contemporaries saw their landscape, which must arise cumulatively from an iterative investigation of the data and of contemporary manifestations of power, networks and the potential for expression of social capital.⁴⁴ In some contexts, this may involve overlapping spheres of influence; in Whitbourne one might work

⁴² All sources for examples in the text are from the WRO, BDLHC and HRO register copies or from the CEBs, unless otherwise specified; Thomas Clark, 19 April 1836, Probate Film 107 HRO

⁴³ W. Newman Brown, ‘A Note on the Linking of Information from the Registers of Four Parishes’, *Local Population Studies* 22 (1979): 53

⁴⁴ Marshall, *The Tyranny of the Discrete*, pp. 84-94

from a premise that information was transmitted to women in at least two distinct networks: the glove out-workers centred on Worcester, and the autumn influx of hop-pickers from the Black Country and Wales.⁴⁵

If parish boundaries were indeed porous, even when there is no measurable need for it (for example a family apparently permanently resident in one place but with children baptised in two or more nearby parishes), the method needs to be modified to give less weight than conventional reconstitutions do to linkages within one parish: for example linking a burial to a same-name individual who has not yet appeared in the burial registers. This problem is exacerbated in smaller parishes. Several studies have now been carried out on clusters of parishes, notably in Kent, East Anglia and Nottinghamshire, using a variety of sources, from probate and poor law records to parish registers and census returns.⁴⁶ All show that there have long been communities of interest spanning parish boundaries, which may represent a closer approximation to, but still far from a complete picture of, the experience of life of the individuals concerned. Many of the issues discussed above are encapsulated in urban parishes, for which reconstitution studies are very rare; this is partly because of erratic historical record-keeping, but also a consequence of high mobility rates, exacerbated by the small geographical area of these parishes.⁴⁷

⁴⁵ Jean Hopkinson, ed., *A Pocketful of Hops: Hop Growing in the Bromyard Area* (Bromyard: The Bromyard and District Local History Society, 1988); Barry Reay, *Rural England: Labouring Lives in the Nineteenth Century* (Basingstoke: Palgrave Macmillan, 2004), pp. 16-17

⁴⁶ Rex Watson, 'A Study of Surname Distribution in a Group of Cambridgeshire Parishes, 1538-1840', *Local Population Studies* 15 (1975): 23-31; Kevin Schürer, 'The Role of the Family in the Process of Migration' in *Migrants, Emigrants and Immigrants. A Social History of Migration*, ed. Colin G. Pooley and Ian D. Whyte (London and New York: Routledge, 1991): 106-42; Anne Mitson, 'The Significance of Kinship Networks in the Seventeenth Century: South-West Nottinghamshire' in *Societies, Cultures and Kinship, 1580-1850. Cultural Provinces and English Local History*, ed. Charles Phythian-Adams (Leicester: Leicester University Press, 1993): 24-76; Reay, *Microhistories*; Audrey Perkyns, 'Migration and Mobility in Six Kentish Parishes, 1851-1881', *Local Population Studies* 63 (1999): 30-70

⁴⁷ Jan de Vries, *European Urbanisation, 1500-1800* (London: Methuen and Co Ltd, 1984), pp. 175-76; Pamela Sharpe, 'Population and Society, 1700-1840' in *1540-1840*, vol. 2, ed. Peter Clark (The Cambridge Urban History of Britain; Cambridge: Cambridge University Press, 2000): 491-528; Jeremy Boulton and Leonard

Extending a reconstitution beyond parish boundaries should increase the percentage traced, but even with modern data sources this is limited, for example a study of a 1946 birth cohort only achieved full residential histories for 79% of the cases.⁴⁸ The reconstituted minority is also enlarged if the procedure is modified to include 'total reconstitution' techniques, using a wider variety of sources to broaden the socio-economic picture.⁴⁹ For example a 'total reconstitution' of Colyton parish, Devon, highlighted a shortfall in the ratio of marriages to baptisms between 1660 and 1750, many of the missing marriers being craftsmen and small landholders. Some were found to have married in four nearby parishes; others in the same parish as their parents; farm servants sometimes married in their parish of employment. There were also specific local factors: eighty-six men from the parish had fought in Monmouth's rebellion, and only six of these were married in the parish church; there was a succession of contentious appointments to the living; the puritan minister ejected in 1662 had remained in the area; and there was a Presbyterian church in the parish, with a congregation of two hundred in 1715. All four factors relate to the essential porosity of parish boundaries, and the last also reveals the danger of exclusive reliance on Anglican registers without awareness of local context.⁵⁰

Schwarz, 'Yet Another Inquiry into the Trustworthiness of Eighteenth-Century London's Bills of Mortality', *Local Population Studies* 85 (2010): 28-45; Peter Razzell, 'Infant Mortality in London, 1538-1850: A Methodological Study', *Local Population Studies* 87 (2011): 45-64

⁴⁸ Kathleen Kiernan, 'Characteristics of Young People Who Move Inter-Regionally: A Longitudinal Study' in *Regional Demographic Development*, ed. John Hobcraft and Philip Rees (London: Croom Helm, 1977): 211-27

⁴⁹ Barry Reay, 'Before the Transition: Fertility in English Villages, 1800-1880', *Continuity and Change* 9 (1994): 91-120; Ottaway, 'Reconstructing the Life-Cycle Experience of Poverty'; Tilley, 'Creating Life Histories and Family Trees'

⁵⁰ Pamela Sharpe, 'Locating the 'Missing Marryers' in Colyton, 1660-1750', *Local Population Studies* 48 (1992): 49-59

4.4 The Sample

This project deliberately started from a parish which was too small according to conventional family reconstitution wisdom. The smaller the parish, the less likely it is that data will be obtained which can be compared meaningfully with other single parishes,⁵¹ and it has been suggested that a parish will 'not be worth exploiting statistically at a period where the average number of events is fewer than about 15-20' a year.⁵²

an ideal parish might perhaps be one whose population lay between 1,000 and 2,000, whose area was, say, 10,000 acres, whose main settlement lay towards the centre of the parish, and whose registers were full and complete . . . [while] parishes where the number of marriages was below c. 3-6 per annum, and of baptisms below c. 12-20 per annum are most unlikely to yield sufficient reconstituted families to afford useful results . . . unless the quality of the register or the low level of migratory movement enables a comparatively high proportion of the families to be reconstituted.⁵³

On these criteria, no reconstitution-based work should be attempted in rural Herefordshire.

However, the present study was not limited to searching the registers of one parish, nor intended as a conventional family reconstitution study, but rather it used a technique akin to

⁵¹ Colin D Rogers and John H Smith, *Local Family History in England, 1538-1914* (Manchester and New York: Manchester University Press, 1991), pp. 118-19

⁵² D. E. C. Eversley, 'Exploitation of Anglican Parish Registers by Aggregative Analysis' in *An Introduction to English Historical Demography from the Sixteenth to the Nineteenth Century*, ed. E. A. Wrigley (London: Weidenfeld and Nicolson, 1966): 44-95, p. 57

⁵³ Wrigley, 'Family Reconstitution', p. 105

total reconstitution, across parochial boundaries. This increased the opportunities for tracing missing life-events and hence members of the population on which it is based. The classic reconstitution is conducted for family units, from marriages, but this project was based on individuals and so included not only illegitimate children, but also those who were part of 'incomplete' families caused for example by migration and the consequent omission of the baptisms of additional siblings, or by the death of a parent before the mother reached age fifty.⁵⁴ Lastly, this study was not restricted to residents of Whitbourne but extended to cover their descendants after they have left the parish, up to the 1871 census.

Within Whitbourne, the project focused on those family name-groupings and their descendants (referred to hereafter as 'tribes' to distinguish them from individual family units) which were established in the parish by 1800. This rather arbitrary terminus included about 110 of the 160 tribes present in the parish at the 1851 census. Although it is acknowledged that this initial selection procedure was androcentric, this effect was reduced by the later inclusion of descendants in the female line, and Whitbourne-baptised wives, as these were identified. It enabled the elimination of the most transient social units from the parish population, and the four wealthiest families in the parish were also excluded, so the study related to the 'middling sort' and below.

Of these 110 tribes, seventeen of the largest ones were chosen as a non-random sample population, to reflect the approximate occupational make-up of the parish, as shown in **Table 4.2.**

⁵⁴ Wrigley et al., *English Population History . . . 1580-1837*, p. 359

Table 4.2: The Whitbourne-baptised Initial Sample

standardised tribal name	year of first appearance of surname in data ¹	number of baptisms with this surname in parish, 1700-1871	total number of baptisms in the parish, 1700-1871, including female line ²	occupational grouping in Whitbourne ³
Bradburn	1751	31	37	yeoman
Bullock	1721	23	28	ag. labourer & shoemaker
Burraston	1708	45	48	yeoman
Caswell	1765	19	39	yeoman
Clark	1700	46	76	yeoman
Collins	1700	93	112	yeoman
Combey	1700	45	56	ag. labourer
Gomery	1750	30	33	yeoman
Hodges	1709	39	42	farmer
Lawrence	1716	19	28	farmer
Lloyd	1774	45	48	blacksmith
Mitchell	1729	33	42	ag. labourer & mason
Price	1701	44	63	ag. labourer & shoemaker
Portman	1737	31	36	ag. labourer
Rowberry	1700	21	23	ag. labourer
Soley	1717	47	51	ag labourer & cooper
Vernals	1782	40	68	ag. labourer
total (% of parish total)		651 (18.8%)	830 (23.9%)	

1. From 1700, and excluding any 'reliably unrelated' individuals.

2. Children of inter-tribal marriages are included with father's tribe. Includes wives, step-children and descendants in the female line.

3. Based on an initial review of the post-1812 baptism register and the parish Land Tax records for 1777.

In addition to this initial sample, some gaps in incomplete families were filled using evidence from the baptism registers of nearby parishes, so the eventual sample was equivalent to almost one in four of all baptisms in Whitbourne during the research period.

The sample was deliberately non-random, because of the small parish size and its uneven socio-economic structure. A comparison of the early nineteenth-century paternal occupations in the baptism registers and the 1777 Land Tax assessments (the most complete year, and by

which time all but the Vernals tribe were present in the parish) gave a basis for the occupational distinctions made, as shown in **Table 4.3**.

Table 4.3: Eighteenth-century Land Ownership as a Guide to Socio-economic Grouping in Whitbourne

occupational grouping	number of tribes	value of Land Tax assessment, 1777, for land ownership
farmer	2	£8.10s.8d; £1.1s.8d. mean = £4.16s.2d.
yeoman	6	£1.12s.; 5s; 12s; 8s; 12s; 0. mean = 11s. 6d.
agricultural labourer and craftsman	4	0; 0; 0; 4s. mean = 1s.
agricultural labourer	3	0; 6s; 0. mean = 2s.
blacksmith	1	0

There is inevitably a danger of bias inherent in using any sample, especially when, as in the present study, the population is diverse, dispersed geographically and changing through time.⁵⁵ The use of a relatively large sample rather than the 10% or less accepted in some studies,⁵⁶ combined with its selected non-random nature, was designed to reduce this problem. However, the divisions between groupings changed over time as well as place, and this affected the choice of a representative sample. It was possible to obtain an overview of the proportions of tribes in the parish population which were in each of the above categories at a given time, but not a reliable socio-economic parochial structure. Occupational groupings change over time, as well as according to the source used; the Land Tax assessment gave some indication, but the baptism registers often give a different view to the census returns (a literate man with an acre of land might style himself ‘farmer’ when in the baptism registers the Rector labels him ‘labourer’).

⁵⁵ David Souden, ‘East, West - Home’s Best’? Regional Patterns in Migration in Early Modern England’ in *Migration and Society in Early Modern England*, ed. Peter Clark and David Souden (London: Hutchinson, 1987): 292-332, pp. 292-93

⁵⁶ See for example Michael Anderson, *Family Structure in Nineteenth-Century Lancashire* (Cambridge: Cambridge University Press, 1971); I. L. Williams, ‘Migration and the 1881 Census Index: A Wiltshire Example’, *Local Population Studies* 69 (2002): 67-73, who used 10% and 2% respectively

4.5 Sources: Potential and Pitfalls

The core data sources used for the study were the parish registers and census returns. These were partly accessed through pre-1837 digital marriage indices for Herefordshire and for Birmingham;⁵⁷ a printed 1700-1836 marriage index for Worcestershire;⁵⁸ a digital baptism index for some Worcestershire parishes from 1813 to 1837;⁵⁹ the partly-digitised Herefordshire county burial registers from 1813 to 1837;⁶⁰ and the national on-line civil district registers from 1837 and CEBs from 1841.⁶¹

The question of the reliability of parish registers is central to the validity of any data obtained, especially whether there are years or periods when the records were poorly kept. An initial examination of the Whitbourne registers suggested that they had no gross flaws. Wrigley and Schofield found that less than 1% of registers examined had defective periods (measured as a variation of more than 2.58 standard deviations from the expected mean, which should occur only once in two hundred occasions by chance alone) from 1754 to 1839, and less than 2% for baptisms and burials from 1695, although nearly 5% of marriage registers contained defective periods between 1695 and 1754.⁶² The smaller the population, the harder it is to detect such flaws, especially for marriage registers which have fewest events recorded, although since 1754 they have had legal status which renders them more reliable, and there was also no alternative to Anglican marriage or burial within Whitbourne parish. Burial registers can in

⁵⁷ Herefordshire Family History Society Marriage Index, 1538-1837, © Herefordshire Family History Society; Greater Birmingham Marriage Index, © The Birmingham and Midland Society for Genealogy and Heraldry (BMSGH)

⁵⁸ WRO The Worcestershire Marriage Index, © WRO and BMSGH, 26 vols

⁵⁹ WRO access to Malvern Family History Society Baptisms Index

⁶⁰ Herefordshire Family History Society Early Burial Records, © Herefordshire Family History Society

⁶¹ Ancestry.co.uk, first accessed October 2007

⁶² Wrigley and Schofield, *The Population History of England 1541-1871*, pp. 20-25

any case only be assessed with a prior knowledge of migration. The baptism registers are the most crucial source here, as the starting point for the present study. The only decade when they appear to have a shortfall is 1841-1850, with a total of 209 baptisms compared with 258 and 241 in the decades before and after. But a detailed analysis showed that although there was a period of fourteen years, from 1839 to 1852, when there were fewer baptisms (an annual mean of 21.0 compared with 26.1 in the rest of the period 1831-1861), there was no one year which qualified as 'defective' by the above criterion.

An alternative test, devised by Eversley, derives from standard data in which crude death rates do not fall below twenty per thousand, nor crude birth rates below thirty per thousand, in the period before civil registration, so the baptisms plus burials index should be greater than fifty.⁶³ In Whitbourne 1839-1852, baptisms totalled 294 and burials 206, while the population averaged 826 at the two censuses 1841 and 1851, giving an index of 43.2 and so suggesting that the registers may be slightly defective. However, Eversley's index is based on urban data and so may perhaps be unsuitable for testing the Whitbourne registers, especially since, as noted in Chapter Three, this appears to have been a period of substantial out-migration from the parish. For the period 1795-1804, when parish registers are thought by many scholars to have been declining in completeness,⁶⁴ baptisms averaged twenty-five per annum and burials 14.6 per annum, while the population in 1801 was 770. The resulting baptisms plus burials index of 51.4 per thousand suggests that the registers were acceptably complete at this time. Interestingly, a study cross-matching register and census data for forty-five parishes in six counties, to assess register completeness, has found that they did not in fact deteriorate over

⁶³ Eversley, 'Exploitation of Anglican Parish Registers by Aggregative Analysis'

⁶⁴ Following J. T. Krause, 'The Changing Adequacy of English Registration, 1690-1837' in *Population in History*, ed. D. V. Glass and D. E. C. Eversley (London: 1965): 379-93

time, although there was a general dip in the early nineteenth century and in some parishes they were consistently poor.⁶⁵

A more direct indication of register quality from 1818 to 1861 might come from the surviving pocket book which the parish clerks used as the General Register. Initially, this register also gives age at baptism, but the clerks' spelling is erratic and the sequence of entries is sometimes wrong. The pocket book in fact contains fewer entries than the official baptism register: 246 not 256 from 1818 to 1827, and 235 not 247 for 1833-1842, for example. It would seem therefore that the incumbents were more rigorous in their record keeping than their clerks.

In the same way as the Whitbourne burial register was compared with civil death registrations (section 3.6), tests were also carried out on the nineteenth-century baptism registers. These are sometimes said to be of little use, both because of increasing delays between birth and baptism, and because more children were never baptised.⁶⁶ The parish baptism registers were tested against two independent sources, the civil registrations of births and the census. Neither of these are free from problems of construction or application: civil registration was an obligation from its inception, but there were initially no penalties for non-compliance and it only became effectively complete from 1874;⁶⁷ the census returns will be discussed further below.

⁶⁵ Razzell, 'The Evaluation of Baptism', p. 130

⁶⁶ Krause, 'The Changing Adequacy of English Registration' ; Wrigley and Schofield, *The Population History of England 1541-1871* ; Peter Razzell, 'Further Evaluation of Anglican Baptism as a Form of Birth-Registration through Cross-Matching Census, Parish and Civil Register Data' in *Essays in English Population History*, ed. Peter Razzell (London: Caliban Books, 1994): 119-49, pp. 103-54; Dewhurst, 'Age at Baptism'; Saxby, 'Age at Baptism in the Parish of St Nicholas, Pevensey'; Poole, 'Baptismal Delay'; Saxby, 'Ages at Baptism in the Parish of All Saints, Sudbury'; Wright, 'Birth-Baptism Intervals'

⁶⁷ Leslie Bradley, *A Glossary for Local Population Studies*, vol. 1 (Second edn; Local Population Studies Supplements; Matlock: Local Population Studies, 1978), p. 60; Edward Higgs, 'A Cuckoo in the Nest? The

Firstly, the number of Whitbourne residents registering the birth of their children was compared with the number of entries in the baptism register (**Table 4.4**). The comparison is not exact, since the former includes, for instance, non-Anglicans while the latter may include children not born in the parish, as well as being compounded by the inaccuracies of record keeping already discussed.

Table 4.4: Comparison of Baptisms and Civil Registration of Births, Whitbourne, 1838-1871

	1. Jan. 1838 - 31 Dec. 1850	1 Jan 1851 - 31 Dec. 1860	1 Jan 1861 - 2 April 1871¹	Total
Baptisms in this period	273	242	254	769
Civil registrations in this period	257	247	245	749

1. Census day 1871 was Sunday 2nd April.

The results suggest that in the early years of civil registration some people failed to register their children, but by 1851-1871 there were only slightly more baptisms than civil registrations (496 compared with 492). Without a full nominal analysis, it is not known whether many families opted just for either baptism or civil registration, or whether the norm was for both. But even this crude test suggests that in Whitbourne at least, baptisms continued to be a significant part of the culture of family life until at least the 1870s, and the baptism registers remain a valid tool for accessing information.

Secondly, a query run on the 1851 census extracted a sample of seventy-two individuals whose life-histories had already been traced in preliminary assessment work, who were listed as having been born in the parish, out of a total for the census of 380 such ‘natives’ (a sample

of 19%). Of these seventy-two, only two (3%) do not appear in the Whitbourne parish baptism register: one female born *circa* 1842 and one male born *circa* 1795. Neither have yet been found in other baptism registers, although ten younger siblings of the female are in the Whitbourne register, and her absence is compatible with a recognised tradition of first children being born or baptised in the mother's parental parish. The male may fit into a gap in a family's baptism records between 1788 (the fifth child) and 1798 (the last known child, 18 years after the parental marriage).

These Whitbourne results compare well with those obtained for three small Essex parishes, using a sample of 742 individuals in the 1851 census who claimed to be natives of the parishes. Sixty five (9%) were not traced in the baptism registers, but of these, twelve were children who were either first-borns or whose siblings were all baptised, and so may not be genuine 'non-baptised', thereby reducing the level to 7%. There were other categories which it was argued might also be excluded, notably those claiming a different birthplace in subsequent censuses, and some servants and lodgers. The 'bottom line' for non-baptisms in this study was potentially only 3%.⁶⁸

A different study, using a series of forty-five diverse parishes, found a greater discrepancy between the 1851 census returns and baptisms, and suggested a connection between the percentage of census 'natives' who did not appear in the baptism registers and parish size. Below a population of 1,000, there were fewer than 20% not in the registers, with a minimum of 4.8% in a Buckinghamshire parish with a population of 401, but above 1,500 there could be over 30%. Possible reasons for this pattern might be that non-conformity was more

⁶⁸ Jarvis, 'The Reconstitution of Nineteenth-Century Rural Communities'

prevalent in larger parishes, or that the incumbent was not able to keep in contact with all his parishioners.⁶⁹

There are many possible causes of discrepancies between the place in which civil registrations or church services occurred and the actual location of vital events, and hence a reduced usefulness of registers as a measure of mobility. First children seem quite often to have been delivered or baptised away from the normal residence. 'Marriage horizons', as will be discussed in Chapter Five, are complicated for many reasons. Burials and death records are confused by transport of corpses and by the movement of the dying and the very elderly 'back home', while changes to the Settlement Laws and burial fees altered the mobility goals and needs of the poor.⁷⁰

The main drawbacks of using census material are, firstly, that detailed nominative data does not exist for the United Kingdom until 1841 and it is only from 1851 that place of birth is given in full, and secondly that the questions asked changed over time, so it is not a simple process to make comparisons longitudinally. To this might be added a third problem, which is that the CEBs look superficially so useful that it is easy to read too much into them. The early censuses from 1801 were only intended to supply information on population change, and to investigate medical and housing questions, but from 1851 onwards there is, in theory at least, information on the birthplace of every person recorded, down to parish or hamlet level for people who were born in their current country of residence. In practice, cross-checking suggests that this data is not always accurate. There was also a tendency for the most mobile segments of the population to slip through the net. Itinerants were a particular problem,

⁶⁹ Razzell, 'The Evaluation of Baptism', p. 128

⁷⁰ Snell, 'Parish Registration and the Study of Labour Mobility'

especially in 1841 when the census was in June and many migratory agricultural labourers may already have been on the move. By 1861 this loophole had been partially blocked, with instructions to include migrants, including those in ‘barns, sheds, tents and in the open air.’⁷¹

Although the census provides a large body of data on migration, and includes non-marriers who are excluded from most demographic reconstitution work,⁷² interpreting it is complex. An apparently low level of in-migration to a particular district may either mean that the population was stable and mortality was low, or that it was declining in prosperity and was an undesirable destination.⁷³ Changes in claimed birthplace between censuses are a major stumbling block, especially when the individual concerned seems to have migrated, as are acceptable limits for age variation.⁷⁴ Even apparently fixed categories such as Christian name can be misleading, and weighting systems must be designed to suit local conditions.

The validity of extending reconstitution and life-history work to other sources than parish registers is a vexed question. Everyone is at least theoretically present in the burial registers, most are in the baptism registers, and everyone who married should also be registered (exceptions being Quakers, Jews and members of the Royal Family), so registers should introduce a minimum of bias. Any additional sources could be argued to introduce bias towards particular sub-sections of society: the poor, the criminal, the affluent, depending on

⁷¹ Higgs, *Making Sense of the Census Revisited*, pp. 53-56

⁷² A Bideau and G Brunet, ‘The Construction of Individual Life Histories: Application to the Study of Geographical Mobility in the Valserine Valley (French Jura) in the Nineteenth and Twentieth Centuries’ in *Old and New Methods in Historical Demography*, ed. David S. Reher and R. Schofield (Oxford: Clarendon Press, 1993): 111-24

⁷³ Higgs, *Making Sense of the Census Revisited*, p. 147

⁷⁴ Razzell, ‘The Evaluation of Baptism’; David Thomson, ‘Age Reporting by the Elderly and the Nineteenth-Century Census’, *Local Population Studies* 25 (1980): 13-25; Perkyns, ‘Age Checkability and Accuracy’; Audrey Perkyns, ‘Birthplace Accuracy in the Censuses of Six Kentish Parishes, 1851-1881’ in *Local Communities in the Victorian Census Enumerators’ Books*, ed. Dennis Mills and Kevin Schurer (Local Population Studies Supplements; Oxford: Leopard’s Head Press Ltd, 1996): 229-45

the material used. But use of parish registers is not straightforward, as we have seen, and their interpretation may discriminate against the mobile, the long-lived, or women who marry, to name but a few. In some situations, for example where the proportion of Anglicans is suspected of being low, the parish registers may be unreliable and other sources become correspondingly important.⁷⁵ Moreover, when constructing a series of life-histories rather than a parish reconstitution, widening the range of sources used increases the chance of making a correct linkage between entries in parish registers, by enabling triangulation and ‘thick description’. It is possible therefore that for this type of work the question of bias should be approached in a rather different way.

Sources that have been used in previous studies include settlement papers and examinations, apprenticeship listings, probate records, church court depositions, manorial rolls, taxation lists and material relating to particular trades or occupations; perhaps the most iconic are the isolated nominal parish listings from before the census era.⁷⁶ Of this last category, the Cardington listing of 1782 gives information about out-migration and not merely population turnover,⁷⁷ but whichever source is used, the purpose and clientele for which it was compiled, and the reason for its preservation, are of immediate relevance to its value, limitations and bias for nominal linkage work.

Whitbourne has a good range of surviving records which might be used to supplement the census and register data, including probate material, land tax and hearth tax lists, manorial

⁷⁵ Robert Anthony, ‘a Very Thriving Place’: The Peopling of Swansea in the Eighteenth Century’, *Urban History* 32 (2005): 68-87

⁷⁶ P Clark, ‘Migration in England During the Late Seventeenth and Early Eighteenth Centuries’, *Past and Present* 83 (1979): 57-90

⁷⁷ N Tranter, ‘Population and Social Structure in a Bedfordshire Parish: The Cardington Listings of Inhabitants, 1782’, *Population Studies* 21 (1967): 261-82; R. S. Schofield, ‘Age-Specific Mobility in an Eighteenth-Century Rural English Parish’ in *Migration and Society in Early Modern England*, ed. Peter Clark and David Souden (London: Hutchinson, 1987): 253-66

court records, the tithes apportionment, vestry notebooks naming parish officers for most of the research period, a list of annual Parish Apprentices from 1755 to 1821 which gives the apprentice's name, age and the farmer to whom they were apprenticed, poor records, and so on. By using some of these additional sources, bias against one particular socio-economic group may be minimised, for example the apprenticeship lists are a source for the children of poorer families, in the gap between baptism and marriage, while the probate records give information about the families and servants of the more affluent. The method which was used enabled the calculation of percentage reconstitution for different groupings within the parish, so a check could be maintained on internal bias. Comparable sources are available for some neighbouring parishes in Herefordshire and Worcestershire, enabling similar procedures to be used for them.

The sources transcribed for the initial data-base were the parish registers for Whitbourne from 1700 to 1871, the four Whitbourne CEBs 1841-1871, civil registrations of births and deaths from 1837 to 1871 for those giving their parish of residence as Whitbourne,⁷⁸ the Land Tax lists for Whitbourne from 1777 to 1831, together with the baptisms register of Upper Sapey 1700-1871 and the baptism registers for Tedstone Delamere from 1813 to 1871. Hard copies of parish registers for some other Herefordshire and Worcestershire parishes were accumulated in the course of the analysis. The Land Tax records provided a means of locating some individuals, although their early bias to landowners and, later, the larger tenants, necessitated cautious use.⁷⁹

⁷⁸ Made available through the Herefordshire Family History Society

⁷⁹ Roy Douglas, *Taxation in Britain since 1660* (Basingstoke: Macmillan, 1999); Land Tax records on film in WRO, BDLHC and HRO

4.6 Methodological Implications of Different Methods of Analysis

The choice of research strategy for migration studies can have a marked impact on the results obtained. As Schofield noted in the context of the detailed Cardington population listing, 'There can . . . be no guarantee that the picture it yields of the patterns of migration is typical of other parishes. Rural communities in the past were by no means alike . . .'⁸⁰ But if individual parochial studies risk giving too particular a view, aggregating data may hide the truths in a meaningless mean. Broad brush impressions can be helpful, or misleading, or they may stand at an unknown point in between. There is a related question of the meaning of migration, specifically whether net movement from beginning to end of the research period is what matters, or whether the aim is to uncover an approximation to gross migration, the sum of all movements. This again is related to whether a study is cross-sectional (looking for example at the proportion of natives in a given population) or longitudinal (following individuals or groups over time). Finally, migration may be analysed quantitatively, assessed statistically and explained mathematically, or a qualitative approach may be used on fewer individuals, using narrative, life history and description.

If a source or location has particular merit, its particularity is no necessary bar to its use. The Cardington listing is unique, and uniquely valuable, but it should perhaps always be contextualised as a late eighteenth-century Bedfordshire lace-making village, with easy access to London. A very different source, the indents of almost 10,000 transported criminals from 1818-1839, has been used to explore migration between counties in the generation after the Cardington listing, with rather different results. Two thirds were first offenders and the data-

⁸⁰ Schofield, 'Age-Specific Mobility in an Eighteenth-Century Rural English Parish' , p. 265

set was therefore considered unlikely to be biased towards professional criminals, but although in many respects the sample was representative of contemporary society, more were literate, there were more single young men and more in the armed forces than the national average. These factors may or may not relate to the relatively high and generalised inter-county mobility found.⁸¹

Aggregate net data can reveal important trends, although they cannot give any individual information, and seldom indicate if a person behaved in a 'typical' way, since the mode is often concealed beneath the mean. Imbalances between men and women's migration through the eighteenth century, as calculated from Rickman's data, show that women predominated in the south-west (a ratio of about 0.85:1 men to women in Dorset by 1790) while men predominated in the south-east (1.1:1 in Kent), suggesting a drift of men to the east.⁸² A comparable effect has been detected between different age-groups in the London region in the early censuses, with a depletion in the fifteen- to nineteen-year-old cohort in Sussex compared with a surplus in urban Middlesex, and this has been linked to demand for domestic servants.⁸³

Aggregate figures can also give finer-scale insights into migration patterns, for example the above pattern of migration into London was selective, with some parts of London having a much larger imbalance than others, and such information can shape discussion of the city's development.⁸⁴ Dividing England and Wales into 'rural' and 'urban' registration districts

⁸¹ Stephen Nicholas and Peter R. Shergold, 'Internal Migration in England, 1818-1839', *Journal of Historical Geography* 13 (1987): 155-68

⁸² Souden, 'East, West - Home's Best?', p. 306

⁸³ Leonard Schwarz, 'Hanoverian London: The Making of a Service Town', *Proceedings of the British Academy* 107 (2001): 93-110, p. 102

⁸⁴ *Ibid.*

similarly reveals that the net rural 13% population increase from 1841 to 1911 was caused by an 86% natural increase combined with 73% out-migration, which highlights the dangers of simplistic use of net data. Registration District level data has been used to investigate migration flows in Cornwall in the second half of the nineteenth century, indicating that the agricultural east of the county was affected by out-migration earlier than the mining regions, and that women's migration patterns were more varied than those of men.⁸⁵ Likewise, a study using net migration data from the 1851 and 1861 censuses has produced information on migration trends in four different rural areas, although its interpretation relies on preconceptions of how societies functioned, and how and why different groups migrated.⁸⁶

Whether a study is cross-sectional or longitudinal, and whether the aim is to investigate gross or net migration, are closely interwoven issues when conducting nominative studies. The incompleteness and opacity of sources mean that gross migration will never be fully revealed. Even twentieth-century life-history studies cannot reliably trace every change of residence of their cohort,⁸⁷ and this effect is compounded in historical studies, for which the researcher may have little idea of what is missing.⁸⁸ So any study will either be net, or an estimation of gross migration. At one extreme, cross-sectional studies using one census give net information, from birth-place to present residence, but the information for married women is

⁸⁵ R Lawton, 'Population Changes in England and Wales in the Later Nineteenth Century: An Analysis of Trends by Registration Districts', *Transactions of the Institute of British Geographers* 44 (1968): 55-74; Deacon, 'Communities, Families and Migration'; Bernard Deacon, 'Reconstructing a Regional Migration System: Net Migration in Cornwall', *Local Population Studies* 78 (2007): 28-46

⁸⁶ Andrew Hinde, 'The Use of Nineteenth-Century Census Data to Investigate Local Migration', *Local Population Studies* 73 (2004): 8-28

⁸⁷ Kiernan, 'Characteristics of Young People Who Move'

⁸⁸ Colin Pooley and Ian Whyte, 'Approaches to the Study of Migration and Social Change' in *Migrants, Emigrants and Immigrants. A Social History of Migration*, ed. Colin G. Pooley and Ian D. Whyte (London and New York: Routledge, 1991): 1-15; Daniel Courgeau, 'An Attempt to Analyse Individual Migration Histories from Place of Usual Residence at the Time of Certain Vital Events: France During the Nineteenth Century' in *Old and New Methods in Historical Demography*, ed. David S Reher and R. Schofield (Oxford: Clarendon Press, 1993): 206-22, pp. 3-4

potentially greater than for men, since it includes the birthplace of any children. At the other, a longitudinal study through several censuses is a closer approximation to a gross migration study, and incorporating parish register data and other material helps to fill out the information available. But, as noted above, this may bias the results according to socio-economic grouping, so the outcome may be less representative for some than others.

While most reconstitution and migration studies are essentially quantitative and aggregative, a minority have used some qualitative techniques, especially to explore life-histories. Aggregative work tends to over-emphasise the mean at the expense of the variation within the data, thereby overlooking the importance of individuals.⁸⁹ Conversely, qualitative studies are often accused of over-reliance on anecdote and single cases, both of which may be misleading or unrepresentative, and of lacking a rigorous approach. But this may be a false dichotomy: Carus and Ogilvie have argued that the two methods are mutually indispensable, and that they 'are progressively and iteratively confronted with each other in the context of a particular focus of interaction, a particular local community.' The two methodologies are better viewed as part of a continuum, with most historical research lying between the extremes.⁹⁰

The present study therefore deliberately seeks to adopt a combined approach throughout, constructing a series of quantitative results and then exploring their meaning in terms of the micro-history and life-histories they begin to expose. It aims for a longitudinal and multi-generational study using a large number of life-histories, so that both summaries and case-studies can be explored, and the migration revealed can be a first approximation to gross individual movement. It begins with a population rooted in one little-understood social

⁸⁹ Laslett, 'Signifying Nothing'

⁹⁰ A. W Carus and Sheilagh Ogilvie, 'Turning Qualitative into Quantitative Evidence: A Well-Used Method Made Explicit', *Economic History Review* 62 (2009): 893-925, especially p. 901

context, a rural Herefordshire parish, and in the eighteenth century, a period for which there are relatively few good data sources, but expands out into the wider population and the nineteenth-century, in both of which many more comparisons and sources are available.⁹¹ The method to be developed had to combine rigorous elimination of false linkages and a robust and replicable system, to produce a data-set that was representative of the population sampled.

4.7 Constructing the Data-base

The data-base was constructed in four stages. Firstly, Access transcripts of the basic sources were created. Secondly, hard copy information sheets were compiled for the seventeen tribes in the sample, one per person in the Whitbourne baptism registers from 1700 to 1871, and to these were later added sheets for siblings and descendants baptised in other places, and for 'known' people for whom no baptism records were found. On these sheets, information was added sequentially as the sources were tested and possible linkages made. Thirdly, once the linkages were confirmed, the data was entered into a master 'descendants data-base'. Fourthly, this data-base was examined and extended using a variety of techniques, including adding new information fields, for example distance from baptism place to marriage.

Individual record sheets were preferred to cards or working straight into a data-base, because of variation in the detail available for different individuals, for some of whom several options were explored before a linkage was confirmed. All rejected information was thereby preserved and some was subsequently used elsewhere (see example 1, below).

⁹¹ Pooley and Whyte, 'Approaches' ; Bideau and Brunet, 'The Construction of Individual Life Histories'

The method for linkage-making was based on that used for family reconstitution studies by the Cambridge Group and for total reconstitutions, but extended and developed for the requirements of a migration study. A modified system of weightings similar to that developed by Wojciechowska was used.⁹² She divided factors into 'essential' and 'non-essential,' so for example in her study a linkage would only be acceptable if the 'essential' county of birth was the same in consecutive census returns, but Whitbourne's position on the county boundary meant that here this factor had a low weighting. Similarly, she gave a high weighting to the 'non-essential' agreement of an adult's trade in consecutive censuses, but even Whitbourne descendants who remained in the parish could be listed with different occupations in the censuses. For example Joseph Collins (whose linked identity was confirmed by the consistent recording of his wife's unusual birthplace), appeared in the 1841 census as age forty-five, independent; in 1851 age fifty-eight, agricultural labourer; in 1861 age seventy-five, lath cleaver, which could represent life-cycle or cultural changes: the weighting of occupation was further reduced to take account of the possible consequences of migration.

The preliminary Access data-bases were transcribed directly from register manuscripts and CEBs, so variations in surnames and house descriptions were retained. This maximized information-retention and enabled back-checking. For example there were two parish surnames, Price and Preece, and it was not initially clear that they related to the same tribe. For census returns on the commons, where multiple houses are simply described as 'Badleywood' or 'Bringsty', a system of roman numerals was adopted, following the route taken by the enumerator each year. This meant that some comparisons between censuses

⁹² Bogusia Wojciechowska, 'Brenchley: A Study of Migratory Movements in a Mid Nineteenth-Century Rural Parish', *Local Population Studies* 41 (1988): 28-40

suggested that a family had moved house when they may not have done so, but it retained the geographical relationships between properties insofar as the enumerator copied up a logical geographical sequence. Where two or more households were indicated in a single tenement in the CEB, the designations a, b, c were used to distinguish them.

Where there was uncertainty over the correct reading of the source, particularly with pale ink, cross-checks began with entries of the same type (for example earlier and later baptisms to the same parents, to check a parental Christian name) and then searched entries in different sources (for example a census to cross-check an uncertain baptism entry). For the small minority of cases which remained unclear, a question mark preceded the relevant part of the data base record, so all ambiguous entries could be selected and checked for possible linkages. When an entry in a CEB gave a birth-place outside Herefordshire and Worcestershire there was sometimes more variation between spellings, perhaps reflecting local difficulties with unfamiliar place names. Where possible, the place was identified, and the modern spelling added in square brackets after the direct transcription, maximising the information in the data base.

The only cases where information was not transcribed directly were in the CEBs where there was clear evidence of source-errors, most commonly involving county of birth being continued with ditto marks for many entries, even when the parish of birth of some individuals was in a different county. These entries were corrected to avoid distorting the data, but if there was any doubt, the original entries were left unchanged (for example there is a Tibberton in each of Worcestershire, Gloucestershire and Shropshire). Where appropriate, a note was added to the data base entry, indicating that a change had been made.

All analysis was arranged by tribe. As the study progressed, it became apparent that there was considerable intermarriage between tribes, but assigning individuals to their correct tribe prevented duplication, and clear signposts were given on the personal information sheets and in the descendants data-base for the marriage-links from one to the other. Hard copies and all additional material, including wills and inventories, were filed by tribe.

The first stage was to allocate the transcribed surnames to the tribes. Collins included Collings and Colins, while Bradburn included Bradbourne, Bradbourn, Bradburne, Bradborne, Bradbone and Bradborn. The farm which was apparently named after the latter tribe was sometimes written Bradbands, but this spelling did not appear in any sources for the surname. The development of a name-range for the tribe required some familiarity with the sources, but in practice was not very time-consuming. From the list of alternatives, a standardised form of the tribal name was devised, using wild cards based on the rules behind the Soundex system. Thus for Collins the name would be Col*in*s and for Bradburn it would be Bradb*n*. The Soundex system was kept in mind for unexpected 'outliers': for example on two occasions Arden was written as Harding.⁹³ Beyond the locality, additional variants were often encountered, for example Abraham Bradburn was married in 1841 in Worcester, as Broadburne. If it was impossible to produce one distinct name form, the Access OR option was used.

Once tribal groupings were identified, queries extracted individual data from the parish registers, sorting baptisms by father's and then mother's Christian name, then by date, so each

⁹³ Winchester, 'The Linkage of Historical Records', pp. 114-17

set of parents had their offspring listed in chronological order, with all the illegitimate children together at the top of the list, arranged by mother's Christian name and date. Marriages were sorted by Christian name and then date for each of brides and grooms, and burials likewise by Christian name and then date. Surname variants were ignored. Descendants through the female line were traced later, when surnames were known.

Before individual sheets were printed out, unique identifiers (uids) were assigned to all Whitbourne baptisms within the sample tribes. These were each two letters and three digits, so the Collins tribe used co, while the Bradburns used br. The Joseph Collins cited above was not baptised in Whitbourne so had no uid, but his father Richard was (co058), as were his oldest siblings Mary (co010) and John (co011) and his two youngest children (co088 and co089). This system of uids facilitated tracing the female line, despite changes of surname on marriage; thus this same Mary Collins' children were identifiably descended from a Collins, even though neither they nor their father were baptised in Whitbourne.

The individual Life History Forms were printed with a panel showing tribal baptism number, uid, Christian name(s), surname, date of baptism and parental Christian names. They were sorted by parental (maternal for illegitimates) family units, with a slip attached noting the date range of the Whitbourne baptisms, any suspected gaps in the baptism sequence, parental names and a standard list of sources to be searched. Material was then added to these Forms sequentially, beginning with the most certain linkages and using a system of colour-coding by source-type and origin (red for non-Whitbourne registers, and so on). Linkages were made by hand, assisted by the sorting and querying facilities of Access, starting with the Whitbourne registers and progressing through the sources in turn, beginning with the most certain linkages

in each case. Land tax and probate indices from other parishes were used to trace individuals whose initial linkage was already securely made, (for example to a marriage implying adulthood), but not to determine otherwise uncertain linkages. As information on each family accumulated, additional baptisms sometimes filled the gaps in Whitbourne-baptised children, and fresh Forms were created manually for each new descendant. For example Richard and Susannah Collins baptised two children (Mary and John) in Whitbourne in 1772 and 1774 after their marriage at Wichenford in 1772, followed by two in Leigh, one in Martley and five in Leigh (including Joseph in 1787). Joseph's birth in Leigh was confirmed by his subsequent census entries in Whitbourne, while probate records for his father Richard and brother Thomas provided triangulation evidence.

The basic Cambridge Group guidelines were followed, with introduced provisos for local information. So no age at death greater than a hundred was accepted without firm triangulation such as unambiguous identification of the individual in extreme old age, and no man should father a child at age greater than seventy-five. No woman should have two successive births closer together than ten months, or three successive births within twenty-two months, and none before age fifteen. Age at first marriage for both men and women should be between fifteen and fifty (but see section 3.7, with one Whitbourne bachelor groom aged fifty-seven) and no individuals should marry at an age greater than seventy-five without unambiguous triangulating evidence.⁹⁴

Linking began with the unequivocal burials, to eliminate those individuals from later stages.

Thus the only Herbert Burrason in the locality, and his son Richard (baptised in December

⁹⁴ E. Anthony Wrigley and Roger S. Schofield, 'Nominal Record Linkage by Computer and the Logic of Family Reconstitution' in *Identifying People in the Past*, ed. E. Anthony Wrigley (London: Edward Arnold, 1973): 64-101

1728) were linked to the burial of Richard Burraston son of Herbert, in 1735; and William Hodges, buried 4th Sept 1818 aged four days, was linked to the baptism of William Hodges on Sept 2nd 1818, corroborated by the next baptism in that family twenty-two months later. The next most certain category was usually marriages after 1837 or with licence details, when the father's name and occupation, or occupation and age of the groom, sometimes gave additional confidence levels.

Having linked the most obvious cases, the process became iterative, repeatedly back-checking as additional sources beyond the parish registers were brought into play. The census was often used to locate new linkages and for cross-checking, such as between two possible burial dates for one individual, especially if close kin were known. Weightings were applied, and although this system was complex and relied on increasing experience of the data pool, some extra guidelines were drawn up to make the method as robust as possible. Rare Christian names or unusual husband and wife combinations of names were highly weighted, as was use of a family Christian name persisting over several generations. The weighting system was developed using the Herefordshire marriage index to 1837, and then civil registrations for Herefordshire from Ancestry up to 1901 in order to include marriages for the majority of individuals in the data-set. The resulting tables were subdivided to indicate the changing frequency of Christian name choice in the county (**Tables 4.5 and 4.6**). For a baptism in 1740, for example, the marriage period 1751-1800 gave a guide to name frequency, so a man named John (233 per thousand) had no weighting attached to his name, whereas Robert (10.7 per thousand) had substantial weighting, especially if Robert were married to Rebecca (4.4 per thousand). Other research has indicated that name frequencies varied regionally as well as temporally in the past, with the proviso that some cultures continued to use identical or

similar Christian names for two children in one family. Despite this limitation, seen here with the use of both Elizabeth and Eliza for nineteenth-century siblings, these local Herefordshire tables offered a powerful new tool in making linkages.⁹⁵

Distinctive or specialised occupations, such as blacksmithing, were also highly weighted, while compatible occupations, for example farmer and yeoman, were equated. Marriages between people in their twenties and thirties were highly weighted, as were remarriages within twelve months for widowers with small children, but marriages where bride and groom were resident far apart were normally lower weighted. Consistent recording of an unusual birthplace or a consistent age claim without clumping in successive censuses increased the weighting. A mis-match of Christian name made a linkage extremely implausible, and any factor with a low weighting usually required balancing by two or more of high weighting, even though this biased the linked sub-sample away from those with smaller historical footprints. The nineteenth-century sample was liable to bias towards those born in smaller parishes, since they could be identified more confidently through their birthplace claims.

⁹⁵ Anne Harris, 'Christian Names in Solihull, Warwickshire, and Yardley, Worcestershire, 1540-1729', *Local Population Studies* 19 (1977): 28-33; Kenneth M. Weiss et al., 'Wherefore Art Thou Romio? Name Frequency Patterns and Their Use in Automated Genealogical Assembly' in *Genealogical Demography*, ed. Bennett Dyke and Warren T. Morrill (New York: Academic Press, 1980): 41-61; David Scott Smith, 'Child-Naming Practices as Cultural and Familial Indicators', *Local Population Studies* 32 (1984): 17-27; Tom Arkell, 'Forename Frequency in 1851', *Local Population Studies* 47 (1991): 65-76; Razzell, 'Evaluating the Same-Name Technique'; Galley et al., 'Living Same-Name Siblings'; Galley et al., 'Living Same-Name Siblings: A Reply'

Table 4.5: Male Christian Name Frequencies, per thousand Herefordshire marriages recorded

Period of marriages:	1700-1750	1751-1800	1801-June 1837	July 1837-1871	1872-1901
no. marriages:	26,504	28,559	26,002	27,106	21,622
John	229.2	233.0	203.8	164.1	116.4
Thomas	162.6	177.2	166.7	135.2	101.1
William	141.3	165.6	176.8	158.6	154.1
James	62.6	88.3	115.0	114.5	83.0
Richard	81.5	70.6	62.1	40.7	25.1
Edward	40.1	40.4	34.3	29.7	24.7
Joseph	25.1	30.7	37.0	34.9	23.7
Samuel	20.6	26.6	24.7	20.3	14.9
George	19.7	21.9	30.2	70.9	91.2
Benjamin	14.0	18.4	15.7	10.9	7.7
Henry	21.0	13.9	15.1	36.4	47.6
Francis	18.3	14.1	10.2	7.1	8.4
Robert	15.0	10.7	10.5	12.7	10.5
David	11.8	10.6	6.5	5.8	6.9
Charles	12.4	10.3	14.0	37.0	58.8
Philip	11.5	10.2	7.8	6.2	4.2
Walter	12.6	7.3	4.2	3.5	10.2
Daniel	5.2	4.5	3.0	4.0	3.1
Peter	4.2	4.1	4.2	3.4	2.5
Matthew	3.4	3.4	2.2	2.5	1.7
Stephen	3.8	2.8	2.4	2.5	2.6
Hugh	4.2	2.4	1.0	0.7	0.7
Jonathan	3.7	2.3	2.0	2.3	1.2
Timothy	2.0	2.2	2.2	1.8	0.8
Jeremiah	1.8	2.0	1.8	0.7	0.9
Abraham	2.6	2.0	1.5	1.5	1.0
Edmund	4.0	1.8	1.5	2.6	2.4
Roger	5.3	1.7	0.5	0.1	0.3
Anthony	4.3	1.6	0.5	0.4	0.2
Isaac	1.8	1.6	1.4	2.5	1.7
Humphrey	3.3	1.5	0.8	0.4	0.1
Simon	1.9	1.2	0.3	0.4	0.3
Job	1.1	1.1	1.0	0.7	0.7
Jacob	1.4	1.0	0.7	0.3	0.5
Christopher	1.4	0.9	0.7	1.8	2.0
Nathaniel nb Nathan	1.5	0.9	1.1	1.0	0.3
Joshua	1.3	0.8	0.7	0.7	0.7
Nicholas	1.4	0.8	0.3	0.2	<0.1
Josiah / Josias	0.8	0.8	0.5	1.2	0.9
Caleb / Calip	0.7	0.6	0.4	0.4	0.2
Aaron	0.3	0.4	0.5	0.6	1.6
Jonah / Jonas	0.3	0.4	0.2	0.1	0.3
Nathan nb Nathaniel	0.2	0.4	<0.1	0.2	0.1
Griffith / Griffin	0.8	0.4	<0.1	0.0	<0.1
Emanuel	0.3	0.3	0.5	1.0	0.4
Ezekiel	0.2	0.3	<0.1	0.2	<0.1
Gabriel	0.6	0.2	0.1	0.2	0.1
Solomon	0.3	0.2	0.3	0.4	0.1
Oliver	0.7	0.1	0.2	0.3	1.2
Frederick	<0.1	0.1	0.8	7.2	18.2
Other names/ variants	35	5	32	69.2	164.4

Table 4.6: Female Christian Name Frequencies, per thousand Herefordshire marriages recorded

Period of marriages:	1700-1750	1751-1800	1801-June 1837	July 1837-1871	1872-1901
no. marriages recorded:	26,504	28,559	26,002	27,106	21,622
Mary nb Maria	200.8	230.1	180.5	183.9	140.9
Elizabeth/Bess/Beth nb Eliza	210.0	207.5	178.4	134.0	101.8
Ann (incl. Nancy)	172.6	199.8	177.0	122.6	34.1
Sarah	48.5	79.2	99.0	85.4	74.2
Margaret	54.8	39.6	29.2	18.4	15.3
Susannah / Susan	30.1	36.6	33.9	25.6	12.4
Jane	36.6	34.6	41.7	46.7	36.8
Hannah	20.2	29.6	33.8	28.8	16.0
Martha	22.1	27.0	21.0	16.9	11.3
Eleanor	27.9	20.7	15.3	5.3	3.9
Catherine	20.6	17.7	22.3	13.4	13.1
Esther / Hester	10.8	14.2	15.2	11.1	7.7
Frances / Fanny	9.5	7.4	10.4	18.1	29.3
Alice	16.2	6.9	4.3	4.1	38.6
Joan / Joanna	21.3	4.5	1.3	0.6	<0.1
Rebecca	5.7	4.4	4.9	3.7	1.4
Bridget	7.2	2.6	1.4	0.6	0.2
Dorothy	4.5	2.4	0.5	<0.1	0.2
Rachael	2.5	2.3	1.9	1.1	0.9
Joyce	5.8	2.1	0.4	0.3	0.2
Abigail	3.2	1.9	0.8	0.4	<0.1
Penelope	1.8	1.9	1.1	0.4	0.3
Priscilla	1.3	1.7	2.7	2.0	1.6
Diana / Dinah	1.8	1.7	1.4	1.9	1.0
Maria nb Mary	1.1	1.7	12.1	14.3	7.4
Winifred	1.8	1.6	0.8	0.5	0.8
Phoebe	0.7	1.5	3.0	2.3	1.8
Lucy	1.2	1.5	3.8	5.6	8.2
Judith	2.8	1.4	0.8	0.2	0.1
Lydia	1.5	1.3	2.4	2.6	1.8
Theodora	0.9	1.3	0.7	<0.1	<0.1
Charlotte	<0.1	1.3	9.8	16.5	11.8
Milborough	0.8	1.0	2.4	1.3	0.4
Jemima	0.1	1.0	1.8	2.3	1.2
Sophia	0.2	0.8	5.2	5.6	4.4
Grace	1.4	0.8	0.7	0.4	1.1
Ruth	1.2	0.7	1.3	0.8	1.7
Eliza nb Elizabeth	0.9	0.6	11.5	56.4	41.4
Patience	1.1	0.5	0.3	0.3	<0.1
Amelia	<0.1	0.4	2.2	3.7	4.0
Leticia	0.2	0.4	1.1	0.9	0.5
Beatrice	1.2	0.4	0.3	0.4	1.6
Barbara (incl. Barbarellin)	0.8	0.3	0.3	0.4	0.2
Ellen nb Helen	0.2	0.2	1.6	12.9	25.0
Caroline	<0.1	0.2	3.4	21.6	13.3
Helen nb Ellen	0.1	0.2	0.5	2.5	2.9
Harriet	<0.1	0.1	8.2	28.3	27.6
Emma / Emily	<0.1	0.1	1.9	29.7	34.7
Louise	<0.1	<0.1	0.7	6.9	15.4
Matilda / Maud	<0.1	<0.1	0.4	2.3	4.8
Other names & variants	45.8	4.2	44.4	55.6	246.2

Baptism to marriage (with surname change for women) links were next made, together with the children of the marriages where found. If a baptism was identified, a search was made for others, until fifty years after the mother's baptism where known, or for five years before and after the last baptism of a family member. Thus Ann Hodges married 'Edward Price of Tedstone Delamere' at Whitbourne in 1786, aged eighteen; four children were baptised in Whitbourne in 1794, 1796, 1806 and 1811, by which time Ann was about forty-three, and four more in Tedstone between 1789 and 1801. The marriages of five of these children were traced in Herefordshire and Worcestershire. Where no cross-checking evidence existed, linkages remained provisional, but the evidence was recorded on the Life History Form for subsequent appraisal.

Evidence for residence at marriage, as for Edward Price above, sometimes located the baptism of children. These then sometimes aided the search for marriages, as for Thomas Collins, the son of Richard and Susannah. The Leigh baptism registers revealed several of Thomas' siblings, confirmed by his will which gave three sisters of the same names and his brother Joseph in Whitbourne. The combination of Richard and Susannah as Christian names gave quite a high weighting to the identification of their children. But a marriage in 1864 of a Thomas Collins (now of Alfrick), son of Richard, was unlikely to refer to this same individual, since the Thomas brother of Joseph of Whitbourne was then seventy-nine. However, both Thomas and his father were repeatedly identified as tailors; the 1864 bride had the unusual name Hannah Emma; in the 1861 census Thomas was a widower; in the 1871 census two months after Thomas's burial Hannah was listed as widow; and crucially, in his

will Thomas refers to ‘my dear wife Hannah Emma’.⁹⁶ Of these, the greatest weighting was given to the unusual name of the (third) wife, but without other supporting evidence the rule that marriages should not be assigned to a person over seventy-five would not have been overridden as it was.

. . . wills do not, of course, set out to give the kind of total cross-section of the community which the surveys do, and they are therefore inadequate. However . . . until one has more adequately translated the statistics into human terms, it seems that despite all the care one takes, the human beings have slipped between the meshes of the net, and that one has not yet begun to understand the real situation.⁹⁷

Once the search for linkages was broadened out, particularly to the on-line census records, there was greater scope for false linkages and the weightings system became correspondingly more important. The tendency to ‘cherry-pick’ apparently plausible linkages was restricted by including strong negative testing, triangulating to try and disprove hypotheses. For aggregative demographic studies using large samples, a small percentage of false linkages can perhaps be overlooked, since they may cancel out. But in a study using a relatively small sample size for individual life-history construction, false linkages must be minimised. One high negative weighting, or several of lower weighting, should cause the linkage to be discarded, but these decisions were deferred until enough material was accumulated, or the individual was deemed untraceable, as illustrated below.

⁹⁶ Thomas Collins, 13 March 1871, Probate Film 507, WRO; it was also tempting to give additional weight to the evidence for this late marriage, from a plain-speaking codicil to Thomas’ will, revoking a bequest to his sister-in-law, Joseph’s wife

⁹⁷ M. Spufford, *Contrasting Communities: English Villagers in the Sixteenth and Seventeenth Centuries* (Cambridge: Cambridge University Press, 1974), p. 167

4.8 Two Worked Examples

4.8.i. Minimising False Linkages

Eleanor Bullock, eldest child of agricultural labourers Thomas and Mary, was baptised in Whitbourne in May 1790. Neither of her parents had signed their marriage register entry. There are no further records for Eleanor in the Whitbourne registers, and the one 1841 census listing in this name was almost certainly a widow so was rejected. There were no possible Herefordshire marriages to 1837, but three Worcestershire ones were identified. First, to Edward Matthews at Doddenham (4 km from Whitbourne) in 1819, witnessed by John Wood and Jane Bullock (the name of Thomas and Mary's second child) but this was eliminated because the 1851 census showed this Eleanor (Ellen) with birthplace Doddenham, and there was an Ellen Bullock baptised there in 1790, twin sister of Jane. The second possible Worcestershire marriage was to John Russell at Broadwas (6 km) in 1829, followed by seven baptisms biennially from two months after the wedding until October 1842, by which time the Whitbourne Eleanor would have been at least fifty-two, rendering this linkage highly implausible.

The third possible Worcestershire marriage for Eleanor Bullock was traced via the 1851 census for St Nicholas' parish, Worcester, which gave an Eleanor Passey aged fifty-five (a plausible approximation for sixty-one), widowed and head of the household with a step-daughter also called Eleanor Passey, aged thirty-three. Eleanor senior's birthplace was Whitbourne, and the two women were china and glass merchants in a prosperous district of

the city. If this were a true linkage, it would be a significant example of upward social mobility. The 1861 census confirmed Whitbourne as the place of birth, although the age was sixty-three, not seventy-one as expected: this could have been a copying error, because the step-daughter's age was forty-three, but it introduced further uncertainty, which was compounded when the Whitbourne baptisms data-base showed an Eleanor Hodges baptised in April 1798, a perfect fit for Eleanor Passey's age in the 1861 census. The registers index then gave Eleanor Hodges marrying Edward Passey (widower) at St Nicholas', for which the bride, groom and witnesses all signed the register. The St Nicholas' registers also include the burials of Edward's first wife and two of their four children between 1820 and 1823, the baptisms of Edward junior (1815) and Eleanor (1818), and Edward senior's burial in 1843. Together this confirmed the linkage to Eleanor Hodges and eliminated Eleanor Bullock.

In this instance, further thick description of Eleanor Hodges' life after her marriage was found in the Worcester Trade Directories, which list Edward Passey alone in 1820, two branches of the family business (Edward Passey, and Edward Passey Junior) from 1837 to 1842, the imprecise 'Passey and Co.' in 1847, but then 'Eleanor Passey and Co.' in 1850. Eleanor's will shed no further light on her Whitbourne connections, but it helped to locate her burial in February 1865, aged sixty-six, supporting her birth in or about 1798.

Eleanor Bullock remained untraced until it emerged that her place of birth was mis-recorded in the 1851 census as Withington, Herefordshire, where no Bullocks were baptised from 1775 to 1810. Chance evidence from her descendants, including an early nineteenth-century copy of her Whitbourne baptism register entry, a letter written by her in 1820 from Birmingham, and written evidence that her future husband Joseph Gardner had worked as a coachman in

Shelsley Beauchamp and Kidderminster, linked her securely to a marriage in Harborne in 1828. Both Eleanor and Joseph signed the marriage register. This marriage, at thirty-eight, agreed well with Birmingham evidence that Eleanor had only two children, one of whom died in infancy.

4.8.ii. Confirming Improbable Linkages

Unett Lloyd, eldest son of Charles and Jane, was baptised in Whitbourne in June 1836. His father was from the Lloyd family, blacksmiths in Whitbourne since the 1770s, but through his mother he was descended from affluent yeoman stock present in the parish from the seventeenth century, for whom Unett was a family name. In the 1851 census, Unett was living with his parents, aged fifteen, but he was not traced in 1861. By 1871, he was a blacksmith in Belbroughton, north Worcestershire, married and with four children. His rare Christian name, unusual occupation and correct age made this a strong linkage, even though the connection between Whitbourne and Belbroughton was a new pattern in the sample. His wife's name was given as Fanny, and her place of birth Ullingswick, Herefordshire; the two oldest children were listed as born in Martley, adjacent to Whitbourne.

Ullingswick was a medium sized parish, with a population in 1861 of 318 and a further 186 in the chapelry of Little Cowarne; the 1839 baptism register records Frances, daughter of James and Milborough Weaver, labourer. The 1841 census listed James Weaver as thatcher, and in 1851 he was still in Ullingswick, butcher and thatcher with six children, the eldest of whom was Fanny, aged eleven. No other possible baptisms of Frances or Fanny occurred in Ullingswick, but nor was there evidence for a marriage anywhere between Unett and Fanny.

In neighbouring Little Cowarne, however, Henry Lloyd, blacksmith, son of Charles Lloyd, blacksmith, married Frances Weaver, daughter of James Weaver, butcher, in 1863. Letitia Weaver (the name of Frances' sister) and Henry Symonds were witnesses, and in the Ullingswick baptism register Henry Charles Symonds was the son of a blacksmith. There are many high-weightings here: butcher and blacksmith were both uncommon occupations in rural Herefordshire (typically only one or two in a parish),⁹⁸ the infrequent names of the groom's father and the bride, the rare names of the brides' sister and mother, the absence of any Lloyd entries in the Ullingswick registers from 1830 to 1871, and the exact match of age and place of birth for Frances wife of Unett in all subsequent censuses, all pointed to the equivalence of Unett Lloyd and Henry Lloyd.

Before accepting a linkage involving a change of Christian name, very strong independent evidence was required, and this was later found. Firstly, the 1871 census gave Unett and Fanny's eldest two children as John H. Lloyd and Rose Lloyd, and the baptism registers in Martley have Rose as daughter of 'Unit and Frances', but her older brother as John Harvey Lloyd, son of 'Henry and Frances'. Secondly, while there was no 1861 census entry for Unett Lloyd, however spelled, there was a Henry Lloyd in Leominster, only a few kilometres from Ullingswick, and he was a shoeing smith, boarding with a master smith and bell-hanger. Henry's age was given as twenty-nine, when Unett was about twenty-five, and his birthplace as 'Sapey, Worcestershire' (an area just north of Whitbourne, half in Herefordshire and half in Worcestershire), but these are both minor discrepancies, plausibly attributable to the master smith completing the census return without consulting his four employees (two are listed simply as from 'Worcester'). The linkage via the Little Cowarne marriage was therefore

⁹⁸ The Kelly's and Post Office Directories for Herefordshire for 1851 to 1879 give only one blacksmith for Ullingswick and one for Little Cowarne

accepted, Mrs Fanny Lloyd was identified as the daughter of James and Milborough Weaver, and Unett was equated with Henry.

4.9 Summary

The method which has been developed for this study has been designed to be rigorous and replicable, in order to produce meaningful evidence for the migration paths of the chosen Herefordshire sample. Although it uses a small sample, and sources beyond the parish registers and CEBs, and therefore risks bias in the data-set obtained, these effects have been minimised as far as possible. Life-histories, to flesh out and challenge the aggregative findings, have deliberately been used to explore groups which may otherwise be under-represented, especially married women and eighteenth-century individuals who were much harder to trace than later cohorts. The basic tools of the classic Family Reconstitution method have been adapted for use in migration studies, and in a sample originating in a small rural parish in an area about which relatively little is known. The following two chapters set out the results obtained from an initial analysis of the data-set, and then discuss what these results may reveal about migration and family dispersal in hitherto under-researched regions.

CHAPTER FIVE: RESULTS

5.1 Introduction

This study has collected data on the migration of a sample of individuals descended from the natives of the parish of Whitbourne, tracing their places of residence as far as possible from 1700 onwards. In some tribes this has involved six generations, and while it has been concentrated geographically in the south and west of England, it has extended far beyond this. From an initial sample of 830 Whitbourne baptisms (23.9% of the parish baptisms in the time period), 1451 of them and their descendants were successfully traced, enabling the accumulation of quantitative and life-history data, in cross-section and longitudinally over multiple generations.

This chapter presents the analysis of these migrations in three main sections: from parish of baptism to parish of marriage, from baptism to burial, and from baptism to parish of residence in 1871 for those individuals still alive then. All these categories need some qualification: analysis was restricted to individuals aged ten and over; parish of baptism or burial was replaced by parish of birth or death where these were known to be different; parish of birth sometimes required clarification; and the number of traced individuals varied considerably in the different sub-sections of the analysis, restricting the possibilities for cross-comparisons.

The migration analysis was restricted to individuals traced to at least age ten. This was based ultimately on observation of the data pool, in which almost all children younger than ten were still resident with family members, and few were employed (Figure 3.3). A small minority in

the early censuses were working away from home soon after this age, for example James Bullock (1830-) appears 'age 13' in 1841 as one of four servants on a large farm in Stanford Bishop (7 km from Whitbourne), while his parents and five of his seven siblings remained at the family home in Badleywood. Many children made their first change of residence while still apparently living with their family of birth, for example Jeremiah and Susannah Burraston moved from Whitbourne to Knightwick between 1808 and 1810 with five children under fifteen, and Mary Ann Gould (Rowberry) (1835-1857) moved with her parents from Great Witley to Shelsley Beauchamp between 1835 and 1838.

The cut-off at age ten is consistent with a variety of other sources. Opportunities for children's employment have probably always varied according to the type of work involved, and there is evidence that there has also been variation through historical time. Maximum employment for children under ten in the modern period was perhaps in the early nineteenth century, particularly in factory work and, where applicable, in mining, even if the average age for starting work was then between thirteen and fifteen.¹ From 1845 it became illegal to employ children under eight, and children aged eight to twelve could only be employed part-time, although implementation and interpretation of such legislation no doubt varied.² It has been suggested that the 'end of childhood' in the seventeenth and eighteenth centuries was at about age fifteen, and the age of entering apprenticeship fell from about seventeen in many

¹ Sara Horrell and Jane Humphries, "'The Exploitation of Little Children': Child Labor and the Family Economy in the Industrial Revolution', *Explorations in Economic History* 32 (1995): 485-516; Jane Humphries, 'At What Cost Was Pre-Eminence Purchased? Child Labour and the First Industrial Revolution.' in *Experiencing Wages: Social and Cultural Aspects of Wage Forms in Europe since 1500*, ed. Peter Scholliers and Leonard Schwarz (New York and Oxford: Berghahn Books, 2003): 251-68

² Michael Anderson, *Family Structure in Nineteenth-Century Lancashire* (Cambridge: Cambridge University Press, 1971), p. 22

trades to fifteen by the early nineteenth century.³ At the other extreme, parish apprenticeships for paupers were often begun much younger: in Colyton, Devon, this averaged about ten and a half in the eighteenth and early nineteenth centuries,⁴ and in late eighteenth-century Whitbourne the apprentices were often under ten.⁵ In the 1851 Hereford census, 1.5% of boys and 0.3% of girls aged five to nine were listed as employed, compared with 32.2% of boys and 12.7% of girls aged ten to fourteen.⁶

Place of baptism was used in lieu of birthplace, unless a different birthplace was known, and because birth to baptism intervals were seldom known. Substantial mobility was indicated by John Walker (Hodges), admitted into the Church in Whitbourne in 1790 ‘having been privately baptised in London’, and occasionally there was evidence for birth and baptism in different parishes, for example Edward and Margaret Gomery probably lived in Whitbourne before moving to Claines in about 1818, but their first three children were baptised in Bromyard at the Independent Church, the fourth was baptised in 1819 at the city centre Countess of Huntingdon’s Chapel, and the last five were baptised at the Angel Street Congregational Church, although the youngest had also been baptised in Claines parish church four months previously, aged four months.

Similarly, burial place was used in lieu of place of death unless the latter was known, even though there was certainly some transport of corpses among the sample. This practice was not

³ Horrell and Humphries, ‘“The Exploitation of Little Children”’; Patrick Wallis et al., ‘Leaving Home and Entering Service: The Age of Apprenticeship in Early Modern London’, *Continuity and Change* 25 (2010): 377-404

⁴ Pamela Sharpe, ‘Poor Children as Apprentices in Colyton, 1598-1830’, *Continuity and Change* 6 (1991): 253-70

⁵ Since the Whitbourne parish apprentices were all bound to farmers within the parish, they do not appear as migrants and so this does not affect the analysis; see the Whitbourne Parish Book Apprentice Lists, 1767-1831, HRO AL92/2

⁶ H. Cunningham, ‘The Employment and Unemployment of Children in England C. 1680-1851’, *Past and Present* 126 (1990): 115-50

confined to the poor, although parishes were required to bear the cost of pauper burials. In one Kent parish with detailed eighteenth-century burial records, over a quarter of internments in a twenty-four year period have been found to be ‘imported’ corpses, most from within 8 km, but some from London, 55 km away.⁷ In another study, of mid nineteenth-century Kent, corpses from a range of social classes were found to have been imported for burial, some from beyond Kent and London.⁸ Within London, some parishes appear to have offered burial grounds of choice, to the extent of accepting 5% of all burials within the Bills of Mortality in some years,⁹ and traffic of corpses between the capital’s parishes may in fact have been taking place among both rich and poor, from the sixteenth century onwards.¹⁰

Examples of transport of corpses over more than one parochial boundary in the present study are Ann Walton (Combey) (1798-1833), baptised and buried in Bromyard but ‘resident in Worcester’ at her death (24 km from Bromyard); John Burraston (1760-1846), baptised in Whitbourne and buried in Eastham with his wife, but registered as having died in the Tenbury Workhouse (8 km); Samuel Gomery (1788-1851), baptised and buried in Whitbourne, died in Cheltenham (54 km); and the infant John Lloyd (1819) was buried in Whitbourne from Marylebone (196 km).

Place of birth listings in the censuses often varied (see discussion in section 4.4), and when baptism registers or other sources were not readily available for cross-checking, the more specific option was chosen. Thus Elizabeth Vernals (1839-) married in Birmingham and her

⁷ R. Schofield, ‘Traffic in Corpses: Some Evidence from Barming, Kent (1788-1812)’, *Local Population Studies* 33 (1984): 49-53

⁸ Audrey Perkyns, ‘Migration and Mobility in Six Kentish Parishes, 1851-1881’, *Local Population Studies* 63 (1999): 30-70

⁹ Jeremy Boulton and Leonard Schwarz, ‘Yet Another Inquiry into the Trustworthiness of Eighteenth-Century London’s Bills of Mortality’, *Local Population Studies* 85 (2010): 28-45

¹⁰ Peter Razzell, ‘Infant Mortality in London, 1538-1850: A Methodological Study’, *Local Population Studies* 87 (2011): 45-64

husband was listed in the 1861 census as both born and living in Handsworth, but in 1871 his place of birth was given as Fulbrook, Oxon, so this was taken as the correct place, in view of the tendency for CEBs to list urban residents as natives. Where the census differed from the baptism registers, cases were taken on their own merits. For example Richard Walton (Combey) was baptised in Stanford Bishop in 1789, and his father was described in the register as a pauper, which was taken to mean that he was in receipt of Stanford parish poor relief. In the 1851 and 1861 censuses, however, Richard was listed as born in the neighbouring parish of Acton Beauchamp. Since all Richard's siblings were also baptised in Stanford Bishop, and by 1851 he had moved away and was a widower living with his daughter in Hallow (22 km from Stanford Bishop), his birth was allocated to Stanford, following the baptism entry with its specific reference to his father as a parish pauper, in preference to a non-local census.

Distances were obtained using the AA route-planner,¹¹ using only contemporary roads and bridges, and more direct minor roads where possible. The only exception was Holt Fleet, just north of Worcester, where an important ferry service operated for many years before the bridge was opened in 1830, and so river crossings here were used throughout. Approximations were used where necessary: one bride was listed in the 1861 census as born in 'London, Surrey' but her parish of birth, although given, was illegible, so she was entered as from 200 km. In the case of marriage partners both born and marrying in Birmingham or in Worcester city, with a parish not specified, the distance was assigned as a standard 1 km.

¹¹ www.theaa.com/route-planner, first accessed September 2010

With the exception of the journey from Whitbourne to Lower Sapey, for which even in the twenty-first century there are several green roads but no direct metalled route, it was considered that this method produced an acceptable approximation to eighteenth- and nineteenth-century travel. In an area where communication networks have historically been restricted by rivers and floods, and where the many small ferries and fords were not usable all year round, a simpler system of concentric circles or distances ‘as the crow flies’ was considered to be inappropriate.

5.2 Migration Between Baptism and Marriage

5.2.i. Exogamy *versus* Baptism to Marriage Distance

Mobility between birth and marriage is generally researched via exogamy, ‘The practice of marrying a partner from a different community, occupation or social group,’¹² or more pertinently when the bride and groom had different parishes of residence immediately before the wedding,¹³ a period defined as four weeks, for banns or licence, by Hardwicke’s Marriage Act of 1754. Snell considers that Hardwicke is ‘abundantly clear’ that residence should be the key factor, not parish of legal settlement or birth.¹⁴

Conventional exogamy studies are therefore only using a very brief time window, and may give a false impression of mobility, since they need say nothing about mobility prior to the

¹²Leslie Bradley, *A Glossary for Local Population Studies*, vol. 1 (Second edn; Local Population Studies Supplements; Matlock: Local Population Studies, 1978), p. 10

¹³K. D. M. Snell, ‘English Rural Societies and Geographical Marital Endogamy, 1700-1837’, *Economic History Review* 55 (2002): 262-98, pp. 268-72

¹⁴ *Ibid.* p. 269

decision to marry, although this is sometimes implied in the literature.¹⁵ Some local studies can reveal differences between parishes, perhaps related to their size or transport networks, and suggest changing patterns through time.¹⁶ However, following a detailed analysis of predominantly rural marriage in the later eighteenth century, Edwards noted that although such research ‘provides a useful and readily accessible statement of both the scale and pattern of interaction . . . to step beyond them and argue that these data provide a complete statement of mobility and migration in the pre-industrial period would be unrealistic.’¹⁷

Nevertheless exogamy, or the related spatial measurement of ‘marriage horizons,’ defined by Bradley as ‘the radius within which a specific percentage of the extra-parochial partners reside; for example, “90% of partners from outside the parish come from within a radius of fifteen miles,”’¹⁸ remains a tempting and convenient basis for research, and has sometimes been taken as a surrogate for mobility before marriage. Exogamy is typically found to be about 30% in much of the eighteenth and nineteenth centuries,¹⁹ although it is usually lower in larger parishes, and marriage horizons are less in urban areas.²⁰

Several scholars have now challenged the equivalence of marriage horizons and mobility before marriage. Firstly, the short-term nature of some marriage partners’ residence was supported by a study of mobility in a late eighteenth-century Berkshire parish with

¹⁵ Rebecca Probert and Liam D’Arcy Brown, ‘The Impact of the Clandestine Marriages Act: Three Case-Studies in Conformity’, *Continuity and Change* 23 (2008): 309-30

¹⁶ A. Constant, ‘The Geographical Background of Inter-Village Population Movements in Northamptonshire and Huntingdonshire, 1754-1943’, *Geography* 33 (1948): 78-88

¹⁷ William John Edwards, ‘Marriage and Mobility 1754 -1810: An Examination of the Anglican Marriage Registers of Selected Shropshire Parishes’ (Queen Mary College, University of London, London, 1979), pp. 332 and 335; see also Ian Whyte, *Migration and Society in Britain, 1550-1830* (Social History in Perspective; Basingstoke: Macmillan Press, 2000), p. 46

¹⁸ Bradley, *A Glossary*, p. 15

¹⁹ Bessie Maltby, ‘Easingwold Marriage Horizons’, *Local Population Studies* 2 (1969): 36-39; Bessie Maltby, ‘Parish Registers and the Problem of Mobility’, *Local Population Studies* 6 (1971): 32-42; Alan Hunter, ‘Marriage Horizons and Seasonality: A Comparison’, *Local Population Studies* 35 (1985): 38-42

²⁰ Grace Wyatt, ‘Population Change and Stability in a Cheshire Parish During the Eighteenth Century’, *Local Population Studies* 43 (1989): 47-54

particularly detailed records. Of the 104 couples married there between 1779 and 1801, only fifty of the seventy-two grooms claiming to be 'of this parish' were demonstrably permanently resident there, and only twenty-nine of the 104 brides.²¹

Secondly, the baptism registers of Stanhope in Weardale, County Durham, give the birthplaces of the parents between 1798 and 1812, and these have been used to assess migration before marriage. Cross-referencing to the marriage registers gave a set of 587 couples with known birth-place, who were married and went on to baptise at least some of their children in the parish. There was no significant difference between the sexes, but 15-16% of those designated 'of this parish' had not been born there, so had migrated there before marriage. A further 208 couples did not reappear in the baptism registers, and most of these could best be explained by out-migration.²²

Similarly, a comparison of marriage horizons and migration in Pocklington, in the East Riding, used the parish baptism registers from 1779 to 1783 in which the place of residence of both grandfathers are given, in the form 'baptism of n son of m (son of x of place A) and y (daughter of z of place B)'. Exogamy as calculated conventionally from the marriage registers was 17% (29% for men and 6% for women), but 57% of the brides' fathers were resident outside the parish at the time of the first linked baptism. The registers implied that only 8% of all marriage partners were resident over 16 km away at the time of marriage, and most of these were grooms, but 31% of the brides' fathers were resident beyond 16 km at the first linked baptism, suggesting that some of these women were in-migrants to Pocklington. The

²¹ Margaret Escott, 'Residential Mobility in a Late Eighteenth-Century Parish: Binfield, Berkshire, 1779-1801', *Local Population Studies* 40 (1988): 20-35

²² A. J. Pain and M. T. Smith, 'Do Marriage Horizons Accurately Measure Migration? A Test Case from Stanhope Parish, County Durham', *Local Population Studies* 33 (1984): 44-48

parish population increased substantially in the later eighteenth century, from 943 in 1743 to 1,502 in 1801, and it was suggested that this was fuelled by in-migration of women, a migration that was invisible with conventional use of marriage horizons.²³

Finally, an indication of in-migration before marriage can be derived for any reconstituted parishes from the proportion of brides and grooms who are themselves absent from the baptism registers of the parish in which they married. Where the registers give additional information, more precise estimates can be obtained. In Colyton, Devon, they include the mother's parish of birth from 1765 to 1777, and this twelve-year period has given a snap-shot of female mobility in this locality, with 45% of the 366 women being Colyton natives, 34% from within 8 km, 10% from 8-16 km and all but one of the remaining 11% from Devon, Dorset and Somerset, mainly within 40 km; the longest-distance migrant was from the Isle of Wight.²⁴

One practical factor complicating these analyses is that banns involved a fee, so if both partners successfully claimed residence in the same parish, this cost was halved.

5.2.ii. Method

A reliable method for measuring the net individual distance moved between birth or baptism and first marriage would enable comparison of net mobility in different sub-groups of a population in the early years of life. A limitation is that this excludes non-marriers, perhaps a

²³ Roger A Bellingham, 'The Use of Marriage Horizons to Measure Migration: Some Conclusions from a Study of Pocklington, East Yorkshire in the Late Eighteenth Century', *Local Population Studies* 44 (1990): 52-55

²⁴ E.A Wrigley, 'A Note on the Life-Time Mobility of Married Women in a Parish Population in the Later Eighteenth Century', *Local Population Studies* 18 (1977): 22-29

quarter of the adult population at the end of the seventeenth century, although this probably fell to about one in twenty before rising again to about a tenth by the mid nineteenth century.²⁵ These national estimates fit approximately with the results of a study on the 35-44 age group in the 1851 census for Preston, where 12% of men and 16% of women were ‘never-married’, but it should be noted that in the surrounding rural areas over twice the proportion of men were bachelors; this has been attributed to the imbalance in numbers of the sexes in the two places, with many more young men migrating into the town, and marrying up to a decade younger than their rural contemporaries.²⁶

Net movement between baptism and marriage may also be far removed from the gross migration undertaken in this time, and the extent of the difference may vary according to how mobile the local population was, or individually by social class, occupation and other variables. In districts where annual hirings for farm service continued late into the nineteenth century, for example, gross migration before marriage may have been far greater than where the custom ceased earlier, since annual movement to a new place of employment was a possibility if not the norm; in the absence of detailed biographical material, quantifying this is problematic.

For the present study of baptism to marriage migration, net migration was used, with a ‘table query’ generated from the descendants table, selecting ‘married’, ‘place of birth/baptism not null’, and ‘place of marriage not null’, and showing gender, age at marriage, year of marriage, unique number, ancestor uid, place of baptism/birth code, place of marriage code, spouse place of baptism/birth code, occupation of self and occupation of spouse. From the 1451

²⁵ E. Anthony Wrigley and Roger S. Schofield, *The Population History of England. 1541-1871. A Reconstruction* (Cambridge: Cambridge University Press, 1989; tr. from 1981, Edward Arnold, London), p. 260

²⁶ Anderson, *Family Structure*, p. 133

records in the Descendants Table, this produced 564 known marriages (39% of baptisms leading to a known marriage) and when those records with incomplete data were removed, this gave 457 marriages suitable for analysis. (seventy-six had no known year of marriage, seventy-nine had no age at marriage and ninety-six had no parish of marriage.) Five additional fields were then added, for parish of baptism/birth of self and spouse, parish of marriage, and distance in kilometres between parishes of baptism/birth and of marriage. These fields were filled manually, the first three from the paper records on each individual and the others using the route-planner.

5.2.iii. Exogamy and Marriage Horizons in the Whitbourne Sample

An analysis of conventionally-defined exogamous marriages in the Whitbourne registers after Hardwicke's Act, as summarised in **Table 5.1**, shows the change in marriage horizons with time, with a proportion of exogamous marriages comparable to that found in other studies.

Table 5.1: Exogamous Marriages in Whitbourne Registers, in Sample Decades¹

parish of exogamous spouse	km ²	1760-69	1790-99	1820-29	1840-49	1860-69
Tedstone Delamere	4	1m	1m 2f	1m		
Doddenham	4		1f			
Alfrick	6				1m	
Bromyard + townships	6	2m	1f	1m 1f	3m	3m
Suckley	7	1m				1m
Martley	8		1m			
Wichenford	8			1m		
Great Shelsley	12	1m				
Acton Beauchamp	12	1m				
Avenbury	12					1m
Bishops Frome	14	1m			1m	
Stoke Lacy	15					1m
Much Cowarne	17					1m
Worcester city parishes	17	1m	1m		2m	1m 1f
Grimley	18					1m
Claines	21					1m
Lindridge	21	1m				
Pudleston	21			1m		
Stourport	22					1m ⁵
Hawford, Worcs	23			1m		
Stoke Prior	23		1m			
Hope-under-Dinmore	26					1m
Welland, Worcs	27	1m				
Castlemorton, Worcs	29	1m				
Middleton-on-the-Hill	30	1m				
Monkland	32			1m		
Longdon, Worcs	36		1m			
Snitterfield, Warwicks	63			1m ³		
Blunsdon St Andrew, Wilts	99					1m ⁶
Madeley, Staffs	125					1m ⁷
Taunton, Somerset	178		1m			
London parishes	202				2m ⁴	1m ⁶
Nonington, Kent	311					1m ⁸
total marriages in decade		37	45	31	42	42
Exogamy		32%	22%	26%	21%	36%

m, f, represent male or female exogamous partners.

1. Includes all marriages, not only the tribes studied.
2. Distances from Whitbourne, derived as explained in section 5.1.
3. Clerk.
4. Westminster (no occupation given) and Islington (clockmaker).
5. Blacksmith.
6. Gardener, son of a gardener.
7. Schoolmaster.
8. Clerk (M.A.).

This table suggests firstly that Whitbourne experienced longer in-coming marriage horizons with time.²⁷ Although there were seven eighteenth-century grooms from further away than Worcester, seven of the eight who were resident beyond 50 km were nineteenth-century. Two of these long-distance grooms in the 1860s were a schoolmaster and a clergyman, while the other two were men in domestic service. Secondly, of the fifty-six exogamous marriages in Table 5.1, only six of the non-resident partners were women, and none of these came from further than Worcester. It may at first appear that this reflects an uxorilocal tradition, with men coming into the parish to marry more sedentary women, but it could equally well represent a tendency for women to move into the parish earlier in life than men, and perhaps have gained a legal settlement there after, for example, a twelve months' hiring. Thirdly, Whitbourne would appear to be broadly similar to other rural parishes which have been studied, with approximately 30% exogamy over this period.

The data in Table 5.1 has some other distinctive features, as summarised in **Table 5.2**. Bromyard and Tedstone Delamere both share common wastes along their boundaries with Whitbourne, and Bromyard and its townships had about three times Whitbourne's population. So it is unsurprising that these were the place of residence of almost a third of all exogamous marriage partners, outweighing the whole of the rest of the zone to 16 km. But although Worcester seems to have been a prominent source of exogamous spouses in Whitbourne, it only accounted for half of the marriage partners coming from 17-23 km away, despite its population of 30,400 in 1831²⁸ greatly exceeding the combined population of approximately 17,900 for the rest of this zone, which included Great Malvern.

²⁷ Pearson one-tailed correlation significant at 95% level

²⁸ Including suburbs and the extra-parochial St Michael's in the Cathedral precincts. Populations are for 1831 census, www.histpop.org, first accessed October 2010

Table 5.2: Areas of Residence of Exogamous Marriage Partners (see Table 5.1)

parish grouping where exogamous partner was resident	no. marriages
Bromyard and Tedstone Delamere (maximum 8 km)	16
1-16 km (excluding Bromyard and Tedstone Delamere)	12
Worcester & environs (17-23 km, including Claines)	7
17-23 km (excluding Worcester and Claines)	7
24-50 km	6
over 50 km	8

Although some information can be obtained in this way about lines of communication, and places which may have been important to the parish population, the limitations of conventional exogamy data for studying mobility, let alone migration, can be demonstrated with one example. The bridegroom who gave his place of residence as Welland in the 1760s was Unett (III) Hodges, fourth child in a family of eight, all of whom were baptised in Whitbourne. He still owned land in Whitbourne at the time of his marriage, although his first child was subsequently baptised in Welland. He later occupied land in Kempsey, just south of Worcester, and was buried in Wichenford, near Whitbourne. Conversely, Unett (III)'s wife is described in the marriage register as 'of this parish' but she was not baptised in Whitbourne.²⁹

As an alternative to conventional exogamy, in-migration before marriage can be measured where place of baptism of the 'non-native' spouses are known. The descendants data-base included 163 marriages in Whitbourne involving at least one Whitbourne native. Only eighty-six of these natives (53%) were women, showing that there was not a strong uxorilocal tradition and suggesting that women may not in fact have been more sedentary than men. Moreover, eighty-five of these marriages (52%) were to a non-native, defined as someone not baptised or registered as born in the parish, and this is much higher than the conventional exogamy rate of about 30% derived from marriage registers.

²⁹ Kempsey Land Tax, Film BA 823/3 (1788) WRO; Unett Hodges, 25 October 1814, Probate Film 439, WRO

Figure 5.1 shows the baptism to marriage distances for non-native spouses (where known) in these eighty-five marriages. Twenty-five of these marriages were before 1800, but only four of the non-native baptisms were located: three in Tedstone Delamere or Knightwick (only 4 and 2 km from Whitbourne respectively), but the fourth, a bridegroom, was baptised in Preston Wynne (23 km). The three local non-native spouses are all listed in the Whitbourne marriage register as ‘of this parish’, but the groom from Preston is described as resident there. Early longer-distance records of spouses’ baptisms could not be searched for reliably using the tools currently available, and mobility before marriage will therefore have been underestimated, because only the registers of nearby parishes could be searched systematically. After 1800, more tools were available, an increasing number of individuals survived until the 1851 census, and more longer-distance non-native spouses were traced. But the pattern remained predominantly short-distance, and this may still be an artefact of the data-collection method, with its less systematic searching at longer distance. This limitation of course applied in reverse to out-migration from the parish.

Figure 5.1: Whitbourne Marriages of Whitbourne Natives to Non-native Spouses

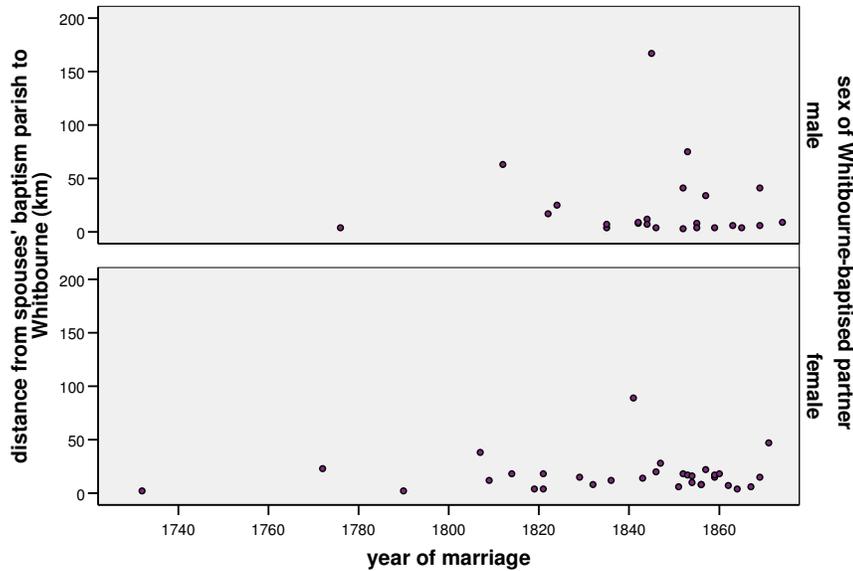


Figure 5.1 shows three other things. Firstly, and despite the results from conventional exogamy, there was no significant increase of baptism to marriage distance over time for the non-native partners of these Whitbourne marriages: occasional long-distance migrations into the parish before marriage were already part of village life by the early nineteenth century. Secondly, there was no significant difference between the mean distances moved by incoming men and women. But thirdly, it was predominantly the men of Whitbourne who were occasionally marrying women from more distant parts: **Table 5.3** lists the outliers who came from further away than Worcester and its suburbs. Although the sample is small, there may have been a tendency for brides to move from the east to Whitbourne while the grooms were from the west, especially in earlier decades. This may relate to differential employment opportunities or gender differences in social capital, and will be discussed further below. There may also be an indication that in-coming women were more mobile overall than men.

Table 5.3: Whitbourne Marriages of Natives with Spouse Baptised over 23 km away¹

sex²	year of marriage	baptism parish of spouse	distance and direction from Whitbourne (km)	location
f	1807	Bitterley, Salop	38 (NW)	between Ludlow and Titterstone Clec
f	1841	Brecon	89 (SW)	
f	1847	Leominster	28 (W)	
f	1871	Halesowen	47 (NE)	
mean distance moved by grooms			51	
m	1812	Birmingham	63 (NE)	
m	1824	Withington	25 (SW)	just north of Hereford
m	1845	Ketton, Notts	167 (NE)	
m	1852	Church Lench	41 (E)	north of Evesham
m	1853	Leamington	75 (E)	
m	1857	Ripple	34 (SE)	south of Upton-upon-Severn
m	1869	Hanbury	41 (NE)	east of Droitwich
mean distance moved by brides			64	

1. Where the birthplace of the spouse was in Herefordshire or Worcestershire, this has been checked against the relevant baptism registers; otherwise successive census returns have been used for cross-checking.

2. Sex of Whitbourne-baptised individual.

5.2.iv. Baptism to Marriage Distances for Whitbourne Marriages of Non-native Whitbourne Descendants

A special category of individuals were the ten who married in Whitbourne and were descended from Whitbourne natives but were themselves not Whitbourne natives because their ancestors had migrated from the parish. All of these ten were baptised within 12 km of Whitbourne, and eight were native to adjacent parishes.

There was no significant gender-based difference between the baptism to marriage distances of these returning descendants, but their grooms had moved significantly further than their

brides prior to marriage.³⁰ With baptism parishes within 12 km of Whitbourne and returning to Whitbourne for marriage, these ten may be designated as ‘almost-stayers’, who were themselves children of ‘almost-stayers’. More men returned to their ‘ancestral’ parish for marriage than women, which may have been a practical consequence of differential migration patterns in early adulthood (see section 5.2.v), perhaps reflecting more long-distance migration by women and making it less likely that they would marry in Whitbourne. Unlike the previous sample, of Whitbourne natives who also married there, there was no clear pattern among spouses of grooms migrating from the west and brides from the east.

Table 5.4: Marriages of Non-native Whitbourne Descendants in Whitbourne

sex¹	year of marriage	baptism parish of Whitbourne descendant (km from Whitbourne)	baptism parish of spouse (km from Whitbourne)
f	1841	Norton (6)	Hadzor, near Droitwich (29)
f	1863	Clifton-upon-Teme (7)	Grimley (18)
f	1868	Cradley (12)	Much Cowarne (17)
mean distance		8	21
m	1786	Tedstone Delamere (4)	-
m	1797	Bromyard (8)	-
m	1797	Suckley (7)	-
m	1817	Norton (6)	Norton (6)
m	1842	Norton (6)	Norton (6)
m	1854	Norton (6)	Tedstone Wafer (6)
m	1869	Martley (8)	Worcester St. Helen's (17)
mean distance		6	9

1. Sex of the Whitbourne descendant.

5.2.v. Changes in Baptism to Marriage Distances by Marriage Cohort

Because the sources available for different periods were different, the data was analysed in four sections: up to the start of standard baptism and burial registration (1700-1812); thence to

³⁰ One-tailed t-test, significant at 95%

civil marriage registration (1813-1836); thence to the detailed census period (1837-1850); and the full birth-place and nominal census period (1851-1871). As shown in **Table 5.5**, the proportion of women traced averaged 45% and never fell below a third of all marriers traced in any one time period. This was an important vindication of the research method, since women are much harder to trace than men.

Table 5.5: Marriages of All Whitbourne Descendants, by Period of Marriage

period	N	men	women (% of N)	no. for whom spouse's baptism parish was known (%)
1700-1812	136	78	58 (43)	60 (44)
1813-1836	114	70	44 (39)	97 (85)
1837-1850	54	26	28 (52)	53 (98)
1851-1871	147	74	73 (49)	134 (91)
total	451	248	203 (45)	344 (76)

For each period, all known distances between parishes of baptism and first marriage were plotted for the Whitbourne descendants and their spouses, and tested for any significant correlations.

a. 1700-1812 (Figures 5.2, 5.3 and 5.4)

No Whitbourne descendant traced in this period had a birth to marriage distance greater than 40 km, and many were very short-distance; one 1812 bride was a native of Birmingham (63 km from Whitbourne, the place of marriage). For the sixty individuals for whom the spouse's parish of birth was known (**Figure 5.4**), there was a very significant correlation between the distance moved by the two marriage partners between birth and marriage: mobile individuals tended to marry other mobile individuals, and *vice versa*.³¹

³¹ Pearson Correlation, two-tailed test, significant at 99%

Figure 5.2: Distance from Baptism to Marriage for Whitbourne Descendants, 1700-1812

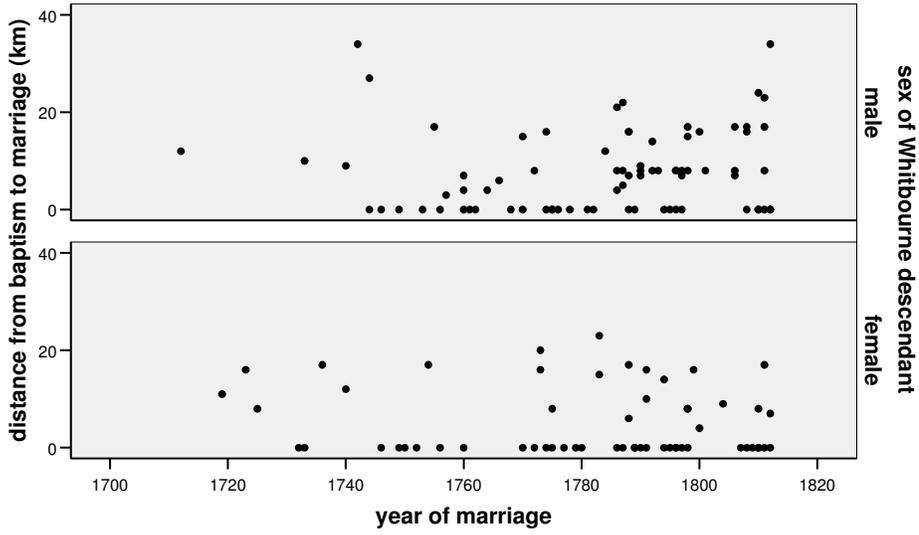


Figure 5.3: Distance from Baptism of Spouse to Marriage, 1700-1812

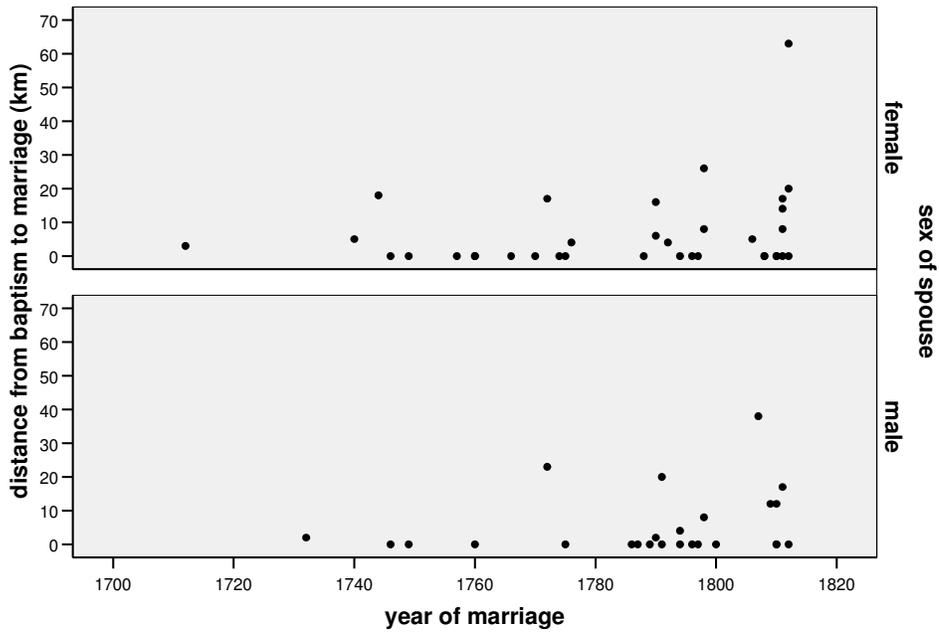
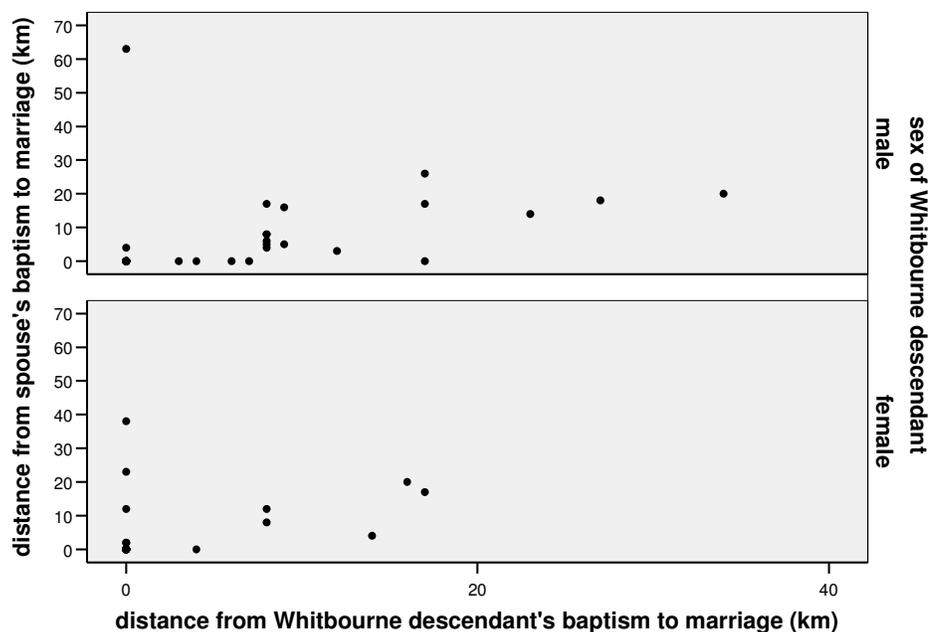


Figure 5.4: Distances from Baptisms to Marriage, 1700-1812



b. 1813-1836 (Figures 5.5, 5.6 and 5.7)

Most individuals traced in this period moved less than 40 km between baptism and marriage, but two women and one man migrated 40-60 km and one woman travelled 216 km. Similarly, there were two bride outliers with a birth to marriage distance greater than 200 km. For the ninety-seven individuals for whom the spouse's birth parish was known (**Figure 5.7**), there was again a very significant correlation between the distances moved by bride and groom before marriage.³²

³² Pearson Correlation, two-tailed test, significant at 99%

Figure 5.5: Distance from Baptism to Marriage for Whitbourne Descendants, 1813-1836

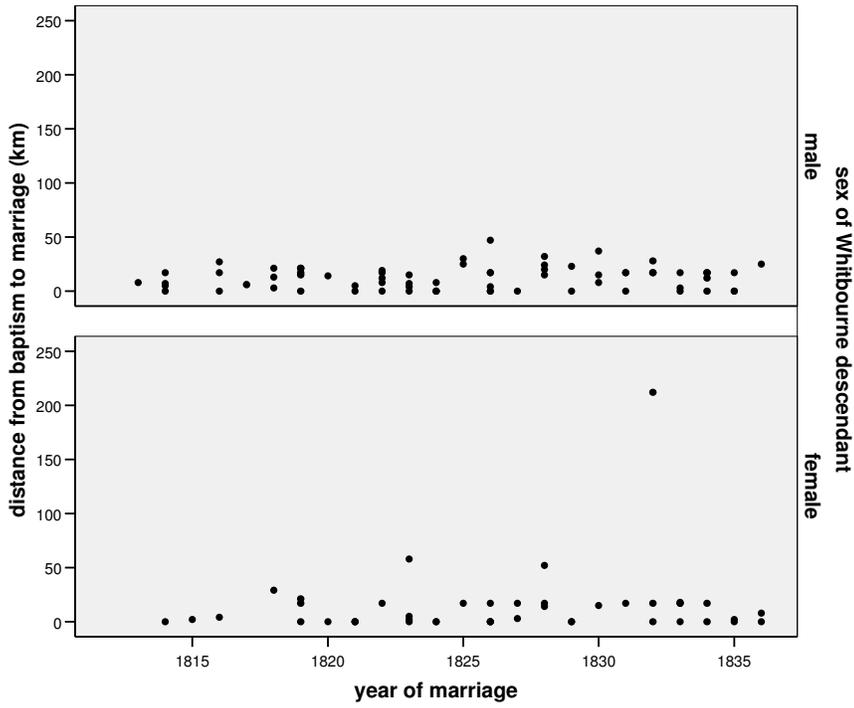


Figure 5.6: Distance from Baptism of Spouse to Marriage, 1813-1836

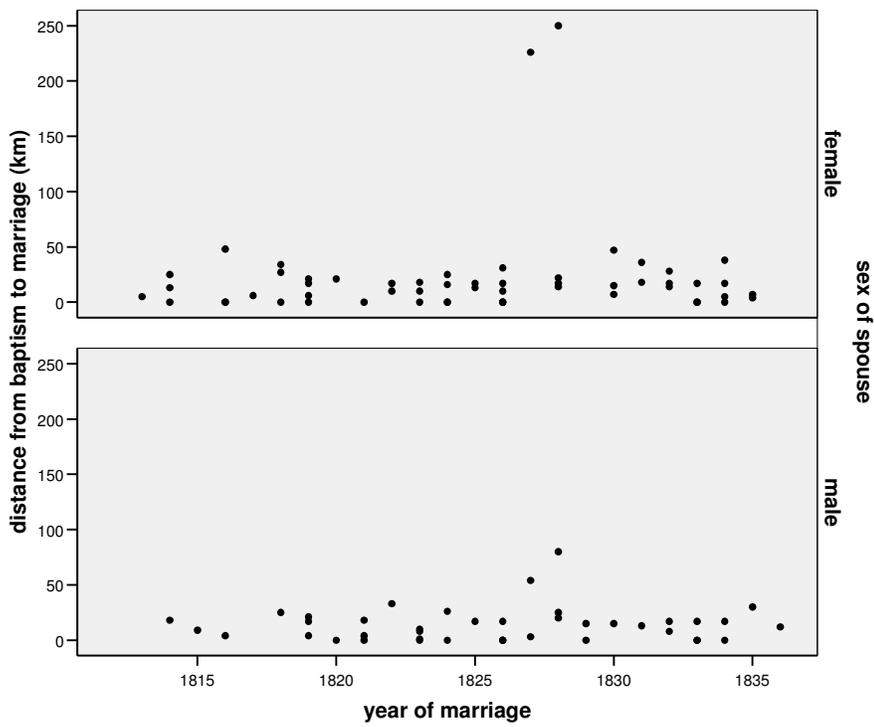
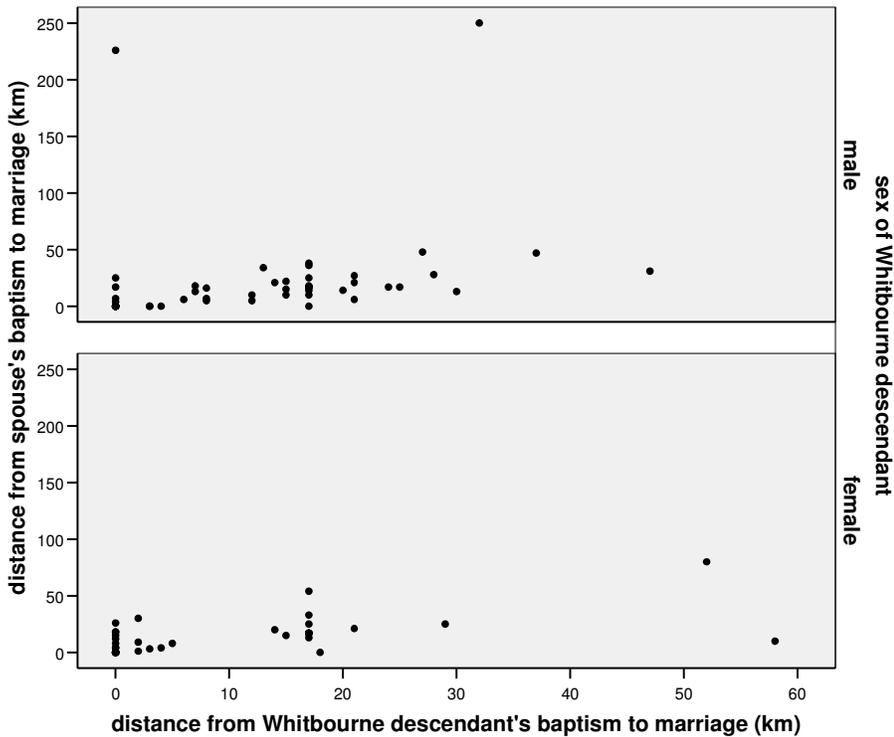


Figure 5.7: Distances from Baptisms to Marriage, 1813-1836



c. 1837-1850 (Figures 5.8, 5.9 and 5.10)

As before, women were traced over longer distances than men. The extreme outlier in this period was a woman, migrating 201 km to London before marriage; two others moved 60-80 km to Birmingham, where one married a man born in Birmingham while the other married a long-distance in-migrant. Although three brides of Whitbourne-descended men and four grooms of Whitbourne women migrated over 50 km before marriage, no Whitbourne men were themselves traced to marriages beyond 40 km from their birthplace. For the fifty-three individuals for whom the spouse's birth parish was known (**Figure 5.10**), there was a significant correlation between the distance moved by the two marriage partners before marriage.³³

³³ Pearson Correlation, two-tailed test, significant at 95%

Figure 5.8: Distance from Baptism to Marriage for Whitbourne Descendants, 1837-1850

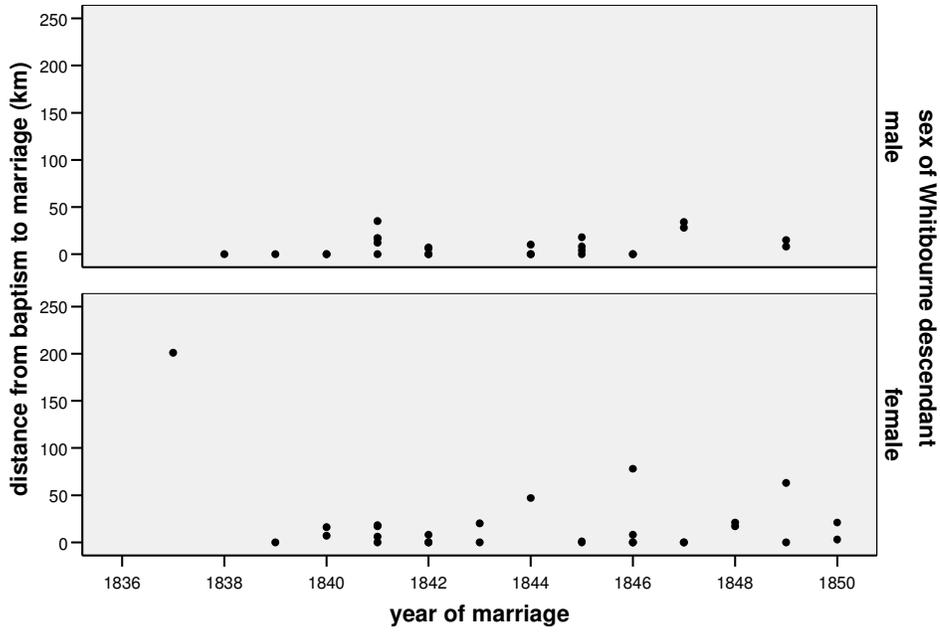


Figure 5.9: Distance from Baptism of Spouse to Marriage, 1837-1850

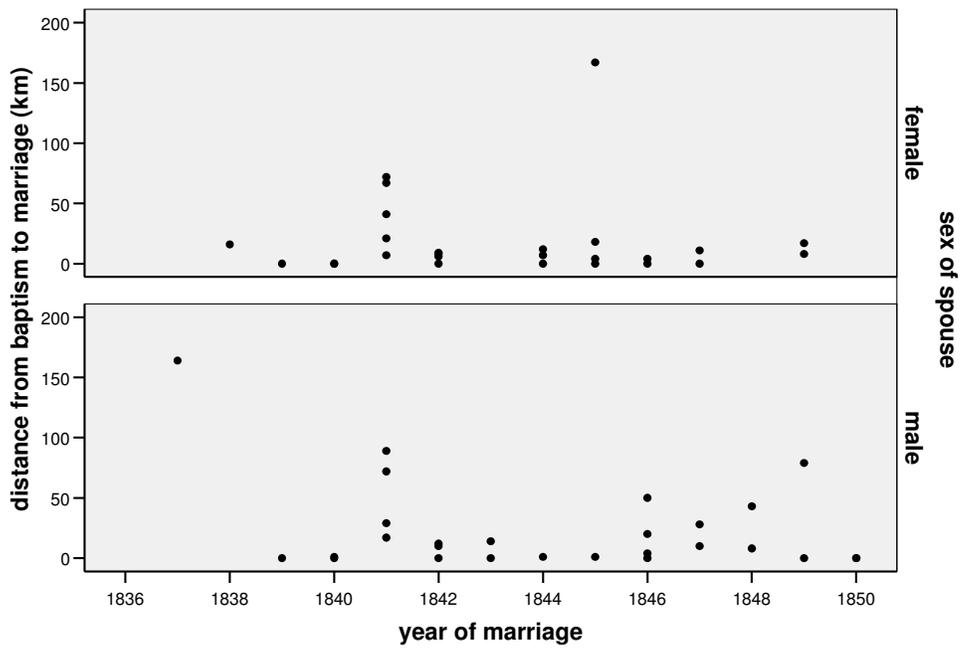
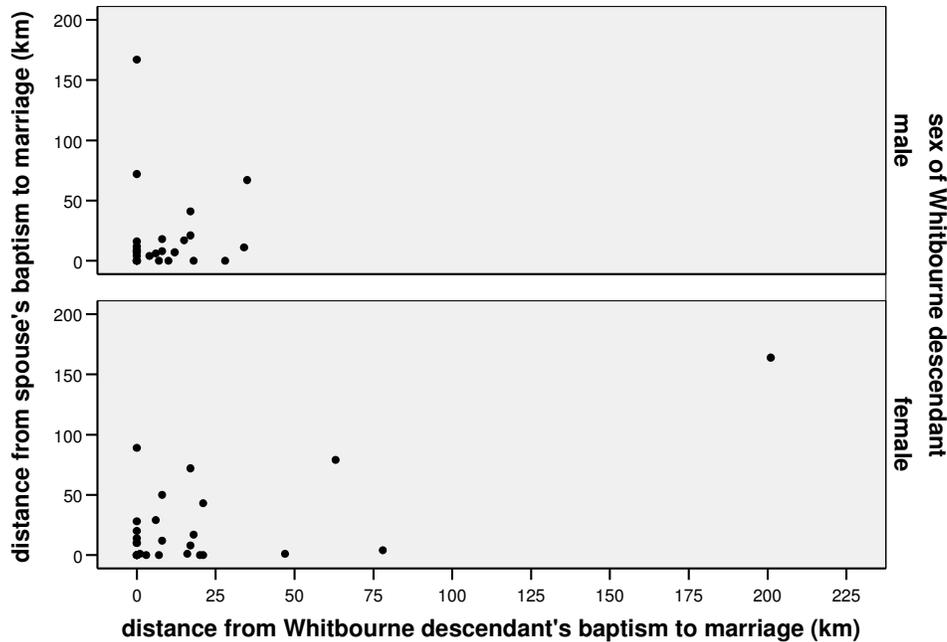


Figure 5.10: Distances from Baptisms to Marriage, 1837-1850



d. 1851-1871 (Figures 5.11, 5.12 and 5.13)

This was the first period when Whitbourne-descended individuals and their spouses were traced to similar distances before marriage. Also more of the men, both Whitbourne descendants and the grooms of Whitbourne women, migrated further than women before marriage, although the gender difference was not significant. Three male Whitbourne descendants moved more than 100 km, compared to only one woman, while seven women moved more than 50 km. Five grooms migrated over 100 km compared to two brides.

There was no significant correlation between the distances moved by marriage partners prior to marriage in this time period. It was considered possible that this was due in part to the increasing proportion of individuals born in urban areas, who were more likely to move only a short distance before marriage. Although the sample was too small for independent analysis,

excluding the twelve Whitbourne descendants and spouses who were born in the Black Country, Birmingham and London did give a slightly stronger (but still non-significant) correlation. An additional reason may have been that the sample was more dispersed by this period, and other factors were coming into play. This will be explored in the following sections.

Figure 5.11: Distance from Baptism to Marriage for Whitbourne Descendants, 1851-1871

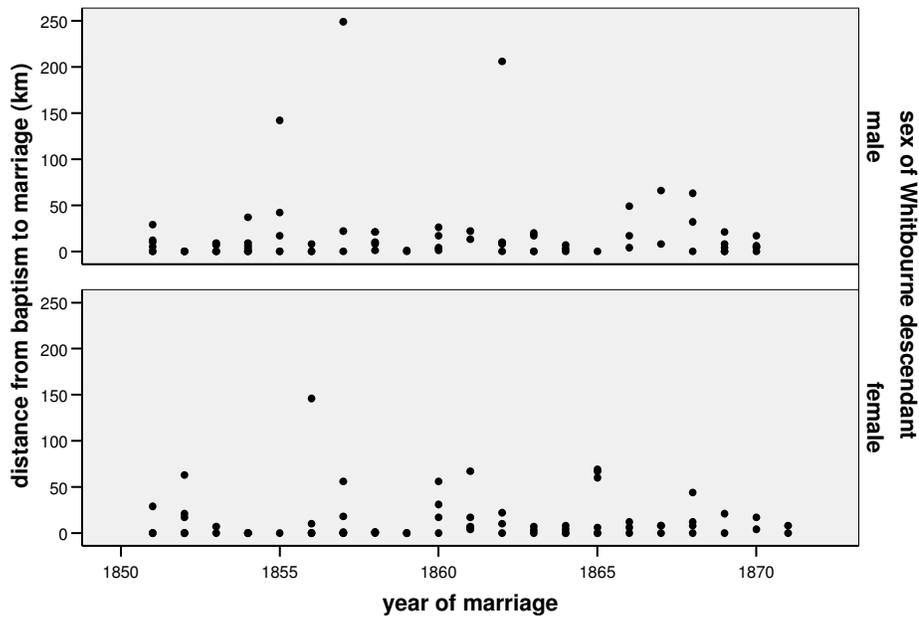


Figure 5.12: Distance from Baptism of Spouse to Marriage, 1851-1871

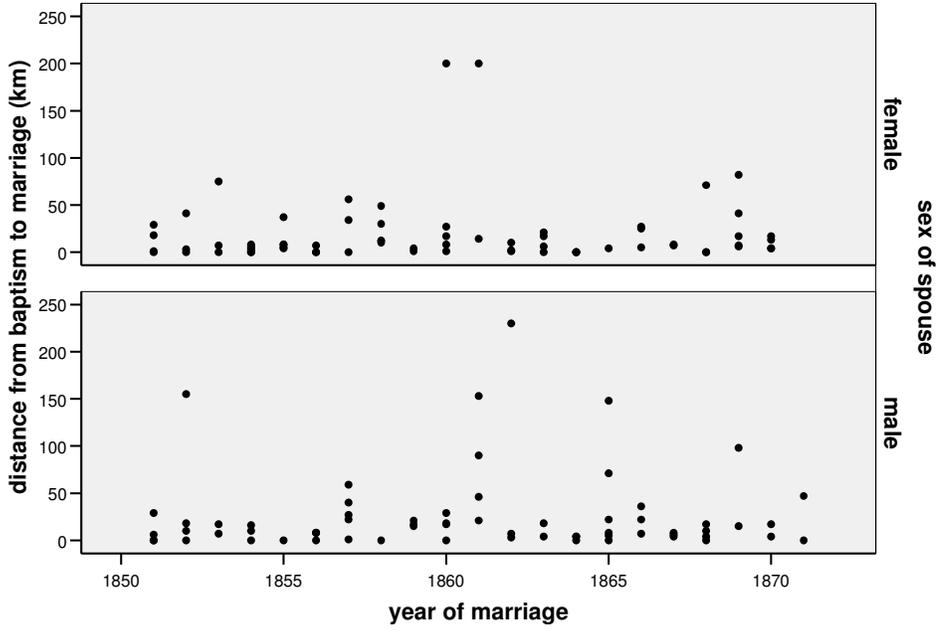
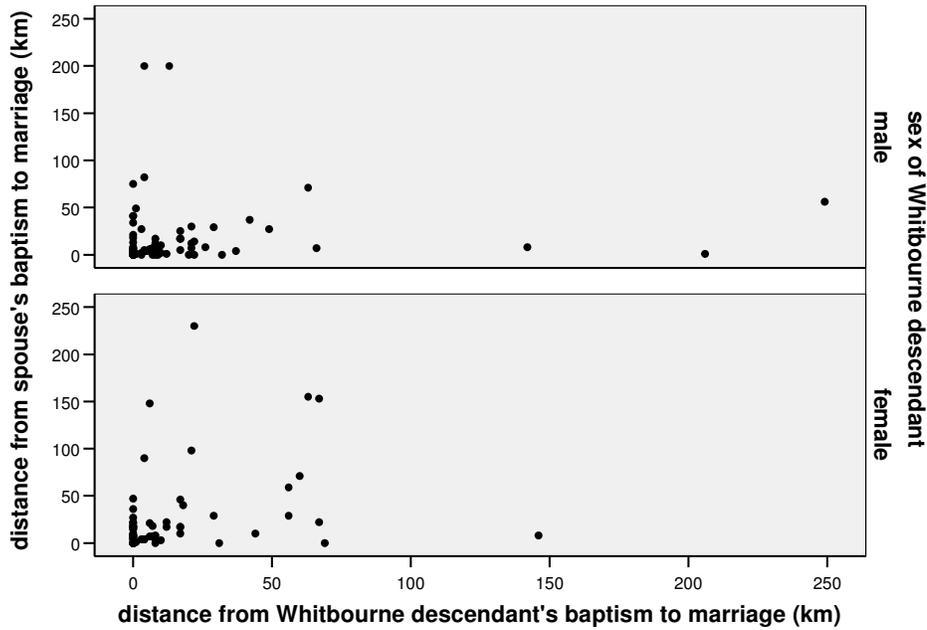


Figure 5.13: Distances from Baptisms to Marriage, 1851-1871



In summary, in every time period up to the mid nineteenth century, Whitbourne women were traced further than the men, but the longest-distance migrants were the non-Whitbourne spouses. There was also a statistically significant correlation between distances migrated before marriage by the respective brides and grooms. While it is unsurprising that non-migrants tended to marry each other, marriages between migrants suggest that positive selection processes were at work. The pattern in 1851-1871, when men were as mobile as women, Whitbourne descendants were as mobile as their spouses, and migrants were no longer tending to marry migrants, sets this period apart from the earlier ones.³⁴

5.2.vi. Male Baptism to Marriage Distances, by Occupation

The relationship between occupation and migration distance before marriage was analysed using the same time periods as above. Female occupation was excluded because it is both less standardised and more complex than for men, and is rarely known before 1851. For example Hannah James, widow of a Whitbourne smallholder, married Mark Clark, an independent smallholder, in 1832; on Mark's death she left the parish and entered domestic service as a housekeeper and later a companion to a retired female farmer. In her lifetime she went from farmer's wife to domestic servant, the reverse of a 'normal' pattern.

Occupational data was coded to give a more nuanced picture of local employment than the simple Primary, Secondary and Tertiary divisions, and a more historically relevant one than the modern socio-economic groupings.³⁵

³⁴ This cohort is coincidentally the one on which many of Ravenstein's conclusions were based

³⁵ Edward Higgs, *Making Sense of the Census Revisited. Census Records for England and Wales, 1801-1901* (London: Institute of Historical Research, 2005), pp. 153-64

Occupational codes

- 1 yeoman or farmer
- 2 agricultural labourer and labourer, including labourer in brickyard or iron works³⁶
- 3 domestic servant including groom or coachman
- 4 domestic gardener
- 5 carpenter, cooper, wheelwright or spade-tree maker
- 6 tailor or shoemaker
- 7 mason or bricklayer
- 8 Whitbourne Parish Apprentice
- 9 interior building trades (painter, plasterer, glazier)
- 10 urban service trades (food, shop staff, clerk, fly proprietor, toll collector, porter, police constable)
- 11 self employed nurseryman, builder or pump-maker
- 12 iron and brass manufacturing
- 13 blacksmith

³⁶ Although this category risked conflating skilled agricultural workers with unskilled labourers, the latter designations were relatively rare, and tended to be a brief life-cycle phase

Table 5.6: Numbers of Whitbourne-descended Men with Known Occupational Data, Married in each Time Period

occupation code	before 1813	1813-1836	1837-1850	1851-1871	total
1	25	10	0	6	41
2	10	32	15	26	83
3	0	0	1	6	7
4	1	4	0	3	8
5	5	7	5	9	26
6	2	4	1	4	11
7	2	0	2	2	6
8	1	0	0	0	1
9	0	0	0	1	1
10	0	3	1	5	9
11	0	2	0	0	2
12	0	0	1	5	6
13	0	4	0	4	8
total	46	66	26	71	209
no. men marrying in time period (Table 5.5)	78	70	26	74	248
% of men for whom occupational data was known	58.9	94.3	100.0	95.9	84.3

The data relating male migration distances before marriage and occupations are given in **Figures 5.14 to 5.17**. Agricultural labourers, for whom most data was available, were mobile within a limited radius before marriage, with only seven (12%) moving further than 20 km in the first three time periods. Yeomen were even more restricted, with only two traced more than 20 km before marriage: one of these was 21 km, the other, in 1812, may have been a conventional example of exogamy (Benjamin Portman married in Burghill near Hereford (34 km) but returned with his bride to Winslow and then Whitbourne to farm). Male domestic servants were among the longest-distance migrants, and the coachmen were the most mobile; by contrast, domestic gardeners seem to become less mobile with time: it is possible that these two occupations were linked in certain circumstances, since some individuals switched

between them. Trades which may have transferred readily between rural and urban settings (the woodworking, leather and cloth trades, codes 5 and 6, and the metal workers, codes 12 and 13) seem to have been flexible, with some long-distance migrants.

Two men definitely migrated more than 100 km before marriage (**Figure 5.17**), namely Edward Combey, a coachman, baptised in Whitbourne and married in Macclesfield, and James Vernals, a boiler maker who moved to Lincoln. In addition, Alfred Kreisa (Vernal), a tailor (code 6), was born in Marylebone and married in Basford, Derbyshire, although he and his wife subsequently lived in Marylebone.

Figure 5.14: Distance from Baptism to Marriage for Men, by Occupation, 1700-1812

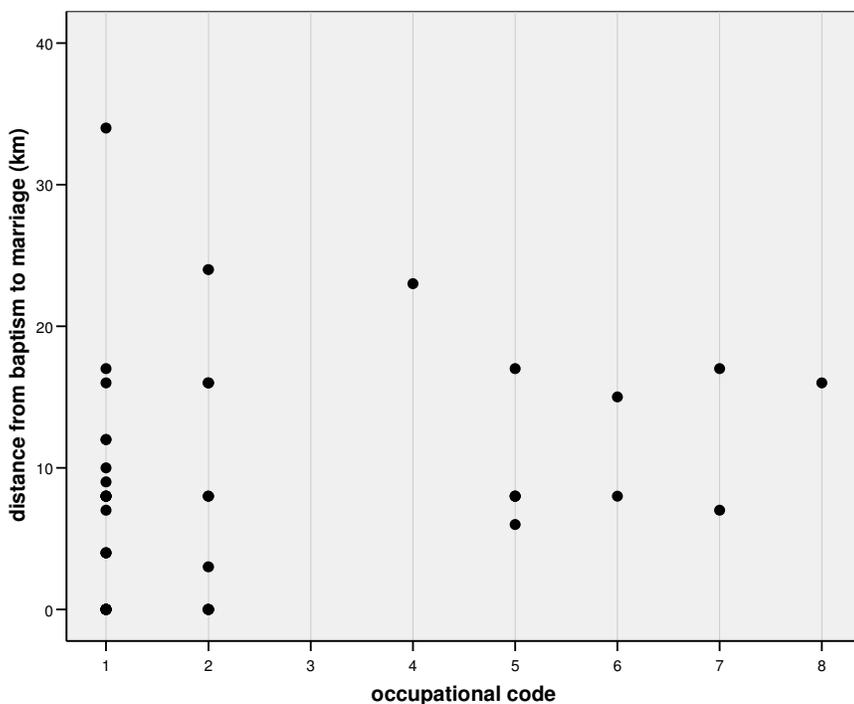


Figure 5.15: Distance from Baptism to Marriage for Men, by Occupation, 1813-1836

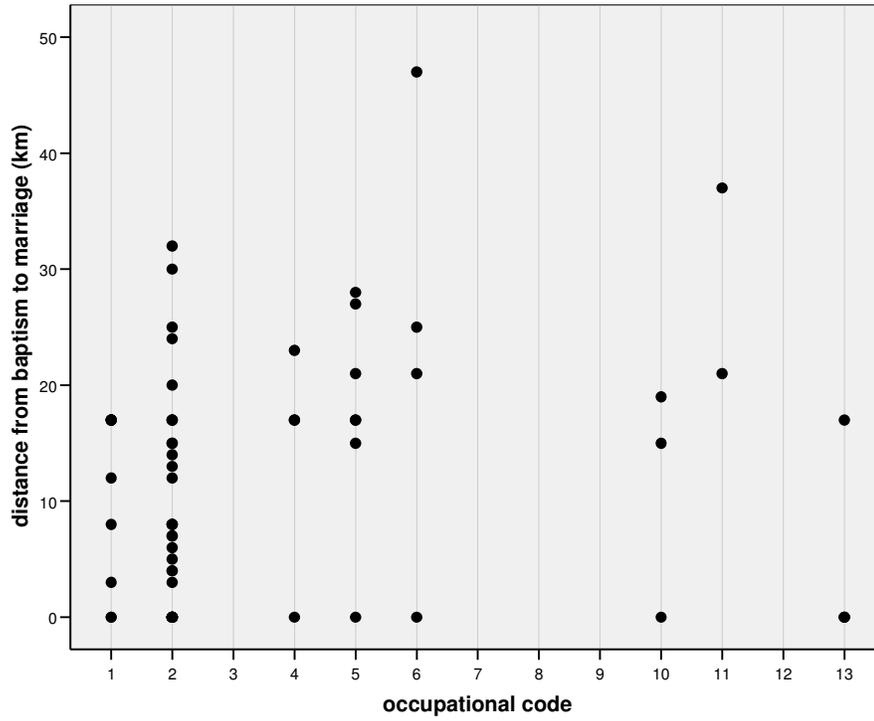


Figure 5.16: Distance from Baptism to Marriage for Men, by Occupation, 1837-1850

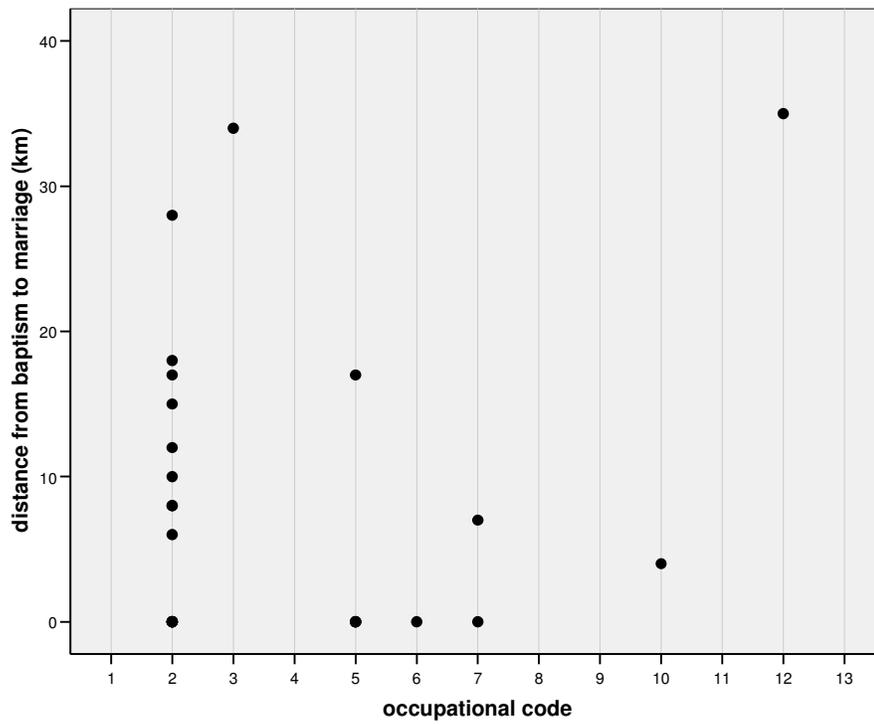
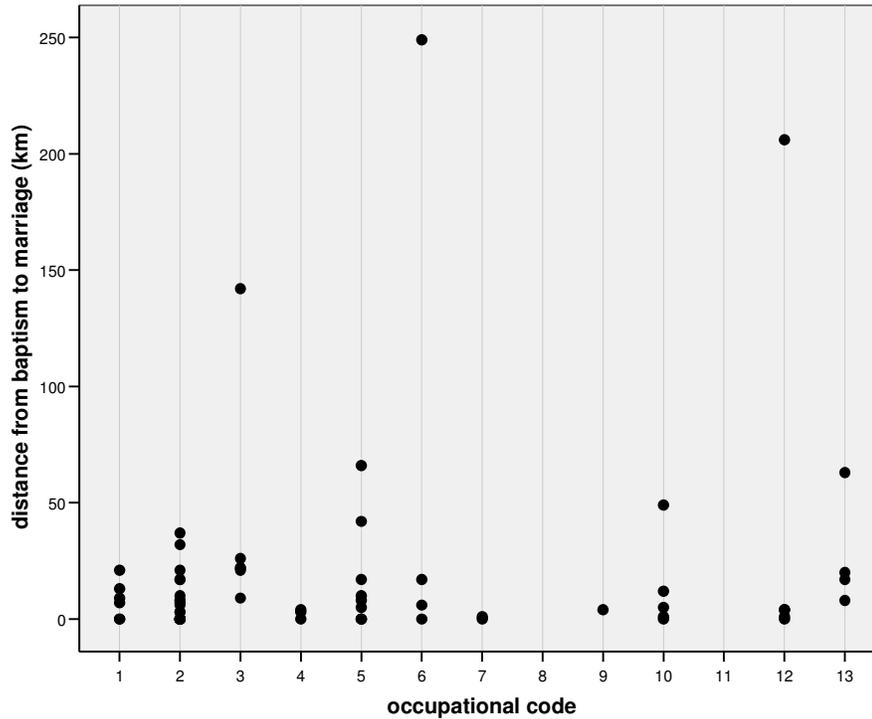


Figure 5.17: Distance from Baptism to Marriage for Men, by Occupation, 1851-1871



5.2.vii. Literacy and Baptism to Marriage Distances

a. Introduction

Literacy may have impinged on migration both directly and indirectly, increasing potential for employment and enhancing capacity to discover opportunities and to travel to new destinations. Some jobs, not only those involving clerical work but also in domestic service³⁷ and the retail trades, may have required some literacy, while an ability to read job advertisements, coach timetables and even milestones may have had a significant effect on an individual's life-choices.

³⁷ W.B Stephens, *Education, Literacy and Society, 1830-70: The Geography of Diversity in Provincial England* (Manchester: Manchester University Press, 1987), pp. 20-22

Measuring literacy is not straightforward. Indirect measures such as numbers of newspapers in circulation, or book ownership, or even provision of educational facilities, each have their own problems: newspaper volume was affected by changes in production methods, taxation and distribution systems; book ownership might be more affected by unit cost than by literacy; and education establishments had a wide range of aims beyond teaching literacy and numeracy.³⁸

The most commonly used 'direct' measure of literacy in the eighteenth and nineteenth centuries, signature literacy on marriage certificates, is also complex. It has the advantage that it is available for most of the adult population of Britain from 1754, including some non-married individuals if they can be conclusively demonstrated to have witnessed a marriage. Where Anglican registers survive, the data exists in an unbroken series from 1754 through to the present day, and relates to the majority of people during their twenties, thereby reducing its variability compared with, for example, probate signature evidence, which mostly relates to those at the end of their life, often made *in extremis* and many in old age, removed in time from any education they may once have received. However, the decision as to whether or not to sign seems to have been a personal one, or perhaps made by local tradition or precedent: there was no compulsion to sign if capable of so doing, and some individuals seem to have varied their practice. For example William Buckle (Combey) marked his own marriage register with a cross in April 1824, but three months previously he had signed as witness to another marriage.

³⁸ R. S. Schofield, 'Dimensions of Illiteracy, 1750-1850', *Explorations in Economic History* 10 (1973): 437-54

The meaning of signature literacy, and its value as a surrogate for the ability to read and write, has also been questioned, and its relationship to quality of educational attainment is unclear.³⁹

‘Are people who can sign contracts really capable of reading and writing? . . . what does such a capability mean for market exchange, and what good does it do on the labour market?’⁴⁰

There is, however, a variety of evidence that in England and elsewhere, proficiency in reading was given precedence over writing from at least early modern times, and that in the absence of cheap sources of paper, signature literacy can be used as a ‘middle range indicator’ of some ability to read and write.⁴¹ Private schools up to the mid nineteenth century may have concentrated on reading, and only later did the National Schools stress the ‘Three Rs’, so signature literacy perhaps implied a competence in reading.⁴² The detailed Shipping Lists for the first emigrants to Sydney and Port Phillip, Australia, in 1841, include information on literacy, in three categories: able to read and write, able to read only, or neither. Of the English emigrants, 60% could read and write, and an additional 20% could read only, showing that reading was the primary skill.⁴³ This is further supported by the US Federal census returns for English emigrants, which included questions on both reading and writing ability.⁴⁴

In view of the above, signature-literacy has been used here as a surrogate for basic competence in both reading and writing.

³⁹ Stephens, *Education, Literacy and Society*, p. 266

⁴⁰ Tine de Moor and Jan Luiten van Zanden, ‘Every Woman Counts’: A Gender-Analysis of Numeracy in the Low Countries During the Early Modern Period’, *Journal of Interdisciplinary History* 41 (2010): 179-208, p. 180

⁴¹ Schofield, ‘Dimensions of Illiteracy’; Michael J. Heffernan, ‘Literacy and Geographical Mobility in Nineteenth-Century Provincial France: Some Evidence from the Département of Ille-Et-Vilaine’, *Local Population Studies* 42 (1989): 32-42; W. B Stephens, ‘Illiteracy in the North-East Coalfield, C. 1830-1870’, *Northern History* 37 (2000): 215-37

⁴² Barry Reay, *Microhistories: Demography, Society and Culture in Rural England, 1800-1930* (Cambridge: Cambridge University Press, 1996), pp. 213-24

⁴³ Eric Richards, ‘An Australian Map of British and Irish Literacy in 1841’, *Population Studies* 53 (1999): 345-59

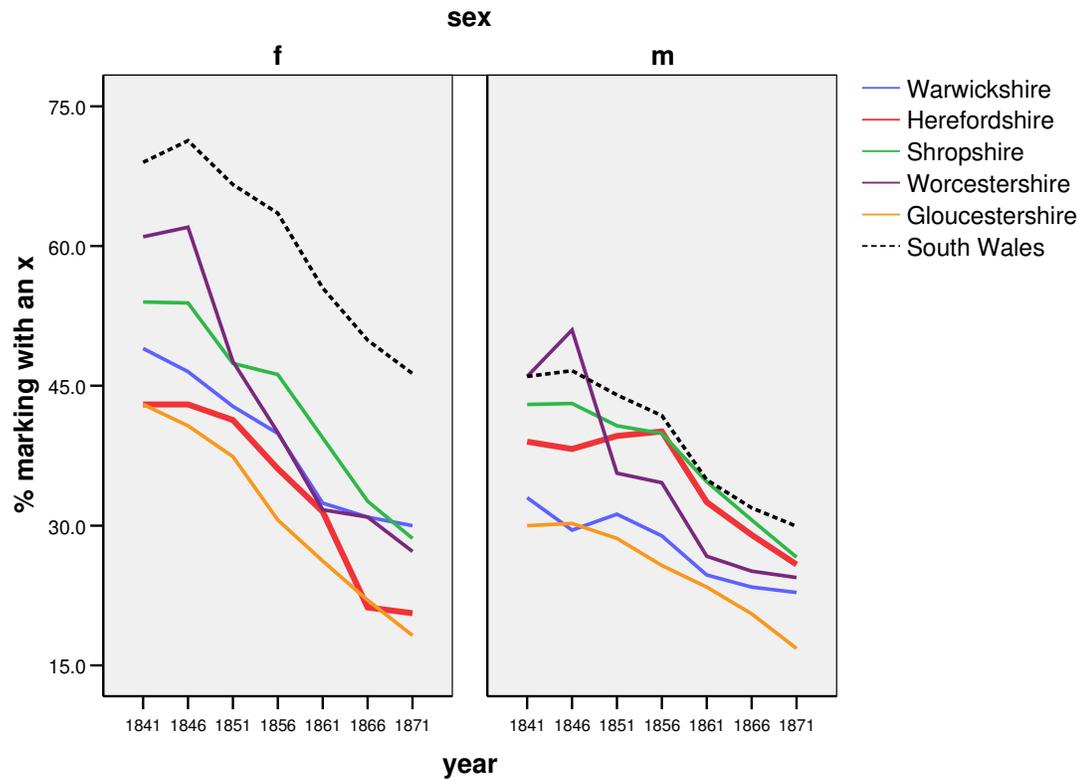
⁴⁴ U.S Federal census, www.Ancestry.co.uk, first accessed October 2009

b. Whitbourne Literacy in Context

The Annual Reports of The Registrar General contain information on the numbers of brides and grooms who signed or marked with a cross on their marriage certificates, in each county. There were wide regional variations in literacy, which have been variously attributed to educational provision, employment of children and occupational specialisation. **Figure 5.18** compares this data for Herefordshire and neighbouring counties, at five-yearly intervals from 1841 to 1871.

In this region, as elsewhere, women were less signature-literate than men in 1841 but with the exception of South Wales (black dotted line) this was reversed or the gender difference was greatly reduced by 1871. Herefordshire (heavy red line) brides were among the most literate in the region, second only to Gloucestershire (orange), and were already on average almost as literate as their grooms in 1841. Groom literacy in Herefordshire declined relative to Herefordshire brides, and to grooms in all but Warwickshire through this period.

Figure 5.18: Signature Illiteracy at Marriage



Quinquennial data from The Registrar General's Annual Reports, 1841 to 1871, on illiteracy at marriage: 1841 p. 16; 1846 pp. 34-35; 1851 pp. 4-5; 1856 p. vi; 1861 p. vi; 1866 p. vii; 1871 pp. xii-xiv and lxvi.⁴⁵

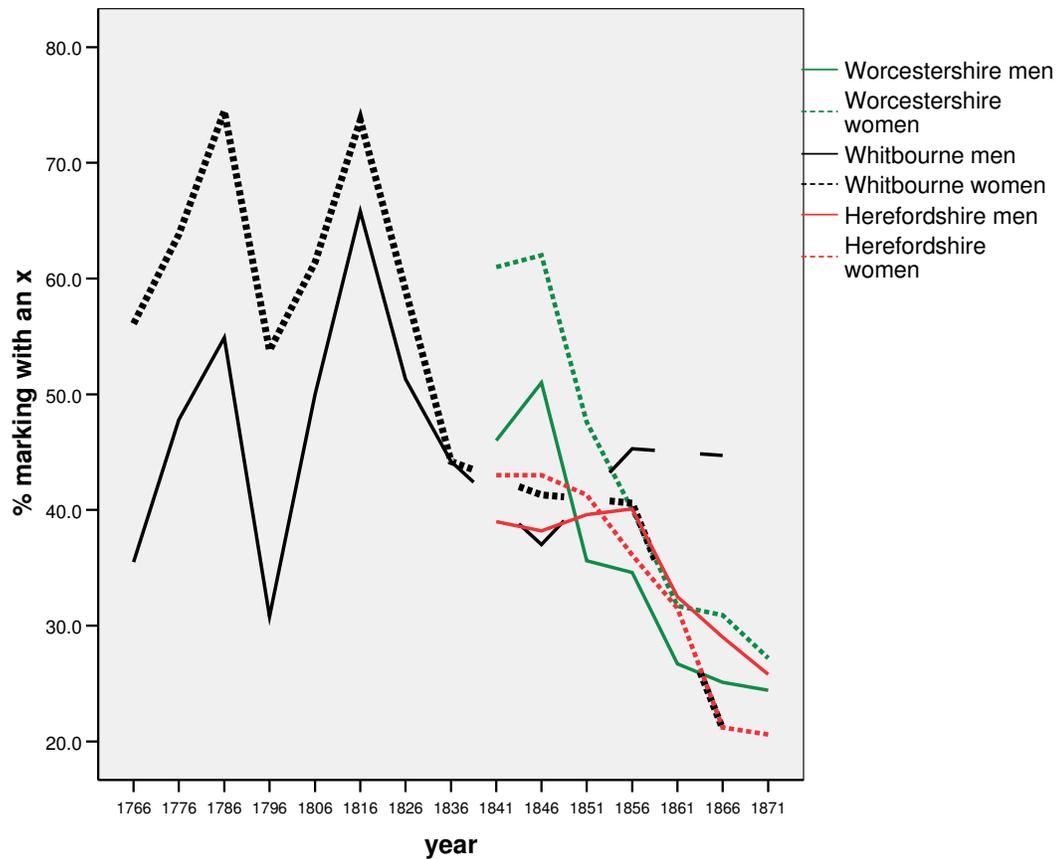
Data for signature literacy can be obtained for eighty years before the beginning of civil registration, from the parish marriage registers from 1754. **Figure 5.19** shows this data for all marriages conducted in Whitbourne (not only those of natives of the parish). The fluctuations may in part be due to the small sample size, averaging forty-six marriages per decade, but they are also symptomatic of a nation-wide pattern of depressed literacy at the turn of the century.⁴⁶ This graph suggests that the gender gap in Whitbourne literacy had closed by the early nineteenth century, perhaps somewhat earlier than it did in Herefordshire as a whole,

⁴⁵ The Registrar General's Annual Reports, www.histpop.org

⁴⁶ Schofield, 'Dimensions of Illiteracy'

and that Whitbourne grooms may have been relatively less literate towards the end of the research period. Whitbourne and indeed Herefordshire brides in general were more literate than their Worcestershire contemporaries.

Figure 5.19: Signature Illiteracy at Marriage for Whitbourne, Herefordshire and Worcestershire, 1761-1871



Data for Worcestershire and Herefordshire are from The Registrar General's Annual Reports for 1841, 1846, 1851, 1856, 1861, 1866 and 1871, as for Figure 5.18; data for Whitbourne are from the parish marriage registers, averaged per decade.

c. Analysis

The literacy of the traced sample of Whitbourne natives and their descendants was tested using their personal, spousal and parental signature literacy where known. From 1754 onwards this was based on marriage registers, but before this the positive evidence of a signed

document was accepted. The lack of a signature on the individual's own will was not accepted as evidence of illiteracy. Additional fields were created and coded for literacy, with the three cases of marking with the initial letter of a name being accepted as evidence of literacy. Where an individual sometimes signed and sometimes marked with a cross, they were recorded as literate. Where both bride and groom were in the database, details on self and spouse literacy were recorded in the groom's record. Where a Whitbourne man not otherwise linked to the sample tribes married a bride from these tribes, his literacy information was assigned to his bride's record, as her spouse, but his parental literacy was assigned to his own record which was added to the database.

Before 1754, there was little data available. No Whitbourne women in the sample had personal literacy information, although one of their spouses made a witness mark on a document; three women had parental literacy records, all for literate fathers. There were three records before 1754 for Whitbourne male literacy: two illiterate yeomen witnessed documents, and there was one literate gentleman farmer.

The effect of literacy on birth to marriage distance was tested in four time periods: marriages before 1813, marriages from 1813 to 1836, from 1837 to 1850 and from 1851 to 1871, because of two countervailing effects: increasing availability of sources for long-distance tracing, and decreasing accessibility of personal signature literacy for longer-distance marriages. Although there was a general tendency for the longest-distance migrants to be literate, there were exceptions to this, and only two categories were statistically significant, namely the effect of parental literacy on marriages between 1837 and 1850⁴⁷ (longer-distance women migrants tended to have a literate father or both parents: **Table 5.7**), and the effect of

⁴⁷ Pearson Correlation, two-tailed test, significant at 95%

spousal literacy in marriages in 1851 to 1871⁴⁸ (longer-distance migrants, especially women, tended to marry literate people).

Table 5.7: Distances Moved Before Marriage, 1837-50, According to Parental Literacy

parental literacy	N (m)	mean (m)	st. dev. (m)	median (m)	max. (m)	N (f)	mean (f)	st. dev. (f)	median (f)	max. (f)
0	11	11.55	12.17	8.0	35	8	10.63	8.21	12.0	21
1	8	6.63	11.55	2.0	34	9	23.56	30.98	3.0	78
2	0	-	-	-	-	1	21	-	21	21
3	1	10.0	-	10.0	10	4	56.50	96.62	12.5	201
total N	20					22				

0 = both parents illiterate; 1 = father literate; 2 = mother literate; 3 = both parents literate.

Further analysis of the possible effect of literacy on migration distance before marriage was inhibited by the absence from the data-base of information for most marriages beyond Herefordshire and Worcestershire, owing to the experimental nature of the method and the financial and time constraints of the study. This information was, however, obtained where marriages had been located for the longest-distance migrants, and although it was not added to the main data-base (having been obtained using additional search tools which could bias the sample), it was used in some specified parts of the analysis. These additional searches produced varied results. One marriage registration, from 1838, could not be traced, and another was rejected as a probable false linkage. The others are set out in **Table 5.8**. These were added to a new data table of all baptism to marriage distances, and filtered by distance to remove most of the movement which might have been temporary and perhaps merely for marriage and so to focus on longer-term migrations. This data was then analysed for any correlation between literacy and baptism to marriage distance, and although no statistically significant effects were found, there was a strong positive association up to 1850 for the

⁴⁸ Pearson Correlation, two-tailed test, significant at 99%

thirty-one marriages with distances greater than 20 km,⁴⁹ and a less strong association for the seventeen with distances greater than 25 km.⁵⁰

Table 5.8: Additional Long-Distance Baptism to Marriage Migration and Literacy Data

name and tribe	birth place and year	lit (m,f)	marriage place and year	occ.	occ. spouse	parental literacy (m,f)	baptism-marr (km)
Ann Vernals (ve)	Whitbourne 1783	ss	Dorchester 1809	-	tailor	nk	216
Louisa Kreisa (ve)	Brighton 1813	ss	Radford, Notts 1832	-	vicar	ss	312
Jane Gomery (gy)	Bromyard 1814	ss	Curdworth, Warwicks 1846	ds	mill roller	sx	85
Harriet Gomery (gy)	Worcester 1820	xs	Birmingham 1844	-	gun maker	sx	47
Mary Lloyd (ll)	Whitbourne 1828	xx	Birmingham 1849	-	black-smith	sx	63
Samuel Hodges (hg)	Whitbourne 1800	ss	Strensham 1830	a	-	ss	37
Allen Clark (cl)	Ribbesford 1826	sx	Martley 1847	b	-	sx	34
Edward Combey (cb)	Whitbourne 1829	sx	Macclesfield 1855	c	-	xx	142
James Vernals (ve)	Whitbourne 1836	xs	Lincoln 1862	d	-	xx	208

lit = signature literacy on marriage certificate (groom, bride): x = marked with a cross, s = signed, nk = unknown.

ds domestic servant

a. nurseryman with several employees

b. shoemaker then domestic coachman

c. domestic coachman

d. boilermaker

⁴⁹ Pearson Correlation, one-tailed test, significance level 94.8%

⁵⁰ Pearson Correlation, one-tailed test, significance level 91.7%

5.2.viii. Conclusion: Migration Between Baptism and Marriage

Baptism to marriage distances for traced individuals give a significantly different picture to that derived from conventional exogamy and marriage horizon studies. The Whitbourne population, especially the women, were more mobile and more prone to move longer distances before marriage than the parish marriage horizons suggest. There is some evidence that male occupation affected distance migrated in early adulthood, but literacy, including parental literacy, seems to have been a more powerful determining factor in the sample studied. Long-distance migrants seem to have been drawn to a range of destinations, from the early years of the nineteenth century if not before.

5.3 Migration over Whole Life: Baptism to Burial

5.3.i. Method

The method used for analysing net distances migrated between baptism and burial was in principle the same as that used for baptism to marriage distances. A 'table query' named WholeLifeMigration was generated from the descendants table, with 'place of birth/baptism not null', 'birth year not null', 'residence at death not null', 'death year not null and less than 1872' and 'age at death greater than 9' and also including gender, unique number, place of baptism/birth code and place of death code. From the 1,389 usable baptism records in the Descendants Table (excluding the first two and last twelve years of the Table, to leave whole decades and lives completed to at least age ten) this gave 310 lives traced to a burial at age ten or more by the end of 1871; when the records with incomplete data were removed, 297 full

lives were suitable for analysis (equating to 21.4% of baptisms leading to a known full life history to age ten or more). The incomplete cases were civil death registrations in districts where for various reasons the residence at death could not be reliably ascertained.

Three additional fields were added to the Whole Life table, for parish of baptism, parish of burial, and distance between baptism and burial. Many of the entries in the first of these fields were filled in directly from the marriage data table; where the individual had no known marriage, the data was filled manually from the paper records. The same rules were used as before for assigning baptism and burial place and determining distances.

Before analysing the Whole Life data, it was tested for correlation between longevity and migration distance, since this would impact on other considerations. Although this has previously been found to be significant,⁵¹ there was no significant effect in the present data.

5.3.ii. Whole Life Migration According to Baptism Cohort

A key feature of the information derived for different cohorts is the proportion traced. An individual 'not traced' might either have migrated, or the method may have failed to pick them up for some other reason, or (for later cohorts) they may still have been alive in 1871. For women, an additional methodological constraint is imposed by change of surname on marriage. **Table 5.9** shows baptisms traced to a whole life, numerically and as a percentage of the sample.

⁵¹ Jane Humphries and Timothy Leunig, 'Was Dick Whittington Taller Than Those He Left Behind? Anthropometric Measures, Migration and the Quality of Life in Early Nineteenth-Century London', *Explorations in Economic History* 46 (2009): 120-31

Table 5.9: Baptisms per Decade, in Two Data Tables

baptism cohort	baptisms in Descendants Table ('total')	baptisms in Whole Life Table	Whole Life baptisms as % of total
1700-09	24	2	8
1710-19	23	5	22
1720-29	26	9	35
1730-39	21	5	24
1740-49	24	7	29
1750-59	32	14	44
1760-69	60	29	48
1770-79	54	30	56
1780-89	54	36	67
1790-99	123	51	41
1800-09	94	31	33
1810-19	100	19	19
1820-29	174	30	17
1830-39	198	17	9
1840-49	199	8	4
1850-59	183	4	2
total	1,389	297	21.4%

a. Cohort 1700-1709

Of the 24 individuals in the sample for this decade, six were traced from baptism to burial, but four of these (two male and two female) died before they were ten, leaving just two in the Whole Life Table. Abigail Combey died aged seventy-four in Bromyard (8 km), Hester Collins died age sixty-five in Whitbourne. Although these two women had low net migration distances, this may merely reflect the difficulty of tracing people further afield in this period. Nine women and nine men were untraced; some or many of these women may have returned to the parish after marriage, but the men are potentially out-migrants, since there is no evidence for them in the Whitbourne burial register. These nine represent 82% of the men in their baptism cohort.

b. Cohorts 1710-1749

This had a higher tracing rate than the first cohort, twenty-six out of ninety-four individuals in the Whole Life Table (28%). Although still low, this retrieval rate gave more usable data, and was comparable to the overall rates of reconstitution typically achieved by the Cambridge Group for individual parishes, even though the present analysis is excluding all deaths before the age of ten. Six of the twenty-six (23%), one woman and five men, were certainly migrants, with a baptism to burial distance greater than zero. As for the previous cohort, the thirty-two untraced men in the Descendants Table (62% of their cohort), of whom twenty-six were baptised in Whitbourne, were either migrants or were omitted from the burial register. Combining the known male migrants with these untraced males gives a maximum possible 71% of males changing their parish of residence at least once during their lifetime and dying in a parish other than that in which they were born.

c. Cohorts 1750-1809

In the baptism period 1750-1809, the tracing rate of whole lives up to at least age ten was 46%. This is the period which can be used most reliably to investigate trends in whole life migration, and the data is summarised by decadal baptism cohort in **Table 5.10**. The proportion of women in the second and subsequent decades of this period is always above 33%, again showing that the method is successful in tracing them.

Table 5.10: Known Migrants, 1750-1809, All Baptism Places

baptism cohort	1750-59	1760-69	1770-79	1780-89	1790-99	1800-09
total males in Whole Life Table	11	18	17	24	31	14
no. males in Whole Life Table with baptism-death >0	2	7	6	13	15	10
total females in Whole Life Table	3	11	13	12	20	17
no. females in Whole Life Table with baptism-death >0	0	5	4	8	9	11
% of individuals (both sexes) in Whole Life Table with baptism-death >0 km	14	41	33	58	47	68

The percentage of individuals who were known net migrants increased through this period, albeit erratically. The 14% in the 1750-59 baptism cohort may be a genuine reflection of a relatively immobile population, but it may be an aberration since it was well below the 23% mean for the previous forty years. It may be a consequence of low sample size and may also be exacerbated by individuals in this cohort, unlike later ones in this period, mostly having died before 1813, the date of the earliest digitised burial records for Herefordshire at the conclusion of the research project. It may also reflect the dispersal of many people in this cohort, especially perhaps women, beyond the range of the tools available for tracing eighteenth-century migration. These different factors will be assessed further below.

As for the earlier cohort, adding the number of known migrant men to the number of untraced men gives a rough estimate of the total number of potential male migrants in these baptism cohorts, as shown in **Table 5.11**.⁵² Women's potential migration cannot be assessed in this way because of name changes on marriage. This method can also only provide an indication

⁵² Potential male migrants is defined here as the percentage of males who are absent from the burial registers of their parish of baptism and are therefore presumed to have migrated. This is not equivalent to the percentage prone to migrate, or at risk of migration, as used for example by Jan de Vries, *European Urbanisation, 1500-1800* (London: Methuen and Co Ltd, 1984), p. 217

of potential migrants, since (as well as the imperfections in the burial registers) some untraced individuals may have died before age ten and so should be excluded from the calculations. It is not possible to derive a precise figure, since neither the number of migrants under ten nor their death rate is known. Some 30% died under ten nationwide in the research period,⁵³ although in the Whitbourne descendants sample childhood mortality was substantially below this (section 3.6.ii).

Table 5.11: Derivation of Potential Male Migrants, 1750-1809, All Baptism Places

baptism cohort	1750-59	1760-69	1770-79	1780-89	1790-99	1800-09
i. males in Whole Life Table with baptism to death >0 km	2	7	6	13	15	10
ii. untraced males in Descendants Table	6	12	9	3	26	28
i + ii = total potential male migrants	8	19	15	16	41	38
potential male migrants as % of all male baptisms in Descendants Table	47	58	56	52	57	79

The male baptism cohorts from 1750-1759 to 1790-1799 had a steady maximum potential migration rate, averaging 55% for the fifty-year period. The 1800-1809 figure was higher, but this is not necessarily a reflection of increased mobility in the population sample. Two sources of error are, firstly and more importantly, that some of these individuals may still have been alive in 1871 and so were not traced to a death or burial, even though they may not have been migrants. Of the forty-eight males in this last baptism cohort, two had a known date of burial after 1871, in 1880 and 1893, and although these were found coincidentally, they illustrate the way in which this cohort is at the limits of usefulness. Conversely, if their parents had migrated to parts of the West Midlands and Black Country urban areas outside

⁵³ E. Anthony Wrigley et al., *English Population History from Family Reconstitution, 1580-1837* (Cambridge: Cambridge University Press, 1997), pp. 226 and 248-52

Worcestershire, some may not have been included in the Whole Life Table because their parishes of baptism and burial were not known.

After 1809, rates of tracing declined, perhaps largely because increasing numbers were still alive in 1871, but also because individuals were more dispersed geographically and correspondingly harder to identify accurately. Individuals in these birth cohorts can be used for case studies, but the period cannot be used for extrapolating trends for whole life migration.

5.3.iii. Whole Life Migration According to Year of Death

An overview of migration trends can also be obtained from the proportion of the deaths per decade which were of migrants. As shown in **Table 5.12**, this analysis strategy can reveal different facets of the data. Firstly, it can continue until the decadal death cohort 1860-1869, excluding only the deaths in 1870-1871, and so can relate cases to the mid-Victorian context. Secondly, if migration is principally a life-cycle dominated event, as Ravenstein proposed, basing the analysis on baptism cohorts gives an insight into changes in migration over time, but if migration is more randomly spread through lifetimes, an analysis by year of death may give more information in relation to changes in factors such as transport, employment opportunities and population density. Thirdly, it can reveal some relative longevity data.

The division of the data by year of death fell into distinct groupings. The first seventy years revealed no clear trends, but suggested a low mortality rate for those aged ten and over, consonant with results already obtained. For example twenty-six individuals in the main

descendants table were baptised before 1710 (including the two prior to 1700): four of these died before their tenth birthday, but the four others who have been traced all lived into their sixties and seventies.

From 1780 to 1809, data is still limited, but some tentative conclusions may be drawn, and after 1810 the data is adequate, with at least two deaths per year. The percentage of known migrants traced averaged 42% for the period 1810-1859, and was substantially higher in the death-decade 1860-69.

Table 5.12: Deaths per Decade and Known Migrants, All Baptism Places

decade	male deaths		female deaths		total known migrants (%)
	total	no. of migrants	total	no. of migrants	
1710-19	0	-	0	-	-
1720-29	0	-	0	-	-
1730-39	0	-	0	-	-
1740-49	1	0	0	-	0
1750-59	0	-	3	0	0
1760-69	2	0	1	0	0
1770-79	4	2	4	1	38
1780-89	8	1	3	1	18
1790-99	6	1	3	1	22
1800-09	10	3	6	2	31
1810-19	8	4	13	5	43
1820-29	13	2	8	4	29
1830-39	18	10	8	3	50
1840-49	24	10	23	8	38
1850-59	34	17	21	8	45
1860-69	39	25	30	19	64
total	167	75	123	52	44%

Whether the datum level used is potential male migrants estimated from the baptism cohorts 1750-1799, or known migrants of both sexes derived from the year of death data 1810-1859, it appears that mobility in the sample population was broadly steady rather than increasing

over time. Thereafter, in both the baptism cohort 1800-09 and the deaths decade 1860-69, there was an apparent increase in mobility, even though these two groups do not necessarily contain the same individuals.

5.3.iv. Whole Life Migration from Whitbourne by Area of Destination

Out-migration from Whitbourne can also be analysed in terms of location at death. As above, this can be based on either baptism cohort or death cohort. **Figures 5.21 to 5.28** give residence at death aggregated by area, in the geographical groupings listed below and shown in **Figure 5.20** for the areas closest to Whitbourne:-

1 = Whitbourne

2 = adjacent parishes to Whitbourne, to the west and south: Lower Sapey, Tedstone Delamere, Bromyard, Stanford Bishop

3 = adjacent parishes to Whitbourne, to the east and north: Clifton upon Teme, Martley, Doddenham and Knightwick

4 = the next ring of parishes beyond group 2 to the west and south: Cradley, Acton Beauchamp, Evesbatch, Bishop's Frome, Avenbury, Stoke Lacy, Little Cowarne, Pencombe, Grendon Bishop, Bredenbury, Wacton, Edwyn Ralph, Edwin Loach, Collington, Tedstone Wafer.

5 = the next ring of parishes beyond group 3 to the east and north: Suckley with Lulsley, Alfrick, Leigh, Broadwas, Wichenford, Little Witley, Great Witley, Shelsley Beauchamp (including Shelsley Kings), Shelsley Walsh, Stanford on Teme, Upper Sapey, Wolferlow.⁵⁴

6 = other rural parishes in Herefordshire, Worcestershire and Shropshire south of Bridgnorth

7 = Worcester

⁵⁴ Allocation of individual parishes to groups 4 and 5 was determined by geography and communication networks; for example Wolferlow relates to Upper and Lower Sapey more than to Collington

8 = Herefordshire market towns

9 = Worcestershire market towns

10 = the Black Country

11 = Birmingham and conurbation at the relevant time

12 = London as it was then constituted⁵⁵

13 = Lancashire and Cheshire

14 = other places in the United Kingdom

For areas 10, 11 and 12, see further in section 5.4.iv.

a. Migration from Whitbourne by Baptism Cohort

The baptism cohorts were grouped 1700-1749, 1750-1769, 1770-89 and 1790-1809, to capture changing migration patterns with time. For later cohorts, as for total known migrants (Table 5.9), too few were traced to a burial. Net non-migration, measured as the percentage of Whitbourne natives who were also traced to a burial there, decreased slightly through time, but over half of all traced natives were buried in the parish in every time period (**Table 5.13**) in contrast to the higher migration rates of the whole sample including non-natives (Table 5.10). This does not necessarily imply a low level of mobility, but may reflect the relative ease of tracing non-migrants compared to migrants. It is possible that the decrease over time may thus merely be due to the improved search tools available for later cohorts.

Table 5.13: Percentage of Whitbourne Natives who also Died There, by Baptism Cohort

1700-1749	1750-1769	1770-1789	1790-1809
78	75	53	51
n = 27	n = 36	n = 57	n = 57

⁵⁵ This was chosen in preference to Middlesex, or Middlesex and Surrey for instance, in order to distinguish between migration to the urban metropolis and to its neighbouring non-urban areas. For example a Whitbourne woman is known to have worked on a rural Essex farm

Figure 5.21: Residence at Death of Whitbourne Natives, Baptism Cohorts 1700-1749 (n = 27)

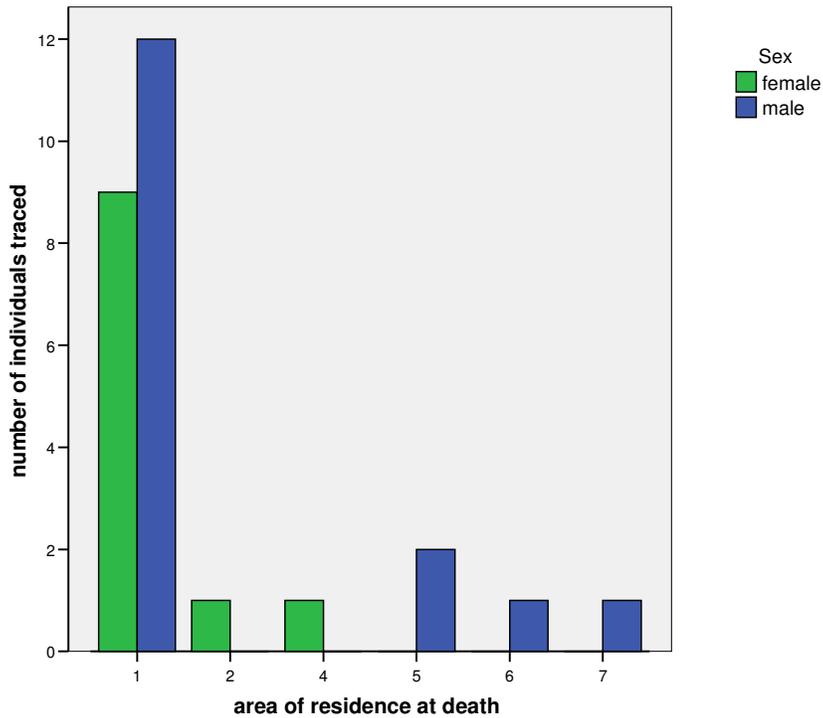


Figure 5.22: Residence at Death of Whitbourne Natives, Baptism Cohorts 1750-1769 (n = 36)

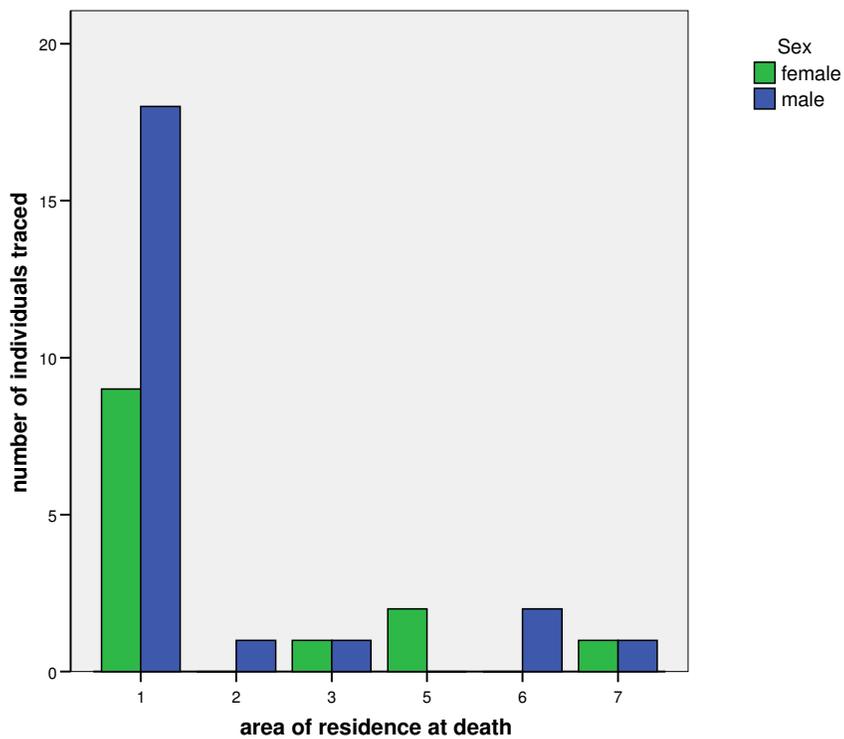


Figure 5.23: Residence at Death of Whitbourne Natives, Baptism Cohorts 1770-1789 (n = 57)

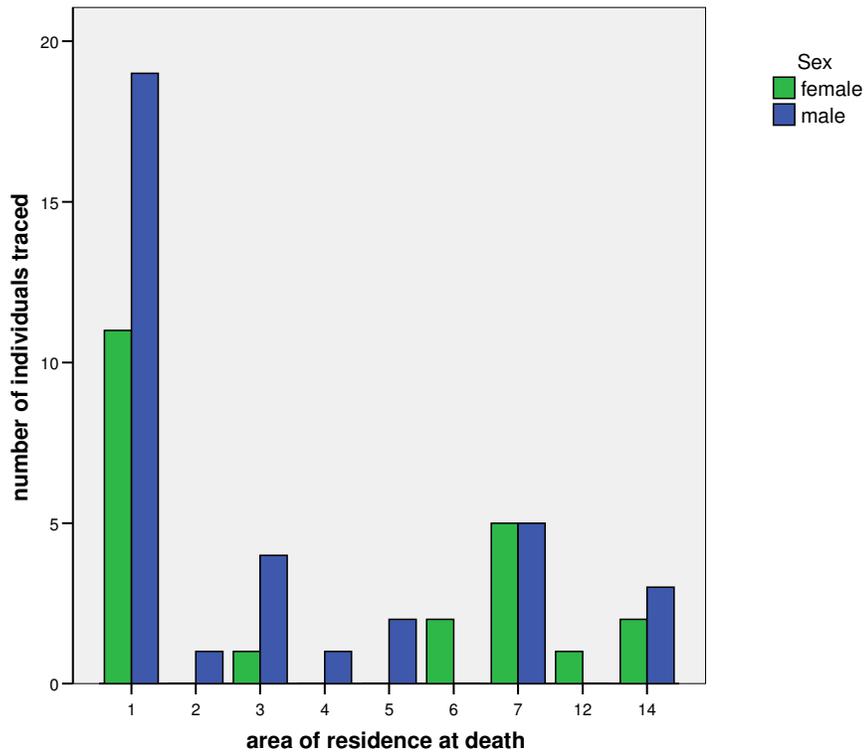
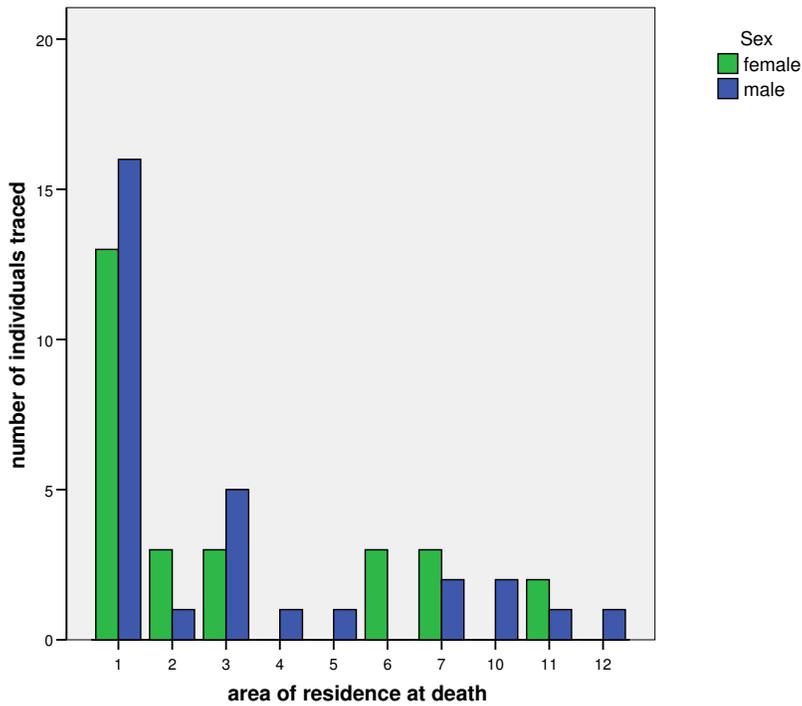


Figure 5.24: Residence at Death of Whitbourne Natives, Baptism Cohorts 1790-1809 (n = 57)



Although over half of all the traced Whitbourne natives were buried in the parish, there was a preponderance of men in this category in every time period. This may be because their female contemporaries were more prone to out-migration, or that the women married elsewhere and so even if they returned to their native parish they were not always traced, because of their change of surname.

There are other noteworthy features of these graphs. Firstly, no Herefordshire market towns were migration destinations, apart from Bromyard which was included in area 2, but Worcester city (area 7) featured from the beginning and it appeared to have been equally attractive as a destination for men and women (nine of each). Secondly, there may have been a tendency for the men to move more to nearby rural parishes to the east (areas 3 and 5). Thirdly, long-distance out-migration (to areas 10 and above) was detected from the 1770-1789 baptism cohort onwards, and both London (12) and the Birmingham area (11) were destinations for both men and women. At first sight, Worcester seems to have been relatively more attractive than the Black Country or Birmingham, even for the early nineteenth-century baptism cohorts, but this may have been because of the better search tools available for Worcester prior to 1837, since the early digitised marriage registers for Birmingham and its contiguous parishes are imperfect because the registers themselves are known to be incomplete.

b. Migration from Whitbourne by Decade of Death

As before, analysis by year of death can show subtle differences in migration patterns compared to analysis by baptism cohort. Moreover, there were seventy-eight individuals baptised between 1810 and 1859 who were excluded from the baptism cohort analysis

because the overall tracing rate (to a burial) in these cohorts was very low, but the Whitbourne natives among these can be included here, thereby increasing the sample size by thirty-seven.

**Figure 5.25: Residence at Death of Whitbourne Natives, Death Years 1710-1812
(n = 45)**

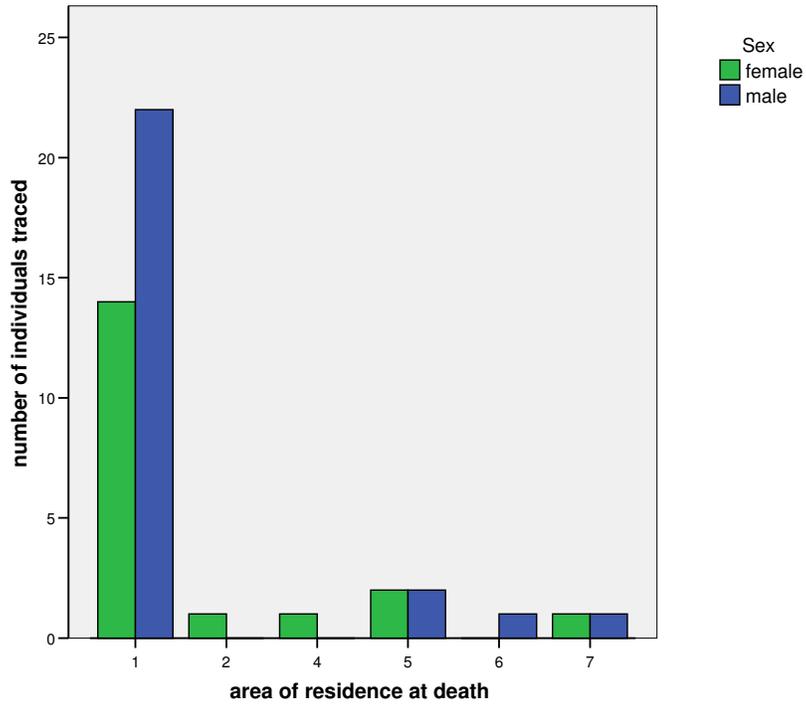


Figure 5.26: Residence at Death of Whitbourne Natives, Death Years 1813-1836 (n = 44)

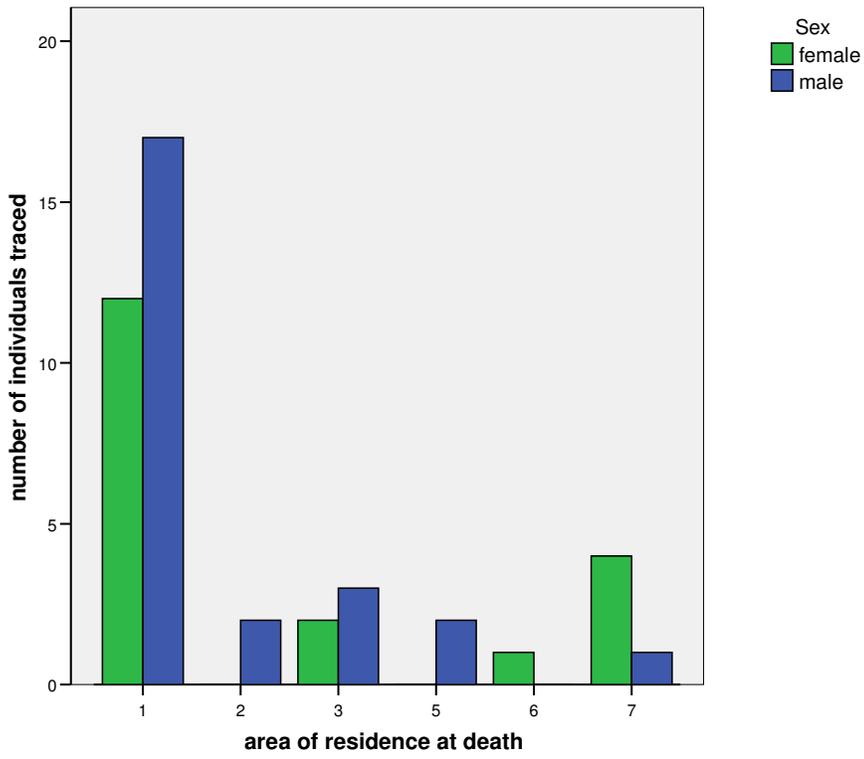
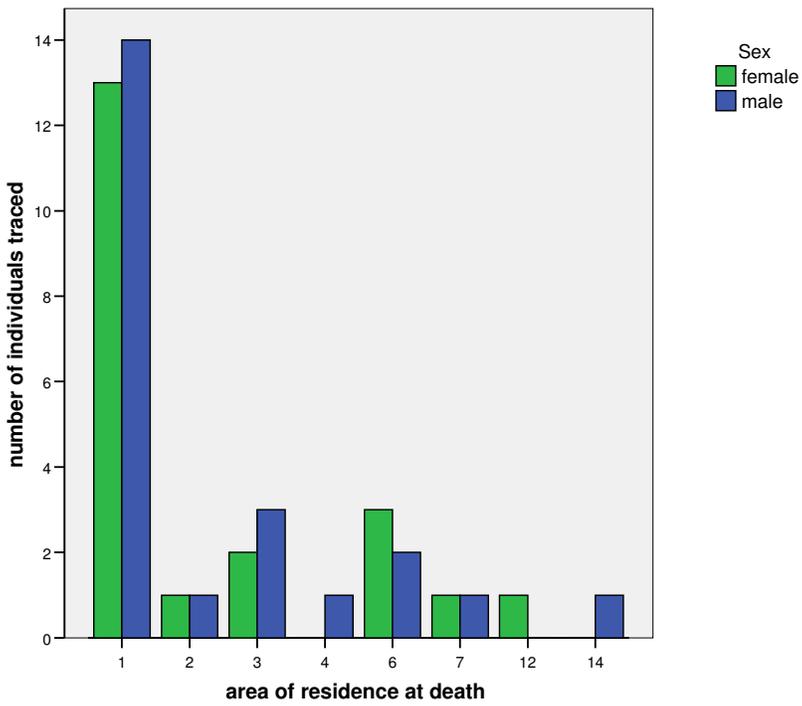
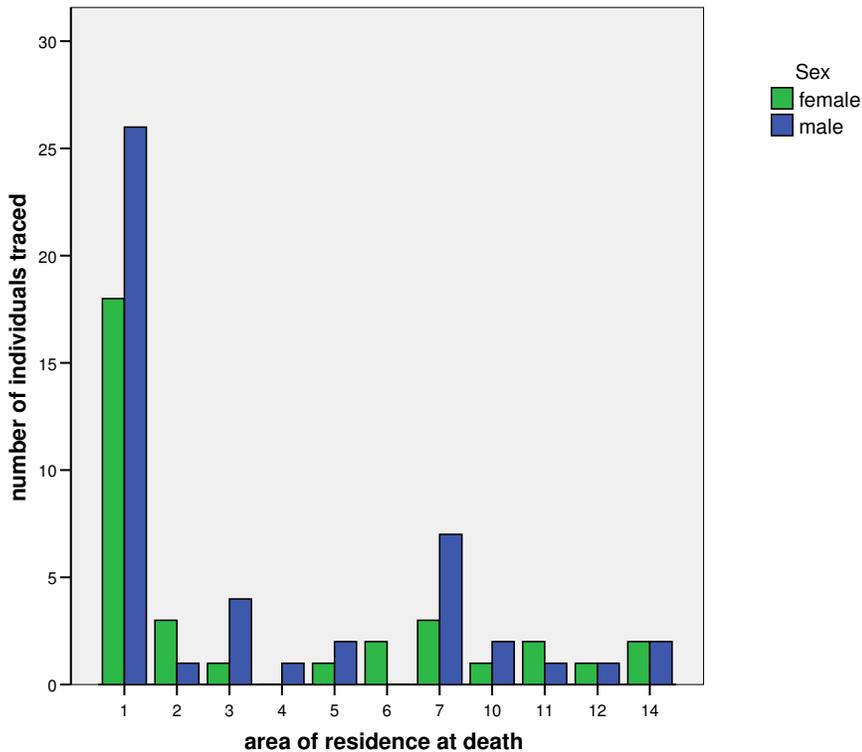


Figure 5.27: Residence at Death of Whitbourne Natives, Death Years 1837-1850 (n = 44)



**Figure 5.28: Residence at Death of Whitbourne Natives, Death Years 1851-1871
(n = 81)**



These graphs confirm the results of the baptism cohort analysis, even in the last cohort which included individuals not present in the analysis by baptism. The majority of traced Whitbourne natives were also buried there, and so were not net migrants, and more of these were men than women, although this may be an artefact due to female name-change on marriage. No individual was traced to a burial in a Herefordshire market town apart from Bromyard; more migrants were traced to rural parishes to the east (areas 3 and 5) than to the west; and Worcester city was a destination for Whitbourne natives in all time periods. Only thirty-one of the eighty-one individuals traced in the last time period were women (38%), but equal numbers of men and women were long-distance migrants (areas 10 and above), suggesting that women may have tended to move longer distances than men.

The pattern of migration to urban areas seems complex. The dominance of Worcester has already been noted, and although this may in part be because the place-name of Whitbourne was more likely to be recognised in Worcester than in Birmingham, and therefore was more likely to be recorded correctly, the fact that equal numbers of Whitbourne natives were traced to deaths in London as Birmingham and its immediate area counterbalances this argument. Whitbourne would have been even less well-known in London than in Birmingham, and the other technical difficulties of tracing Herefordshire individuals in the capital are comparable. London was fifteen times the size of Birmingham (about 2.5 million in 1841 compared to Birmingham's 180,000), and offered correspondingly more opportunities. These results suggest therefore that Whitbourne was not substantially affected by out-migration to Birmingham or the Black Country until at least the birth cohort of 1800-1809 or the death cohorts 1851-1871, whereas London was a destination at least a generation earlier.

5.3.v. Whole Life Migration of Second Generation Whitbourne Descendants

Ravenstein and others following him⁵⁶ proposed that most migration occurs 'stepwise', with a progression towards larger and more distant towns and cities. The present data-set offers an opportunity to test part of this theory on one distinct population sample, by determining whether second and subsequent generation Whitbourne descendants, not born in Whitbourne, were more liable to migrate to such places (areas 7 and above) than Whitbourne natives.

⁵⁶ See especially D. B. Grigg, 'E. G. Ravenstein and the 'Laws of Migration'' in *Time, Family and Community: Perspectives on Family and Community History*, ed. Michael Drake (Oxford: Oxford University Press and Blackwell, 1994): 147-64; Colin Pooley and Jean Turnbull, 'Migration and Mobility in Britain from the Eighteenth to the Twentieth Century', *Local Population Studies* 57 (1996): 50-71

Before death year 1813, there were only eight traced individuals not native to Whitbourne, and none of these died in areas 7 or above. **Figures 5.29 to 5.31** show the areas of death of non-natives of Whitbourne descent from 1813.

Figure 5.29: Residence at Death of Non-Whitbourne Natives, Death Years 1813-1836 (n = 13)

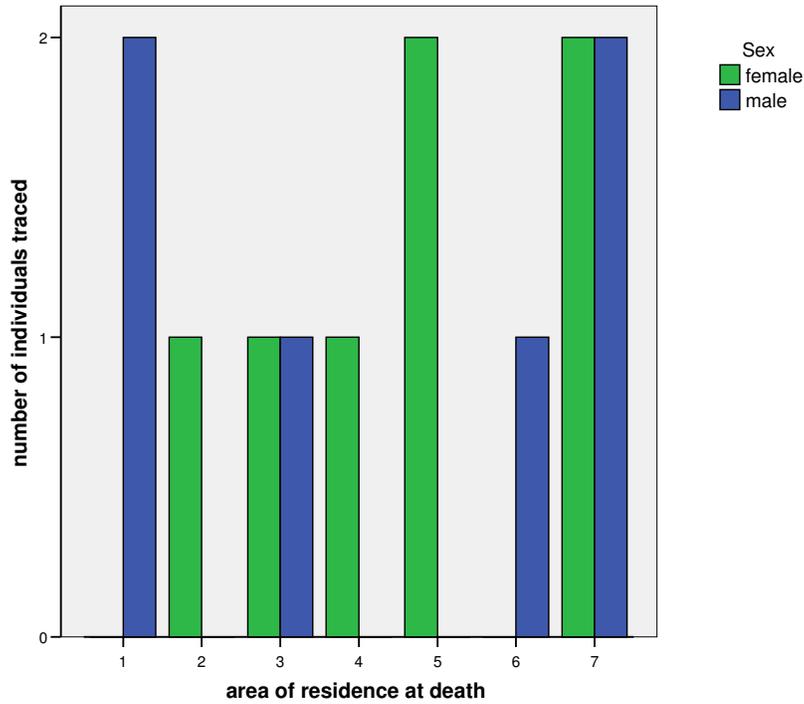


Figure 5.30: Residence at Death of Non-Whitbourne Natives, Death Years 1837-1850 (n = 17)

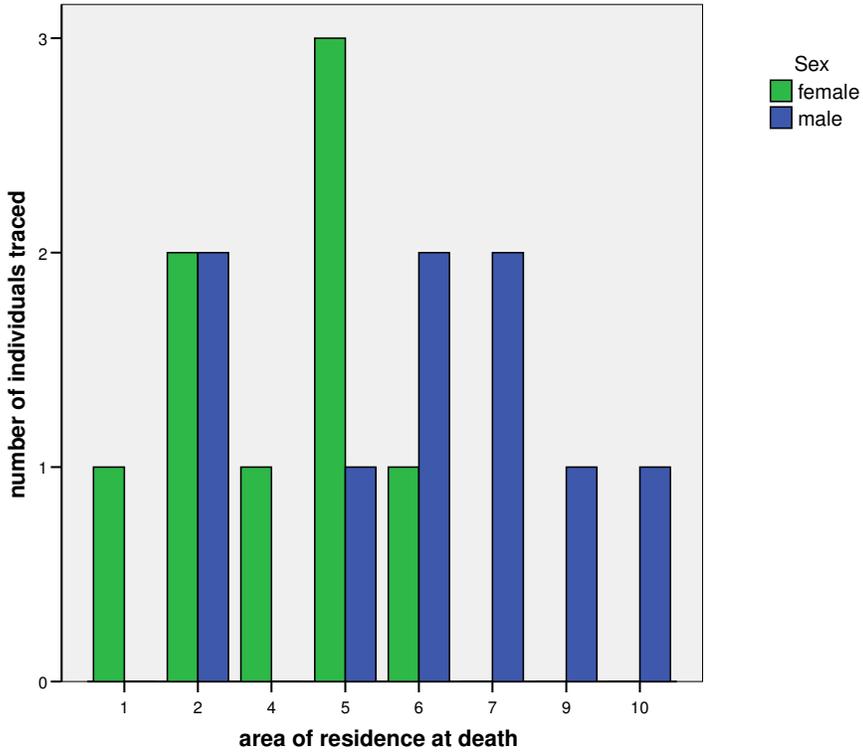
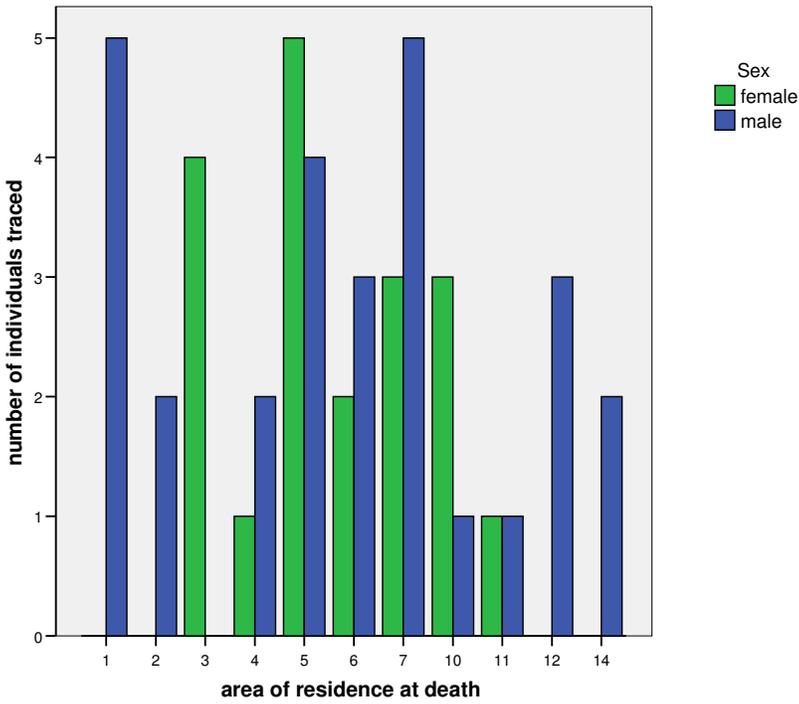


Figure 5.31: Residence at Death of Non-Whitbourne Natives, Death Years 1851-1871 (n = 47)



These graphs show, firstly, that in every time period, some individuals were buried in their ‘ancestral parish’ even though they had not been baptised there. Six non-native ‘return migrants’ were baptised in adjacent parishes, with a net migration less than 10 km; three of these were known to have been agricultural labourers, and the others belonged to families of agricultural labourers; one, William Price baptised in Lower Sapey, was himself a shoemaker. The two who died before 1813 were farmers: Unett (II) Hodges was baptised in Claines, although his father owned land in Whitbourne, John Lawrence was baptised in Tedstone Delamere; both these men eventually took over family land in Whitbourne. The other two return migrants were second cousins from the Collins tribe, and both returned to Whitbourne as children with their yeoman parents. Whereas the farming and yeoman families were literate, the ‘return migrants’ families of labourers tended to be illiterate.

Table 5.14: Non-natives who were Buried in Whitbourne

birth place	birth-death km	birth	death	name	lit.	parental lit.	occ. code
Stourport	22	1831	1845	Eliza Collins	-	ss	-
Claines	21	1717	1782	Unett (II) Hodges	s-	sx	1
Avenbury	12	1843	1868	James Soley	-	xs	2
L. Sapey	9	1798	1855	William Price	-	-	6
Bromyard	8	1800	1851	William Soley	xx	xx	2
Bromyard	8	1807	1830	George Combey	-	-	-
Clifton	7	1760	1831	Richard Portman	-	-	-
Norton	6	1793	1866	William Combey	xx	xx	2
Alfrick	6	1834	1864	Joseph Collins	-	-	2
T.Delamere	4	1760	1806	John Lawrence	sx	sx	1

lit = signature literacy on marriage certificate (groom, bride): x = marked with a cross, s = signed.
 occupation codes: 1 = farmer or yeoman; 2 = agricultural labourer; 6 = shoemaker.

Secondly, despite some non-native descendants ‘coming home’ in this way, the evidence from these non-natives suggests that they were more prone to have died at a greater distance from Whitbourne, or in more urban places, than their ‘native’ contemporaries. **Table 5.15** shows

this comparison, in the same three death cohorts. For example, in the years 1851-1871 ten Whitbourne natives and eight non-native Whitbourne descendants died in Worcester (area 7), and two natives died in London (area 12) compared with three non-natives. In all, 27% of the traced natives but 40% of non-natives died in these areas in this cohort. The possible significance of this is discussed in Chapter Six.

Table 5.15: Urban and More Distant Areas of Death of Natives of Whitbourne, Compared with Non-native Descendants

death period	1813-1836		1837-1850		1851-1871	
	native n = 44	non-native n = 13	native n = 44	non-native n = 17	native n = 81	non-native n = 47
7	1m 4f	2m 2f	1m 1f	2m	7m 3f	5m 3f
9	-	-	-	1m	-	-
10	-	-	-	1m	2m 1f	1m 3f
11	-	-	-	-	1m 2f	1m 1f
12	-	-	1f	-	1m 1f	3m
13	-	-	-	-	-	-
14	-	-	1m	-	2m 2f	2m
total (%)	5 (11)	4 (31)	4 (9)	4 (24)	22 (27)	19 (40)

m = male, f = female; area codes as for Figures 5.21ff.

5.3.vi. Whole Life Migration Distance and Year of Death

Although there was no correlation between year of death and distance migrated within the temporal sub-divisions, over the whole research period the number and scope of longer-distance migrations traced did increase.⁵⁷ This may, as explained above, be largely an artefact due to the increasing range of search tools available, as suggested by the step-increase in the maximum distances over which individuals were traced from the start of the census period (**Table 5.16**). It may however also be that changing circumstances in the early nineteenth

⁵⁷ See Figures 5.25-5.31

century meant that a greater proportion of the sample was able to undertake long journeys (see further the discussion in section 5.4.i, which includes those individuals still alive in 1871).

Table 5.16: Summary of Baptism to Death Distances (km) for Whitbourne Descendants, According to Year of Death

year of death	female				male			
	mean	n	max	min	mean	n	max	min
before 1813	2	20	15	0	3	33	38	0
1813-1836	7	26	37	0	3	31	27	0
1837-1850	12	29	202	0	11	32	164	0
1851-1871	16	53	196	0	18	75	200	0

Median value for females was zero in all four time periods. For males, median rose to 1 in 1837-50 and to 4 in 1851-71.

5.3.vii. The Effect of Literacy on Whole Life Migration

As discussed in section 5.2.vii, literacy increased during the research period, but was higher in Whitbourne and in Herefordshire than in Worcestershire and Warwickshire. The whole life data was tested to determine if migration distances were related to literacy. Since literacy may be a life-cycle phenomenon, and any advantage would be most strongly felt before literacy was widespread, baptism cohorts sub-divided for the late eighteenth century were used for this analysis, based on a new data-table including literacy data, sex, baptism and burial places, years and distances, whether married and the number of children if any.

Effect of literacy was tested in four baptism cohorts: before 1770, 1770-1789, 1790-1809 and 1810-1859. Various methods of analysis were assessed, and the key results are summarised in **Table 5.17**, where the horizontal sub-sections of each time period relate to women and then men. For ‘effect of own literacy’ in the left hand half of the table, the 11 in the top line signifies eleven illiterate women who moved a mean of 3 km; in the ‘spouse’s literacy’

section at the right, the 6 signifies six illiterate husbands, whether the woman was literate or not, and the literacy rating relates to the spouse, so the first line (where $n = 6$, mean = 5) relates to women who had illiterate spouses.

Despite the complexity of the interactions, and the small sample size, this table reveals some interesting and potentially important things. Firstly, for the first three cohorts there was always a higher mean distance for literate than illiterate individuals of both sexes (column five: 3 to 4, 2 to 5 etc. down as far as 8 to 12), and the corresponding median distances were also higher for literate women (column seven: 0 to 4, 4 to 37, 0 to 17). Secondly maximum distances are always higher for literate than illiterate men, and for literate women in the middle two cohorts.⁵⁸ Thirdly, there is a gender difference in literacy, as expected from the national summary data: in the first two cohorts, most of the women traced were illiterate, but in the last two cohorts over two thirds of women were literate; the men remained more evenly divided throughout.

Turning now to the right hand part of the table, which relates to the effect of spouse's literacy on migration distance, if a woman married a literate man (in the 'f' lines, literacy = 1), both mean and maximum distance increased substantially compared with the results for illiterate grooms (literacy = 0) in all but the first cohort, and there was a comparable though not so consistent effect for men who had literate wives (for example in the second cohort the mean distance increased from 4 to 12 km and in the fourth from 3 to 21 km).⁵⁹

⁵⁸ A two-tailed t-test for the effect of own literacy on migration distance was significant at 95%

⁵⁹ A two-tailed t-test for the effect of spouse's literacy on migration distance was significant at 99%

Table 5.17: Influence of Literacy on Baptism to Death Distance (km)

baptism cohort	own sex	literacy rating	effect of own literacy				effect of spouse's literacy			
			n	mean	max	median	n	mean	max	median
<1770	f	0	11	3	15	0	6	5	15	3
		1	2	4	7	4	8	2	7	0
	m	0	19	2	17	0	22	3	20	0
		1	19	5	20	0	10	5	17	2
1770-89	f	0	10	7	19	4	4	10	17	11
		1	2	37	57	37 ²	8	14	57	8
	m	0	15	2	12	2	24	4	22	0
		1	17	9	22	9	6	12	17	15
1790-1809	f	0	3	17	52	0	2	0	0	0
		1	9	21	63	17	10	24	63	18
	m	0	16	8	45	5	17	11	63	5
		1	8	12	63	1	6	4	17	2
1810-1859	f	0	3	17	44	7	3	2	7	0
		1	7	8	38	0	7	15	44	8
	m	0	5	13	50	0	5	3	15	0
		1	6	13	75	0	6	21	75	0

1. Signature literacy rating: 0 = illiterate, 1 = literate.

2. Minimum distance was 17 for literate women in the 1770-1789 baptism cohort; otherwise, minimum was always zero.

In conclusion, it seems that literacy played a significant part in migration patterns, perhaps especially when it was relatively rare, earlier in the research period. Furthermore, regardless of the literacy of the second marriage partner, having one literate member of a married couple very significantly increased lifetime migration distances.

5.3.viii. The Effect of Marriage on Whole Life Migration

a. Net Effect

In section 5.2.v, it was shown that there was a highly significant correlation between the distances moved by bride and groom prior to marriage, up to and including the marriage cohort 1837-1850, and section 5.3.vii indicated that literacy increased whole life migration.

This section explores whether this migration was genuinely a ‘whole life’ effect, or whether, as is often suggested, most mobility occurred before marriage. Ravenstein’s Seventh ‘Law’ proposed that ‘Most migrants are adults; families rarely migrate outside their county of birth,’⁶⁰ and much of this migration is usually attributed to the movement of single farm workers and domestic servants to a succession of employers.

A total of 203 married individuals and forty-four never-married were traced from baptism to burial, and a preliminary analysis showed no significant difference between net distance migrated over whole life-times in the two groups: marriage seemed not to have stopped migration. On the contrary, a comparison of the aggregate results for distance from baptism to marriage and over whole life (**Table 5.18**) showed that in all cohorts some migration continued after marriage, although the differences between the means were not statistically significant.

There seem to be several distinct factors at work here. Firstly, uxori-local marriage may have had an effect: in the last three cohorts, women moved a greater mean distance over their whole lifetime than they did from birth to marriage, while in the middle two cohorts men on average (whether the mean or median figure) moved closer to their native parish after marriage. Secondly, the maximum distances are never the same before marriage and for whole life; they are almost always greater for whole life, and the difference is usually greater for men. It is possible that mobile individuals remained mobile after marriage.

⁶⁰ Grigg, ‘E. G. Ravenstein and the ‘Laws of Migration’’

Table 5.18: Comparison of Baptism to Marriage and Baptism to Death Distances (km) in Four Baptism Cohorts

baptism cohort	sex	n	life-cycle distance	mean	max	median
<1770	f	22	baptism-marriage	3	17	0
			baptism-death	3	15	0
	m	40	baptism-marriage	7	34	6
			baptism-death	5	38	0
1770-1789	f	19	baptism-marriage	7	29	0
			baptism-death	10	57	0
	m	32	baptism-marriage	9	34	8
			baptism-death	7	57	0
1790-1809	f	20	baptism-marriage	12	58	5
			baptism-death	17	63	8
	m	26	baptism-marriage	10	25	10
			baptism-death	9	63	4
>1809	f	16	baptism-marriage	20	201	0
			baptism-death	21	202	0
	m	10	baptism-marriage	9	28	2
			baptism-death	17	75	0

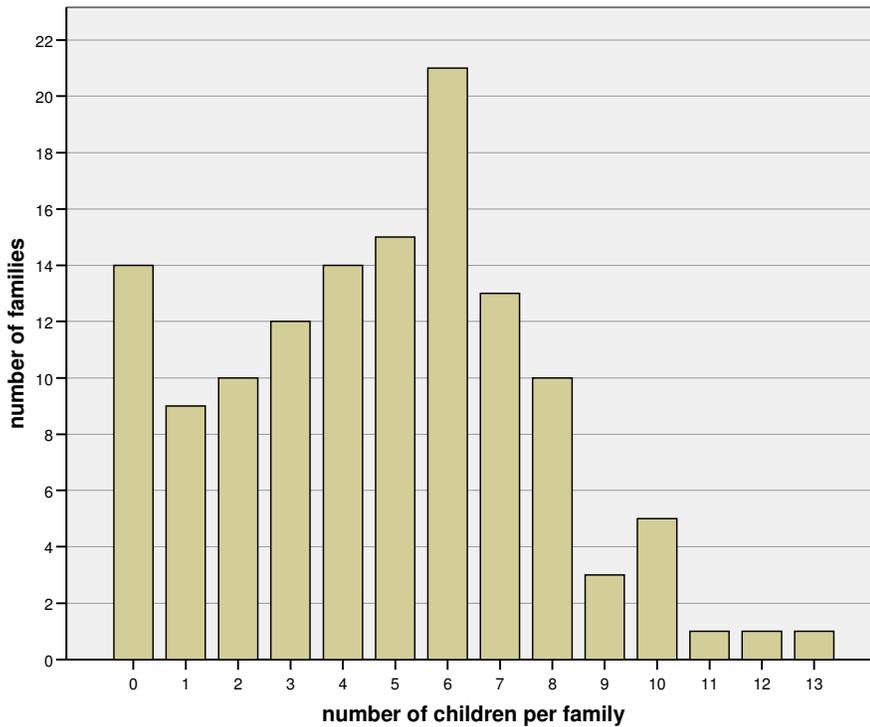
The table only includes individuals for whom both baptism to marriage and baptism to burial distances were known.

b. The Effect of Family Size

If migration were restricted after marriage, an obvious contributing factor might be the number of children in the household, both because this might limit housing options and the employment opportunities of the wife, and because some employers (especially for domestic servants) are known to have specified that there were to be no dependent children.⁶¹ However, any analysis of this question is complicated by the distribution of family size, the varying ages at which children began contributing to the household economy or left home, and remarriage of widows and widowers. **Figure 5.32** shows the size distribution of all known ‘completed’ families for all individuals of Whitbourne descent.

⁶¹ See for example *The Berrows Worcester Journal* Saturday March 16th, 1861: ‘Shepherd wanted . . . Married man without much family. His wife could have regular employment. Excellent cottage and large garden at moderate rent . . . Bewdley;’ or Saturday March 4th 1871: ‘Wanted – Under-gardener – respectable married man, no small children . . . Hagley, near Stourbridge.’ WRO

Figure 5.32: Distribution of Family Size Among Whitbourne Descendants, Parental Baptism 1689-1859



Counter-intuitively, families with four, five or six children moved the furthest, but since these were also the most frequent family sizes, baptism to death distance was tested only for families with more than three children. There was no significant effect,⁶² suggesting that even in extreme cases large family size did not inhibit mobility.

5.3.ix. The Effect of Male Occupation on Whole Life Migration

Occupation is more complex for whole life analyses than for baptism to marriage distance, because of factors including changes in occupations through a life cycle, the habit of

⁶² Pearson Correlation, one-tailed, significance level only 83%

following multiple occupations either simultaneously or seasonally,⁶³ and changes in definitions and available occupations over time and in individual census rubrics.

The analysis used the same coding system as before.

Occupational codes

- 1 yeoman or farmer
- 2 agricultural labourer and labourer, including labourer in brickyard or iron works
- 3 domestic servant including groom or coachman
- 4 domestic gardener
- 5 carpenter, cooper, wheelwright or spade-tree maker
- 6 tailor or shoemaker
- 7 mason or bricklayer
- 8 Whitbourne Parish Apprentice
- 9 interior building trades (painter, plasterer, glazier)
- 10 urban service trades (food, shop staff, clerk, fly proprietor, toll collector, porter, police constable)
- 11 self employed nurseryman, builder or pump-maker
- 12 iron and brass trades
- 13 blacksmith

a. Whole Life Migration and Occupation: Married Men, All Baptism Places

So that comparisons could be made with the baptism to marriage results, a preliminary analysis used only the subset of eighty-five men who were known to have been married, and

⁶³ Those listed with multiple occupations in the 1881 census are estimated to comprise about a third of the total active workforce: see M. Woollard, 'The Classification of Multiple Occupational Titles in the 1881 Census of England and Wales', *Local Population Studies* 72 (2004): 34-49

for whom both baptism to marriage distance and whole life migration data was available as well as occupational information. As with baptism to marriage distances, the different occupational groups showed some distinctive migration patterns over their whole lives (**Figures 5.33 and 5.34**), even though this sample was restricted by the paucity of marital information for men who had died before 1871.

Farmers and agricultural labourers were mobile, but with a few exceptions their net migration distance was below 20 km, and their median distance was 4 km. One of the two long-distance 'labourer' migrants was not necessarily an agricultural worker, but a general labourer: William Burraston was born in Knightwick, married in Whitbourne and died in Northfield (50 km) in 1842, age thirty-two. The other was George Soley, described as an agricultural labourer and waggoner, who moved from Whitbourne to Kingswinford via marriage in St John's Worcester and employment in Claines and Cradley. Although both these men were illiterate, William Burraston had literate parents and a literate wife, while George Soley's employment as a waggoner was near the top of the skills and wages scale in contemporary farm work, skills which would have adapted well to an urbanising environment. Robert Lawrence, a farmer, moved to Radnorshire (57 km) before his marriage and he was buried there in 1852.

The wood-working trades, tailors and shoemakers (codes 5 and 6) showed a diverse mobility pattern, including the most mobile individuals but also some relatively sedentary ones. These skills have widespread application, remaining in demand in rural communities (modal values were zero for code 5 in both periods and for code 6 in the later period, and medians were also low), but they had high maximum distances, suggesting that they were readily transferable to

urban environments. The two most mobile men in groups 5 and 6 were literate. James Gomery, a carpenter baptised in Bromyard, migrated after his 1832 marriage in Claines (where his father Edward ran a substantial carpentry business) to Aston; his father and wife were also both literate. James worked as a carpenter until his death in 1857. John Price, a shoemaker, was baptised in Tedstone Delamere but his parents seem to have been resident in Whitbourne; John also married in Claines, in 1819 and he and his parents were literate although his wife was not. By 1861, he was living in Birmingham St Peter and working as a shoemaker, with an unmarried daughter who was a shoe binder, and he died in 1870.

Of the five long-distance migrants, all but Robert Lawrence moved with several dependent children, further indicating that marriage was no necessary bar to mobility.

Figure 5.33: Baptism to Burial Distances by Occupation, for Men Married before 1813 (n = 42)

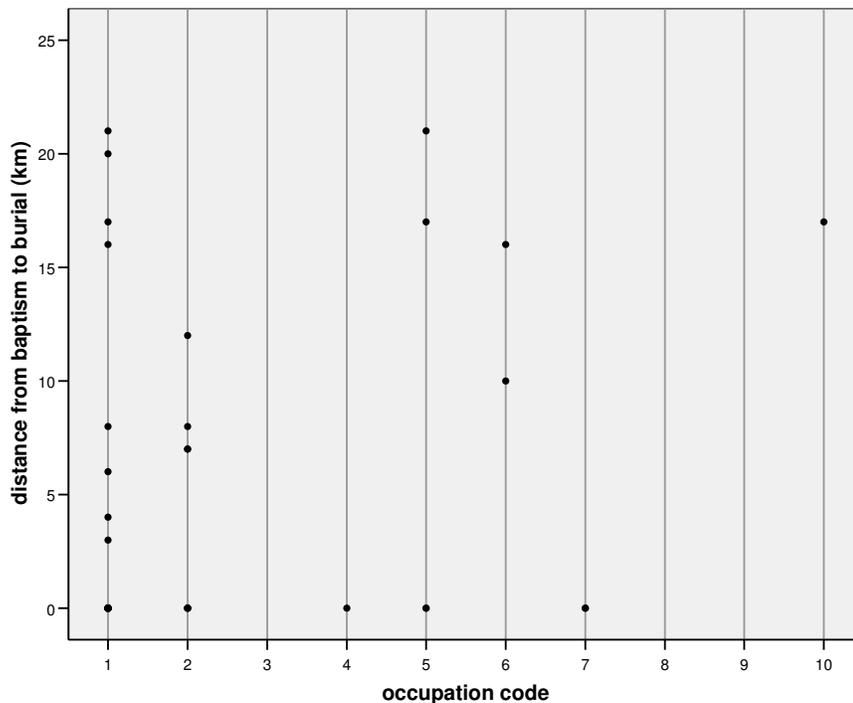
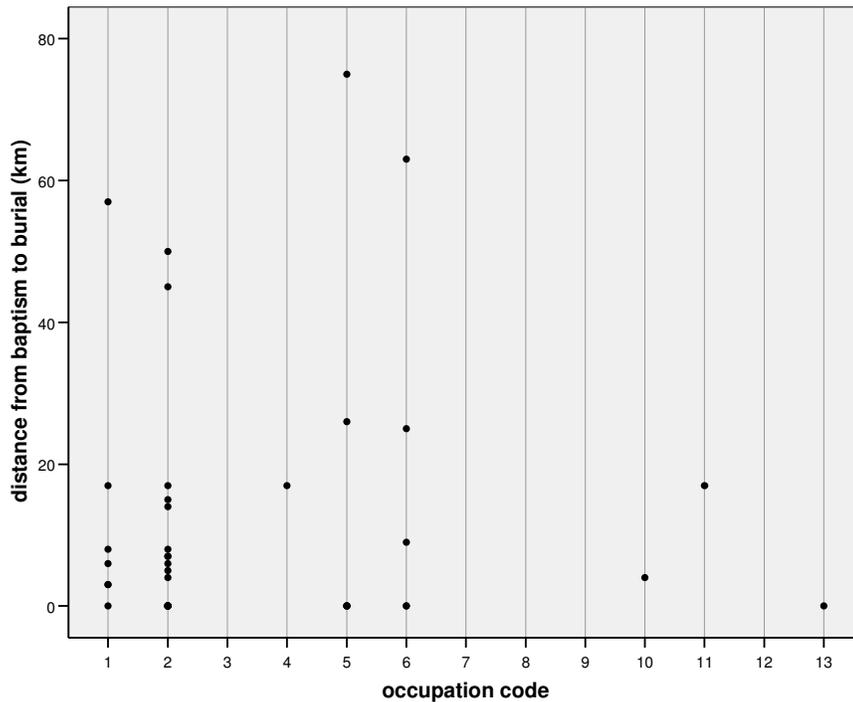


Figure 5.34: Baptism to Burial Distances by Occupation, for Men Married after 1812 (n = 43)



b. Whole Life Migration and Occupation: All Men and All Baptism Places

Figures 5.35 and 5.36 additionally include non-marrying men and those for whom marriage details were unknown. The main additional feature they demonstrate is the mobility of men willing or able to move into urban service trades (code 10). An early example of this was Joseph Mitchell, baptised in Whitbourne in 1734, who married at Knightwick and baptised four children in Whitbourne prior to his first wife's burial there in 1767. His second marriage, by licence, was in Worcester St Swithun, and he is described on the bond as a butcher. Joseph and his father were both illiterate, but his second wife was literate. One child of the second marriage was baptised and buried in St Swithun's, and Joseph was buried there in 1772.

In Figure 5.36 there are two very mobile individuals, both from the Collins tribe. Richard Collins was baptised in Whitbourne in 1798, the first child of illiterate parents, and by 1841

he was in Kings Arch Place, Surrey, working as a porter and with a wife and one child born in Newington. He later lived with his daughter and son-in-law in Camberwell, and died in 1867. John Munn was the grandson of another Richard Collins, a literate yeoman of Whitbourne, whose daughter Susannah married John Munn senior in Worcester in 1804. Both John senior and their eldest child John worked as glovers in Worcester, before John junior became a police constable and moved around rural Worcestershire (Hartlebury, Bredon and Church Lench) and then to Derbyshire, before his death in 1862.

These examples suggest the significance of occupation but also of flexibility in the use of skills, in determining migration options and distance.

Figure 5.35: Baptism to Burial Distance by Occupation, for Men Deceased before 1851 (n = 40)

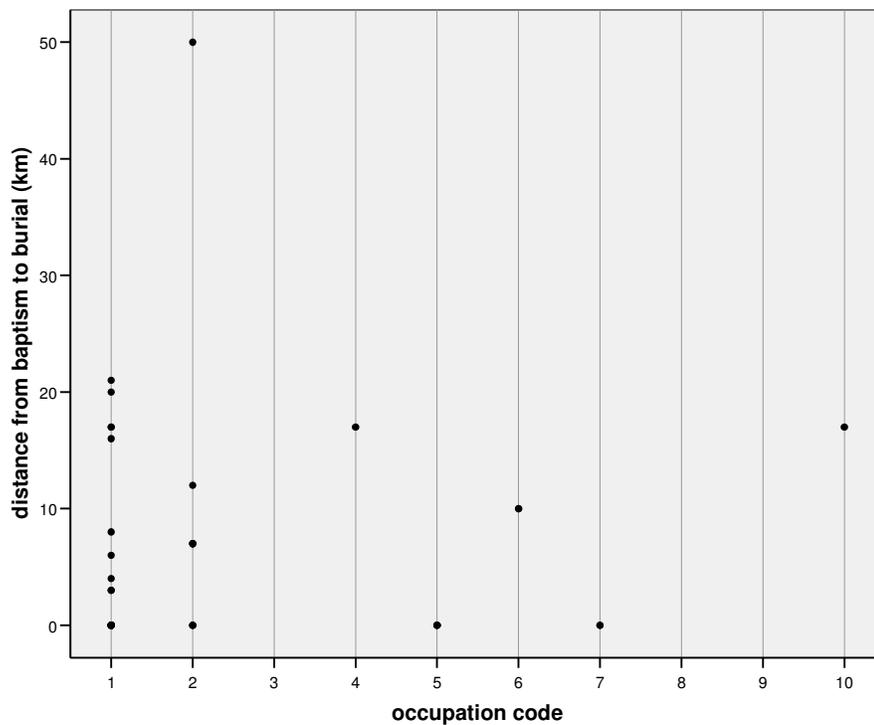
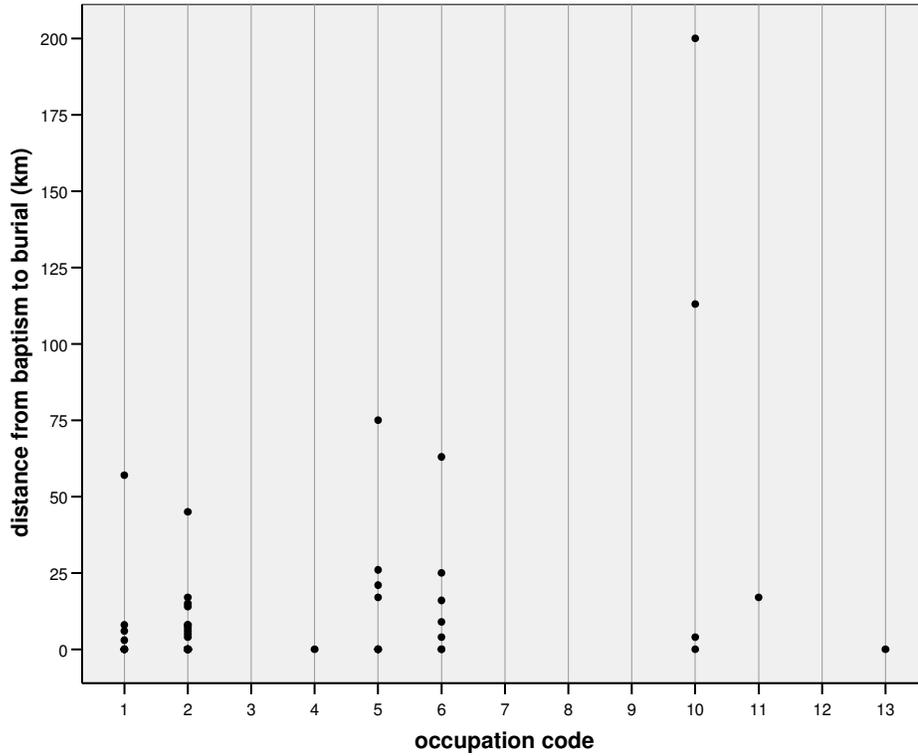


Figure 5.36: Baptism to Burial Distance by Occupation, for Men Deceased after 1850 (n = 54)



5.4 Migration from Baptism to Place of Residence in 1871

A total of 435 Whitbourne descendants aged ten and over (183 Whitbourne natives and 252 non-natives) were still alive and in a known place of residence at the research terminus of 1871, and these were used to provide additional information on migration patterns in the nineteenth century.

5.4.i. Method and Methodological Commentary

The method used for analysis of baptism to residence in the 1871 census was in principle the same as that used for baptism to marriage and baptism to burial. A table query was generated

from the descendants table by selecting ‘place of birth/baptism not null’, ‘birth year not null’, ‘death year null’, together with gender, unique number, ancestral number, first name, surname, whether traced, place of baptism/birth code, and notes, and deleting those cases not traced to 1871. The result was merged with the literacy, place of baptism, occupation and marital status from the marriages table where applicable. This gave an initial sample of 467 individuals traced to the census of 1871, from which children aged less than ten (defined as baptised in 1862 or later and checked for mature baptism against their age in the 1871 census) were filtered out as before. Fields were then added for parish of residence in 1871, a parish area code, distance from baptism to residence in 1871, and a recoded ‘married by 1871’ showing both ‘never married’ and ‘not married by 1871’ as 0 while leaving ‘married by 1871’ as 1. Where necessary, locations and distance were filled manually from the paper records. Place of baptism (or birth) and distances were determined using the same basic rules as before, but moves within London were derived from addresses on the census returns. Road distances were used throughout even if railways offered an alternative. In the few cases where the parishes were not known for people who were born and lived in either Birmingham or Worcester city, the distance was again assigned as a standard 1 km. A few individuals were not identified in the 1871 census, although certainly still alive, and these were deleted from the analysis. For example Thomas Portman, grandson of Joseph and Letitia of Whitbourne, was not found in 1871, but in 1881 he was visiting his parents in Droitwich, as a corporal in the Royal Artillery.

Overall tracing rate can be obtained from those traced to a burial before 1871, added to those still alive in 1871, as shown in **Table 5.19**. The tracing rate of 52% for individuals aged ten

and over throughout the research period is a high success rate, since to this can be added the approximately one quarter of the sample population who died before the age of ten.

Table 5.19: Overall Tracing Rate per Decade

baptism cohort	total baptisms in Descendants Table	individuals traced in <u>Whole Life Table</u>¹ (%)	individuals <u>Still Alive and traced to 1871</u>¹ (%)	total traced² %
1750-59	32	14 (44)	0 (0)	44
1760-69	60	29 (48)	0 (0)	48
1770-79	54	30 (56)	0 (0)	56
1780-89	54	36 (67)	0 (0)	67
1790-99	123	51 (41)	6 (5)	46
1800-09	94	31 (33)	22 (23)	56
1810-19	100	19 (19)	36 (36)	55
1820-29	174	30 (17)	53 (30)	47
1830-39	198	17 (9)	87 (44)	53
1840-49	199	8 (4)	113 (57)	61
1850-59	183	4 (2)	118 (64)	66
total	1,389	297 (21%)	435 (31%)	52%

1. Excludes those traced to death before age ten.

2. Total traced % = percentages traced in 'Whole Life' + 'To 1871', excluding those known to have died before age ten.

Methodologically, it is important that the percentage traced did not in fact increase suddenly once into the ambit of the census period (cohort 1790-99), and so some comparisons can validly be made along the whole time-span without undue bias from many migrants leaving the search area accessible in the pre-census period. This is not to say that such migration did not happen, indeed the evidence presented earlier implies that some almost certainly did take place. The limitations of both the method and the census data may be such that a similar percentage of the sample were traced even using this superficially more sophisticated tool. Nevertheless, the combination of the results for the whole life and still alive sub-samples suggests that most migrant Whitbourne descendants were travelling relatively short distances until the late eighteenth century. The higher tracing rates in the last two cohorts, although still not exceeding that for the 1780-1799 cohort, were perhaps mainly due to the younger age of

these individuals (mean age in 1871 of the final cohort was only sixteen), before much migration had occurred.

5.4.ii Net Migration According to Individual Characteristics

A preliminary aggregative analysis (**Table 5.20**) showed that, although the sample who were still alive in 1871 comprised individuals at varying life stages and ages, many characteristics were the same as found for previous samples of the dataset.⁶⁴ Firstly, although the individual who had moved furthest was a single female, there was no significant difference between the net migration of married and single people. Secondly, male domestic servants had a high mean and especially median distance, and their maximum migration distance was almost as great as the one member of the armed forces. Thirdly, the literacy data here does not show a significant effect, perhaps partly because it was only available for a small minority of long-distance migrants and also because these cohorts may have been born after literacy ceased to be a dominant factor in migration. Fourthly, a methodological point: the predominantly urban skilled non-manual category had a modal value greater than zero, and this was probably because small and densely populated urban parishes give a false impression of greater mobility because their inhabitants are more prone to cross parochial boundaries when moving a short distance.

⁶⁴ They are also compatible with the data assembled by Pooley and Turnbull for individual migratory moves by different types of migrant: see Colin Pooley and Jean Turnbull, *Migration and Mobility in Britain since the Eighteenth Century* (London: University College London Press, 1998), p. 68

Table 5.20: Distance from Place of Baptism to Place of Abode in 1871, According to Various Individual Characteristics

Migrant characteristic (N)	distance (km) from birth to 1871					
	mean	st.dev.	mode	median	max.	min.
gender: male (257)	19	41	0	6	355	0
female (188)	24	52	0	7	397	0
married: yes (237)	21	39	0	7	312	0
no (208)	21	53	0	4	397	0
literate (both sexes) (76)	10	15	0	4	73	0
illiterate (both sexes) (66)	13	18	0	6	70	0
occupation ¹ : farmer (11)	27	59	0	4	203	0
skilled non-manual ² (21)	25	26	2	9	64	0
labourer incl. agric. (108)	11	15	0	6	65	0
domestic service ³ (32)	38	58	0	19	215	0
armed forces (1)	253	-	-	-	253	-

1. Occupational groupings data refers only to men.

2. Skilled non-manual equals occupational code 10.

3. Domestic service equals occupational codes 3 and 4: domestic servants and domestic gardeners.

5.4.iii Known Migrants and Derivation of Potential Migrants

Known migrants were defined in this section as those with a ‘baptism to 1871’ distance greater than zero, and are shown in **Table 5.21**. This is compatible with Table 5.10, which showed 68% known migrants in the baptism cohort 1800-1809 and 47% for 1790-99. The slightly higher figure here may be random variation, with a much smaller sample for these cohorts, but may reflect the greater longevity of individuals in the present sample (being still alive in 1871) and consequent increased migration opportunities. This latter supposition is supported by the lower migration rate in the last cohort here, representing individuals who were still in an early stage of their independent lives.

Table 5.21: Known Migrants from All Baptism Places, Baptism Cohorts 1790 to 1859, for those Still Alive in 1871

baptism cohort	1790-1809	1810-29	1830-39	1840-49	1850-59	total
total males in Still Alive in 1871 Table	14	53	52	62	69	250
no. males with baptism to 1871 distance > 0 km	12	37	39	47	44	179 (72%)
total females in Still Alive in 1871 Table	14	36	35	51	49	185
no. females with baptism to 1871 distance > 0 km	9	28	26	38	29	130 (70%)
% of individuals in Still Alive in 1871 Table with baptism to 1871 distance > 0 km	75	73	75	75	62	71%

In the baptism cohorts 1790-1809, there were equal numbers of males and females traced to 1871, but thereafter more men were traced. While this may be because of the small sample size in the first cohort, it may indicate a gender difference in mobility: migration beyond Herefordshire and Worcestershire restricted the scope for checking marriage registers, for reasons of cost, and so fewer marriages could be confidently identified. Since this had a disproportionate effect on subsequent tracking of women, their long-distance migration was more likely to be lost from the analyses than that of their male counterparts.

Potential male migrants aged ten and over for the baptism cohorts from 1790 were derived by adding the traced and untraced individuals, for Whole Life and Still Alive in 1871, as set out in **Table 5.22**. As before, potential migrants is the sum of known migrants and untraced individuals, since all of these might have both changed parish of residence and lived to the age of at least ten. The figure for potential migrants gives a maximum possible figure to set against known migrants, which is the minimum figure; actual male migrants lies somewhere

between the known and potential levels, reduced by the numbers dying untraced before the age of ten.

Total potential male migrants in this sample remained quite steady, even in the early cohorts with smaller sample size: the combined data for 1790 to 1809 equals 82%. This suggests that the increase in potential migrants from about 50% in the whole life sample during the eighteenth century (Table 5.11), to about 80% in this data, may represent a genuine behavioural change in the male sample. The proportion of untraced males was at a minimum in the last cohort, at 28% (twenty-seven out of ninety-six) with average age about sixteen, compared with 44% in the 1810-1829 cohorts which had an average age of about forty-six, and 51% in 1790-1809 (average age about seventy-two). Although some of these might represent untraced burials of non-migrants, these results could support the contention that migration may have been a whole-life phenomenon rather than predominantly associated with early adulthood.

Table 5.22: Derivation of Potential Male Migrants, 1790-1871

male baptism cohort	1790-99	1800-09	1810-29	1830-39	1840-49	1850-59	total
1. known migrants in Whole Life Table	15	10	7	7	5	-	44
2. known migrants in Still Alive Table	2	10	37	39	47	44	179
3. 1 + 2 = known migrants	17	20	44	46	52	44	223
4. total in Descendants Table	72	48	140	107	100	96	564
5. total in Whole Life Table	31	14	25	7	6	0	83
6. total in Still Alive Table	3	11	53	52	62	69	250
7. 4 - (5 + 6) = total untraced	38	23	62	48	32	27	230
8. 3 + 7 = potential male migrants	55	43	106	94	84	71	453
9. potential male migrants as % of all males in Descendants Table	76	90	76	88	84	74	80%

5.4.iv. Out-migration of Whitbourne Natives, by Area of Destination

Place of residence in 1871 is presented here by area, as for whole life migration, although the parishes included in groups 7, 10, 11 and 12 were slightly different because of increasing urbanisation. The distinction between areas 10 and 11 is obviously imprecise, since the population at the fringes of the West Midlands urban area was increasing rapidly in 1871; for instance King's Norton rose from 13,500 in 1861 to 21,800 in 1871. Nevertheless it serves as a means of highlighting some features of the migration pattern observed in the sample.⁶⁵

Key to parish area codes: see also Figure 5.20

1 = Whitbourne

2 = parishes immediately adjacent to Whitbourne, to the west and south

3 = parishes immediately adjacent to Whitbourne, to the east and north

4 = the next ring of parishes beyond group 2, to the west and south

5 = the next ring of parishes beyond group 3, to the east and north⁶⁶

6 = other rural parishes in Herefordshire, Worcestershire and Shropshire north to Bridgnorth

7 = Worcester, including Claines which was by this time substantially built up, with a population of 8,000 in 1861 and over 10,000 in 1871⁶⁷

8 = Herefordshire and south Shropshire market towns

9 = Worcestershire market towns

⁶⁵ Enumeration Abstracts for Worcestershire: Table 10 p. 143 (1861) and Table 10 p. 431 (1871)
www.histpop.org

⁶⁶ Allocation of individual parishes to groups 4 or 5 was determined by geography and communication networks; for example Wolverlow relates to Upper and Lower Sapey more than to Collington

⁶⁷ Enumeration Abstracts for Worcestershire: Table 10 p. 143 (1861) and Table 10 p. 430 (1871)
www.histpop.org

10 = places in the Black Country and other areas in north Worcestershire and north-west Warwickshire which were already urbanising in 1871 but not part of the Birmingham conurbation: Belbroughton, Bewdley, Bilston, Brierley Hill, Bromsgrove, Cheslyn Hay Staffs, Harborne, Kidderminster, Kingswinford, King's Norton, Lye, Northfield, Oldbury, Rowley Regis, Sedgley, Solihull, Stourbridge, Wollescote

11 = places in Birmingham and its contiguous urbanising areas in 1871: Aston, Birmingham, Bordesley, Edgbaston, Handsworth⁶⁸

12 = London, including Croydon and Fulham

13 = Lancashire and Cheshire

14 = other places in the United Kingdom

The total population for areas 2 and 4, to the west and south, was 8,958 in 1871, compared with 10,153 (12% higher) for areas 3 and 5, to the east and north, as shown in **Table 5.23**.

⁶⁸ Gordon E Cherry, *Birmingham: A Study in Geography, History and Planning* (Chichester: John Wiley and Sons, 1994), pp. 67-69

Table 5.23: Populations of the Parishes in Areas 1 to 5, in 1871

area	parish	population in 1871	total population of area
1	Whitbourne	856	856
2	Lower Sapey	249	
	Tedstone Delamere	235	
	Bromyard	2,983	
	Stanford Bishop	237	3,704
3	Clifton upon Teme	525	
	Martley	1,258	
	Doddenham	279	
	Knightwick	151	2,213
4	Cradley	1,853	
	Acton Beauchamp	221	
	Evesbatch	95	
	Bishop's Frome	949	
	Avenbury	395	
	Stoke Lacy	346	
	Little Cowarne	213	
	Pencombe	394	
	Grendon Bishop	198	
	Bredenbury	60	
	Wacton	137	
	Edwyn Ralph	155	
	Edvin Loach	46	
	Collington	128	
	Tedstone Wafer	64	5,254
5	Suckley and Lulsley	779	
	Alfrick	434	
	Leigh	4,174	
	Broadwas	337	
	Wichenford	301	
	Little Witley	202	
	Great Witley	408	
	Shelsley Beauchamp	574	
	Shelsley Walsh	59	
	Stanford on Teme	164	
	Upper Sapey	383	
	Wolferlow	125	7,940

Data from Enumeration Abstracts for Herefordshire and Worcestershire, Report for the 1871 census, Table 10 (Herefordshire) pp. 139-141 and Table 10 (Worcestershire) pp. 430-432, www.histpop.org

Figures 5.37 to 5.41 show the residence of Whitbourne natives who were traced to 1871, subdivided by baptism cohorts. A third more male natives of Whitbourne than females were traced up to 1871, but proportionally there were few differences, with 38% of women and 37% of men still in the parish in 1871, although as before fewer long-distance female migrants were fully traced. Many women were traced to one destination but then their marriage or burial was not found or confirmed, for example Sarah Priddy (Combey) was a parlour maid in Dover in 1861 but not traced thereafter. Every cohort except the last showed appreciable long-distance out-migration (areas 10 and above), as expected from earlier analyses, but London (area 12) appeared to have been superseded by Birmingham and other more local urbanising areas, especially for individuals born in the nineteenth century.

As for the whole life data, Herefordshire and south Shropshire market towns (excluding Bromyard) were not a significant destination, with just one Whitbourne native traced there. This was Abigail Walton (Combey), living in Leominster with her second husband, a carpenter. Worcester city, however, did still represent a significant destination, perhaps unsurprisingly since its population even in 1831, at the mid-point of this period, was already over 30,000, approximately twice the combined population of all other parishes in the zone between 17 and 23 km from Whitbourne.⁶⁹ Only one Whitbourne native from the first cohort was still alive in Worcester, although five of her contemporaries had been traced to deaths in the city, with a mean age at death of fifty-one.

⁶⁹ Enumeration Abstract for Worcestershire, Report for the 1871 census, Table 10 (Worcestershire) pp. 430-432 www.histpop.org

Figure 5.37: Residence in 1871 of Whitbourne Natives, Baptism Cohort 1790-1809
(n = 21)

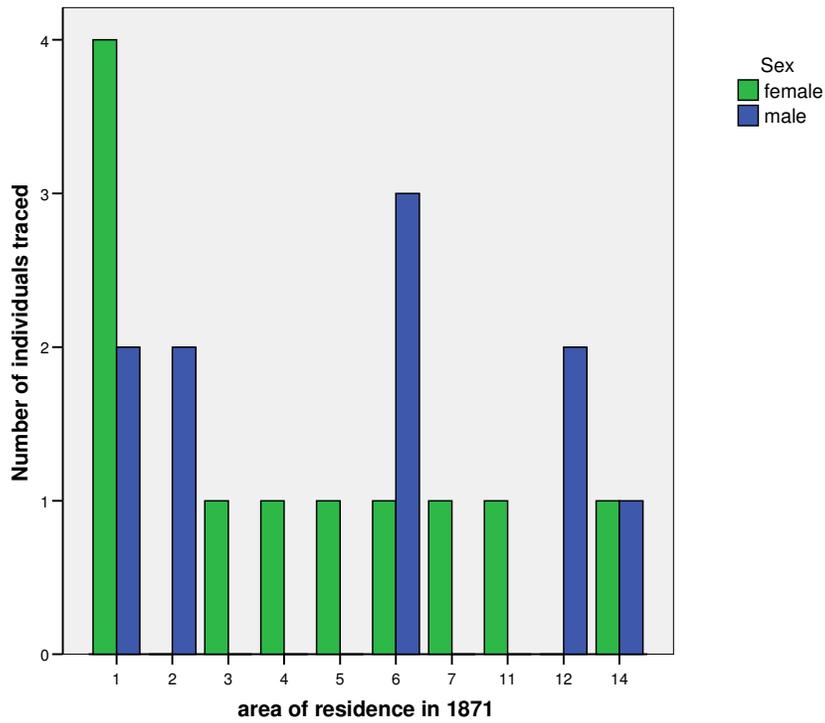


Figure 5.38: Residence in 1871 of Whitbourne Natives, Baptism Cohort 1810-1829
(n = 42)

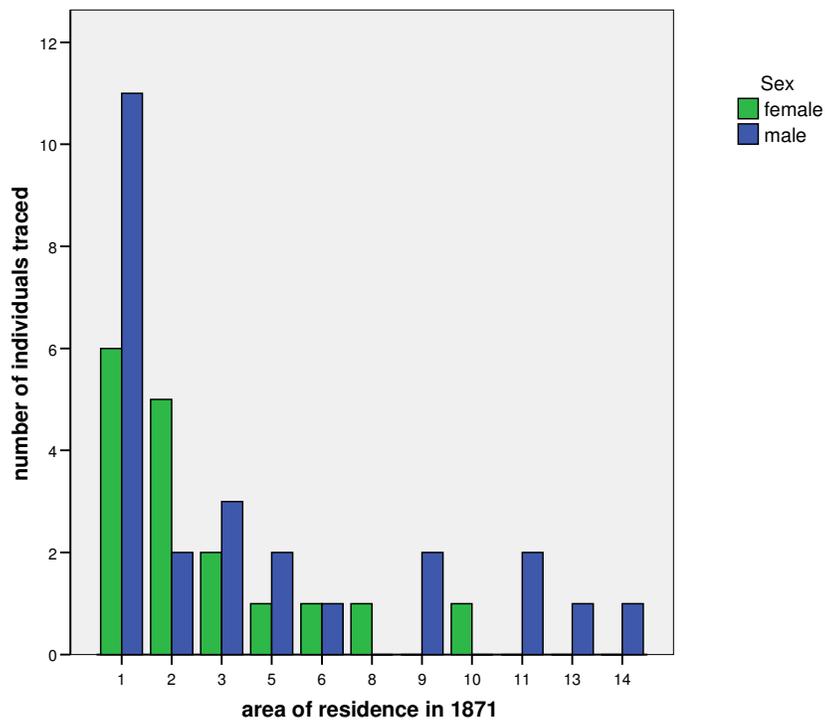


Figure 5.39: Residence in 1871 of Whitbourne Natives, Baptism Cohort 1830-1839 (n = 39)

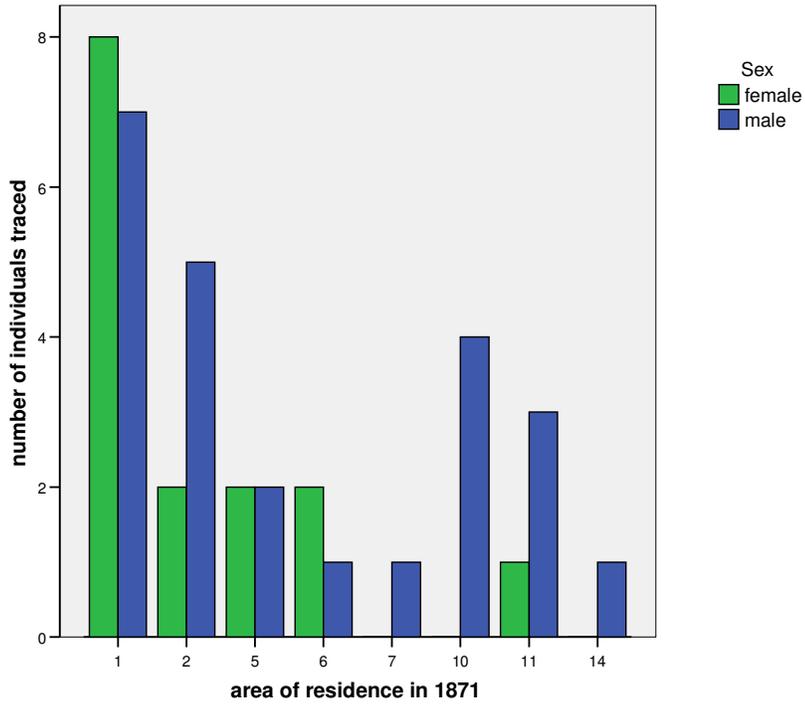


Figure 5.40: Residence in 1871 of Whitbourne Natives, Baptism Cohort 1840-1849 (n = 40)

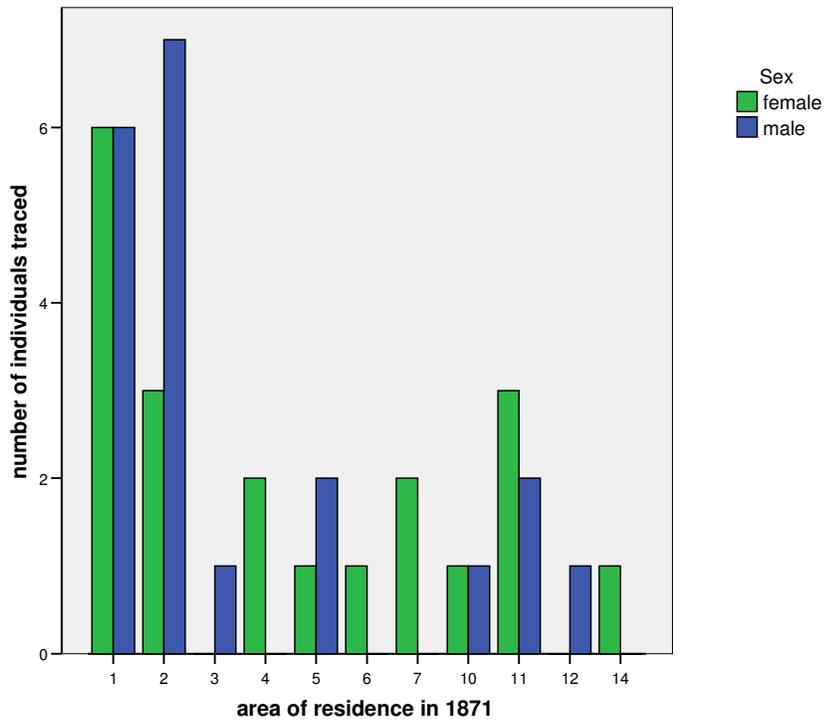


Figure 5.41: Residence in 1871 of Whitbourne Natives, Baptism Cohort 1850-1859 (n = 41)

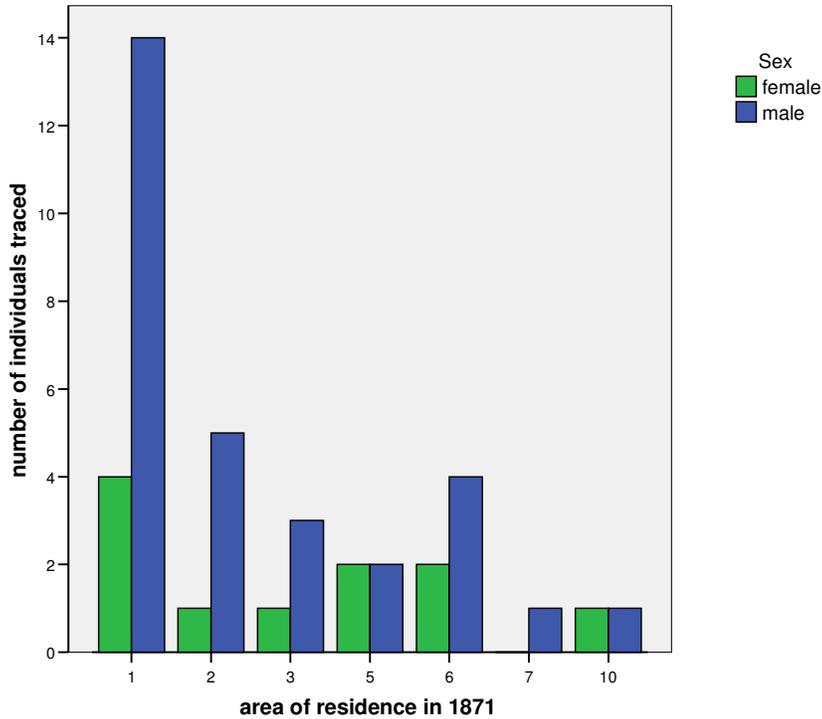


Table 5.24 shows the percentages of each baptism cohort according to their area of residence in 1871, together with the whole life 1790-1809 cohort for comparison. The different pattern in the whole life sub-sample is compatible with the results discussed earlier in this chapter: fewer of these individuals survived to appear in the CEBs (so fewer out-migrants were traced), and secondly their shorter lives gave them fewer migration opportunities.

The table lends support to the hypothesis that migration patterns are a mixture of life-cycle and temporal changes. About a third of all individuals still alive remained resident in Whitbourne (area 1), regardless of their age, but fewer than for the whole life cohort. This may indicate that out-migration had increased in the nineteenth century. In terms of life-cycle migration, teenagers and young adults (cohorts 1840-1859) seem to have focused on nearby

Herefordshire and Worcestershire destinations (areas 2-6), perhaps in farm work or domestic service. Longer-distance migration may have been deferred until full adulthood, since none in the last cohort were traced to areas 11 and above, and only two individuals to area 10. Three features which may relate to temporal changes in the out-migration pattern are firstly that London (area 12) appears to have been overtaken by Birmingham and its nearby urban areas (areas 10 and 11) as a destination of choice for those born from 1830 onwards. Secondly, the only evidence for migration into market towns in Worcestershire and Herefordshire apart from Bromyard (areas 8 and 9) is in the 1810-1829 cohort. Thirdly, Worcester itself (area 7) was less important as a destination for those born in the nineteenth century.

Table 5.24: Percentages of Whitbourne Natives Traced to Different Areas in 1871

	whole life baptism cohort 1790-1809	baptism cohorts of the sample still alive in 1871				
		1790- 1809	1810- 1829	1830- 1839	1840- 1849	1850- 1859
age range	10-75 (mean=47)	62-81	42-61	32-41	22-31	12-21
area: 1	50.9	28.5	40.4	38.4	30.0	43.9
2	7.0	9.5	16.6	17.8	25.0	14.6
3	14.0	4.8	11.9	0.0	2.5	9.8
4	1.8	4.8	0.0	0.0	5.0	0.0
5	1.8	4.8	7.1	10.3	7.5	9.8
6	5.2	19.0	4.8	7.7	2.5	14.6
7	8.8	4.8	0.0	2.6	5.0	2.4
8	0.0	0.0	2.4	0.0	0.0	0.0
9	0.0	0.0	4.8	0.0	0.0	0.0
10	3.5	0.0	2.4	10.3	5.0	4.9
11	5.2	4.8	4.8	10.3	12.5	0.0
12	1.8	9.5	0.0	0.0	2.5	0.0
13	0.0	0.0	2.4	0.0	0.0	0.0
14	0.0	9.5	2.4	2.6	2.5	0.0
total	100.0	100.0	100.0	100.0	100.0	100.0
N	57	21	42	39	40	41

The summary above fits broadly with the detailed evidence from the 1810-1829 baptism cohort, for whom most census information is available and of whom forty out of the forty-two

individuals were identified at each census from 1841 to 1871. At the same time, case studies from this cohort highlight the extent to which net migration can obscure gross patterns of movement. Evidence for life-cycle migrations comes from the individuals who were in Whitbourne in 1871; two women and three men among them had previously been resident in nearby rural parishes and three of the women had married in Worcester. Fifteen individuals had moved around the locality as young adults but did not return to Whitbourne, and three of these had subsequently moved further away. Six women in all had married in Worcester, and five had then left the city, suggesting it offered employment opportunities for young women; only one woman from this cohort remained in Worcester and she was not fully traced and so is not included in this analysis. Temporal changes in the migration pattern are suggested by the absence of any individuals definitely traced to London (one woman who moved there after marriage was not traced at the 1871 census and was dead by 1881), compared with two men in Birmingham and a third man who had been there before returning to rural Worcestershire.

5.4.v. Migration of Second Generation Whitbourne Descendants

Individuals of Whitbourne descent who were not native to the parish were more widely dispersed than their native contemporaries, as shown in **Figures 5.42 to 5.46** (see the area key for Figures 5.37 to 5.41). Nevertheless, much of the migration which had occurred was localised. Even though several generations had elapsed since some families had left Whitbourne, a high proportion remained resident in Herefordshire and Worcestershire, as represented by the segments clockwise to the black area for the Black Country. In baptism cohort 1850-1859, this section still included almost three quarters of women and two thirds of the men traced. Similarly, the segments representing rural Herefordshire and Worcestershire,

clockwise to the red area for Worcester city, included between a third and two thirds in all cohorts.

In the first two cohorts, more women than men were traced to London (area 12). Three quarters of men were in rural Herefordshire and Worcestershire, but less than half the women; more men than women were found in Worcester city, but more women were traced to London than to Worcester, and women were also found in Lancashire and Cheshire (area 13). In the third cohort, 1830-1839, only a quarter of both sexes were found in rural parishes close to Whitbourne, but men predominated in other rural parishes (area 6). More men than women were again traced to Worcester, and more women to London and to the 'rest of the United Kingdom' (area 14). A similar pattern was found in the 1840-1849 cohort, with slightly more men than women found in rural Herefordshire and Worcestershire; both sexes were traced to London and area 14, but women were again also found in Lancashire and Cheshire. Only in the last cohort (Figure 5.46) did rural areas seem to become less dominant as destinations for men. Worcester and the Black Country towns were common locations for both sexes (almost half the men) but women were also found frequently in area 5, the rural parishes to the east of Whitbourne. Conversely, and as for the whole life results, few non-native Whitbourne descendants were found in area 4 to the west, and none from the last cohort.

As with the whole life data, some individuals in all cohorts, and almost always more men than women, were found in Whitbourne, even though they had not been baptised there. This may either be a result of more or less random local circulation of population between parishes, as seen in the baptism cohort 1810-1829 explored above, or it may reflect an overt view of Whitbourne as the 'home parish', perhaps resulting from inherited legal settlement or maybe

from the high degree of inter-relatedness among the population and hence the strong ties of kinship that existed.

Numbers traced to Birmingham and the Black Country increased through time, beginning with women. By baptism cohort 1810-1829, a fifth of all women were found there, the same number as in London, and there was a similar pattern in cohort 1830-1839. In the fourth cohort (Figure 5.45), about a fifth of both sexes were found in these two areas, although more of the women were in the Black Country. By the last cohort, the Black Country predominated, with almost a quarter of all men traced and nearly a fifth of the women. As with the Whitbourne natives, this overall pattern could indicate that women were drawn to the urbanising West Midlands districts at a younger age than their male counterparts, perhaps for domestic service while the men moved later for work in heavier occupations requiring mature strength, or alternatively that the women were being drawn to these urban areas earlier in the century. More detailed analysis of occupations linked to particular life histories and migration patterns might help to clarify the balance between these two hypotheses.

Table 5.25 a: Outlier Migrants who Died before 1871: area 14 (n = 7; 2 female, 5 male)

name and tribe	birth place and year	lit.	occ. code	death place	birth-death km	death year
Ann Vernals (ve)	Whitbourne 1783	ss	-	Radford, Notts	153	1858
Margery Arden ^a (la)	Whitbourne 1788	ss	-	Barland, Radnor	57	1861
James Vernals (ve)	Whitbourne 1782	nm	4	Normanton, Rutland	164	1845
Robert Lawrence ^a (la)	Whitbourne 1785	ss	1	Old Radnor	57	1852
Samuel Gomery (gy)	Whitbourne 1788	??	10 ¹	Cheltenham	54	1851
John Munn (co)	Worcester S.Clement 1809	??	10 ²	St Werburgh, Derbys	113	1862
George John Lawrence ^b (la)	Old Radnor 1827	ss	1	Barland, Radnor	5	1868

Table 5.25 b: Outlier Migrants Still Alive in 1871: area 14 (n = 15; 9 female, 6 male)

name and tribe	birth place and year	lit.	occ. code	occ. spouse	abode in 1871	birth-1871 (km)
Maria Mitten (mi)	Whitbourne 1808	xx	2	farmer/ag lab	Pattingham Staffs	62
Louisa Kreisa (ve)	Brighton 1813	ss	-	vicar	Radford Notts	312
Susannah Combey (cb)	Norton 1833	xx	3	ag lab	Snitterfield Warwicks	70
Ellen Collins (co)	Areley Kings/Whitbourne 1833	?s	3	black-smith	Broadwell Glos	73
Martha Vernals (ve)	Avenbury 1834	nm	3	-	Bishopwearmouth	397
Emma Hodges (hg)	Cheltenham 1835	ss	-	master baker	Reading Berks	111
Elizabeth Palmer (pr) ^c	Whitbourne 1844	nm	3	-	Bath	122
Elizabeth Wainwright (pr)	Clifton 1846	s, nm	3	-	Cheltenham Glos	58
Martha Rowberry (ro)	Welland 1854	nm	3	-	Dawlish, Devon	227
Samuel Hodges (hg)	Whitbourne 1800	ss	11 ³		Cheltenham Glos	54
Allen Clark (cl)	Ribbesford 1826	sx	3 ⁴		Sutton Coldfield	51
William Palmer (pr) ^c	Whitbourne 1827	??	3		Bath	122
James Vernals (ve)	Whitbourne 1836	xs	12 ⁵		Lincoln	208
George Clark (cl)	Shrawley 1846	nm	2 ⁶		Shincliffe Durham	355
Albert Vernals (ve)	Handsworth 1851	nm	RN ⁷		Spithead	253

Literacy (groom, bride): nm = not married by 1871; x = marked with a cross, s = signed, ? = unknown.

a. Margery Arden and Robert Lawrence married Whitbourne.

b. George Lawrence, son of Margery and Robert.

c. Elizabeth and William Palmer were siblings, with literate parents. William Palmer's marriage is untraced.

occupational codes as before:-

- 1 = farmer or yeoman
- 2 = agricultural or brickworks labourer
- 3 = domestic servant including coachman
- 11 = self employed
- 12 = iron and brass trades.

individual superscripts:-

- 1. Samuel Gomery was a dairyman in Cheltenham from at least 1841.
- 2. John Munn was initially a glover in Worcester, later a police constable.
- 3. nurseryman with several employees
- 4. domestic coachman
- 5. boilermaker
- 6. brick-maker
- 7. ordinary seaman RN.

These individuals highlight the tendency already noted for those in domestic service (code 3) and literate people to be among the most mobile. This is particularly so for women. However those in urban service trades (notably Samuel Gomery, dairyman, John Munn, police constable, and Samuel Hodges, nurseryman) also migrated significant distances. Among the women, half of those born in rural Herefordshire and Worcestershire moved south and west, to Gloucestershire and beyond. Among the men, the chief feature is that migration distance seems to have increased through the baptism cohorts. Half the men with rural origins were traced to the south and west, while the remainder moved either into the outer fringes of the West Midlands urbanising area or to the north east of England. Including all individuals still alive in 1871, there was a trend towards increasing distance migrated with time, but the correlation was not quite significant, even with the non-migrants removed.⁷⁰

A similar effect existed among the three individuals known to have been still alive in 1871 who were in Cheshire and Lancashire (area 13), to which can be added one who was employed there before returning to Whitbourne, Jane Clark, born 1827 at Whitbourne. In 1851 age twenty-three she was resident with a silk mercer and his daughter in Garston St Anne's, Lancashire, as one of three servants. By 1857 she had returned to Whitbourne and married John Collins, the publican at the Live and Let Live and son of Joseph, a Whitbourne yeoman. Both Jane and John were literate. The other three migrants to Cheshire and Lancashire were also domestic servants, and like Jane Clark they had migrated while single; one, Edward Combey, continued to move around this region after marriage.

⁷⁰ Pearson Correlation, one-tailed, only 94% significance level

Table 5.26: Individuals found in Area 13 (Cheshire and Lancashire) in 1871

name and tribe	baptism year	baptism place	lit	occupation	abode in 1871	birth-1871 (km)
Mary Carwardine (la)	1817	Moreton-on-Lugg	nm	cook domestic	Lymm Cheshire	170
Mary Soley (so)	1841	Grimley	nm	ds	Liverpool	168
Edward Combey (cb)	1828	Whitbourne	sx	coachman domestic	Withington Lancs	171

Note: Annie Combey, born 1858, is excluded from this table because although over age ten in 1871 she was still resident with her father Edward, and was then a scholar.

5.6 The Role of Kin and Acquaintances in Long-distance Migration

There are some examples in the data-set which support the intuitive idea that kin could have a positive role in determining or facilitating migration.

5.6.i. Parent-child Effects

In two cases, long-distance migration of parents was demonstrably associated with comparable behaviour in the children, although not necessarily causally linked.

Firstly, Ann Vernals, born in Whitbourne in 1783, married a tailor named Francis Kreisa in Dorchester, Dorset. Her husband was born abroad and may have been Czech. They had six children, four baptised in London, one in Warwickshire and one in York, before Francis died in 1849 in Kensal Green. The third child, Louisa, who was born in Brighton but baptised in London, moved from London to Radford near Nottingham when still a minor, and married the

vicar's son, Samuel Cresswell, who was his father's curate before being appointed to the living. Both Louisa and Samuel, and Louisa's parents Ann and Francis, were literate, as were at least two of Louisa's brothers. Ann Vernals died in Radford in 1858, perhaps with her daughter and son-in-law; her net whole life migration distance was 153 km, although her gross migration was clearly many times greater than this; by 1871, Louisa's net migration distance was 312 km.

Secondly, Samuel Hodges, was born in Whitbourne in 1800, the son of a younger son of a yeoman. He moved to Strensham where he was married in 1830 to Mary Clark from Wribbenhall near Kidderminster. He and his bride were both literate, as were his parents. One of the witnesses was a gardener, and Samuel subsequently moved to Cheltenham, where he became the owner of the Imperial Nurseries, living on the site and ultimately employing eight men. Samuel and Mary may only have had one child, a daughter Emma born in Cheltenham. In 1858 Emma married James George, the Cheltenham-born son of a master confectioner (both bride and groom were literate), and by 1861 they had moved to Reading and he was employing a man and three boys in his own bakery. They had at least six children, all born in Reading, and employed six staff in the business and three domestic servants. Samuel's net migration distance to 1871 was 54 km, and Emma's was 111 km.

5.6.ii. Kin and Acquaintances

In some instances, predictably, anecdotal evidence has been found here for some influence of a wider network of kin and acquaintances in determining migration patterns. These range

from the role of siblings to instances which may represent no more than chance encounters, reflecting the social interactions expected in any society.

The closest links were where someone was living with immediate kin. The younger sister of James George, the confectioner cited above, was resident with him and Emma née Hodges in Reading in 1861, but this may only have been a temporary visit. Similarly, the year after the death of Elizabeth Walton (Combey) in Kidderminster in 1860, leaving a widower and five children under nine, her seventeen-year-old sister-in-law (born in Bishops Frome) was present in the household, together with a housekeeper servant. Margaret Vernals (1788-1873) lived for many years with her sister and brother-in-law (James Gomery) in Worcester; all were baptised in Whitbourne. John and George Price, sons of George Price of Bockleton, a literate wheelwright and a second-generation Whitbourne descendant, initially followed their father's trade. John moved to Harborne as a trainee wheelwright in or before 1861, and married the daughter of his lodging-house keeper in 1867. By 1871, his younger brother George was lodging with him and his young family, but by this time John and his wife were stationers. There is, incidentally, strong but unconfirmed evidence for John and George's sister having married a close relation of John's wife, the family having a rare surname and originating in Rock, Worcestershire, 18 km from Bockleton.

One example was found in which parents may have migrated at the same time as an adult child, in a family which seems to have had a tradition of kin-support. Samuel Combey was the illiterate agricultural labourer son of John Combey, an agricultural labourer who received outdoor parish relief in the 1850s and was apparently assisted in his old age by Samuel's wife, who lodged with him. By 1861, John had died and Samuel and his wife, both working as

agricultural labourers, were in turn living with their only child, Thomas, who was also an illiterate agricultural labourer. At some point between 1863 and 1866, Thomas and his family, then comprising a wife and three children under six, moved to Birmingham and by 1871 he was living in Bordesley, employed as a bricklayer's labourer. His parents, aged sixty-seven and seventy-two, were then living in part of a house in Cleveland Street, Birmingham St George's, 2 km from Bordesley. Both Samuel's wife Elizabeth and Thomas's wife Ellen were literate.

An example of probable sibling links in migration concerns the children of Edward and Margaret Gomery. James, baptised in 1812, married in 1832 and his first child was born in his wife's native parish of Alvechurch, Worcestershire, but died in Birmingham aged three. At least three further children were born, two in Birmingham and one in Curdworth, Warwicks. After James' death, his widow lived with their youngest son and his family in All Saints parish, Birmingham. Edward and Margaret's next child, James' sister Jane, baptised in 1814, worked in domestic service in Cheltenham before moving to All Saints Birmingham where she married a mill roller and lived four doors away from James' widow in Lower Camden Street; their eldest son became a jeweller. The third child died in infancy, and the fourth remained in Worcester, but the fifth, Harriet born in 1820 and baptised 1821, also moved to All Saints Birmingham, settling in Lower Camden Street. She married a gun maker in 1844 in Birmingham district, and they had one surviving child. This concentration of three siblings and their own families in one Birmingham street suggests a perceived value in pre-existing knowledge about a destination within the kin network.

In several instances, even looser ties seem to have influenced migration, for example Jane Bradburn was employed in domestic service in 1861 on a 500 acre farm in Essex, before she returned to Whitbourne to marry the recently widowed John Collins (whose first wife was the Jane Clark described above as a temporary migrant to Lancashire). The farmer was born in Essex but his wife came from Hereford city, which may illuminate Jane's employment with them. Jane, John and the witnesses to the marriage (her brother Robert and niece Harriet) were all literate. A second example is of George Clark, son of illiterate parents but whose own literacy is unknown. The eldest of eight children, baptised in 1846 in Shrawley where his father worked as a brick maker's labourer before returning to Whitbourne to take over the family smallholding, George worked in the Shrawley brickyards as a teenager but in 1871 aged twenty-four he was working as a brick maker in Shincliffe, County Durham, one of several people lodging with a farmer. Next door to his lodgings was another brick maker, born in Warwickshire, with his wife born in Malvern and their two infants, one born in Leigh, 20 km from Shrawley and only 10 km from Whitbourne.

5.6.iii. Migration Overseas

Finally, three instances were found of voluntary overseas migration, in addition to the one member of the Mitchell tribe transported to Australia for petty theft in 1833. These three cases, of two rather different types, confirm many of the features already found in the data, while presenting new ones.

Firstly, an extended family of the Burraston tribe migrated to Utah, after an early Mormon mission to the Bromyard area. William Burraston and Sarah Mason married in Whitbourne in

1833, she being literate while he was not. Later evidence from the US Federal Census makes it clear that she could both read and write. They moved to West Bromwich and then Northfield where William died. Sarah returned to the Bromyard area with five surviving children and married an illiterate agricultural labourer widower with five children, in 1848. In 1851, her two daughters were in domestic service in Worcester, and two of the three boys were resident with their mother and step-father, the older being in receipt of outdoor relief. He died two years later in Norton, aged eighteen.

On December 31st 1851, Jane Burraston, William and Sarah's second daughter, married Joseph Walton of Whitbourne; he was of full age and literate, she was illiterate and claimed to be of full age but could not have been older than seventeen. Four days later, these two formed the vanguard of their family emigration, sailing on the *Kennebec* from Liverpool to New Orleans with a group of 333 Mormons.⁷¹ The passage would normally have cost £3.12s.6d., but assistance was by this time available through the Mormons' Perpetual Emigration Fund Company.⁷² After travelling up the Mississippi by paddle-steamer, they reached St Louis, the point from which the Utah trail turned west.⁷³ Here Jane and her husband inexplicably separated:

‘April 24th 1852 – About this time I met Joseph Walton on the street bawling. He had been married to Jane Burraston in England crossed the Atlantic in the *Kennebec* and now his wife had left him and would not return. It seemed a heavy trial for him and Jane afterward went to St Joseph [further up-river] with William Newel.’⁷⁴

⁷¹ www.immigrantships.net/v6/1800v6/kennebec , first accessed April 2010

⁷² Liverpool Mormon Emigration Maritime Archives, www.liverpoolmuseums.org.uk/maritime/archive , first accessed April 2010

⁷³ P.A. M Taylor, ‘Emigrants' Problems in Crossing the West, 1830-70’, *University of Birmingham Historical Journal* 5 (1955): 83-102

⁷⁴ George Henry Abbot Harris, ‘Journals’ in *Mormon Emigration Journals and Accounts* (Salt Lake City, Utah: 1852): 57-85, <http://lib.byu.edu/mormonmigration/voyage=Kennebec> , first accessed April 2010

Other members of the Burraston and Walton families made their way to Utah between 1850 and 1860, where they became independent farmers. In the 1870 Federal census, Sarah (née Mason) was living in Davis County, Utah, but appeared also as present with her youngest son Richard and his family in Juab County, her second husband having died after reaching Utah; her son John was in Santaguin, Utah, and both Richard and John were illiterate and unable to read. By 1880, Jane (briefly Walton) was also in Juab County, farming and employing a farm servant, and her mother Sarah was boarding with her. Joseph Walton meanwhile had rejoined his parents and several siblings who had reached Utah, and they were farming in Salt Lake City.⁷⁵

A second and rather different example concerns John and Samuel Lloyd, sons of William Lloyd, the Whitbourne blacksmith in the early nineteenth century. Their father was literate, as were both they and their wives, and their two brothers whose marriages were traced. Their oldest brother William took over as the village blacksmith. Samuel, baptised in 1809, married in Whitbourne in 1831 and had four sons baptised there up to 1838. From early 1838, notices began appearing in *The Berrows Worcester Journal* about the new colony of South Australia, and in November 1838 the first advertisement for free passages for skilled emigrants to New South Wales was published, followed in June 1839 by an advertisement for Port Phillip [Melbourne] and Sydney:

Ships for Port Phillip and Sydney are despatched regularly every month from London and Plymouth. They are all of the first class . . . carry experienced Surgeons . . . and the best arrangements for Cabin, Intermediate, and Steerage Passengers . . . Agricultural servants and mechanics, of suitable age and character, are conveyed in these ships nearly free. All particulars may be known on application to Mr John Marshall, Australian Emigration Agent, 26, Burchin Lane, Cornhill, London. NB Post-paid letters only will be answered.⁷⁶

⁷⁵ U.S. Federal census, www.Ancestry.co.uk

⁷⁶ *The Berrows Worcester Journal* June 13th, 1839, WRO

This advertisement, or the one the following week, may have been the trigger for Samuel and Maria Lloyd, who applied for an assisted passage⁷⁷ and sailed on *The Lysander*, a 476 ton barque which left from London via Plymouth for Adelaide, South Australia, in May 1840. They travelled with Maria's father, their four sons aged between fifteen months and eight years, the youngest of whom died at sea, and another of Maria's relations, who also died.⁷⁸ They reached Port Adelaide in early September and seven months later their eldest son was buried there. A daughter was born in Adelaide in 1845.⁷⁹

Samuel's older brother John, also a blacksmith, married a Whitbourne native in St Andrew's Worcester in 1832. They had five children by 1843, baptised in Shelsley Beauchamp and Whitbourne. Like Samuel, John applied for an assisted passage⁸⁰ and they sailed with their four surviving children on *The Abberton* from London via Cork in 1844.

Port Phillip – Arrival. Sept 22 – *Abberton*, barque, 450 tons, Campbell, from Cork 1st June. Cabin passengers [fourteen names]; Steerage – 156 adults, 81 children 1-14 years and 15 infants.⁸¹

It is clear from entries in the Sydney Shipping Gazette that, although Melbourne had first been established just ten years previously, there was already frequent communication between the colonies, so the two brothers need not have lost contact. No conclusive evidence for the subsequent fate of John's family was found, but one of his sons was called Felix Lloyd, and this name persisted in the Melbourne area into the twentieth century.

⁷⁷ Register of Emigrant Labourers Applying for a Free Passage to South Australia, 1836-41; PRO CO386/149-151, at www.Ancestry.co.uk, first accessed April 2010

⁷⁸ South Australia Shipping Lists; www.familyhistorysa.info/shipping/passengerlists, first accessed April 2010

⁷⁹ South Australia Genealogy and Heraldry Society, www.saghs.org.au, first accessed April 2010

⁸⁰ Register of Assisted Immigrants from the United Kingdom; PRO V, VPRS 14, www.Ancestry.co.uk, first accessed April 2010

⁸¹ The Sydney Shipping Gazette, no. 30. 12th October 1844; www.theshiplist.com/ships/australia, first accessed April 2010

5.7 Conclusion

This chapter has presented the results of both aggregative and individual studies of migration among the descendants of a sample of the population of the Herefordshire parish of Whitbourne, from the early years of the eighteenth century until 1871. Significant differences have been identified between the observed behaviour of men and women, natives and non-natives of the parish, and according to occupation, literacy and life-cycle stage, as well as through historical time. The next chapter will discuss these findings in relation to those for sample populations in previous studies and other parts of England, and assess their significance.

CHAPTER SIX: DISCUSSION

6.1 Overview

This study began with a sample of 830 baptisms (almost 24% of Whitbourne baptisms in the research period), and 1451 individuals were traced to at least age ten, in some cases extending to six generations and giving a variety of data suitable for analysis. The number of lives traced was restricted by the rigorous methods applied for accepting linkages, but this was built into the design of the study in order to obtain a reliable final data-pool. The study has been underlain by a grounded and iterative approach, exploring the dimensions of migration that have been revealed as the data has accumulated, while acknowledging that this risked a diffuse and inconclusive outcome.

A cluster of possible research questions was identified at the beginning of Chapter Four, and some of these questions have proved amenable to solution within the project's research strategy, by analysing the gender, age, familial, cultural and occupational factors which were related to individual migration outcomes spatially, through time and as part of life-cycle stages. Underlying these questions have been two regional concerns. Firstly, was there a time after which east Herefordshire came under the migration shadow of the urbanising parishes of the West Midlands? Secondly, do the results obtained here illuminate any regional differences in migration patterns during the research period?

This study has deliberately combined quantitative analysis with qualitative exploration, on the premise that these are mutually dependent in work of this kind, the former being rooted in an

understanding of the latter's terms of reference, while the latter must be set within wider frameworks.¹ It has also accepted that individual lives defy theoretical assessment, presenting a mixture of motives and responses to necessity and opportunity, and so sometimes 'the exceptions are infinitely more interesting and important than the rule.'² It has therefore involved statistical analysis, leavened with individual case-histories and comparisons.

There is an increasing recognition that the detail of historical migration incorporated considerable regional variations as well as personal ones, and 'micro-level analyses may help us to isolate variables that are hidden at a macro-level while . . . encouraging a greater engagement with migration processes rather than migration patterns.'³ Even Schofield's cautious hope that the Cardington listing might provide 'a provisional paradigm of English rural migration on the eve of the Industrial Revolution'⁴ now seems optimistic: Bedfordshire in 1782 faced declining craft industries and parliamentary enclosures, while eastern Herefordshire stood on the cusp of a war-time renaissance of glove out-working, its small-scale agriculture was relatively prosperous with mainly early and piecemeal enclosures, and the west midlands industrial revolution was flowering. The present study has followed the micro-historical approach, attempting to interpret the trends and individual human behavioural patterns observed, in the light of contemporary regional contexts.

¹ A. W Carus and Sheilagh Ogilvie, 'Turning Qualitative into Quantitative Evidence: A Well-Used Method Made Explicit', *Economic History Review* 62 (2009): 893-925

² Peter Clark and David Souden, 'Introduction' in *Migration and Society in Early Modern England*, ed. Peter Clark and David Souden (London: Hutchinson, 1987): 11-48, p. 20

³ Bernard Deacon, 'Communities, Families and Migration: Some Evidence from Cornwall', *Family and Community History* 10 (2007): 49-60, p. 50

⁴ R. S. Schofield, 'Age-Specific Mobility in an Eighteenth-Century Rural English Parish' in *Migration and Society in Early Modern England*, ed. Peter Clark and David Souden (London: Hutchinson, 1987): 253-66, p. 265

The study has taken a longitudinal approach, including the eighteenth and early nineteenth centuries, for which information is relatively scarce.⁵ A drawback of this has been the need to subdivide the time period for some parts of the analysis, because of the different research tools available for them. Where possible, it has used intervening migrations to shift the focus from net distances some way towards gross migration patterns: for example Ann Vernals (baptised in Whitbourne in 1783) had a baptism to marriage distance of 216 km, but a net baptism to burial distance of only 153 km, which conceals moves from Whitbourne to London before her marriage in Dorset, then back to London, and thence to Nottinghamshire via the births of her children in London, Warwickshire, Brighton and York. The analysis has moved beyond the averages and norms of population behaviour, to look at some of the equally significant long distance migrations, and some non-migrant lives.⁶

One crucial component of life-cycle migration is that which occurs between leaving the parental home and marriage, with potential impact on migration choices through the rest of life and hence the descendants' lives. This can be seriously underestimated if care is not taken with the use of conventional definitions of 'marriage horizon' and 'exogamy,' as discussed in section 5.2.i. Some studies have acknowledged that marriage horizons do not equal migration before marriage, but have still assumed that they represent 'the area within which people "milled about."' ⁷ The existence of some long-distance marriage horizons must however cast doubt on the real meaning of this phrase. Combining reconstitutions with marriage horizon

⁵ Colin Pooley and Ian Whyte, 'Approaches to the Study of Migration and Social Change' in *Migrants, Emigrants and Immigrants. A Social History of Migration*, ed. Colin G. Pooley and Ian D. Whyte (London and New York: Routledge, 1991): 1-15, pp. 3-6

⁶ Bernard Deacon, 'Reconstructing a Regional Migration System: Net Migration in Cornwall', *Local Population Studies* 78 (2007): 28-46

⁷ A. Constant, 'The Geographical Background of Inter-Village Population Movements in Northamptonshire and Huntingdonshire, 1754-1943', *Geography* 33 (1948): 78-88; William John Edwards, *Marriage and Mobility 1754-1810: An Examination of the Anglican Marriage Registers of Selected Shropshire Parishes* (Unpublished PhD thesis, Queen Mary College, University of London, 1979), p. 332

analysis can indicate the extent to which there was mobility before marriage,⁸ and the present study has identified several examples in which actual pre-marital mobility greatly exceeded the stated marriage horizon. Conventionally-defined exogamy in Whitbourne from 1760 to 1869 was 22-36% per decade, with a general increase over time, but the 'true exogamy' rate as calculated from cross-linking with the baptism registers was 52%. For nineteenth-century marriages, for which better search tools were available, eleven spouses were traced to baptisms at least 25 km away, and several were from substantially further (Table 5.3).

Although this project was based on parish reconstitution methods, it deliberately moved beyond both civil and ecclesiastical boundaries, and has taken a view of multi-faceted localities and overlapping spheres of influence as contributing to individuals' sense of belonging. The parish remained vital for administering poor relief, even for some who had long ago left its geographical area, but for those with the capacity to migrate and thrive, it was not necessarily the only or perhaps even a major concern. Channels of information flow for women in Whitbourne might for instance have included the glove out-working industry from Worcester and the annual influx of hop-pickers from the Black Country and Birmingham.

6.1.i. Migrants *versus* Non-migrants

It may be true that if a potential migrant were fully informed of all the options, migration would only occur if the benefits (however measured) of making the move exceeded the costs (including the unquantifiable psychological costs), but this is not a practical model. Most of the miners drawn to California in 1849 are calculated to have become significantly less well

⁸ Bessie Maltby, 'Easingwold Marriage Horizons', *Local Population Studies* 2 (1969): 36-39

off than if they had remained as day labourers in other parts of America, while non-miners who went to California at the same time did relatively better than their peer group who remained at home.⁹ Some studies have concluded that rural to urban migrants were the cream of the crop, anticipating labour market outcomes and tending to move upward socially compared to non-migrants, while others have suggested that such migrants tended to take more general labouring jobs, and therefore moves to an urban area may have been perceived as undesirable.¹⁰

Time, place and specific local factors interact to shape the different migration rates found within and between studies. Despite any possible limitations of its methodology, one such study found changes over time as well as differences between regional examples, so that the arable village of Terling in Essex tended to become more 'closed' through the eighteenth century, and its men in particular became less mobile, while Hawkshead in Lancashire (Cumbria) experienced increasing mobility of both sexes.¹¹ The scale of the search area is also crucial: turnover may be high in one parish but quite low if seen within a natural hinterland; for example in eleven contiguous parishes in seventeenth-century Nottinghamshire, high stability was found within the cluster, although 75% of the population moved out of their native parish.¹²

⁹ Karen Clay and Randall Jones, 'Migrating to Riches? Evidence from the California Gold Rush', *Journal of Economic History* 68 (2008): 997-1027

¹⁰ Jason Long, 'Rural-Urban Migration and Socioeconomic Mobility in Victorian Britain', *Journal of Economic History* 65 (2005): 1-35; Gwyneth Nair and David Poyner, 'The Flight from the Land? Rural Migration in South-East Shropshire in the Late Nineteenth Century', *Rural History* 17 (2006): 167-86

¹¹ Keith D. M. Snell, 'Parish Registration and the Study of Labour Mobility', *Local Population Studies* 33 (1984): 29-43; David Souden, 'Movers and Stayers in Family Reconstitution Populations', *Local Population Studies* 33 (1984): 11-28

¹² Henry French, 'Ancient Inhabitants: Mobility, Lineage and Identity in English Rural Communities, 1600-1750' in *The Self-Contained Village: The Social History of Rural Communities, 1250-1900*, ed. Christopher Dyer (Hatfield: University of Hertfordshire Press, 2007): 72-95, p. 82; Anne Mitson, 'The Significance of Kinship Networks in the Seventeenth Century: South-West Nottinghamshire' in *Societies, Cultures and Kinship, 1580-1850. Cultural Provinces and English Local History*, ed. Charles Phythian-Adams (Leicester: Leicester University Press, 1993): 24-76

Just prior to the present research period, in the late seventeenth century, population turnover often seems to have been high, at least in the east of England: two-thirds of the population of Clayworth in Nottinghamshire left the parish between 1676 and 1688; in Long Melford, Suffolk, there seems to have been a peak of turnover between 1676 and 1684, and a slower rate from then to 1700; and in Terling there was an overall decline in turnover rate between 1600 and 1780.¹³ Several possible reasons for these trends have been suggested, including the rise of a class of increasingly ‘seigneurial’ tenant farmers, and tighter application of the Settlement Laws. A comparable level of early-modern mobility may be glimpsed nearer to Herefordshire, in the Gloucester and Coventry and Lichfield diocesan court statements for 1650 to 1750, in which over half the witnesses had changed residence once already; here the most mobile people were rural women, over two thirds of whom had migrated.¹⁴

Many local studies have also found high turnover in the mid to late nineteenth century. In Elmton, again in Essex, 48% left the parish in twelve years in the mid nineteenth century.¹⁵ In Brenchley, a depressed rural Kent parish, two-thirds left between 1851 and 1861.¹⁶ The turnover in Colyton, Devon, 1851-1861 was 54%, much of it due to out-migration before marriage and mostly of individuals under the age of twenty-one, especially women.¹⁷ One of the few available studies of out-migration, based on the Wiltshire town of Marlborough, used

¹³ Peter Laslett, *The World We Have Lost, Further Explored* (3rd edn; London: Methuen, 1983); Lyn Boothman, ‘Mobility and Stability in Long Melford, Suffolk in the Late Seventeenth Century’, *Local Population Studies* 62 (1999): 31-51, p. 75; Souden, ‘Movers and Stayers’

¹⁴ Peter Clark, ‘Migration in England During the Late Seventeenth and Early Eighteenth Centuries’ in *Migration and Society in Early Modern England*, ed. Peter Clark and David Souden (London: Hutchinson, 1987): 213-52

¹⁵ Jean Robin, *The Way We Lived Then* (Aldershot: Ashgate, 2000), p. 91

¹⁶ Bogusia Wojciechowska, ‘Brenchley: A Study of Migratory Movements in a Mid Nineteenth-Century Rural Parish’, *Local Population Studies* 41 (1988): 28-40

¹⁷ Robin, *The Way We Lived Then*, pp. 90-95

a sample of 2% of those claiming birth in the town and traced them to the 1881 census; 65% had moved away.¹⁸

A large-scale study of early nineteenth-century transportation convicts, considered to be representative in most respects of their non-convicted peer group, showed that a third had moved from their native county before offending; 51% had moved to non-adjacent counties, a mean distance of over 80 km.¹⁹ Two generations earlier still, between eight and ten percent of the adult population of the south Shropshire town of Ludlow were sojourners, and most stayed there only for a year,²⁰ which bears some comparison with Chambers' early results for a group of thirty-four Vale of Trent parishes in the long eighteenth century, from which he noted between 40% and 50% out-migration per baptism cohort.²¹

Any exceptional local circumstances will influence migration patterns. Thus, when Liverpool was beginning its rapid expansion in 1661-1760, three contiguous Lancashire parishes lost between a quarter and half of their newly married couples before baptising their first child.²² Smaller settlements tend to give the impression of less population stability, because of increased out-migration for marriage partners and employment, while local specialist skills which are in demand tend to reduce mobility, for example straw plait-making for women,²³

¹⁸ I. L. Williams, 'Migration and the 1881 Census Index: A Wiltshire Example', *Local Population Studies* 69 (2002): 67-73

¹⁹ Stephen Nicholas and Peter R. Shergold, 'Internal Migration in England, 1818-1839', *Journal of Historical Geography* 13 (1987): 155-68

²⁰ S. J. Wright, 'Sojourners and Lodgers in a Provincial Town: The Evidence from Eighteenth-Century Ludlow', *Urban History* 17 (1990): 14-35

²¹ J.D. Chambers, 'The Vale of Trent 1670-1800. A Regional Study of Economic Change', *Economic History Review* Supplement 3 (1957): 1-63, p. 22

²² Grace Wyatt, 'Migration in South West Lancashire: A Study of Three Parishes', *Local Population Studies* 27 (1981): 62-64

²³ D. R. Mills and K. Schurer, 'Migration and Population Turnover' in *Local Communities in the Victorian Census Enumerators' Books*, ed. Dennis Mills and Kevin Schurer (Local Population Studies Supplements; Oxford: Leopard's Head Press Ltd, 1996): 218-28

and mining.²⁴ Conversely, the decline of agriculture in the later nineteenth century in Dorset has been linked to increased mobility, and the pattern in individual parishes related to the proximity of railway stations, allowing either out-migration or embryonic commuting.²⁵

The results for the Whitbourne population, from both the comparison of baptisms and burials and the crude marriage rate suggest that the parish was a net recipient of population until about the 1780s, but thereafter there was a change to net out-migration, sometimes exceeding 10% per decade (Table 3.4). This is compatible both with the number of new surnames that appear in the parish in the eighteenth century, and calculations of known and potential migrants. For the whole life sub-sample, out-migration from Whitbourne was below 50% up to the baptism cohort 1790-1809 (Table 5.13), although it had increased from about a third earlier in the eighteenth century. By the end of the research period, among individuals still alive in 1871 (Table 5.24), out-migration from Whitbourne had further increased to about two thirds per baptism cohort. It was initially cautioned that the apparently high proportion of non-migrants from Whitbourne might have been an artefact due to the greater ease of tracing them, but this can now be set aside because the non-natives had different migration patterns. Even the few non-natives from the early baptism cohorts were more likely to be traced as migrants than their Whitbourne-native contemporaries, and the combined effect for all baptism places was a substantially higher migration rate than from Whitbourne alone, with at least 45% per baptism cohort from 1780 onwards, and 68% of the baptism cohort 1800-1809. Potential male out-migrants (all those males over age nine who were not traced to a burial in their parish of baptism) was always at least 50% per decade from 1760 (Tables 5.10 and

²⁴ Andrew Hinde, 'The Use of Nineteenth-Century Census Data to Investigate Local Migration', *Local Population Studies* 73 (2004): 8-28

²⁵ John Fripp, 'Mobility in Victorian Dorset', *Proceedings of the Dorset Natural History and Archaeological Society* 129 (2008): 39-47

5.11). Among those individuals still alive in 1871, there were 71% known migrants for both sexes for baptism cohorts 1790-1859 and 80% potential male migrants, and by this time the migration-propensity gap between Whitbourne natives and their non-native descendants had considerably narrowed (Tables 5.21 and 5.24).

Overall, there was an increase in out-migration from Whitbourne, coinciding with the lives of the 1790-1799 baptism cohort. This effect is highlighted in Figures 5.37 to 5.41, which show fewer Whitbourne natives remaining in the parish in the later cohorts: 40% of the 1810-1829 cohort (N = 42) and 34% of the 1830-1849 cohort (N = 79). These figures are consonant with a levelling off of total parish population in the nineteenth century, a low early infant mortality rate, and a modal family size of six.

Two studies are particularly relevant for comparison with these results. Firstly, Pooley and Turnbull's sample from family historians contained 88% migrants in the birth cohort 1750-1819 (N = 4,454) and 97% for birth cohort 1820-1849 (N = 3,393). Their higher results than the total migration figures in the present study were perhaps partly due to the known bias of their sample towards the longer-lived.²⁶ But secondly, Nair and Poyner's work on rural south-east Shropshire (40 km from Whitbourne) also found higher out-migration than in the sample of Whitbourne natives (Table 5.24). In 1861, 71% of their sample aged twenty-one to thirty had left their native parish, and 84% of the forty-one to fifty year old cohort.²⁷ Possible reasons for this difference will be discussed below.

²⁶ Colin Pooley and Jean Turnbull, *Migration and Mobility in Britain since the Eighteenth Century* (London: University College London Press, 1998), p. 61 and Table 3.2

²⁷ Nair and Poyner, 'The Flight from the Land?', p. 179

6.1.ii. Distances

As with the overall pattern of population turnover, so the migration distances found depend on period, location and migrant type. An extreme example is early modern vagrancy, one study of which found that while 50% of individuals had moved less than 60 km, 11% (mostly from the West Country) had travelled over 240 km, and the extent of the problem varied according to the quality of the harvests.²⁸ Settlement examination documents may show 80% involving movement of under 30 km;²⁹ the Sheffield apprentice registers describe another sub-population, with almost half from within 16 km, but even in the seventeenth century 5% were from over 65 km with a maximum of 320 km, well beyond London.³⁰

At the start of the research period, church court witness documents show that half had moved less than 16 km, and rural witnesses had, counter-intuitively, moved shorter distances than urban ones (perhaps because some of these had previously moved into the urban areas), but 9% of rural men and 7% of rural women had moved more than 67 km, with a clear concentration of rural migration distances between 16 and 40 km.³¹ From eighteenth-century source materials, there is evidence for a variety of migration patterns. The well-established and prosperous port of Chester had 25% of its executorial links further away than 80 km (one executor was from Hereford), while the newly developing Manchester only had 8% so distant.³² Later in the century, Skipton, with long-established natural trade routes through the

²⁸ Paul A Slack, 'Vagrants and Vagrancy in England, 1598-1664', *Economic History Review* 27 (1974): 360-79

²⁹ Henry S. Woledge and Michael A. Smale, 'Migration in East Yorkshire in the Eighteenth Century', *Local Population Studies* 70 (2003): 29-48

³⁰ E.J. Buckatzsch, 'Places of Origin of a Group of Immigrants into Sheffield, 1624-1799', *Economic History Review* 2 (1950): 303-06

³¹ Clark, 'Migration in England During the Late Seventeenth and Early Eighteenth Centuries', p. 223

³² John Stobart, 'Personal and Commercial Networks in an English Port: Chester in the Early Eighteenth Century', *Journal of Historical Geography* 30 (2004): 277-93

Aire Gap, as well as a canal, attracted tradesmen from up to 50 km, while labourers came from within 27-33 km.³³

These differences may be reflected even on a micro-scale. It has been found that over half the population of the old cutlery quarter of Sheffield in 1861 were native to the town, but the new heavy industry districts were under a fifth Sheffield-born.³⁴ In nineteenth-century Cornwall, about half those from rural parishes moved to other rural Cornish parishes, while a mining area had far more emigration to America; out-migrants from urban Falmouth were more likely to move to other urban centres, a fifth of them beyond Cornwall.³⁵

It has been suggested that there was no substantial increase in mean distances migrated between the mid eighteenth century and the late nineteenth century,³⁶ but this overview clearly hides a much more complex picture. Pooley and Turnbull found that (excluding settlements smaller than 5,000 population), the great majority of migratory journeys between 1750 and 1879 were between same-size settlements, and these typically averaged 30-40 km. Moves to larger settlements were 80-95 km on average, and to smaller settlements only slightly less. Interestingly, they also found that, in line with Ravenstein's observations, moves to larger settlements were more common than to smaller ones up to 1880, but thereafter this effect was reversed, further evidence that the Laws of Migration were cast within a mid nineteenth-century world-view.³⁷ Between settlements smaller than 5,000 population,

³³ Moira Long and Bessie Maltby, 'Personal Mobility in Three West Riding Parishes, 1777-1812', *Local Population Studies* 24 (1980): 13-25

³⁴ P. Cromar, 'Labour Migration and Suburban Expansion in the North of England: Sheffield in the 1860s and 1870s' in *The Geographical Impact of Migration*, ed. Paul White and Robert Woods (London and New York: Longman, 1980): 129-51, p. 141

³⁵ Deacon, 'Communities, Families and Migration'

³⁶ Pooley and Turnbull, *Migration and Mobility in Britain since the Eighteenth Century*, pp. 65 and 68

³⁷ *Ibid.*, pp. 97 and 101; see also section 5.2.v. here, which found a shift in migration patterns for the 1851-1871 marriage cohort

distances moved were less, averaging 23.3 km in 1750-1879. This may perhaps be associated with the distribution of market towns. Three quarters of migrations between these small settlements were under 20 km, but 5.5% were 100 km or more. One limiting factor in the interpretation of these results is that the total sample only included 28.4% women, and it is an acknowledged fact that the CEBs reveal different information about married men and women: men are easier to trace, but women's records often give successive children's birth places.³⁸ Elsewhere, it has been found that in Shropshire in the late eighteenth century, a proportion of single women moved up the settlement size scale for work, and then married there.³⁹ Pooley and Turnbull's national figures are broadly confirmed by Nair and Poyner's work on rural Shropshire, with mean distance moved in the mid nineteenth century of 21 km, and in common with many scholars, they have explored a range of factors which influence migration distance and direction (see further below).

Among the eighteenth-century sample, the present study only successfully traced shorter-range (within 40 km) out-migrations before marriage, although one exogamous bride was from Birmingham (63 km), and more mobile people were significantly more likely to marry each other (section 5.2.iii-v). There was, however, an exogamous marriage with a groom from Taunton (178 km), with subsequent untraced out-migration. As search tools became more available through the time periods, so longer-distance migration consequent upon marriage was more frequently identified, with grooms from Kent and London marrying in the parish, and nineteenth-century out-migration before marriage occasionally traced beyond 40 km. Three women migrated more than 200 km in the period 1813-1836; in 1837-1850 one woman went to London (201 km) and two to Birmingham. 1851-1871 was the only period in which

³⁸ *Ibid.*, pp. 13 and 133

³⁹ W. J. Edwards, 'Remarriage: Some Preliminary Findings', *Local Population Studies* 39 (1987): 32-44

more men than women were traced beyond 100 km, a total of three men and five grooms, compared with one woman and two brides.

Individual case-studies of the whole lives of the long-distance migrants mirror the pattern before marriage. For example James Vernals, baptised in Whitbourne in 1782, died in 1845 in Normanton, Rutland, 164 km distant, while Charlotte Gomery, baptised in Whitbourne in 1789, married a London linen draper and died in Kensington in 1860. It seems that occasional long-distance out-migrations were already a feature of Whitbourne culture by the early nineteenth century, and since they are found as soon as they can be traced reliably it seems probable that this pattern was already established in the eighteenth century.

6.1.iii. Return Migration

There is evidence from other research for return migration, to the parish of birth, settlement or other rootedness. Sometimes this migration seems to have been to exploit demand for particular skills, as seen in individuals making repeated trans-Atlantic journeys, apparently in response to advertisements, or the return of agricultural workers to their native area,⁴⁰ sometimes it may have been a voluntary response to more fundamental need or the provision of Poor Relief.⁴¹

Some return non-native migration to Whitbourne was found in every time period in the present research, but the numbers were always small. Two such examples were traced to a

⁴⁰ Pooley and Turnbull, *Migration and Mobility in Britain since the Eighteenth Century*, pp. 294-98

⁴¹ Steven King and Alannah Tomkins, 'Conclusion' in *The Poor in England 1700-1850. An Economy of Makeshifts*, ed. Steven King and Alannah Tomkins (Manchester: Manchester University Press, 2003): 258-79, p. 261

death before 1813, both farmers who later inherited land in the parish, one from each of the Hodges and Lawrence families. Six of the eight later examples were baptised in adjacent parishes to Whitbourne, so were only short-distance migrants. The last two were Collins cousins who returned to the parish with their yeomen parents; one of these was born nearby in Alfrick, the other in Stourport where her father was working as bridge-toll collector. Of these whole life examples, then, there seems to be a connection between return migration and land-ownership: if not 'dead man's shoes' then at least they may indicate an attachment to the family land holding and an expectation of inheritance or other benefits.

Among the sub-group who were still alive in 1871, there are examples of longer-distance return migration, which do not relate to land holding. Of the thirteen children of James and Elizabeth Vernals, baptised between 1789 and 1813, two died in childhood and nine others were traced. All were illiterate, but whereas the seven older ones remained in Whitbourne or its immediate locality, the younger two spent some time in Birmingham. Margaret was married in Whitbourne to a Bromyard bricklayer, and after about four years in Birmingham they returned to Leigh, 10 km south east of Whitbourne. Richard, a gardener, also married in Whitbourne and moved within two years to Aston, then Birmingham and Handsworth, before returning via Malvern to Knightwick (3 km east of Whitbourne) with his second wife, although by 1881 he was again in Northfield. All the other brothers were agricultural labourers, two sisters married agricultural labourers, and one a Whitbourne mason.

One example has been found where the return migration may have been because of actual want. Sarah Burraston was widowed in 1842, age thirty-two, soon after the family's arrival in Northfield, leaving her with five dependent children. She returned to Bromyard, where she

remarried and her oldest son received out-relief. This is compatible with evidence found for one West Riding proto-industrial parish, where even if in-migrants had considerable pre-existing kin- and other links to the parish, most remained excluded from full integration into a society where reputation and the ability to obtain credit with traders could be vital.⁴²

A rather different example is that of Walter Soley, whose migration decisions are opaque. Born in Norton-juxta-Kempsey, just south of Worcester, he was working as a Farm Servant on a 235 acre farm in Northfield in 1851, in 1861, aged twenty-nine, he had migrated to Tower Hamlets where he was a police constable, lodging in the police station on Bromley's London Road, but in 1871 and still single, he had returned to live with his parents and was a railway labourer.

6.2 Spatial Factors: Employment Opportunities and Priorities

Spatial migration patterns are partly the result of random and personal events, but they are also heavily influenced by contemporary conditions, nationally and more locally. This section therefore presents the results found in this study in relation to a hierarchy of localities, from the particular conditions in the home parish of Whitbourne, via regional English differences in employment opportunities in the 'long' Industrial Revolution, to the emigration situation in the mid nineteenth century.

⁴² Steven King, 'Migrants on the Margin? Mobility, Integration and Occupations in the West Riding, 1650-1820', *Journal of Historical Geography* 23 (1997): 284-303

6.2.i. Whitbourne in the Context of East Herefordshire and West Worcestershire

There is certainly no such thing as a ‘typical’ rural county, which can be used as a base-line for comparisons, since each varied over time, in their rate, extent and type of industrialisation, the nature of their urban areas, and their relative prosperity and decline.⁴³ Consequently, migration from Whitbourne to other rural areas is discussed here in relation to its own characteristics and its local context.

Situated on the boundary between the mixed and pastoral agricultural districts, with a high proportion of yeomen farmers, long survival of Farm Service,⁴⁴ relatively few paid labourers and a wide skill set among the agricultural work force⁴⁵ (section 3.2 and 3.3), Whitbourne also had two substantial areas of common waste, unenclosed and available for all the parish. This offered scope for small-scale agricultural activity among its craftsmen, many of whom held only a fraction of an acre of land, and it may well have contributed to the low parish mortality rates, especially in childhood: low infant mortality is linked to late weaning or availability of cows’ milk, a rural environment and also to a delayed maternal return to heavy work.⁴⁶ The commons also increased effective income (section 2.6.iii). Arthur Young’s famous estimate that possessing a cow was worth 5-6s. a week to a family⁴⁷ was perhaps not far wide of the mark.⁴⁸ The value of commons and actively managed coppice woodlands for

⁴³ K. D. M. Snell, *Annals of the Labouring Poor: Social Change and Agrarian England, 1660-1900* (Cambridge: Cambridge University Press, 1985), p. 376

⁴⁴ Alun Howkins and Nicola Verdon, ‘Adaptable and Sustainable? Male Farm Service and the Agricultural Labour Force in Midland and Southern England, C. 1850-1925’, *Economic History Review* 61 (2008): 467-95

⁴⁵ Long and Maltby, ‘Personal Mobility’

⁴⁶ Colin D Rogers and John H Smith, *Local Family History in England, 1538-1914* (Manchester: Manchester University Press, 1991), p. 73

⁴⁷ cited in Snell, *Annals of the Labouring Poor*, p. 213

⁴⁸ Leigh Shaw-Taylor, ‘Labourers, Cows, Common Rights and Parliamentary Enclosure: The Evidence of Contemporary Comment C. 1760-1810’, *Past and Present* 171 (2001): 95-126; Leigh Shaw-Taylor,

wood is also significant in an area lacking coal reserves, since firewood could cost 15% of the basic labourer's wage.⁴⁹

The debate on the value of commons, and the social and political agendas underlying it, is still not settled, although much of the discussion of the role of enclosure upon migration focuses on open fields, not the common wastes. It is clear that in some regions at least, commons enabled smaller farms (of perhaps fifteen acres) to persist into the eighteenth century.⁵⁰ Highley, in Shropshire, was enclosed in the early seventeenth century, and over the next two generations the population changed from being largely settled, with numerous small landholders, and out-migration chiefly among young adults, to one characterised by new surnames and increased spatial and social mobility, a pattern which persisted until the late nineteenth century.⁵¹

Whitbourne's late retention of small farms into the nineteenth century may also have delayed the loss of employment opportunities for women and children; there is evidence for a correlation between engrossing and such a decline in the east of England.⁵² Overall, the superficial impression of parish husbandry in the eighteenth and early nineteenth centuries is of relative prosperity and opportunity, with an increasing population despite out-migration. Herefordshire women were still significantly involved in agriculture, more so than in Worcestershire, and when tying hops, of which there was a large acreage in Whitbourne, they

'Parliamentary Enclosure and the Emergence of an English Agricultural Proletariat', *Journal of Economic History* 61 (2001): 640-62

⁴⁹ Tim Shakesheff, 'Wood and Crop Theft in Rural Herefordshire, 1800-1860', *Rural History* 13 (2002): 1-17

⁵⁰ Christopher Dyer, 'Woodlands and Wood-Pasture in Western England' in *The English Rural Landscape*, ed. Joan Thirsk (Oxford: Oxford University Press, 2000): 97-121, p. 119; M. Spufford, *Contrasting Communities: English Villagers in the Sixteenth and Seventeenth Centuries* (Cambridge: Cambridge University Press, 1974), pp. 37-47, 100 and 165-67

⁵¹ Gwyneth Nair, *Highley: The Development of a Community, 1550-1880* (Oxford: Blackwell, 1988), *passim*.

⁵² Hugh Cunningham, 'Reply', *Past and Present* 187 (2005): 203-15

were paid extra. Children's wages were generally higher in Herefordshire than in Worcestershire⁵³ (section 2.6.iv). All cottages on the tithe map had gardens, the vestry was 'open' and outdoor poor relief continued into the New Poor Law period beyond the prescribed limits. This was a known rural phenomenon but practised more generously in Whitbourne than in some neighbouring parishes (there were twenty-three paupers in the 1851 Whitbourne census, five in 1861 and three in 1871, but no Whitbourne natives in the Bromyard workhouse).⁵⁴

This attitude to poor relief may classify Whitbourne with the more generous south, but the parish seems not to have suffered from declining old proto-industries.⁵⁵ The women, in particular, had the opportunity to work in the glove industry, earning perhaps 3-4s. a week in 1795, 5-7s. by 1825 and 6-8s. in the 1850s, high enough to represent potential independence or a significant contribution to a family budget, rather than the exploitation of a dependent labour force.⁵⁶ Gloving peaked in 1790-1820, when imported gloves were heavily taxed, and Worcester's 150 firms employed 30,000 people, almost half of all British glovers. Most were women out-workers, embroidering the cut leather as required, making the gloves up, adding linings, welts and buttons, and packing them for return to the city for finishing. In 1826 the tax was repealed, and Worcester glove-making began to decline.⁵⁷ Along the turnpike west

⁵³ Report on Agricultural Labourers' Earnings. Return of the Average Rate of Weekly Earnings of Agricultural Labourers in the Unions of England and Wales. (1871), pp. 8-12, www.parlpapers.chadwyck.co.uk, first accessed July 2009

⁵⁴ Richard Smith, 'Charity, Self-Interest and Welfare: Reflections from Demographic and Family History' in *Charity, Self-Interest and Welfare in the English Past*, ed. Martin Daunton (London: University College London Press, 1996): 23-49; Andrew Hinde and Fiona Turnbull, 'The Populations of Two Hampshire Workhouses, 1851-1861', *Local Population Studies* 61 (1998): 38-53; Nigel Goose, 'Workhouse Populations in the Mid-Nineteenth Century: The Case of Hertfordshire', *Local Population Studies* 62 (1999): 52-69, pp. 36-38

⁵⁵ Steven King, *Poverty and Welfare in England, 1700 - 1850. A Regional Perspective* (Manchester University Press, 2000), pp. 141-209

⁵⁶ Snell, *Annals of the Labouring Poor*, p. 316

⁵⁷ D C Lyes, *The Leather Glove Industry of Worcester in the Nineteenth Century* (Worcester: Worcester City Council, 1973)

from Worcester in the 1851 census, Cotheridge parish had five glovers (total population 237), Broadwas had five (318), Doddenham eight (279), Knightwick three (166), Whitbourne seventeen (826) and Linton township ten (524 excluding the Workhouse). Beyond this there were hardly any, with just three in Bromyard (1,394). In 1861, there were twenty glovers listed in Whitbourne, twelve in Broadwas and nineteen in Doddenham.

Glove out-working not only offered waged employment, but may have helped maintain the relatively good levels of agricultural pay and perks: farm accounts indicate that if there was alternative women's home employment in lace, straw or glove-making, their agricultural wages were significantly higher than in parishes with no such alternative.⁵⁸ In Hertfordshire, there is corresponding evidence that straw plait-making parishes had significantly more in-migration of women than purely agricultural parishes, especially in 1851 and 1871 at the industry's peak.⁵⁹

The particular characteristics of Whitbourne may have worked in opposition to one another in relation to potential migration. The beneficial effect of the commons and the cottage industries perhaps reduced out-migration, by making a significant contribution to the 'economy of makeshifts' that would surely have been apparent to contemporaries,⁶⁰ but it has

⁵⁸ Joyce Burnette, 'The Wages and Employment of Female Day-Labourers in English Agriculture, 1740-1850', *Economic History Review* 57 (2004): 664-90, p. 670

⁵⁹ Nigel Goose, 'Cottage Industry, Migration, and Marriage in Nineteenth-Century England', *Economic History Review* 61 (2008): 798-819

⁶⁰ James H Jackson and Leslie Page Moch, 'Migration and the Social History of Modern Europe' in *Time, Family and Community: Perspectives on Family and Community History*, ed. Michael Drake (Oxford: Oxford University Press and Blackwell, 1994): 181-98, pp. 188-89; Samantha Williams, 'Earnings, Poor Relief and the Economy of Makeshifts: Bedfordshire in the Early Years of the New Poor Law', *Rural History* 16 (2005): 21-52

also been found that children of smaller land-holdings in both Ireland and Germany were less likely to remain at home.⁶¹

Whitbourne, in common with many rural areas, had relatively low mortality rates, but they were even lower than those in many other parishes, and infant mortality was lower than for Whitbourne descendants living elsewhere, although the difference was not significant with the small sample size used. Most rural areas had relatively low epidemic mortality,⁶² but again Herefordshire as a whole was particularly fortunate, largely escaping the epidemics during the research period.

As discussed above, Whitbourne remained a frequent burial-place for natives who were traced, the proportion decreasing from three quarters to half per baptism or death cohort, in contrast to the higher known migration rates for all Whitbourne descendants regardless of their baptism place. This suggests that unless there was a very high level of unrecorded transport of corpses to the parish for burial, migration from Whitbourne was lower than from places to which their descendants moved. It would be tempting to infer that Whitbourne natives had less need to migrate than their descendants elsewhere, for much of the research period, but a myriad other factors (the evidence for some of which will be discussed below) precludes a simple explanation.

More native men than women were traced to a burial in the parish, and proportionally more women than men were medium- to long-distance migrants, moving at least as far as the

⁶¹ Michael Anderson, *Family Structure in Nineteenth-Century Lancashire* (Cambridge: Cambridge University Press, 1971), pp. 94-97; Simone A Wegge, 'To Part or Not to Part: Emigration and Inheritance Institutions in Nineteenth-Century Hesse-Cassel', *Explorations in Economic History* 36 (1999): 30-55

⁶² E. Anthony Wrigley and Roger S. Schofield, *The Population History of England. 1541-1871. A Reconstruction* (Cambridge: Cambridge University Press, 1989; tr. from 1981, Edward Arnold, London), p. 668

nearest Black Country towns (26 km). Apart from Bromyard, no Herefordshire market town was found to be the burial place for a Whitbourne native. Some Whitbourne natives were traced to destinations in the local rural area, and of these, the men migrated preferentially east and north (areas 3 and 5, in Worcestershire) rather than west and south (areas 2 and 4, mostly in Herefordshire), while the women who remained locally were more evenly divided between the two directions. The numbers in these sub-samples were too small for statistical analysis, but the pattern was consistent whether for part lives of those not wholly traced, baptism cohorts, or cohort of death.

This pattern of preferential migration to the east among male Whitbourne natives persisted among those who were still alive in 1871, both natives and non-natives. Of the non-natives, some (mainly men) continued to return to Whitbourne up to 1871, and between a third and two thirds of all cohorts remained in local rural areas. Nair and Poyner also found more eastward migration than westward, from their nineteenth-century south-east Shropshire parishes, and half was to other rural locations. However, most of their migrants to urban areas were in the local market towns of Bridgnorth, Bewdley and Cleobury Mortimer.⁶³

In summary, there is evidence here that Whitbourne natives were less prone to migrate than their non-native descendants, and one might with some justification refer to Whitbourne in this period as a 'stable community with a mobile population'.⁶⁴ Of the natives who did migrate, comparatively few remained in the local rural parishes, but the descendants of those who did so were quite likely to remain there, suggesting that there may have been two sub-

⁶³ Nair and Poyner, 'The Flight from the Land?'

⁶⁴ Gérard Bouchard, 'Mobile Populations, Stable Communities: Social and Demographic Processes in the Rural Parishes of the Saguenay, 1840-1911', *Continuity and Change* 6 (1991): 59-86

sets of out-migrants from the parish, one with rural skills, goals or potential, the other with different attributes.

6.2.ii. Worcester

6.2.ii.a. Introduction

An important corollary to the migration patterns noted above is to ask what happened over time to the longer-distance migrants. Is there is evidence for non-natives moving further away, or were the majority rooted to local rural environments? This is one small part of the wider concept of ‘step-wise migration’, the theory of migration taking place via a succession of steps towards a (usually urban) destination.

The results gathered in section 5.3.v and Table 5.15 lend some small support to the notion of step-wise migration in this sample, showing that in the nineteenth century, a higher percentage of non-natives than natives died in Worcester and beyond (areas 7 upwards). About 10% of natives but 18% of non-natives were traced to a burial in Worcester, 4% and 10% respectively to Birmingham and the Black Country, and 5% and 7% to London and other parts of England and Wales. Although this sub-sample only involved fifty-eight life histories, the consistency of the pattern found is interesting. There are two strands of explanation within the overarching ‘social capital’ framework for these results: either the non-natives already had embryonic kin-networks and other elements facilitating mobility, or they had a pre-existing family tradition of mobility. These will be explored further in section 6.3.

6.2.ii.b. Worcester as a Migration Destination

Evidence collected here has shown that Worcester was a destination from the beginning of the research period, apparently more than Birmingham and the Black Country. This fits well with its varied functions as cathedral city, significant leisure town,⁶⁵ regional market, major bridging point and manufacturing centre. All these involved some rural to urban communication,⁶⁶ so those people who moved to urban areas need not have been complete strangers to it, from ‘alien rural cultures’.⁶⁷ Although Hereford shared many of these characteristics, and was also their county town, Whitbourne people did not migrate there, but chose Worcester instead. A detailed study of late eighteenth-century Caen, Normandy, has revealed a pattern compatible with that found for Whitbourne migrants to Worcester, with large numbers of people moving both in and out of the city, acquiring experience of city life in the process.⁶⁸ A typical case in the present study was Mary Portman, illiterate daughter of Joseph and Letitia, baptised in 1816, who was a Farm Servant at Whitbourne Rectory in 1841, married a carpenter in Claines, Worcester, in 1848, was in Hallow 1849-1856, Whitbourne 1857-1859, Linton 1861 and back in Whitbourne in 1871. Among non-natives still alive in 1871, Worcester was an increasingly frequent location for successive cohorts, supporting the picture of employment there being a life-cycle phenomenon, especially but not exclusively for women.

⁶⁵ Leonard Schwarz, ‘Residential Leisure Towns in England Towards the End of the Eighteenth Century’, *Urban History* 27 (2000): 51-61

⁶⁶ Paul Glennie and Ian Whyte, ‘Towns in an Agrarian Economy, 1540-1700’ in *1540-1840*, vol. 2, ed. Peter Clark (The Cambridge Urban History of Britain; Cambridge: Cambridge University Press, 2000): 167-93

⁶⁷ Jackson and Moch, ‘Migration and the Social History of Modern Europe’, pp. 188-89

⁶⁸ Jan de Vries, *European Urbanisation, 1500-1800* (London: Methuen and Co Ltd, 1984), pp. 205-206; see also Pamela Sharpe, ‘Population and Society, 1700-1840’ in *1540-1840*, vol. 2, ed. Peter Clark (The Cambridge Urban History of Britain; Cambridge: Cambridge University Press, 2000): 491-528, pp. 492-93

6.2.iii. London

The early development and dominance of London is well known. There are occasional examples in the literature of migration there from Herefordshire from at least the turn of the seventeenth century, although even Worcestershire remained relatively remote from the capital at this period.⁶⁹ There was a carrier service from Leominster to London established by 1715, which ran through Whitbourne; this was one of only two services linking London to Herefordshire, giving potential migrants along its route important advantages in both opportunity and information.⁷⁰ There was a dramatic increase in coach services to the capital, and a reduction in real costs per passenger, as the route was turnpiked through the eighteenth century.⁷¹ That this route was used by migrants from Whitbourne is probable, since coaching inns are known to have been used to recruit servants.⁷² A counter-current may also have operated: one Whitbourne in-migrant was born in Uxbridge, on the turnpike road.

Migrants to London arrived for innumerable occupations, or simply to try their luck.⁷³

Tracing these early migrants is problematic, so London may be significantly under-

⁶⁹ David Cressey, 'Occupations, Migration and Literacy in East London, 1580-1640', *Local Population Studies* 5 (1970): 53-60; Ian Warren, 'London's Cultural Impact on the English Gentry: The Case of Worcestershire, c. 1580-1680', *Midland History* 33 (2008): 156-78

⁷⁰ J.A. Chartres, 'Road Carrying in England in the Seventeenth Century: Myth and Reality', *Economic History Review* 30 (1977): 73-94

⁷¹ Dan Bogart, 'Turnpike Trusts and the Transportation Revolution in Eighteenth-Century England', *Explorations in Economic History* 42 (2005): 479-508, p. 506

⁷² Sharpe, 'Population and Society', p. 499

⁷³ John Wareing, 'Changes in the Geographical Distribution of the Recruitment of Apprentices to the London Companies, 1486-1750', *Journal of Historical Geography* 6 (1980): 241-49; John Wareing, 'Migration to London and Transatlantic Emigration of Indentured Servants, 1683-1775', *Journal of Historical Geography* 7 (1981): 356-78; Tim Meldrum, *Domestic Service and Gender, 1660-1750* (London: Longman, 2000); Leonard Schwarz, 'Hanoverian London: The Making of a Service Town', *Proceedings of the British Academy* 107 (2001): 93-110; Jane Humphries and Timothy Leunig, 'Was Dick Whittington Taller Than Those He Left Behind? Anthropometric Measures, Migration and the Quality of Life in Early Nineteenth-Century London', *Explorations in Economic History* 46 (2009): 120-31

represented in nominal migration studies,⁷⁴ and the relatively small numbers found there in the present study may be because this destination was at the limits of the capability of the method, given the high confidence levels required.⁷⁵ The county gender imbalance at burial during the eighteenth century indicates persistent surplus female out-migration from Herefordshire: in six out of nine decades there were more than the expected 1.04:1 male to female burials, and in only one decade, 1770-1779, was the ratio below 1.02:1. However the imbalance was much less stark than that for counties adjacent to London, and in Worcestershire, for example, the situation was reversed, so Worcestershire may have been the destination for many Herefordshire women.⁷⁶

Enough cases have nevertheless been found here to show that London was a destination for Whitbourne people baptised from 1770 onwards, if not earlier. For these cohorts, it seems to have been equally attractive to Whitbourne natives as the Black Country and Birmingham, only being superseded by these closer destinations from baptism cohort 1800-1809. Few London migrants were traced fully; more were traced there for part of their lives, for example Mary Portman, daughter of John and Felicia, was baptised in Clifton upon Teme in 1823, was a domestic servant in Worcester in 1841, and in 1851 was a servant in a private girls' school in Camberwell, Surrey, but she was not conclusively linked to a marriage or death in London or elsewhere.

⁷⁴ Colin Pooley and Jean Turnbull, 'Migration and Mobility in Britain from the Eighteenth to the Twentieth Century', *Local Population Studies* 57 (1996): 50-71

⁷⁵ A substantial new series of London parish registers became available on-line shortly before the data-set was closed, and these were not included among the research tools

⁷⁶ David Souden, 'East, West - Home's Best'? Regional Patterns in Migration in Early Modern England' in *Migration and Society in Early Modern England*, ed. Peter Clark and David Souden (London: Hutchinson, 1987): 292-332, pp. 318-28

There are also several examples of migration to London and out again, which may help to explain why many who went there were not fully traced. Walter Soley, who was briefly a London policeman, has already been mentioned; another example is Ann Caswell, baptised 1834 at Clifton upon Teme, who was married in Whitbourne to a carpenter in 1863, and after several moves including a short spell in London she and her husband were in Kingswinford by 1871. John Lloyd (baptised in 1792) married a native of Bagshot, Surrey, and their first child's body was brought back to Whitbourne for burial in 1819. John and his wife later returned to Whitbourne and baptised three children there before moving to Lambeth in the 1840s. Another example concerns William Mitchell, a yeoman's son baptised in Whitbourne in 1840, who was temporarily a joiner in Southwark, where his oldest two children were born, and he had returned to Whitbourne by 1874.

Some non-native Whitbourne descendants were traced to London in every cohort but the last. More women than men were traced there proportionally, and among these the children of Jephthah and Jane Winders (Combey), baptised 1826-1838 in Leigh, exemplify the opportunities in the capital, for those with a suitable 'character'. Mary was a Farm Servant at age fifteen, but on a very large (230 acre) farm in Leigh, and later she went into domestic service, including working for a Malvern bookseller and a magistrate in Pembridge. Her younger sister Charlotte was domestic servant to a solicitor in Ledbury in 1861, another large centre of population. In 1871 they were in Croydon together, with a dressmakers' shop. Their younger cousin George Winders became a butler in Chelsea, and another cousin was a servant in Croydon.

Again, these long-distance results are compatible with those for the four nineteenth-century Shropshire parishes, from which twelve female domestic servants were traced to Sussex.⁷⁷

6.2.iv. Cheltenham

Figure 2.4 shows the unusual population structure of the Herefordshire-born inhabitants of Cheltenham in 1851. The town grew from 3,000 to 35,000 in the first half of the nineteenth century, and while some Herefordshire-born residents were male, the great majority were women aged between twenty and fifty. There were nearly as many Herefordshire natives in Cheltenham in 1851 (equivalent to 0.9% of the population of Herefordshire that year) as in Birmingham, which was six times the size. The total Cheltenham population in 1851 was also heavily gender-biased, with 20,000 women and only 15,000 men, of whom 1.6% were gardeners, 2% male domestic servants and 10% female domestic servants.⁷⁸

Cheltenham was in an area already well served by turnpikes by 1770, a swathe of country from Bristol and Bath up to south Staffordshire,⁷⁹ and it was also readily reached from Worcester by river via Gloucester. Like the older-established Bath,⁸⁰ to which a brother and sister of the Price tribe were traced to jobs in domestic service, it advertised easily-accessible employment.

⁷⁷ Nair and Poyner, 'The Flight from the Land?'

⁷⁸ Owen Ashton, 'Clerical Control and Radical Responses in Cheltenham Spa 1838-1848', *Midland History* 8 (1983): 121-47

⁷⁹ Dan Bogart, 'Did Turnpike Trusts Increase Transportation Investment in Eighteenth-Century England?' *Journal of Economic History* 65 (2005): 439-68, p. 441

⁸⁰ Schwarz, 'Residential Leisure Towns'

Five individuals were traced to Cheltenham, all baptised in Whitbourne or adjacent parishes, and they illustrate the range of opportunities in the town. The youngest chronologically were Elizabeth Wainwright (Price), baptised in 1846, who was one of six servants at Bayshill Lawn, Cheltenham, in 1871, and Elizabeth Gomery, baptised in 1827, who was a servant to a bank manager in Clarendon Villas in 1851 but was buried in Whitbourne in 1857. Her second cousin Jane Gomery, baptised in 1814, was in domestic service in Pitville Terrace, Cheltenham, before moving to Aston where she married. Another cousin, Samuel, was baptised in 1788 and came from a literate family; in 1841 he was cowman to a milk vendor in Cheltenham's Winchcombe Place and died in the town in 1851, but his migration path was not identified. The other migrant, Samuel Hodges, was baptised in 1800 into a literate farming family. He had moved to Cheltenham by 1835, and by 1837 had established the four acre Imperial Nurseries in the town centre, selling shrubs, hothouse plants and cut flowers,⁸¹ eventually employing eight men. He remained in Cheltenham until his death in 1873.

6.2.v. Birmingham and the Black Country

Despite its relative proximity, apparently good employment opportunities and its eight-fold population increase in the eighteenth century, the urbanising West Midlands region has not been identified here as a destination for Whitbourne descendants until the baptism cohort 1790-1809. Among non-natives, there was only one man traced to a death there between 1837 and 1850, but thereafter more cases were found, so that by the 1850-1859 baptism cohort, a fifth of all traced young men and women were in the Black Country. Nair and Poyner

⁸¹ *pers com.* Jerry Holmes, Cheltenham Local History Library

similarly found that their Shropshire sample did not migrate early to the Black Country, even though parts of it were only 15 km from their sample parishes.⁸²

Evidence was found for women migrating to this area earlier than the men, perhaps for domestic service; the earliest examples of this were in the Bullock family. Of the four siblings traced in the older generation, two women and two men, both the women went to Birmingham in the 1820s and at least one (Eleanor) is known to have been initially in domestic service. One of the two brothers remained in Whitbourne, the other went to Birmingham where he was a shoemaker. In the next generation, only one of the ten traced children left the local rural area, and that was also a woman, baptised 1834, who went to Birmingham, worked as a saddler and married a brass founder, the son of a saddler.

Unlike Cheltenham, there were no obvious ancient routes connecting the Birmingham area to Worcester and thence to Whitbourne, and this may partly explain why migration there was slow to develop. The River Severn is almost 30 km away, at Bewdley, and although Birmingham's turnpiking began early, it aimed initially at London and at the northern Black Country to the west. The Pershore Road was not turnpiked until the 1820s, although by the early eighteenth century an estimated eighty packhorses a day were coming in from Evesham with fruit and vegetables. These transport priorities are mirrored in the numbers and destinations of early carrier services (section 2.9),⁸³ and the axis for the early development of

⁸² Nair and Poyner, 'The Flight from the Land?'

⁸³ G.L. Turnbull, 'Provincial Road Carrying in England in the Eighteenth Century', *Journal of Transport History* 4 (1977): 17-39; Eric Hopkins, *Birmingham: The First Manufacturing Town in the World, 1760-1840* (London: Weidenfeld and Nicholson, 1989), pp. 12-13

the West Midlands has also been linked to pre-existing medieval textile routes, from Wolverhampton to Coventry and beyond.⁸⁴

The early catchment area for Birmingham is indicated by the origins of immigrants with Settlement certificates, 14,000 of which survive for the period 1686-1757. Up to 1726, only one was from Herefordshire (from Bromyard, in 1710), compared with twenty-seven from Shropshire excluding Halesowen (a major contributor),⁸⁵ seventeen from Cheshire, eleven from Lancashire and thirteen from Leicestershire; between 1726 and 1757, 155 certificated immigrants were from beyond the three counties of the conurbation, mostly from Leicestershire.⁸⁶

Other reasons for this late movement of Whitbourne descendants to the West Midlands are hard to identify. In terms of housing supply, early Birmingham was not poorer than Worcester, both having 5.1 inhabitants per house in the 1801 census, compared with 6.8 in Liverpool; Worcester was marginally more densely populated in the 1770s (5.4 compared with 5.1 in Birmingham, and 5.8 in Liverpool).⁸⁷ A possible contributing factor is that although there were 50% more places for man-servants in Birmingham than in Worcester, and correspondingly more for women, these were much more thinly spread through the population of Birmingham, with a far smaller proportion of affluent households.⁸⁸

⁸⁴ Marie B. Rowlands, 'Continuity and Change in an Industrialising Society: The Case of the West Midlands Industries' in *Regions and Industries: A Perspective on the Industrial Revolution in Britain*, ed. Pat Hudson (Cambridge: Cambridge University Press, 1989): 103-31

⁸⁵ Halesowen was a detached portion of Shropshire

⁸⁶ R. A. Pelham, 'The Immigrant Population of Birmingham, 1686-1726', *Transactions of the Birmingham Archaeological Society* 61 (1937): 45-82; A. Parton, 'Poor-Law Settlement Certificates and Migration to and from Birmingham, 1726-57', *Local Population Studies* 38 (1987): 23-29

⁸⁷ P. J. Corfield, *The Impact of English Towns 1700-1800* (Oxford: Oxford University Press, 1982), p. 183

⁸⁸ Schwarz, 'Residential Leisure Towns'

Although the wage differential between agricultural and urban employment was considerable, with unadjusted industrial wages at the end of the research period being twice those in agriculture,⁸⁹ the equation was not as simple as this suggests, as discussed in section 2.6. Agricultural wages were relatively good for both men and women through the Napoleonic Wars, rising by nearly 40% between 1796 and 1815, more than the cost of living increase.⁹⁰ Even in the south and east of England, male agricultural wages probably increased briefly in real terms until the mid 1820s; in the Welsh Marches, female wages held up relatively well and men's wages also remained good until the downturn in the 1830s.⁹¹ This was not associated with anything comparable to the Swing riots of the east and south, although there was plenty of poaching, sheep-stealing and scrumping of fruit, which may have been politically motivated.⁹² However, the relative deterioration of rural conditions may be one factor in the timing of movement into the urbanising West Midlands.

Yet Whitbourne in the early nineteenth-century was not primarily a parish of agricultural labourers, but of yeomen farmers and smallholders. Relatively poor harvests, with Government grain-buying for the war, meant that agricultural prices were high for twenty years from 1798, so yeomen prospered while the urban poor were at a relative disadvantage, having to buy almost all their food.⁹³ But from 1820, prices fell sharply and small farmers in many parts of the country who had invested heavily in buildings or equipment to increase

⁸⁹ John Saville, *Rural Depopulation in England and Wales, 1851-1951* (London: Routledge and Kegan Paul, 1957), p. 13

⁹⁰ Burnette, 'The Wages and Employment of Female Day-Labourers', p. 676

⁹¹ K. D. M. Snell, 'Agricultural Seasonal Unemployment, the Standard of Living, and Women's Work in the South and East, 1690-1860', *Economic History Review* 34 (1981): 407-37; Snell, *Annals of the Labouring Poor*, p. 417

⁹² Timothy Shakesheff, *Rural Conflict, Crime and Protest. Herefordshire, 1800-1860* (Woodbridge: Boydell Press, 2003); John Maynard, 'The Last Labourers' Revolt in Worcestershire, 1830-1831', *Midland History* 32 (2007): 110-27

⁹³ A. H. John, 'Farming in Wartime: 1793-1815' in *Land, Labour and Population in the Industrial Revolution. Essays Presented to J. D. Chambers*, ed. E. L. Jones and G. E. Mingay (London: Edward Arnold Ltd, 1967): 28-47

arable acreage were left with greatly reduced assets or even debts.⁹⁴ The Collins tribe from Whitbourne exemplifies this, sliding down from being among the chief of the ‘middling sort’ to predominantly agricultural labourers by the mid nineteenth century.

At the same time, employment in the urban areas was not guaranteed even in superficially thriving industries, and short-time working often cut the wages of iron workers and labourers to below subsistence level in the Black Country (section 2.8). One index has found that only 1834-1837, 1845-1855 and 1870-1874 were times of sustained full-employment in the district of Dudley, Walsall, Warley, West Bromwich, Wolverhampton., Stourbridge and Halesowen.⁹⁵ Another study has noted a trade slump for many Birmingham manufacturers during the Napoleonic Wars, but considered that the years from 1850-1873 were relatively prosperous.⁹⁶ Knowledge of the uncertainty of urban incomes may have played a part in framing migration decisions.

Another possible factor was awareness of mortality levels in the urbanising areas, although there was no means to assess this in the present study and it was compounded by variable age at first marriage. Of the Bullock siblings mentioned above, one of the three who migrated to Birmingham had no known issue and the other two both had only one surviving child. By contrast, the brother who remained in Whitbourne had eleven children, ten of whom were traced and all these survived childhood. Mortality decreased in Birmingham, and sanitary and

⁹⁴ Ian Whyte, ‘Cumbrian Village Communities: Continuity and Change, C. 1750 - C. 1850’ in *The Self-Contained Village: The Social History of Rural Communities, 1250-1900*, ed. Christopher Dyer (Hatfield: University of Hertfordshire Press, 2007): 96-113

⁹⁵ George J. Barnsby, ‘The Standard of Living in the Black Country During the Nineteenth Century’, *Economic History Review* 24 (1971): 220-39

⁹⁶ Eric Hopkins, ‘The Birmingham Economy During the Revolutionary and Napoleonic Wars, 1793-1815’, *Midland History* 23 (1998): 105-20; Eric Hopkins, ‘Industrial Change and Life at Work in Birmingham, 1850-1914’, *Midland History* 27 (2002): 112-29

medical arrangements improved, markedly between 1841 and 1873, coinciding with the time of increasing migration there from Whitbourne, but a causal link cannot be ascertained.⁹⁷

Bilston and Kidderminster both suffered significantly from epidemics during the research period, and neither were common destinations for Whitbourne migrants. Allen Clark, a house carpenter baptised in 1792, migrated to Kidderminster, but he lived outside the overcrowded weaving area. One Whitbourne descendant was traced to Bilston, after the cholera epidemics: George Portman (1834-), an agricultural labourer from Norton, moved there in the 1860s and became a forge labourer. Bilston's population in 1851 was 23,500, of whom half were born there. The CEBs show the in-migrants' birthplaces: 1,000 in nearby Sedgeley and Tipton; 1,600 in the main towns in the ellipse including Dudley, Birmingham and Wolverhampton; 3,000 in Shropshire, 200 in Gloucestershire (mainly the Forest of Dean), 150 in Derbyshire, but only eighty in Herefordshire, none of whom are listed as from Whitbourne.⁹⁸ Bilston was thus primarily a destination for in-migrants from adjacent urban areas and for those with relevant skills in mining and metal working,⁹⁹ which may adequately explain the scarcity of Herefordshire natives there.

6.2.vi. Cheshire and Lancashire

Like Cheltenham, both Cheshire and Lancashire were accessible from Whitbourne, via the River Severn up to Shrewsbury, by road from Ludlow, and later by a choice of railways. This

⁹⁷ Robert Woods, 'Mortality and Sanitary Conditions in The "Best Governed City in the World" - Birmingham, 1870-1910', *Journal of Historical Geography* 4 (1978): 35-56

⁹⁸ 1851 census Population Tables II volume I, Staffordshire, p. 66, www.histpop.org, first accessed August 2011; CEB analysis from www.Ancestry.co.uk

⁹⁹ Arthur Redford and W. H Chaloner, *Labour Migration in England, 1800-1850* (2nd edn; Manchester: Manchester University Press, 1964), p. 60

area was a major early destination from the West Midlands, not least for the mails routes to Holyhead and the port of Liverpool (section 2.9). It also formed a distinctive destination for Whitbourne descendants, primarily for domestic servants, and thus mostly for women. In addition to the three individuals who were fully traced (Table 5.26), Emma Lloyd (baptised in Whitbourne in 1834), is known to have been the senior servant in a house in Kirkdale, Liverpool, in 1861, and Eliza Vernals, dairymaid at Tedstone Delamere Court in 1851, later lived in Prestbury, Cheshire. Jane Clark spent a relatively short period in this area, before returning to Whitbourne for marriage in 1857, which suggests that it may have been perceived as an accessible milieu. Of the men who migrated here, the shoemaker Richard Caswell, baptised in Whitbourne in 1798, was in Liverpool by 1830 but not traced after 1851; the only male domestic servant was Edward Combey, a coachman.

6.2.vii. Overseas

After the transportation era, the new Australian colonies used financial inducements to compensate for the greater costs of emigration there than to North America. Almost three quarters of a million nineteenth-century emigrants were assisted in some way from 1831 onwards, mostly agricultural workers and female domestic servants, to supplement the 1.6 million non-assisted emigrants. Apart from the other costs, the cheapest fare was £18 in 1836, and Port Phillip (Melbourne) and South Australia were the first to take these assisted passage schemes seriously. Families were typically subsidised by about a year's wage; initially New South Wales expected repayment, but later only assessed deposits of about £2 were needed, which acted as a positive selection mechanism. There was often a bias towards young adults without children, but always towards the young, fit and those of good character. Kinship

assistance was a recognised route for successful emigrants, via the Australian Nomination and Remittance System.¹⁰⁰

Herefordshire was an infrequent origin for emigrants to either America or Australia, with only eighteen of the 8,000 registered emigrants to the New England colonies coming originally from Herefordshire.¹⁰¹ The county was beyond the area in the south and east of England where interest in emigration to Australia was initially most intense. But the Lloyd brothers of Whitbourne (section 5.6.iii) were typical of those who gained assisted passages. They were from the upper echelons of the working class, with vital skills; they were young enough (Samuel was thirty-one, John thirty-seven) and may well have been able to pay any premiums necessary for travelling with several children.

The Mormon exodus from north-east Herefordshire was exceptional, made possible by networks of family and fellow-believers at home and in Utah. This enabled illiterates and even single women to achieve daunting journeys. The Walton-Burraston group emigrated very early, but in other respects were typical. It has been estimated that fewer than 10,000 Europeans had crossed the Rockies by 1849, but in 1850 more than 40,000 passed through Fort Laramie on the North Platte River alone. The first Mormon guidebook to the trail was published in 1848, four years before Jane and Joseph Walton reached America, and was widely used by emigrants of all kinds. Groups were often led by men who had made the trail

¹⁰⁰ Eric Richards, 'How Did Poor People Emigrate from the British Isles to Australia in the Nineteenth Century?' *Journal of British Studies* 32 (1993): 250-79

¹⁰¹ Dudley Baines, *Emigration from Europe, 1815-1930*, ed. L.A. Clarkson (Studies in Economic and Social History; Basingstoke: Macmillan, 1991), p. 43

before, even in these early years; practical details were laid down in minute detail, and the success rate was much higher than in non-Mormon companies.¹⁰²

6.3 Personal Social Capital

6.3.i. Gender

Although not perhaps an obvious factor to include under the umbrella of social capital, gender has clear implications for migration decision-making and ability, so will be mentioned briefly here. Early studies of migration suggested that women migrate more than men, but that men move further. In many cases, women are indeed found to move more frequently, and a contributing factor is women moving to their husband's parish after marriage, not least because it became their legal parish of settlement. The proposition that men moved further than women is not quite so clear.¹⁰³

Any discussion of the role of gender in migration is complicated by interactions with occupation, and the associated difficulty of obtaining meaningful data on women's occupations. Many studies have found big differences between sexes in both distance and frequency of moves, and in some instances men may have emigrated more, because they more often travelled singly.¹⁰⁴ The age at which boys and girls began in service also varied over

¹⁰² P.A. M Taylor, 'Emigrants' Problems in Crossing the West, 1830-70', *University of Birmingham Historical Journal* 5 (1955): 83-102

¹⁰³ Mills and Schurer, 'Migration and Population Turnover'

¹⁰⁴ Deacon, 'Reconstructing a Regional Migration System'; Fripp, 'Mobility in Victorian Dorset'

time and regionally; in the Welsh Marches boys may have started work later than girls.¹⁰⁵ The study of nineteenth-century out-migration from Marlborough found that twice as many women as men had left, most moved away after age fifteen and most had non-Marlborough spouses. Almost all the long-distance movers in domestic service were women. The largest single destination was London, and the other long-distance migrants were also in urban centres, especially Reading, Gloucester and Cheltenham, while those still in Wiltshire were either in rural parishes or small towns.¹⁰⁶

Domestic service was probably the single greatest employment for women in the nineteenth century, with 11% of females aged over ten listed as such in the 1851 census.¹⁰⁷ It was an inherently mobile occupation, partly because few households had more than three servants. Martha Rowberry (Soley) is in some ways typical of the present data-set: in 1871, aged sixteen, she had migrated from near Worcester to Devon, and was employed by a family who had previously lived within 10 km of her birthplace. Eastern Herefordshire and the Worcester area also offered work in glove-making, five women for every man employed in the city,¹⁰⁸ while in Herefordshire in particular, women continued to work in agriculture later and in larger numbers than previously thought.¹⁰⁹ Here, women's real wages, perks and employment opportunities held up relatively well, sustaining family budgets. The late survival of Farm Service, which included some women, also offered opportunities for women to remain in the

¹⁰⁵ Snell, *Annals of the Labouring Poor*, p. 326

¹⁰⁶ Williams, 'Migration and the 1881 Census Index'

¹⁰⁷ Peter Mathias, *The First Industrial Nation: An Economic History of Britain 1700-1914* (2nd edn; London: Methuen, 1983), p. 239

¹⁰⁸ Lyes, *The Leather Glove Industry of Worcester*

¹⁰⁹ Barry Reay, *Rural England: Labouring Lives in the Nineteenth Century* (Basingstoke: Palgrave Macmillan, 2004), pp. 50-61

locality¹¹⁰ (section 2.6.iv). The net result was a very different employment market for men and women, both locally and for out-migrants.

The results from this study show clear gender differences in migration patterns. Between 1813 and 1851, most of the long-distance migrants before marriage were women (section 5.2.v), and only in the last marriage cohort were men traced further than women. Correspondingly, more Whitbourne-native men than women were buried in the parish in all cohorts (section 5.3.iv), more non-native Whitbourne-descended men than women were married there (section 5.2.iv) and more men than women were traced to the surrounding rural parishes, all indicative of men remaining more local. Worcester and London were both approximately equally attractive to women and men in the earlier cohorts, but women may have migrated to Birmingham and the Black Country towns earlier than men. Women were also more likely than their male counterparts to migrate to Cheshire and Lancashire, Cheltenham and a variety of other long-distance destinations, especially for employment in domestic service.

6.3.ii. Land Holding

Previous studies have suggested that there was a connection between land ownership and spatial mobility. For example from the 1690s to the 1830s in Colyton, Cardington, Binfield and Swindon, yeomen's children remained co-resident longest, while labourers' children left home earlier.¹¹¹ In Levisham, North Yorkshire, land holding was a key stabilising factor, but by the eighteenth century it was losing its constraining influence over migration.¹¹²

¹¹⁰ Snell, *Annals of the Labouring Poor*, pp. 40-49

¹¹¹ Richard Wall, 'Real Property, Marriage and Children: The Evidence from Four Pre-Industrial Communities' in *Land, Kinship and Life-Cycle*, ed. Richard M. Smith (Cambridge: Cambridge University Press, 1984): 443-79

¹¹² B. Halse, 'Population Mobility in the Village of Levisham, 1541-1900', *Local Population Studies* 65 (2000): 58-63

Although there were examples in the present study of return migration to the parish in land-owning families, there was no correlation between land ownership and migration, perhaps because changes through time had an over-riding effect. Of the two farming tribes in the sample, the male line of the Hodges had left the parish before 1871, and the last Whitbourne male of the Lawrence tribe, a bachelor, died in 1860. The yeoman tribes were less migratory, although many individual families did leave the parish, but by 1871 they were less closely associated with the land. For example the four surviving sons of John and Sarah Collins (baptised between 1807 and 1829) all remained in Whitbourne: the eldest held the five acres at The Scar but also ran The Boat Inn there, one was an agricultural labourer, one a cooper and one a carpenter. Of the three sons of Job and Susannah Clark (baptised between 1821 and 1831), the eldest was farming his maternal uncle's 300 acres in Whitbourne, the second had returned from Leigh (10 km) and was farming the family's twelve acre plot which was now only rented, while the youngest was an agricultural labourer in Canon Pyon, Herefordshire (38 km). The landless agricultural labourers had similar migration patterns to the yeomen. Thus of the five surviving sons of Thomas Bullock and Ann Vernals (baptised 1830-1851), four were traced: two were agricultural labourers in Whitbourne, one in Stoke Lacy (15 km) and one a domestic gardener in Tedstone Delamere (4 km). It is possible, although unsubstantiated, that this convergence between the yeomen and the 'landless' was in part because of the survival of the commons, so the yeoman class persisted and labourers supplemented their wages, delaying out-migration. A comparative study with fully enclosed Herefordshire parishes might elucidate this hypothesis.

6.3.iii. Life-cycle Stage, Family Size and Social Networks

The life-cycle stage at which migration takes place is to some extent related to the kin and other social networks involved in it, and so these two factors will be discussed together. This project has not, however, been formulated to assess their causal links.

It is often said that eighteenth- and nineteenth-century migration was predominantly a feature of single, young adult life. However, many studies have found evidence for significant migration in family groups. Thus Pooley and Turnbull's data base showed that between 1750 and 1879 only 60% of migrants moved singly, and migration could take place over the whole life-time: between 1750 and 1839, 41% of moves were made by people under twenty, but nearly 20% of migrants were over sixty. There was a trend through historical time towards migration being more evenly spread over life-cycle, so that before 1800, most was between ages twenty and thirty, with little after forty; from 1800-1849, the peak was between fifteen and thirty, with a tail up to about age sixty; and thereafter migration was through much of adult life.¹¹³

As with overall migration rates and mean migration distances, the results found are heavily influenced by the particular study material. Thus about half of the in-migrants to Grantham and Scunthorpe, as heavy industry expanded in the later nineteenth century, came as families with children, and most of the others as married couples,¹¹⁴ but most miners migrating to

¹¹³ Pooley and Turnbull, *Migration and Mobility in Britain since the Eighteenth Century*, pp. 68, 205-208

¹¹⁴ Martin B. White, 'Family Migration in Victorian Britain: The Case of Grantham and Scunthorpe', *Local Population Studies* 41 (1988): 41-50

County Durham were single men.¹¹⁵ All age groups were liable to be issued with removal orders from London in the late Old Poor Law period, and significant numbers involved children.¹¹⁶ In a group of rural Essex parishes between 1861 and 1871, single people were the most frequent migrants, but some moved at all life-stages, with relatively few at the end of child-rearing and more again in old age; female-headed households were more likely to migrate than male-headed ones, with a trend over time towards more migration with families.¹¹⁷ A study based on the turn of the eighteenth century also found that the most common age group for migration was between twenty-one and thirty, but with quite a wide spread of ages.¹¹⁸ The Cardington listing from 1782 Bedfordshire shows most male out-migration in young adulthood, so that by age twenty-five to twenty-nine, 80% were further away than 16 km,¹¹⁹ while in mid nineteenth-century Dorset, the peak migration age in 1851 was also twenty to twenty-nine, but with significant numbers aged thirty to forty-nine.¹²⁰

The differences can be quite nuanced, both regionally and through time. Among eighteenth-century emigrants to the New England colonies, 80% of those from the south of England were single craftsmen or traders, but half those from the north and Scotland were families, mostly agricultural. Three quarters of men travelled alone, over half of women went with family groups, and the great majority of male emigrants were aged fifteen to twenty-nine.¹²¹ In the early nineteenth century, emigrants to America were typically young families, while later still

¹¹⁵ Michael Sill, 'Mid Nineteenth-Century Labour Mobility: The Case of the Coal-Miners of Hetton-Le-Hole, County Durham', *Local Population Studies* 22 (1979): 44-50

¹¹⁶ Alys Levene, 'Poor Families, Removals and 'Nurture' in Late Old Poor Law London', *Continuity and Change* 25 (2010): 233-62

¹¹⁷ Kevin Schürer, 'The Role of the Family in the Process of Migration' in *Migrants, Emigrants and Immigrants. A Social History of Migration*, ed. Colin G. Pooley and Ian D. Whyte (London and New York: Routledge, 1991): 106-42

¹¹⁸ Clark, 'Migration in England During the Late Seventeenth and Early Eighteenth Centuries', p. 226

¹¹⁹ Schofield, 'Age-Specific Mobility in an Eighteenth-Century Rural English Parish'

¹²⁰ Fripp, 'Mobility in Victorian Dorset', p. 44

¹²¹ Bernard Bailyn, *Voyagers to the West: A Passage in the Peopling of America on the Eve of the Revolution* (New York: Alfred A. Knopf, 1986), pp. 134-51

they were more often young and single, with twice as many men as women. After 1840, nearly three-quarters were aged fifteen to forty.¹²²

The present study found that marriage had no significant effect on net whole-life migration distance, and that mobile individuals tended to remain mobile, so marriage was not the end of mobility (section 5.3.viii);¹²³ moreover, family size had no effect on migration distance. The proportion of untraced males rose through life, further suggesting that migration was a whole-life phenomenon and not principally restricted to youth and young adulthood (section 5.4.iii).

The nature of kin ties and other social networks, and their impact on migration-decisions, is undoubtedly complex, and is also opaque to many historical tools. Ravenstein's seminal work did not include this aspect of migration, but it is now appreciated that a complex web of ties could play a major part, even after the supposed social dislocations of the industrial revolution.¹²⁴ At its most overt level, it is apparent that in some close-knit families (whether through affection or necessity) blood relationships led to common migration routes, as in the examples cited in section 5.6 and the cousins Emma and Richard Soley, who became close neighbours in Forge Road, Lye. The closeness of these links can sometimes be seen when siblings are witnesses to a succession of family marriages.

The 1601 Poor Law Act had a clause requiring kin-relief, but there is little unequivocal evidence of its enforcement, except for deserting husbands. On the contrary, many paupers received relief while adult children were resident in the parish, sometimes perhaps because

¹²² Baines, *Emigration from Europe, 1815-1930*, p. 43

¹²³ See also Kevin Schürer, *Migration, Population and Social Structure: A Comparative Study Based in Rural Essex, 1850-1900* (Unpublished PhD Thesis, Bedford College, University of London, 1988), p. 458

¹²⁴ Mills and Schurer, 'Migration and Population Turnover'; Ann-Kristin Högman, 'Elderly Migrants in a Northern Swedish Town in the Nineteenth Century', *Continuity and Change* 16 (2001): 423-42

they were themselves poor and exempt.¹²⁵ After 1834 it became more customary to place orders on adult children, requiring them to contribute towards the relief of their parents, or take them in.¹²⁶ A study in mid nineteenth-century Kent found evidence supporting the operation of kin-support, since 38% of widowed parents died in the households of adult children, a further 30% died in the immediate local area, although their support system was not clear, and only 5% ended in the workhouse.¹²⁷ In other studies, much of the kin-support for the elderly seems to have taken place at a distance, with no adult children living nearby, but through the nineteenth century there may have been an increasing tendency for co-habitation with adult children.¹²⁸ Such co-habitation may, of course, have been to the benefit of the young family at critical stages of the child-rearing cycle, and it has been noted that widows were more frequent cohabitantes than widowers.¹²⁹

One example of migration of elderly parents, perhaps to be near a son, was identified in the present study: Samuel and Elizabeth Combey moved from Whitbourne to Birmingham in the same decade as their son Thomas, who then had three small children (section 5.6.ii). Many cases were found of widows and occasionally widowers living in the households of adult children, while John Collins' will specified that his widowed daughter-in-law Mary (1756-1832) was to have a room in her son's house for life.¹³⁰

¹²⁵ Smith, 'Charity, Self-Interest and Welfare: Reflections', p. 34; Pat Thane, 'Old People and Their Families in the English Past' in *Charity, Self-Interest and Welfare in the English Past*, ed. Martin Daunton (London: University College London Press, 1996): 113-38

¹²⁶ Snell, *Annals of the Labouring Poor*, p. 365

¹²⁷ Barry Reay, 'Kinship and the Neighbourhood in Nineteenth-Century Rural England: The Myth of the Autonomous Nuclear Family', *Journal of Family History* 21 (1996): 87-104

¹²⁸ Richard Wall, 'Economic Collaboration of Family Members within and Beyond Households in English Society, 1600-2000', *Continuity and Change* 25 (2010): 83-108

¹²⁹ Snell, 'Parish Registration and the Study of Labour Mobility'

¹³⁰ John Collins, 28 February 1780, Probate Film 84 HRO

There is some good evidence that siblings helped channel migration, for example sisters from Zeeland moved sequentially into domestic service jobs in Dutch cities, while from north eastern Belgium, brothers and sisters both found work in the textile industries, all cases tending to follow siblings who had already migrated.¹³¹ In Shropshire, a case has been found of two Welsh sisters working in the same household in Shrewsbury,¹³² while in Cornwall kin links may also have frequently underlain migration patterns.¹³³

An apparently clear-cut example of kin facilitating migration in the present study concerns William Palmer (Price), who was baptised in Whitbourne in 1827, moved to Bath in his twenties, married and worked as a domestic gardener and then a footman. His sister Elizabeth (baptised in 1844) was a glover in Whitbourne in her teens but then moved to Bath and was a servant in the lodging house run by William's brother- and sister-in-law. Sometimes, kin groups working as economic units might equally well have reduced migration, as in the case of Mark Clark, the son of a yeoman in reduced circumstances, who took over the substantial Whitbourne farm of his maternal uncle by marriage.¹³⁴

However, kin and common interest are not equivalent. Occupation, social group, religion, a shared locality or region, godparents, all might play a part, as suggested equally in the present research, in localised studies elsewhere and in emigration outcomes. People were mobile, but bound by common interests and networks, which sometimes encouraged follow-up migration (although there is some evidence that this might be avoided if it was perceived to increase

¹³¹ Hilde Bras and Muriel Neven, 'The Effects of Siblings on the Migration of Women in Two Rural Areas of Belgium and the Netherlands, 1829-1940', *Population Studies* 61 (2007): 53-71

¹³² Colin G. Pooley and John C. Doherty, 'The Longitudinal Study of Migration: Welsh Migration to English Towns in the Nineteenth Century' in *Migrants, Emigrants and Immigrants. A Social History of Migration*, ed. Colin G. Pooley and Ian D. Whyte (London and New York: Routledge, 1991): 143-73, pp. 166-67

¹³³ Deacon, 'Communities, Families and Migration'

¹³⁴ Reay, 'Kinship and the Neighbourhood'

competition for a limited and very specialised market).¹³⁵ Any pre-existing contacts formed part of the network of social capital facilitating migration,¹³⁶ a network which was perhaps greatly enhanced after the introduction of the penny post in 1840, and they also might represent an advance of social reputation which was a vital part of the ability to obtain financial credit, exchange information and, where appropriate, do business.¹³⁷

It has been noted that these factors are more likely to be missed using short time periods or cross-sectional snapshots for research, but over several decades the ‘hidden kinship’ and other connections at either end of communication channels become more apparent.¹³⁸ From the present research, two domestic servants were traced to the same household in Bordesley in 1861. Eliza Lloyd (aged twenty, baptised in Whitbourne) and Emma Caswell (aged nineteen, baptised in Clifton upon Teme) were cook and housemaid respectively for a hop merchant. The two were only very distantly related, but their fathers and grandfathers were both from Whitbourne and two of Emma’s older siblings farmed there, where Eliza’s uncle was the village blacksmith. Similarly, Ellen Collins was a servant to a doctor in Worcester in 1861, and in 1871 two of his three servants were Eliza Hodges and Richard Bradburn, also from Whitbourne.

¹³⁵ Evelyn Lord, ‘Communities of Common Interest: The Social Landscape of South-East Surrey, 1750-1850’ in *Societies, Cultures and Kinship, 1580-1850. Cultural Provinces and English Local History.*, ed. Charles Phythian-Adams (Leicester: Leicester University Press, 1993): 131-99; George Fertig, ‘Balancing, Networking and the Causes of Emigration: Early German Transatlantic Migration in a Local Perspective, 1700-1754’, *Continuity and Change* 13 (1998): 419-42; Leslie Page Moch, ‘Networks among Bretons? The Evidence for Paris, 1875-1925’, *Continuity and Change* 18 (2003): 431-55; Marlou Schrover, ‘Living Together, Working Together: Concentrations Amongst German Immigrants in the Netherlands in the Nineteenth Century’, *Continuity and Change* 18 (2003): 263-85; Elspeth Johnson, ‘The Role of Family and Community in the Decision to Emigrate: Evidence from a Case Study of Scottish Emigration to Queensland, 1885-88’, *Family and Community History* 9 (2006): 5-25

¹³⁶ Sharpe, ‘Population and Society’, pp. 514-17

¹³⁷ K. Wrightson, *Earthly Necessities: Economic Lives in Early Modern Britain* (New Haven and London: Yale University Press, 2000); Stobart, ‘Personal and Commercial Networks in an English Port’, p. 300

¹³⁸ Schürer, ‘The Role of the Family’; Paul Hudson and Dennis Mills, ‘English Emigration, Kinship and the Recruitment Process: Migration from Melbourn in Cambridgeshire to Melbourne in Victoria in the Mid-Nineteenth Century’, *Rural History* 10 (1999): 55-74

Sometimes, there was residential propinquity of people from the same area, but with no other overt connection: one Joseph Collins (baptised in Whitbourne in 1770) was in Marylebone from 1810 at the latest and in 1851 his next door neighbour was from Worcester. With time and resources, many of these threads of inter-connectedness could perhaps be traced, revealing more mechanisms of migration.

6.3.iv. Occupation

There have been many studies of the impact of occupation on migration distance and frequency, and while there is considerable agreement over the basic pattern, numerous differences and exceptions persist. In part, this may be because many individuals, not just women, did not expect to have the same occupation after migration, so occupational type for them was not a constant.¹³⁹ This tendency to change occupation, or to have a simultaneous portfolio, affected perhaps 3% of the population towards the end of the research period, and may have been especially common among farmers.¹⁴⁰ Joshua Philpotts (Caswell), baptised in Whitbourne in 1812, was a farmer at Hallow, then migrated to Birmingham where he was a jobbing labourer, then a steel pen maker; John Hodges, baptised in Wichenford in 1823, moved around the local rural area as a farmer, then a farm bailiff and eventually a shopkeeper. These examples may represent the ‘disparate self help . . . patchy, desperate and sometimes failing strategies of the poor,’¹⁴¹ even though both men began with substantial farms. Others

¹³⁹ Robert Woods, *The Population History of Britain in the Nineteenth Century* (Cambridge: Cambridge University Press, 1995), p. 23

¹⁴⁰ M. Woollard, ‘The Classification of Multiple Occupational Titles in the 1881 Census of England and Wales’, *Local Population Studies* 72 (2004): 34-49

¹⁴¹ Alannah Tomkins, and King, Steven, ‘Introduction’ in *The Poor in England 1700-1850. An Economy of Makeshifts*, ed. Steven King, and Tomkins, Alannah (Manchester: Manchester University Press, 2003): 1-38, p. 1

seem closer to a flexible and opportunistic use of a wide skill set, for instance John Munn (Collins) the glover who became a policeman, or John Price the wheelwright who became a Harborne stationer, an adaptability which might be a strength in a changing economy.

A study on migration near Skipton at the turn of the nineteenth century found a hierarchy of flexibility among different occupations, with masons, blacksmiths and to a lesser extent carpenters tending to inherit their father's occupation; farming was also quite conservative, but over half the labourers and textile workers changed occupation.¹⁴² These hierarchies might not, however, determine migration outcomes, since skilled and conservative trades such as blacksmiths might be prone to migrate because of inflexibility of demand, while labourers might migrate and change occupation. In the different environment of the depressed Weald of Kent in the mid nineteenth century, moreover, almost all agricultural labourers were found to have followed their fathers' occupation, and it was proposed that this was because alternative occupations were unavailable unless men had the capacity to migrate long distances.¹⁴³

Among individuals who did not apparently change their occupation in association with a migration, a range of studies in different periods and regions have found that domestic servants were usually the most mobile and migrated the longest distances, together with those in the armed forces and miners.¹⁴⁴ Farmers, craftsmen and traders comprised an intermediate grouping, while agricultural labourers and farm servants migrated round a small area, and those with specialist local skills which were in demand moved least.¹⁴⁵ This pattern may be

¹⁴² Long and Maltby, 'Personal Mobility'

¹⁴³ Wojciechowska, 'Brenchley: A Study of Migratory Movements'

¹⁴⁴ Sill, 'Mid Nineteenth-Century Labour Mobility'; Deacon, 'Communities, Families and Migration'

¹⁴⁵ P Clark, 'Migration in England During the Late Seventeenth and Early Eighteenth Centuries', *Past and Present* 83 (1979): 57-90; A. S Kussmaul, 'The Ambiguous Mobility of Farm Servants', *Economic History Review* 34 (1981): 222-35; Nicholas and Shergold, 'Internal Migration'; Wojciechowska, 'Brenchley: A Study of

perturbed, however, firstly where individuals had nationally marketable skills which, as Ravenstein hypothesised, encourages long-distance migration,¹⁴⁶ secondly where particular regional situations produced different detail (for example the high local mobility among farmers in nineteenth-century Devon, who took annual leases),¹⁴⁷ and thirdly, events such as the Potato Famine led to anachronistic long-distance migration by day labourers.¹⁴⁸

The results obtained here were broadly in line with those in most other studies, although the aggregative analysis was restricted to men. Agricultural labourers and yeomen were mobile within a 30 km radius and mostly within 20 km. Blacksmiths were occupationally conservative and mostly intermediate range migrants, although two emigrated and those who remained in the parish did diversify into running a carriers business. Male domestic servants were very mobile, especially coachmen and some gardeners, two occupations which sometimes formed a portfolio. Trades which could adapt to an urban environment produced varied mobility patterns, some individuals remaining in their native rural parishes and some migrating. The late nineteenth-century trend towards loss of rural craft-workers seems not to have begun in eastern Herefordshire by 1871.¹⁴⁹

Migratory Movements'; Ruth Tinley, and Mills, Dennis, 'Population Turnover in an Eighteenth-Century Lincolnshire Parish in Comparative Context', *Local Population Studies* 52 (1994): 30-38; Mills and Schurer, 'Migration and Population Turnover'; June Sheppard, 'Out-Migration 1821-1851 from a Wealden Parish: Chiddingley', *Local Population Studies* 59 (1997): 13-25; Christer Lundh, 'Servant Migration in Sweden in the Early Nineteenth Century', *Journal of Family History* 24 (1999): 53-73; Audrey Perkyns, 'Migration and Mobility in Six Kentish Parishes, 1851-1881', *Local Population Studies* 63 (1999): 30-70; Martin Dribe and Christer Lundh, 'People on the Move: Determinants of Servant Migration in Nineteenth-Century Sweden', *Continuity and Change* 20 (2005): 53-91

¹⁴⁶ Pooley and Turnbull, *Migration and Mobility in Britain since the Eighteenth Century*, p. 13; William Turner, 'Patterns of Migration of Textile Workers into Accrington in the Early Nineteenth Century', *Local Population Studies* 30 (1983): 28-34; Fripp, 'Mobility in Victorian Dorset'

¹⁴⁷ Robin, *The Way We Lived Then*, pp. 90-95

¹⁴⁸ Mills and Schurer, 'Migration and Population Turnover'

¹⁴⁹ R Lawton, 'Rural Depopulation in Nineteenth-Century England' in *English Rural Communities: The Impact of a Specialised Economy*, ed. Dennis Mills (London: Macmillan, 1973): 195-219, p. 215

There were inevitably exceptions to these patterns. The yeoman Moses Rowberry migrated west 38 km to Canon Pyon in the 1730s, and Robert Lawrence farmed in Radnor (57 km). There were many examples of labourers transferring their skills to urbanising areas and so they too migrated longer distances. Wood-workers, tailors and shoemakers were again divided between those who stayed and those who migrated, and the most mobile ones tended to be literate (see further, section 6.3.vi). There was some evidence that in the nineteenth century the rapidly expanding north Worcester suburb of Claines acted as a spring-board for this category of migrants from rural parishes. Gardeners were also divided, with some migrating long distances, for instance James Vernals (1782-1845) who moved to Rutland, and John Lloyd (1791-c.1865) to London.

The migration types found are exemplified by the following life-histories. Firstly, Joseph Collins, grandson of the wealthy yeoman couple John and Winifred (he inherited £5 from his grandfather in 1780),¹⁵⁰ migrated to Middlesex before 1810 and worked as a coachman; his wife and two daughters, all born in London, were laundresses. Secondly, Joseph Walton (Combey), initially a poor and sometimes pauper carpenter from Stanford Bishop, apparently remained resident there all his life, and accumulated significant wealth;¹⁵¹ his nephew James by comparison (baptised in 1815) was an agricultural labourer whose seven children were each baptised in different local parishes. Lastly, the five surviving sons of the yeoman family John and Ann Gomery (baptised 1778-1791): two moved to Worcester and became very prosperous carpenters and builders;¹⁵² the oldest and youngest lived in Whitbourne, one a

¹⁵⁰ John Collins, 28 Feb 1780, Probate Film 84 HRO

¹⁵¹ Joseph Walton, 12 May 1840, Probate Film 109 HRO, including legacies to the value of £98 and two houses

¹⁵² John Gomery, 2 August 1851, Probate Film 481 WRO, including 18 houses and a timber yard; James Gomery, 11 November 1859, Probate Film 493 WRO, including 4 houses and 2 inns with stabling and outbuildings

pump-maker who also worked in Worcester,¹⁵³ the other a domestic gardener; the middle brother Samuel became a dairy cowman in Cheltenham.

The results for rural to urban migrations at the end of the research period were similar to those found in south east Shropshire, with no inevitable pattern of more 'skilled' workers moving to urban areas, and many instances of agricultural migrants to towns continuing in comparable jobs as draymen, waggoners, gardeners or ostlers. The other main categories of male migrants to urban areas were blacksmiths and carpenters, and those working with wood, metal and leather, who brought other relevant skills.¹⁵⁴ This reaffirms a view of agricultural workers having a refined, diverse and adaptable skill-set.

One apparently anomalous case was James Vernals, baptised in Whitbourne in 1836, who migrated to Lincoln where he married and settled. No evidence for any other Whitbourne migrants to Lincolnshire was found, and moreover James was illiterate. However he was a boiler maker, and the Steam Engine Makers Society, founded in 1824, was one of the earliest trade societies, with an active tramping system supporting members seeking work. About 13% left their town for other branches annually, and in the depression year 1841-1842, 19% of its members were on the move, travelling an average of 535 km.¹⁵⁵ Such organisations shared information and resources between towns, making migrations the length of the country a practical reality,¹⁵⁶ and boiler makers were among the most mobile.¹⁵⁷

¹⁵³ Richard Gomery, 17 April 1845, Probate Film 111 HRO, including legacies to the value of £200 and two houses with land, in Whitbourne

¹⁵⁴ Nair and Poyner, 'The Flight from the Land?'

¹⁵⁵ Humphrey R. Southall, 'The Tramping Artisan Revisited: Labour Mobility and Economic Distress in Early Victorian England', *Economic History Review* 44 (1991): 272-96

¹⁵⁶ R.A. Leeson, *Travelling Brothers: The Six Centuries' Road from Craft Fellowship to Trade Unionism* (London: Granada, 1979), pp. 111-14

¹⁵⁷ June A. Sheppard, 'The Provenance of Brighton's Railway Workers, 1841-1861', *Local Population Studies* 72 (2004): 16-33

Another example of a very long-distance migrant with a distinctive occupation was George Clark, a brick maker, who moved to County Durham. It should be noted, however, that he was not the first Whitbourne descendant traced to the north east: Martha Vernals, twelve years his senior, was a domestic servant in Bishopwearmouth (397 km) by 1861. The heavy brick-earth of many parts of Herefordshire stimulated the early development of hand-made bricks, in many small-scale and often temporary yards, and it was another skill that transferred readily to urbanising areas.¹⁵⁸ Migrant brick makers were a feature of nineteenth-century England.¹⁵⁹ A brick tax imposed from 1784 to 1850 inhibited innovation because it was levied on all bricks, including rejects, but in the 1840s mobile machines were introduced for making drainage-tiles, which were exempt from the tax, and output boomed, coinciding with the acceleration of new urban house-building.¹⁶⁰ Like the boiler makers, brick makers' trade connections facilitated information flow and migrations to places with demand for their skills.

6.3.v. Intergenerational Effects

One of the design criteria for this project was to enable exploration of possible multi-generational migration patterns. A study in France used three generations of 225 families in the early nineteenth century, and found some suggestion that parental migration decisions

¹⁵⁸ One such temporary series of bonfire kilns for brick and tile making has been excavated in Whitbourne: Tim Hoverd, 'Whitbourne: The Archaeology of a Herefordshire Village' in *Herefordshire Archaeology Reports* (Hereford: Herefordshire Archaeology Service, 2006), pp. 23-34

¹⁵⁹ Perkyns, 'Migration and Mobility in Six Kentish Parishes'

¹⁶⁰ Kathleen Watt, "Making Drain Tiles A "Home Manufacture": Agricultural Consumers and the Social Construction of Clayworking Technology in the 1840s', *Rural History* 13 (2002): 39-60; Edwin Davey and Rebecca Roseff, *Herefordshire Bricks and Brickmakers* (Leominster: Logaston Press, 2007), pp. 38-39

might have influenced those of their children,¹⁶¹ and similar results have been found in Kent, Cornwall, Essex and the Low Countries.¹⁶² It has been speculated that this was due either to wider geographical networks among migrants, a factor which may have been especially valuable for single women, or alternatively to the relative paucity of local support networks for recently-migrated families, encouraging onward-migration.

The present research found many examples of migration among descendants of those who had themselves migrated, but these effects were not as marked as the tendency for sibling groups to show similar migration patterns. For example of the nine traced adult children of James and Elizabeth Vernals (baptised 1782-1798), seven remained in Whitbourne, and the two youngest migrated to Birmingham with episodic return migration. By contrast, of the five adult children of their contemporaries John and Elizabeth Vernals, one went to Rutland, one to London and the other three to Worcester, with one granddaughter subsequently migrating from Worcester to London and a grandson to Birmingham. Other factors than the previous migration experience of the parents were at work in this case.

6.3.vi. Literacy

Some of the most significant findings in the present research concern the connection between literacy and migration. Although signature literacy, mainly obtained from marriage certificates together with some licences and probate material, is an imperfect measure of

¹⁶¹ Daniel Courgeau, 'An Attempt to Analyse Individual Migration Histories from Place of Usual Residence at the Time of Certain Vital Events: France During the Nineteenth Century' in *Old and New Methods in Historical Demography*, ed. David S Reher and R. Schofield (Oxford: Clarendon Press, 1993): 206-22

¹⁶² Wojciechowska, 'Brenchley: A Study of Migratory Movements'; Bras and Neven, 'The Effects of Siblings'; Deacon, 'Communities, Families and Migration'; see also Schürer, *Migration, Population and Social Structure* p. 459

functional literacy, and in particular of the ability to read, there is substantial evidence that it can serve as an adequate guide, not least because personal reading skills generally exceeded writing during the research period (section 5.2.vii). The *Hereford Journal* for July 12, 1826, for example, noted that of twenty-six prisoners held, only three could read and write, but nine more could read.¹⁶³

Since the research period covered the main epoch of the Industrial Revolution, and in particular the development of the west midlands as a major manufacturing region, it is pertinent to consider the possible role of literacy in stimulating its inter-connected dependents of migration and economic development. It has been suggested that a certain level of literacy (perhaps 40%) among a workforce might be a contributing factor in such development,¹⁶⁴ but some research suggests that this was not necessarily so, or that the relationship between industrial development and literacy might be a two-way process.¹⁶⁵ If employment were available for illiterate adults, or if there were high use of child labour, literacy could be inhibited without precluding industrial development. The Leicester frame knitters are a case in point: they were reliant on child labour and were among the least literate occupational groups.¹⁶⁶ Some factory-based industries had low-literacy workforces, but agriculture, especially with an active land market, could benefit from high literacy levels.¹⁶⁷

¹⁶³ Shakesheff, *Rural Conflict, Crime and Protest*, p. 26

¹⁶⁴ R. S. Schofield, 'Dimensions of Illiteracy, 1750-1850', *Explorations in Economic History* 10 (1973): 437-54

¹⁶⁵ Harvey J Graff, *The Labyrinths of Literacy: Reflections on Literacy Past and Present* (Lewes: The Falmer Press, 1987), p. 83

¹⁶⁶ Elaine Brown, 'Gender, Occupation, Illiteracy and the Urban Economic Environment: Leicester, 1760-1890', *Urban History* 31 (2004): 191-209

¹⁶⁷ David Mitch, "Education and Economic Growth in Historical Perspective." EH Net Encyclopedia, 2005, eh.net/encyclopedia/article/mitch.education, accessed November 2007; W. B Stephens, 'Illiteracy in the North-East Coalfield, C. 1830-1870', *Northern History* 37 (2000): 215-37

Herefordshire women were among the most literate in the Welsh Marches, significantly more so than those of Worcestershire, and where comparative data is available, Whitbourne brides mirrored the county average, with literacy rates usually above those in Worcestershire (Figures 5.18 and 5.19). The grooms of the parish, by contrast, were less literate than their peer group and relatively less so towards the end of the research period. These levels were broadly similar to those in a sample of thirty-one eighteenth-century Shropshire villages, but in a single-parish Shropshire study, the brides remained predominantly illiterate well into the nineteenth century.¹⁶⁸ There was an apparent temporary increase in illiteracy in both sexes in Whitbourne just after 1800, a feature also found in a sample of 274 English parish registers, among almost all occupational groups. The period 1785-1814 had 3% more male illiteracy than in 1754-1784. It has been proposed that this may relate to specific opportunity costs of schooling, both provision and attending, in the preceding fifteen years.¹⁶⁹

There is some evidence in the literature that signature literacy might have been positively linked to migration within Britain, although firm data is scarce.¹⁷⁰ One study, based on a sample from 1818-1839, found that those who had moved between counties were significantly more literate than non-movers, and rural and urban movers alike were more literate than non-movers, the urban literate moving further than the non-literate.¹⁷¹ Conversely, it has been found that for seamen, literacy was not a significant factor determining migration to London in mid nineteenth century.¹⁷² Likewise, but in this case perhaps because of a generalised correlation between illiteracy and lower economic status,

¹⁶⁸ R. E Jones, 'Population and Agrarian Change in an Eighteenth-Century Shropshire Parish', *Local Population Studies* 1 (1968): 6-29; Edwards, 'Remarriage'

¹⁶⁹ Schofield, 'Dimensions of Illiteracy'

¹⁷⁰ Richard Lawton and Colin G. Pooley, *Britain 1740 -1950. An Historical Geography* (London: Edward Arnold, 1992), p. 129

¹⁷¹ Nicholas and Shergold, 'Internal Migration', p. 162

¹⁷² Humphries and Leunig, 'Was Dick Whittington Taller Than Those He Left Behind?': significance level only 90%

migrants moving up to the frontier in the American West from 1860 to 1870 were predominantly illiterate, but after migration they often prospered.¹⁷³

Although clear evidence for the impact of literacy on migration within Britain is rather limited, there is important material relating to emigrants. In the Potteries, newspapers were a tool used by the workforce to encourage emigration to America, and by the employers to try to limit it.¹⁷⁴ It is also apparent from the questions asked by prospective emigrants that they were carefully comparing different emigration options, implying a considerable body of knowledge accumulated from agents for the Colonial Companies, newspapers and elsewhere.¹⁷⁵ Some studies of emigration suggest that having better information about the opportunities and means available were more important in decision-making than particular distress.¹⁷⁶

There is also evidence that literate people were more likely to emigrate, to both America¹⁷⁷ and Australia. The 1841 Shipping Lists for 20,000 emigrants to Sydney and Port Phillip show that among the English emigrants, 73% could read and write and an additional 18% could only read. These levels were much higher than the national average of 59% signature literacy

¹⁷³ James I Stewart, 'Migration to the Agricultural Frontier and Wealth Accumulation, 1860-1870', *Explorations in Economic History* 43 (2006): 547-77; James I Stewart, 'Economic Opportunity or Hardship? The Causes of Geographic Mobility on the Agricultural Frontier, 1860-1880', *Journal of Economic History* 69 (2009): 238-68

¹⁷⁴ Horst Rössler, 'The Dream of Independence: The "America" Of England's North Staffordshire Potters' in *Distant Magnets: Expectations and Realities in the Immigrant Experience, 1840-1930*, ed. Dirk Hoerder and Horst Rössler (New York and London: Holmes and Meier, 1993): 128-59

¹⁷⁵ Paul Hudson, 'English Emigration to New Zealand, 1839-1850: Information Diffusion and Marketing a New World', *Economic History Review* 54 (2001): 680-98, pp. 692-93 and 696-97

¹⁷⁶ Hudson and Mills, 'English Emigration, Kinship and the Recruitment Process'

¹⁷⁷ Graff, *The Labyrinths of Literacy*, p. 84

in 1841,¹⁷⁸ implying significant positive selection for literacy among emigrants, although this was ‘only one element in the chemistry of emigration.’¹⁷⁹

The Shipping Lists also demonstrate connections between occupation and literacy. Emigrant agricultural labourers were less literate than farmers and craftsmen, carpenters and dressmakers more literate than housemaids, female agricultural labourers less so than domestic servants, and clothing workers were more literate than most other groups. These results were similar to those found in three nineteenth-century Kent parishes, which additionally found high literacy levels among those in trade, and that male literacy depended on attending school, while females seemed more able to become literate even if they began work early.¹⁸⁰ There is some evidence that changes in the predominant occupation within an area could significantly affect literacy rates: County Durham was the sixth county nationally in average literacy rates in 1841, but following the dramatic increase in mining in the mid nineteenth century it was twenty-ninth by 1871, with an absolute rise of only 3% compared with a national rise in literacy of 14%.¹⁸¹

To explore the possible connection between literacy and migration in the present research, additional data was collected on the literacy of nine migrants whose marriages could be most securely linked, by obtaining copies of their marriage certificates. This data was not added to the main data base, nor used in the main analyses, because it had been gathered using a different tool from the rest of the research and so was liable to introduce bias, but it was used

¹⁷⁸ 4th Annual Report of The Registrar General, p. 16, www.histpop.org, first accessed November 2010

¹⁷⁹ Eric Richards, ‘An Australian Map of British and Irish Literacy in 1841’, *Population Studies* 53 (1999): 345-59, especially p. 357

¹⁸⁰ Barry Reay, *Microhistories: Demography, Society and Culture in Rural England, 1800-1930* (Cambridge: Cambridge University Press, 1996), pp. 213-24

¹⁸¹ Stephens, ‘Illiteracy in the North-East Coalfield’

for an isolated test of the effect of literacy on migration. An example of these individuals is Edward Combey (1828-), the son of illiterate parents; of their five children baptised in Whitbourne only he and his sister (the youngest, who was still a scholar when she was fifteen) were literate. His four siblings all remained on Bringsty Common, as agricultural labourers or in the case of his sister an agricultural labourer's wife, but although Edward was living with his parents as a labourer in 1851, by 1855 he was in Cheshire. He married in Macclesfield, and moved around Cheshire and south Lancashire as a domestic coachman; in 1861 he and his family were next door to Park Field, Didsbury, and in 1871 in a cottage at Manley Hall, Withington, Lancashire. The sample of marriages including these additional long-distance ones was tested for a correlation between own literacy and net distance travelled between baptism and marriage. For the period 1837-1850, which combined large sample size and low national literacy, there was almost a statistically significant effect of literacy on distance travelled,¹⁸² and likewise for all marriages up to 1850 with a baptism to marriage distance greater than 20 km,¹⁸³ but for the whole sample it was still not significant.

Literacy seemed to have a complex effect, facilitating out-migration but sometimes increasing options for local employment, as exemplified by the family of Josiah Winders (Combey) of Leigh and Alfrick, the brother of Jephthah (section 6.2.iii). Of his five children who survived infancy, three daughters were traced and while none were married by 1871, there was circumstantial evidence that at least the oldest and youngest were literate. The eldest, baptised in 1834, was still at school aged sixteen, but remained in Leigh as a nurse; the youngest became a shopkeeper in Leigh; the middle sister migrated to Croydon, within a kilometre of her cousins Mary and Charlotte, and was a domestic servant in an aristocrat's household.

¹⁸² 94% significance level, N = 47

¹⁸³ 94.8% significance level, N = 31

Among the whole life sample, literacy increased mean migration distance for men in every baptism cohort, and for women baptised between 1770 and 1809, and these results were statistically significant (Table 5.18). Where occupational data was available, female domestic servants often combined literacy with long-distance migration, as did coachmen. If one marriage partner was literate, regardless of the literacy of the other, whole-life migration distance increased very significantly. Thus the only one of Jemima Mitchell's¹⁸⁴ seven surviving children who was traced to a marriage with a literate spouse was also the only one known to have migrated, to Deritend in Birmingham.

Even using this small sample, literacy has been shown to be a significant factor associated with migration. If literate people were more aware of the opportunities available to migrants, and some of the costs involved, they were more able to make informed choices. It has been suggested that literacy might also reduce the 'psychic costs' of migration, especially the distress of leaving family and friends, because it was easier to remain in contact.¹⁸⁵ The introduction of penny post, reducing the cost of a letter from a minimum of 4 d., rising to 7 d. for 50 miles (80 km), would have facilitated this process even before it made literacy more relevant to the mass of the population.¹⁸⁶

¹⁸⁴ Jemima Mitchell (1763-1809), an illiterate Whitbourne Parish Apprentice

¹⁸⁵ Nicholas and Shergold, 'Internal Migration', p. 162

¹⁸⁶ Derek Gregory, 'The Friction of Distance? Information Circulation and the Mails in Early Nineteenth-Century England', *Journal of Historical Geography* 13 (1987): 130-54

CHAPTER SEVEN: CONCLUSION

7.1 Introduction

This micro-historical study has traced the descendants of the population of one rural parish, in order to gain insights into the nature of family dispersal over several generations, and it has used personal life-histories to illuminate the general trends uncovered. The time span for the study, 1700-1871, was chosen to avoid the phase of high mobility which has sometimes been found in association with and in the aftermath of the Civil War, but to encompass the major expansion of the west midlands industries, and the research continued up to the time immediately before the local railway line came to the sample parish. It was chosen as a period of superficial stability and consequently one in which it was hoped that other temporal trends could be explored.

The study was based on seventeen large and apparently stable family groupings, or tribes. The sample was deliberately non-random, to represent a cross-section of the parish by occupation and land-holding, with a mix of long-term resident tribes and some whose male line arrived in the parish in the late eighteenth century. It is consequently not necessarily representative of the parish population as a whole, especially in terms of size of family grouping, inter-relatedness of households through the male line, or mobility of households and individuals. If the propensity to migrate were inherited through the male line, the sample might have been biased towards less migratory people.

Being based in eastern Herefordshire, a part of England which has not previously been used in migration studies, one concern throughout the project has been an awareness of possible regional differences between this setting and better-researched locations. Many such differences have been explored in the course of the research, from agricultural practices and employment opportunities to transport networks and mortality indicators, and some or all of these may have impacted on the migration patterns observed. One distinctive characteristic of the locality is that it lies close to the Black Country and Birmingham and their associated urbanising parishes. Throughout the study period, these areas experienced industrial development with associated population expansion at considerably above the national average, drawing in a large number of migrants with a wide range of skills. It has therefore been pertinent to test whether the study population migrated to these urbanising areas, and if so when, and what factors were linked to it.

Within the constraints of space and time set by this initial study, it has not been possible to attempt a detailed analysis of more than a few individual migrations, and more than a few family dispersal patterns. Nor has the study been extended to include the wealth of poor law material, militia lists and land transactions available for the original sample parish and those to which its out-migrants went. To simplify the comparisons made and to limit the complexity of the analysis, evidence has seldom been drawn from outside the time period or beyond England, although it is appreciated that the time frame and locality used is part of a wider picture with many common elements. Within these limitations of sample, time period and sources, therefore, the study has aimed for a broad view of migration, including many aspects of the dispersal of families (including illegitimate children) from their ancestral roof. As such, it has looked at both migrants and non-migrants from the parish of birth, and has explored a

range of factors including the family economy, access to land, social networks, terms of service, wages, mortality and literacy.

7.2 Methodological Assessment

The primary aim of this research project was to design and test a method by which out-migration from any small rural parish could be mapped in the eighteenth and nineteenth centuries. There were several distinct components to this aim. Firstly, out-migration is less frequently studied than in-migration, because it is inherently more difficult since, in theory at least, migrants could have gone anywhere in the known world; as a result of this it is much more complex to achieve linkages with high confidence levels. If it can be achieved, however, it enables some understanding of how contemporary wider migration patterns operated and not merely the factors drawing individuals in to one particular place. Secondly, it was considered desirable to design a method which could be applied to any parish, not restricted to one with a pre-existing reconstitution; such parishes are unevenly distributed geographically and demographically, they tend to concentrate work on a relatively small sample of parishes, and often have atypically full or detailed parish registers. Thirdly, and connected with the preceding point, it enabled the study of a 'new' part of the United Kingdom, at a significant regional historical moment. Fourthly, the method was designed to include the eighteenth century, which is relatively poor in source materials and consequently less frequently chosen for social history analyses. If a method could be developed which produced results for an eighteenth-century population, it should be possible to extend it back into the seventeenth century and forward into the late nineteenth.

Despite the constraints mentioned above, and the added challenges of using a parish which stands on a county and diocesan boundary, in a region with no prior information about migration trends, a viable method has been devised and tested and a sample analysis has been achieved. The tracing rate for the eighteenth-century cohorts indicated that the method was acceptable for the pre-census era. The digital indices and search tools available are in a state of rapid development, and significantly more eighteenth-century linkages could now be made than were possible at the start of the project. As such, the results obtained represent a minimum of what is potentially possible.

The method which has been developed was deliberately rigorous, eliminating many possible but uncertain linkages and consequently limiting the size of the final data-set. The strict criteria used have resulted in material in which a high level of confidence can be placed, and a positivist analysis framework can be applied to the exploration of the patterns observed. The method was also designed to be robust, with standardised methods which included the use of a system of Christian name weightings, to assess the plausibility of linkages. Lastly, the method was developed so that it was as representative as possible, taking account of the tendency for those with the largest historical footprint to be more readily traced. Thus it has sought to avoid a patrilineal bias, and has devoted more time and additional search strategies to women, those without probate or land tax records, the unmarried and those who were born in larger parishes, for all of whom linkages are harder to achieve.

The method has produced a substantial sample of individuals whose lives have been traced. Some may never have changed residence but most of those for whom there was evidence

available moved at least once, some only within their native parish (which has not been included as migration in this study), but often further away, on short or longer-range migrations. The results obtained here dovetail with the findings of the Cambridge Group in single-parish reconstitutions, for which an average of some 30% reconstitution is achieved. The much higher tracing rate here, averaging 52% of all the 1750-1859 baptism cohorts, to which must be added all those who died before age ten (representing approximately a further 25% of the sample), is accounted for by out-migrants who have been traced in the present study. The tracing rate was, as we have seen, significantly higher for younger individuals in last baptism cohorts. Combining a conventional reconstitution with a study of the migration paths of the out-migrants, as has been achieved here and as some of the case studies have shown, offers insight into the part played by the reconstituted minority in the overall social and demographic dynamic of a family grouping.

7.3 Evaluation and Summary of Findings

Whitbourne parish had several distinctive features during the research period, which may have impacted on the results found. It had a very low infant mortality rate (IMR) until the mid nineteenth century, and it escaped all but two of the national periods of high mortality: it did suffer a raised mortality in the early eighteenth century, and again during the potato blight years of the 1840s. Together with the survival of the commons, and the survival of yeoman farming into the nineteenth century, this may be enough to explain the eighteenth-century population growth and the relatively low out-migration compared with nearby Herefordshire parishes. Out-migration began to be significant in 1780-1800, although in 1831 Whitbourne

had the highest population density in the Hundred, and only thereafter does movement away from the parish seem to have become a dominant trend, gathering pace through the 1860s. The sub-section of the sample who were native to Whitbourne were less mobile than their contemporaries who had already left the parish. For the whole sample, the proportion of men who were potential migrants was just over 50% up to end of the eighteenth century, and then it increased to 80% for the nineteenth-century baptism cohorts.

Although Whitbourne in the early years of this study had a growing population and relatively low out-migration, there is evidence for some dispersal of its population from the earliest dates possible. There was a Mail and carrier route running through the parish, and the population had above average literacy for the west midlands region, so the early out-migrants had avenues and tools at their disposal to facilitate their travel. Some marriages were identified in Worcester in the first generation, for instance that of William and Hannah Mitchell in 1730, followed in some instances by return migration to Whitbourne, and these are strongly suggestive of an established tradition of movement to Worcester, but not for example to Leominster or Hereford. Similarly, some migrants to London were found from the first decades when the method could trace them there. It is possible, although unsubstantiated, that these patterns may have been well-established and may not have changed fundamentally for generations.

Various different indicators have been used which together suggested that men were more prone to remain in or return to the study parish than their female contemporaries. There was corresponding evidence that many of the early long-distance migrants (including some in-migrants) were women, some of whom entered domestic service; among the long-distance

male migrants, some also went into domestic service, especially as coachmen; other male migrants worked in the urban service trades, or continued using their rural skill-sets as ostlers, draymen, dairymen, carpenters, blacksmiths or leatherworkers. The longest-distance migrants moved principally as single people, the middle-distance ones were more often married already, and many married couples and families continued to be mobile. No evidence was found for marriage terminating migration; on the contrary, the three longest-distance migrants, the emigrants, were all married: one was newly married, but the other two travelled with several dependent children.

Two case-studies exemplify many of the processes that have been uncovered. Firstly, Eliza Walton (Combey) was baptised 1825 at Stanford Bishop and was a fifth-generation Whitbourne descendant through the female line, in which time her ancestors had only migrated within about 10 km of Whitbourne. Her father was a carpenter and builder who appears from the evidence available to have always been resident in Stanford Bishop. In 1841 at the age of fifteen, Eliza, who was literate, was in a goldsmith's household in a prime location in central Worcester, apparently as one of his three domestic servants. Ten years later she was in the same household but as a shop assistant. Eliza's future husband was then four doors away, working as one of four assistants to a grocer; he too had been born in Stanford Bishop, and was also literate. They were married in Claines, north Worcester, in October 1851 and then moved to Kidderminster (25 km from Worcester and 38 km from Stanford Bishop), where they ran a grocery business and had five children before Eliza died in 1860.

Secondly, John Collins was born in 1823 in Areley Kings, where his father was the toll collector on the Stourport bridge, but the family had returned to Whitbourne by the time he

was thirteen and he was a servant at Whitbourne Court in 1841. His father (Joseph) had himself been baptised in Leigh, a second-generation Whitbourne descendant. John's first wife Jane Clark was baptised in Whitbourne in 1827 and was a domestic servant in Garston St Anne's, Lancashire, in 1851 before returning to Whitbourne for marriage in 1857. After her death in 1867, John married another member of the study sample, Jane Bradburn, baptised in Whitbourne in 1834. This Jane had also worked away from Herefordshire in domestic service; in her case she is known to have been in Whitbourne at Poplands Farm in 1851 and then on a 500 acre farm in Sible Hedingham, Essex, 256 km distant. John Collins and both his wives were literate, but while all three individuals returned to their ancestral parish, John apparently remained resident in Whitbourne all his adult life, becoming the village publican, while his brides initially followed a more conventional migration pattern for literate women, travelling long distances along established transport routes to work in domestic service.

These examples highlight the varied employment opportunities in Whitbourne and its locality, especially for men. Literacy was a valuable component of social capital, but although it was often associated with long-distance migration, it could also enable individuals to occupy niches in rural parishes which may have been denied to their illiterate peer-group. They also typify the greater mobility of many women in the sample; the tendency for many people in the sample to use Worcester as a life-cycle employment destination; and the frequent use of Claines as a spring-board for migration to other urbanising parishes. The spatial patterns are more broadly typical, as well. Out-migrants were predominantly traced to rural parishes to the east and south, to Worcester, and for those migrating further, especially to London; many were also traced in the nineteenth century to Cheshire, south Lancashire and Cheltenham, but only to the Black Country towns and Birmingham from the second quarter of the century.

Some common factors can be discerned which helped to shape early long-distance migration choices, including availability of transport at affordable prices, and pre-existing kin or acquaintance migration to a particular destination. These may both have been important in the early dominance of London as a destination from Whitbourne, even though it was at a considerable distance and there were closer cities offering a range of employment, for example Gloucester and Bristol, to which no Whitbourne descendants were traced. To these primary factors can be added firstly the advertising of opportunities in the *Berrows* which was accessible to literate would-be migrants from the beginning of the research period, and in particular the positive selection of literate employees by this means; and secondly, the ease of access to Cheltenham from the early years of its growth.

Taken together, the results obtained indicate that there were many complex interactions involved in the migration patterns and decisions. Although Whitbourne parish was densely populated, and agricultural wages were much lower than those which could be obtained under ideal circumstances in the urbanising west midlands, migration there was deferred and was not an overwhelming feature up to the end of the research period; for non-natives, it was more important but still not dominant, with about a quarter of non-native Whitbourne descendants resident there from baptism cohort 1850-1859. This is consonant with the findings of other studies, which have concluded that the population and its migrant component were aware of the wider situation, in terms of their options under the Poor Laws, the pay and employment conditions in possible destinations, and how to access them if they did decide to make a move. Sometimes a plausible pathway can be glimpsed, for example in the advertisements for assisted passages to Australia that coincided with Samuel and Maria Lloyd's preparations for

emigration, but often the connections are less clear as in the examples of the migrants to London and Cheltenham. But rather than a randomised wandering in search of ‘betterment’ which may be stumbled upon at any moment in the form of an ‘intervening opportunity’¹ and thereby terminate the migration, the key for this population, at least for the sample of it studied, seems to have been information flow and its reception and use. One small indicator of this is the frequency with which migrants were found to have married other migrants, whether from the Whitbourne sample or apparently unrelated individuals, which is perhaps suggestive of common goals and ambitions among this segment of the national population.

The period of transition in the migration patterns observed was focused in the second quarter of the nineteenth century. Its key features were a shift from London as the sole long-distance destination to a more diffuse pattern, notably including Birmingham and its developing urbanising hinterland, and a change of focus from Worcester to Cheltenham, although Worcester remained a life-cycle destination especially for young women. Many of the key features of this transition are illustrated by the dispersal patterns of two generations of the Caswell tribe, all of whom were found to be literate where the information was available.

From the older generation, John and Sarah Caswell of Whitbourne had six sons and no daughters, baptised between 1794 and 1806. The eldest son, John, married a Whitbourne native in Worcester, and after baptising their eldest two children in Whitbourne, they farmed in Clifton upon Teme. The second son died in childhood. The third, Richard, had moved to Lancashire by 1825, married a native of Westmorland and worked as a boot and shoemaker in Liverpool. The next son was baptised in 1800, was a butler in Wanstead, Essex and retired to

¹ John Saville, *Rural Depopulation in England and Wales, 1851-1951* (London: Routledge and Kegan Paul, 1957), p. 41

Croydon after selling a property in Whitbourne. The next was a manservant in Belgravia 1841, moved around London and in 1871 was in St Martin in the Fields, while the youngest was an ostler in Worcester at The Bell coaching inn and died in 1867. Of the five survivors, then, two went to London, one to Liverpool and two had links with Worcester although one returned to the local area.

In the younger generation, the three sons and then four daughters of John and Sarah's eldest son John and his wife Charlotte, who moved to Clifton upon Teme, were baptised between 1828 and 1841 and exemplify the pattern for the end of the research period. The first child died in infancy; the second moved to Knightwick and then back to Whitbourne, and was a wheelwright. The next became a blacksmith in Clifton. The eldest daughter, Ann, baptised in 1834, was an apprentice milliner in Stourport, worked in Whitbourne as a dressmaker before marrying a carpenter there in 1863, and moved via Oldbury in the Black Country, Swansea, London, back to Oldbury and then Kingswinford. The next daughter married a farmer from Leominster and settled in Whitbourne; the next moved to Kingswinford where she married a boilermaker, while the youngest was a housemaid in Aston in 1861. In this generation, both the surviving sons remained in the immediate locality, as did one daughter; the other three daughters all moved to the west midlands urban areas, one via London.

This change in the level of migration to Birmingham and the Black Country after the 1820s is not, as far as it is possible to confirm from the data available, an artefact but represents a real behavioural change in the study population. After choosing other migration destinations through the eighteenth and early nineteenth centuries, there was a move towards this area from the second quarter of the nineteenth century. Several contributory factors to this could be

suggested, foremost among which are the changes in conditions in Herefordshire agricultural employment. Although the county experienced nothing comparable to the Swing riots, and in Worcestershire the disorder was very limited, day- and weekly-paid wages were relatively depressed by 1830, and although perks were still given, they were no longer as widespread or full as they had been. The frosts of the late 1830s destroyed much of the potato crop which was becoming a staple, and the potato blight from 1845 to 1848 was also severe. Perhaps associated with some of these factors, the IMR in Whitbourne began to rise from the 1840s. Secondly, the opening of the railway from Spetchley in 1840 opened the routes to the west midlands, by train and by increasingly competitive road transport, twelve years before Worcester had direct trains to London.

Some suggestions have been made in the course of this study which contribute to an understanding of the changing migration patterns observed. The early prominence of Worcester not Hereford as a destination, and later of Cheltenham from its early years as a spa town, may in large part have been because of the availability and relatively low cost of transport to these places, along established and well-known routes. For longer-distance migration, London was likewise on a traditional route, which passed through the parish. London, Worcester, and later Cheltenham all had work advertised in the *Berrows* newspaper, and combined with the known high literacy levels among the Whitbourne population this had the potential to stimulate migration there. Women's links with Worcester were further maintained by the glove out-working trade. More generally, the increased availability and reduced costs of travel coincided with the introduction of the standard penny post, perhaps encouraging more people to migrate further than before.

Some time ago, Woods proposed three themes that influence the scale of migration, arguing that if both push and pull effects are operating, if access and information flow is easy, and if the economic incentives are high, then migration will be maximised.² In Whitbourne, neither push nor pull seem particularly appropriate terms. There was out-migration at least from the early years of the research period, but the parochial population continued to grow substantially and there were features of the parish which appear to have made it a relatively good place to live. Access and information flow was good for those who could avail themselves of it and had the means and the desire to migrate, especially along the old coach roads and river routes, and perhaps particularly for the literate. Migration was moreover selective spatially, being very rarely traced to the Herefordshire market towns but a significant volume was found moving to Worcester. Economic incentives were perhaps low for men, given the relatively secure and generous nature of Herefordshire agriculture, at least until the recovery of the urbanising west midlands area in the 1840s coincided with a decline in local agricultural conditions for most men, but these incentives may have been higher for women from an earlier date.

In summary, then, it is proposed that the results of this study indicate that information flow and access, epitomised by literacy and transport networks, were major elements in migration decision-making and patterns within the sample population. Comparative research, using the same method on a parish on other communication routes, would go some way towards clarifying the validity of these conclusions.

² Robert Woods, *The Population History of Britain in the Nineteenth Century* (Cambridge: Cambridge University Press, 1995), p. 25

BIBLIOGRAPHY

Primary Archival Sources

The Berrows Worcester Journal, film and fiche copies at WRO.
The Hereford Journal, film and original copies at BDLHC and HRO.
 Land Tax Listings, film copies at HRO and WRO.
 Parish Registers of Baptisms, Marriages and Burials, film and photocopies at BDLHC, HRO and WRO.
 Probate copies on film at HRO and WRO; PCC Probate copies from National Archives.
 The Whitbourne Parish Book Apprentice Lists, 1767-1831; HRO AL92/2.
 The Whitbourne Tithe Apportionment and Map, 1838-1839, HRO.

Primary Digital Sources

www.Ancestry.co.uk , first accessed October 2007.

British Census Transcripts and filmed CEBs.

British Civil Registration District Summaries.

www.Ancestry.co.uk emigration sections, first accessed October 2009.

Register of Assisted Immigrants from the United Kingdom; PRO V, VPRS 14.

Register of Emigrant Labourers Applying for a Free Passage to South Australia, 1836-41; PRO CO386/149-151.

U.S. Federal census.

www.Esds.ac.uk/aandp , first accessed May 2011.

Turner, M., *Crop Returns for England, 1801* [computer file]. Colchester, Essex: UK Data Archive [distributor], May 2005. SN: 5156.

www.familyhistorysa.info/shipping/passengerlists, first accessed April 2010.

South Australia Shipping Lists.

www.histpop.org , first accessed October 2010.

Census Enumeration Abstracts for England, Wales and Scotland.

The Registrar General's Annual Reports.

www.immigrantships.net/v6/1800v6/kennebec, first accessed April 2010.

The Immigrant Ships Transcribers Guild, passengers and ship lists, *Kennebec* voyage 1852.

www.metoffice.gov.uk/climate/uk , first accessed September 2011.

<http://lib.byu.edu/mormonmigration/voyage=Kennebec> , first accessed April 2010.

George Henry Abbot Harris, 'Journals' in *Mormon Emigration Journals and Accounts* (Salt Lake City, Utah: 1852): 57-85.

www.parlpapers.chadwyck.co.uk , first accessed July 2009.

Commission of Inquiry into the Administration . . . of the Poor Laws, Appendix B 1: Answers to Rural Queries, 1834.

Report of the Commissioners Appointed . . . Inquiries Concerning Charities in England and Wales, 1837-1838. Part II, Herefordshire.

Agricultural Returns for Great Britain, 1871. 79 pp.

Report on Agricultural Labourers' Earnings. Return of the Average Rate of Weekly Earnings of Agricultural Labourers in the Unions of England and Wales, 1871.

www.saghs.org.au, first accessed April 2010.

South Australia Genealogy and Heraldry Society.

www.theshiplist.com/ships/australia, first accessed April 2010.

The Sydney Shipping Gazette, no. 30. 12th October 1844.

Unpublished Theses

Edwards, William John, *Marriage and Mobility 1754-1810: An Examination of the Anglican Marriage Registers of Selected Shropshire Parishes* (Unpublished PhD thesis, Queen Mary College, University of London, 1979).

Lane, Joan, *Apprenticeship in Warwickshire, 1700-1834* (Unpublished PhD thesis, University of Birmingham, 1977).

Schürer, Kevin, *Migration, Population and Social Structure: A Comparative Study Based in Rural Essex, 1850-1900* (Unpublished PhD Thesis, Bedford College, University of London, 1988).

Secondary Digital Sources

www.theaa.com/route-planner , first accessed September 2010.

The AA Route Planner and Distance Finder.

eh.net/encyclopedia/article/mitch.education , accessed November 2007.

Mitch, David, *Education and Economic Growth in Historical Perspective*, EH Net Encyclopedia, 2005.

www-hpss.geog.cam.ac.uk/research/projects/occupations , accessed December 2011.

Shaw-Taylor, L. and E.A. Wrigley, *The Occupational Structure of England, c. 1750-1871: A Preliminary Report*, (2008).

www.liverpoolmuseums.org.uk/maritime/archive, first accessed April 2010.

Liverpool Maritime Archives on Mormon Emigration, Sheet 29.

Secondary Published Sources

- Adams, Jane, 'Combating Smallpox in Nineteenth-Century Herefordshire' in *Newsletter of the Friends of Hereford Record Office* (Hereford: 2011): 5-7.
- Albert, William, *The Turnpike Road System in England, 1663-1840* (Cambridge: Cambridge University Press, 1972).
- , 'The Turnpike Trusts' in *Transport in the Industrial Revolution*, ed. Derek Aldcroft and Michael Freeman (Manchester: Manchester University Press, 1983): 31-63.
- Allen, Robert C, *Enclosure and the Yeoman* (Oxford: Clarendon Press, 1992).
- Anderson, Michael, *Approaches to the History of the Western Family, 1500-1914* (Cambridge: Cambridge University Press, 1980).
- , *Family Structure in Nineteenth-Century Lancashire* (Cambridge: Cambridge University Press, 1971).
- , 'Mis-Specification of Servant Occupations in the 1851 Census: A Problem Revisited', *Local Population Studies* 60 (1998): 58-64.
- , *Population Change in North-Western Europe, 1750-1850* (Studies in Economic and Social History; London: Macmillan Education, 1988).
- , 'The Social Implications of Demographic Change' in *People and Their Environment*, ed. F. M. L. Thompson (The Cambridge Social History of Britain 1750-1950; Cambridge: Cambridge University Press, 1990): 1-70.
- Anon, *The Worcester Royal Directory for the Year 1794* (Worcester: J Grundy, 1794).
- Anthony, Richard, 'Farm Servant Vs Agricultural Labourer, 1870-1914: A Commentary on Howkins', *Agricultural History Review* 43 (1995): 61-64.
- Anthony, Robert, 'a Very Thriving Place': The Peopling of Swansea in the Eighteenth Century', *Urban History* 32 (2005): 68-87.

- Arkell, Tom, 'Forename Frequency in 1851', *Local Population Studies* 47 (1991): 65-76.
- , 'Illuminations and Distortions: Gregory King's Scheme Calculated for the Year 1688 and the Social Structure of Later Stuart England', *Economic History Review* 59 (2006): 32-69.
- , 'A Method for Estimating Population Totals from the Compton Census Returns' in *Surveying the People: The Interpretation and Use of Document Sources for the Study of Population in the Later Seventeenth Century*, ed. Kevin Schurer and Tom Arkell (Oxford: Leopard's Head Press, 1992): 97-116.
- Ashton, Owen, 'Clerical Control and Radical Responses in Cheltenham Spa 1838-1848', *Midland History* 8 (1983): 121-47.
- Bailyn, Bernard, *Voyagers to the West: A Passage in the Peopling of America on the Eve of the Revolution* (New York: Alfred A. Knopf, 1986).
- Baines, Dudley, *Emigration from Europe, 1815-1930*, ed. L.A. Clarkson (Studies in Economic and Social History; Basingstoke: Macmillan, 1991).
- Barnsby, George J., 'The Standard of Living in the Black Country During the Nineteenth Century', *Economic History Review* 24 (1971): 220-39.
- Bellingham, Roger, 'Dade Parish Registers', *Local Population Studies* 73 (2004): 51-60.
- Bellingham, Roger A., 'The Use of Marriage Horizons to Measure Migration: Some Conclusions from a Study of Pocklington, East Yorkshire in the Late Eighteenth Century', *Local Population Studies* 44 (1990): 52-55.
- Bentley, J, *Bentley's History, Gazeteer and Directory of Worcestershire, Vol 1 Part Ii: Worcester* (Birmingham: J Bentley, 1840).
- Berg, Maxine, 'The Genesis of 'Useful Knowledge'', *History of Science* 45 (2007): 123-33.

- Bideau, A, and G Brunet, 'The Construction of Individual Life Histories: Application to the Study of Geographical Mobility in the Valserine Valley (French Jura) in the Nineteenth and Twentieth Centuries' in *Old and New Methods in Historical Demography*, ed. David S. Reher and R. Schofield (Oxford: Clarendon Press, 1993): 111-24.
- Bogart, Dan, 'Did Turnpike Trusts Increase Transportation Investment in Eighteenth-Century England?' *Journal of Economic History* 65 (2005): 439-68.
- , 'Turnpike Trusts and the Transportation Revolution in Eighteenth-Century England', *Explorations in Economic History* 42 (2005): 479-508.
- Boothman, Lyn, 'Mobility and Stability in Long Melford, Suffolk in the Late Seventeenth Century', *Local Population Studies* 62 (1999): 31-51.
- Bouchard, Gérard, 'Mobile Populations, Stable Communities: Social and Demographic Processes in the Rural Parishes of the Saguenay, 1840-1911', *Continuity and Change* 6 (1991): 59-86.
- Boulton, Jeremy, and Leonard Schwarz, 'Yet Another Inquiry into the Trustworthiness of Eighteenth-Century London's Bills of Mortality', *Local Population Studies* 85 (2010): 28-45.
- Bradley, Leslie, *A Glossary for Local Population Studies*, vol. 1 (Second edn; Local Population Studies Supplements; Matlock: Local Population Studies, 1978).
- Bras, Hilde, and Muriel Neven, 'The Effects of Siblings on the Migration of Women in Two Rural Areas of Belgium and the Netherlands, 1829-1940', *Population Studies* 61 (2007): 53-71.
- Brayshay, Mark, et al., 'Knowledge, Nationhood and Governance: The Speed of the Royal Post in Early-Modern England', *Journal of Historical Geography* 24 (1998): 265-88.

- Brown, Elaine, 'Gender, Occupation, Illiteracy and the Urban Economic Environment: Leicester, 1760-1890', *Urban History* 31 (2004): 191-209.
- Brundage, Anthony, *The English Poor Laws, 1700-1930* (Basingstoke: Palgrave Macmillan, 2002).
- Buckatzsch, E.J., 'Places of Origin of a Group of Immigrants into Sheffield, 1624-1799', *Economic History Review* 2 (1950): 303-06.
- Burnette, Joyce, 'How Skilled Were English Agricultural Labourers in the Early Nineteenth Century?' *Economic History Review* 59 (2006): 688-716.
- , 'Labourers at the Oakes: Changes in the Demand for Female Day-Labourers at a Farm near Sheffield During the Agricultural Revolution', *Journal of Economic History* 59 (1999): 41-67.
- , 'The Wages and Employment of Female Day-Labourers in English Agriculture, 1740-1850', *Economic History Review* 57 (2004): 664-90.
- Carus, A. W, and Sheilagh Ogilvie, 'Turning Qualitative into Quantitative Evidence: A Well-Used Method Made Explicit', *Economic History Review* 62 (2009): 893-925.
- Chambers, J.D., 'The Vale of Trent 1670-1800. A Regional Study of Economic Change', *Economic History Review Supplement* 3 (1957): 1-63.
- Chandler, John, *John Leland's Itinerary: Travels in Tudor England* (second edn; Stroud: Sutton, 1998).
- Chartres, J.A., 'Road Carrying in England in the Seventeenth Century: Myth and Reality', *Economic History Review* 30 (1977): 73-94.
- Chartres, John A, and Gerard L Turnbull, 'Road Transport' in *Transport in the Industrial Revolution*, ed. Derek Aldcroft and Michael Freeman (Manchester: Manchester University Press, 1983): 64-99.

- Cherry, Gordon E, *Birmingham: A Study in Geography, History and Planning* (Chichester: John Wiley and Sons, 1994).
- Christiansen, Rex, *Thames and Severn*, vol. 13 (A Regional History of the Railways of Great Britain; Newton Abbot: David and Charles, 1981).
- Clark, Gregory, 'Farm Wages and Living Standards in the Industrial Revolution: England, 1670-1869', *Economic History Review* 54 (2001): 477-505.
- Clark, John, *General View of the Agriculture of the County of Hereford. Drawn up for the Consideration of the Board of Agriculture* (London: The Board of Agriculture, 1794).
- Clark, P, 'Migration in England During the Late Seventeenth and Early Eighteenth Centuries', *Past and Present* 83 (1979): 57-90.
- Clark, Peter, *European Cities and Towns, 400-2000* (Oxford and New York: Oxford University Press, 2009).
- , 'Migration in England During the Late Seventeenth and Early Eighteenth Centuries' in *Migration and Society in Early Modern England*, ed. Peter Clark and David Souden (London: Hutchinson, 1987): 213-52.
- Clark, Peter, and David Souden, 'Introduction' in *Migration and Society in Early Modern England*, ed. Peter Clark and David Souden (London: Hutchinson, 1987): 11-48.
- Clay, Karen, and Randall Jones, 'Migrating to Riches? Evidence from the California Gold Rush', *Journal of Economic History* 68 (2008): 997-1027.
- Collins, E. J. T., 'Migrant Labour in British Agriculture in the Nineteenth Century', *Economic History Review* 29 (1976): 38-59.
- Constant, A., 'The Geographical Background of Inter-Village Population Movements in Northamptonshire and Huntingdonshire, 1754-1943', *Geography* 33 (1948): 78-88.

- Cooper, Di, and Moira Donald, 'Households and 'Hidden' Kin in Early Nineteenth-Century England: Four Case-Studies in Suburban Exeter, 1821-1861', *Continuity and Change* 10 (1995): 257-78.
- Corfield, P. J., *The Impact of English Towns 1700-1800* (Oxford: Oxford University Press, 1982).
- Courgeau, Daniel, 'An Attempt to Analyse Individual Migration Histories from Place of Usual Residence at the Time of Certain Vital Events: France During the Nineteenth Century' in *Old and New Methods in Historical Demography*, ed. David S Reher and R. Schofield (Oxford: Clarendon Press, 1993): 206-22.
- Creighton, C, et al., *A History of Epidemics in Britain: From the Extinction of the Plague to the Present Time*, vol. 2 (2 vols.; second edn; London: Frank Cass and Co Ltd, 1965; tr. from 1894).
- Cressey, David, 'Occupations, Migration and Literacy in East London, 1580-1640', *Local Population Studies* 5 (1970): 53-60.
- Cromar, P., 'Labour Migration and Suburban Expansion in the North of England: Sheffield in the 1860s and 1870s' in *The Geographical Impact of Migration*, ed. Paul White and Robert Woods (London and New York: Longman, 1980): 129-51.
- Cullen, Karen, 'Baptism to Marriage Ratios and the Reliability of Late Seventeenth-Century Scottish Parish Registers', *Local Population Studies* 76 (2006): 15-30.
- Cunningham, H., 'The Employment and Unemployment of Children in England C. 1680-1851', *Past and Present* 126 (1990): 115-50.
- Cunningham, Hugh, 'Reply', *Past and Present* 187 (2005): 203-15.
- Daunton, M. J., *Progress and Poverty: An Economic and Social History of Britain 1700-1850* (Oxford: Oxford University Press, 1995).

- Davey, Edwin, and Rebecca Roseff, *Herefordshire Bricks and Brickmakers* (Leominster: Logaston Press, 2007).
- de Moor, Tine, and Jan Luiten van Zanden, 'Every Woman Counts': A Gender-Analysis of Numeracy in the Low Countries During the Early Modern Period', *Journal of Interdisciplinary History* 41 (2010): 179-208.
- de Vries, Jan, *European Urbanisation, 1500-1800* (London: Methuen and Co Ltd, 1984).
- Deacon, Bernard, 'Communities, Families and Migration: Some Evidence from Cornwall', *Family and Community History* 10 (2007): 49-60.
- , 'Reconstructing a Regional Migration System: Net Migration in Cornwall', *Local Population Studies* 78 (2007): 28-46.
- Devine, T.M., 'Temporary Migration and the Scottish Highlands in the Nineteenth Century', *Economic History Review* 32 (1979): 344-59.
- Dewhurst, Stephen, and Hinde, Andrew, 'Age at Baptism in Rural Hampshire in the Second Half of the Nineteenth Century', *Local Population Studies* 57 (1996): 72-75.
- Dobson, C.R., *Masters and Journeymen. A Prehistory of Industrial Relations, 1717-1800* (London: Croom Helm, 1980).
- Dobson, Mary J, *Contours of Death and Disease in Early Modern England* (Cambridge: Cambridge University Press, 1997).
- Dodd, J. Phillip, 'Herefordshire Agriculture in the Mid-Nineteenth Century', *Transactions of the Woolhope Naturalists Field Club* 43 (1980): 203-22.
- Douglas, Roy, *Taxation in Britain since 1660* (Basingstoke: Macmillan, 1999).
- Dröbe, Martin, and Christer Lundh, 'People on the Move: Determinants of Servant Migration in Nineteenth-Century Sweden', *Continuity and Change* 20 (2005): 53-91.

- Duncumb, John, *General View of the Agriculture of the County of Hereford; Drawn up for the Consideration of the Board of Agriculture and Internal Improvement* (London: Board of Agriculture, 1805).
- Dyer, Christopher, 'Were Late Medieval English Villages 'Self-Contained'?' in *The Self-Contained Village: The Social History of Rural Communities, 1250-1900*, ed. Christopher Dyer (Hatfield: University of Hertfordshire Press, 2007): 6-27.
- , 'Woodlands and Wood-Pasture in Western England' in *The English Rural Landscape*, ed. Joan Thirsk (Oxford: Oxford University Press, 2000): 97-121.
- , ed., *The Self-Contained Village: The Social History of Rural Communities, 1250-1900* (Hatfield: University of Hertfordshire Press, 2007).
- Edwards, W. J., 'Remarriage: Some Preliminary Findings', *Local Population Studies* 39 (1987): 32-44.
- Edwards, William John, 'Marriage and Mobility 1754 -1810: An Examination of the Anglican Marriage Registers of Selected Shropshire Parishes' (Queen Mary College, University of London, London, 1979).
- Escott, Margaret, 'Residential Mobility in a Late Eighteenth-Century Parish: Binfield, Berkshire, 1779-1801', *Local Population Studies* 40 (1988): 20-35.
- Eversley, D. E. C., 'Exploitation of Anglican Parish Registers by Aggregative Analysis' in *An Introduction to English Historical Demography from the Sixteenth to the Nineteenth Century*, ed. E. A. Wrigley (London: Weidenfeld and Nicolson, 1966): 44-95.
- Fertig, George, 'Balancing, Networking and the Causes of Emigration: Early German Transatlantic Migration in a Local Perspective, 1700-1754', *Continuity and Change* 13 (1998): 419-42.

- Fideler, Paul A., *Social Welfare in Pre-Industrial England. The Old Poor Law Tradition* (Basingstoke: Palgrave Macmillan, 2006).
- Field, R. K, 'Migration in the Later Middle Ages: The Case of the Hampton Lovett Villeins', *Midland History* 8 (1983): 29-48.
- Fletcher, David, 'The Parish Boundary: A Social Phenomenon in Hanoverian England', *Rural History* 14 (2003): 177-96.
- French, Christopher, 'Persistence in a Local Community: Kingston Upon Thames, 1851-1891', *Local Population Studies* 81 (2008): 18-36.
- French, Henry, 'Ancient Inhabitants: Mobility, Lineage and Identity in English Rural Communities, 1600-1750' in *The Self-Contained Village: The Social History of Rural Communities, 1250-1900*, ed. Christopher Dyer (Hatfield: University of Hertfordshire Press, 2007): 72-95.
- Fripp, John, 'Mobility in Victorian Dorset', *Proceedings of the Dorset Natural History and Archaeological Society* 129 (2008): 39-47.
- Frost, Pauline, 'Yeomen and Metalsmiths: Livestock in the Dual Economy in South Staffordshire 1560-1720', *Agricultural History Review* 29 (1981): 29-41.
- Galley, Chris, et al., 'Living Same-Name Siblings and British Historical Demography', *Local Population Studies* 86 (2011): 15-36.
- , 'Living Same-Name Siblings and English Historical Demography: A Reply to Peter Razzell', *Local Population Studies* 87 (2011): 70-77.
- Galley, Chris, and Nicola Shelton, 'Bridging the Gap: Determining Long-Term Changes in Infant Mortality in Pre-Registration England and Wales', *Population Studies* 55 (2001): 65-77.

- Glennie, Paul, and Ian Whyte, 'Towns in an Agrarian Economy, 1540-1700' in *1540-1840*, vol. 2, ed. Peter Clark (The Cambridge Urban History of Britain; Cambridge: Cambridge University Press, 2000): 167-93.
- Goose, Nigel, 'Cottage Industry, Migration, and Marriage in Nineteenth-Century England', *Economic History Review* 61 (2008): 798-819.
- , 'Farm Service, Seasonal Unemployment and Casual Labour in Mid Nineteenth-Century England', *Agricultural History Review* 54 (2006): 274-303.
- , 'Poverty, Old Age and Gender in Nineteenth-Century England: The Case of Hertfordshire', *Continuity and Change* 20 (2005): 351-84.
- , 'Workhouse Populations in the Mid-Nineteenth Century: The Case of Hertfordshire', *Local Population Studies* 62 (1999): 52-69.
- Graff, Harvey J, *The Labyrinths of Literacy: Reflections on Literacy Past and Present* (Lewes: The Falmer Press, 1987).
- Gregory, Derek, 'The Friction of Distance? Information Circulation and the Mails in Early Nineteenth-Century England', *Journal of Historical Geography* 13 (1987): 130-54.
- Grigg, D. B., 'E. G. Ravenstein and the 'Laws of Migration'' in *Time, Family and Community: Perspectives on Family and Community History*, ed. Michael Drake (Oxford: Oxford University Press and Blackwell, 1994): 147-64.
- Gritt, A.J., 'The Census and the Servant: A Reassessment of the Decline and Distribution of Farm Service in Early Nineteenth-Century England', *Economic History Review* 53 (2000): 84-106.
- Grix, Jonathan, *The Foundations of Research* (Basingstoke: Palgrave Macmillan, 2004).
- Hadfield, Charles, *The Canals of South Wales and the Border* (2nd edn; Newton Abbot: David and Charles, 1967).

- , *The Canals of the West Midlands* (2nd edn; Newton Abbot: David and Charles, 1969).
- Halse, B., 'Population Mobility in the Village of Levisham, 1541-1900', *Local Population Studies* 65 (2000): 58-63.
- Harris, Anne, 'Christian Names in Solihull, Warwickshire, and Yardley, Worcestershire, 1540-1729', *Local Population Studies* 19 (1977): 28-33.
- Hay, D., 'War, Dearth and Theft in the Eighteenth Century: The Record of the English Courts', *Past and Present* 95 (1982): 117-60.
- Haywood, R, *Haywood's Directory of the City and Borough of Worcester for the Year 1840* (Worcester: R Haywood, 1840).
- Heath-Agnew, Edward, *Roundhead to Royalist. A Biography of Col. John Birch 1615-1691* (Hereford: Express Logic Ltd, 1977).
- Heffernan, Michael J., 'Literacy and Geographical Mobility in Nineteenth-Century Provincial France: Some Evidence from the Département of Ille-Et-Vilaine', *Local Population Studies* 42 (1989): 32-42.
- Henry, L., *Anciennes Familles Genevoises. Etudes Démographique: Xvie-Xxe Siècles* (Paris: 1956).
- Higgs, Edward, *Making Sense of the Census Revisited. Census Records for England and Wales, 1801-1901* (London: Institute of Historical Research, 2005).
- Higgs, Edward., 'A Cuckoo in the Nest? The Origins of Civil Registration and State Medical Statistics in England and Wales', *Continuity and Change* 11 (1996): 115-34.
- Hill, Bridget, 'Rural-Urban Migration of Women and Their Employment in Towns', *Rural History* 5 (1994): 185-94.
- Hill, Waldron, 'The Foley Scrapbooks' (Worcester: Worcester Record Office WRO A. 3762, 1787): vol 1, p. 94a.

- Hinde, Andrew, 'The Use of Nineteenth-Century Census Data to Investigate Local Migration', *Local Population Studies* 73 (2004): 8-28.
- Hinde, Andrew, and Fiona Turnbull, 'The Populations of Two Hampshire Workhouses, 1851-1861', *Local Population Studies* 61 (1998): 38-53.
- Hinde, P. R. A., 'Household Structure, Marriage and the Institution of Service in Nineteenth-Century Rural England', *Local Population Studies* 35 (1985): 43-51.
- Hindle, Brian Paul, 'The Road Network of Medieval England and Wales', *Journal of Historical Geography* 2 (1976): 207-21.
- Hindle, Steve, 'Not by Bread Only'? Common Right, Parish Relief and Endowed Charity in a Forest Economy, C. 1600-1800' in *The Poor in England 1700-1850. An Economy of Makeshifts*, ed. Steven King, and Tomkins, Alannah (Manchester: Manchester University Press, 2003): 39-75.
- Högman, Ann-Kristin, 'Elderly Migrants in a Northern Swedish Town in the Nineteenth Century', *Continuity and Change* 16 (2001): 423-42.
- Holderness, B.A., 'Open' and 'Close' Parishes in England in the Eighteenth and Nineteenth Centuries', *Agricultural History Review* 20 (1972): 126-39.
- Honeyman, Katrina, 'The Poor Law, the Parish Apprentice, and the Textile Industries in the North of England, 1780-1830', *Northern History* 44 (2007): 115-40.
- Hopkins, Eric, 'The Birmingham Economy During the Revolutionary and Napoleonic Wars, 1793-1815', *Midland History* 23 (1998): 105-20.
- , *Birmingham: The First Manufacturing Town in the World, 1760-1840* (London: Weidenfeld and Nicholson, 1989).
- , 'Industrial Change and Life at Work in Birmingham, 1850-1914', *Midland History* 27 (2002): 112-29.

- Hopkinson, Jean, ed., *A Pocketful of Hops: Hop Growing in the Bromyard Area* (Bromyard: The Bromyard and District Local History Society, 1988).
- Horrell, Sara, and Jane Humphries, '“The Exploitation of Little Children”: Child Labor and the Family Economy in the Industrial Revolution', *Explorations in Economic History* 32 (1995): 485-516.
- Hoverd, Tim, 'Whitbourne: The Archaeology of a Herefordshire Village' in *Herefordshire Archaeology Reports* (Hereford: Herefordshire Archaeology Service, 2006).
- Howkins, Alun, 'Farm Servant Vs Agricultural Labourer, 1870-1914: A Reply to Richard Anthony', *Agricultural History Review* 43 (1995): 65-66.
- Howkins, Alun, and Nicola Verdon, 'Adaptable and Sustainable? Male Farm Service and the Agricultural Labour Force in Midland and Southern England, C. 1850-1925', *Economic History Review* 61 (2008): 467-95.
- Hudson, J., 'Parish Population Reconstruction in Stonehouse, Gloucestershire: An Experiment Using Wrigley and Schofield's Correction Factors', *Local Population Studies* 77 (2006): 24-41.
- Hudson, Pat, and Steve King, 'Two Textile Townships, C. 1660-1820: A Comparative Demographic Analysis', *Economic History Review* 53 (2000): 706-41.
- Hudson, Paul, 'English Emigration to New Zealand, 1839-1850: Information Diffusion and Marketing a New World', *Economic History Review* 54 (2001): 680-98.
- Hudson, Paul, and Dennis Mills, 'English Emigration, Kinship and the Recruitment Process: Migration from Melbourn in Cambridgeshire to Melbourne in Victoria in the Mid-Nineteenth Century', *Rural History* 10 (1999): 55-74.
- Humphries, Jane, 'At What Cost Was Pre-Eminence Purchased? Child Labour and the First Industrial Revolution.' in *Experiencing Wages: Social and Cultural Aspects of Wage*

- Forms in Europe since 1500*, ed. Peter Scholliers and Leonard Schwarz (New York and Oxford: Berghahn Books, 2003): 251-68.
- , ‘Enclosures, Common Rights, and Women: The Proletarianization of Families in the Late Eighteenth and Early Nineteenth Centuries’, *Journal of Economic History* 1 (1990): 23-31.
- Humphries, Jane, and Timothy Leunig, ‘Was Dick Whittington Taller Than Those He Left Behind? Anthropometric Measures, Migration and the Quality of Life in Early Nineteenth-Century London’, *Explorations in Economic History* 46 (2009): 120-31.
- Hunter, Alan, ‘Marriage Horizons and Seasonality: A Comparison’, *Local Population Studies* 35 (1985): 38-42.
- Huzel, James P., ‘The Demographic Impact of the Old Poor Law: More Reflexions on Malthus’, *Economic History Review* 33 (1980): 367-81.
- Jackson, James H, and Leslie Page Moch, ‘Migration and the Social History of Modern Europe’ in *Time, Family and Community: Perspectives on Family and Community History*, ed. Michael Drake (Oxford: Oxford University Press and Blackwell, 1994): 181-98.
- Jackson, S., ‘Population Change in the Somerset-Wiltshire Border Area, 1701-1800: A Regional Demographic Study’, *Southern History* 7 (1985): 119-44.
- Jarvis, Claire, ‘The Reconstitution of Nineteenth-Century Rural Communities’, *Local Population Studies* 51 (1993): 46-53.
- John, A. H., ‘Farming in Wartime: 1793-1815’ in *Land, Labour and Population in the Industrial Revolution. Essays Presented to J. D. Chambers*, ed. E. L. Jones and G. E. Mingay (London: Edward Arnold Ltd, 1967): 28-47.

- Johnson, Elspeth, 'The Role of Family and Community in the Decision to Emigrate: Evidence from a Case Study of Scottish Emigration to Queensland, 1885-88', *Family and Community History* 9 (2006): 5-25.
- Jones, Colin, 'Some Recent Trends in the History of Charity' in *Charity, Self-Interest and Welfare in the English Past*, ed. Martin Daunton (London: University College London Press, 1996): 51-63.
- Jones, Peter M., *Industrial Enlightenment: Science, Technology and Culture in Birmingham and the West Midlands, 1760-1820* (Manchester and New York: Manchester University Press, 2008).
- Jones, R. E., 'Population and Agrarian Change in an Eighteenth-Century Shropshire Parish', *Local Population Studies* 1 (1968): 6-29.
- Jonker, M. A., and A. W van der Vaart, 'Correcting Missing-Data Bias in Historical Demography', *Population Studies* 61 (2007): 99-113.
- Kiernan, Kathleen, 'Characteristics of Young People Who Move Inter-Regionally: A Longitudinal Study' in *Regional Demographic Development*, ed. John Hobcraft and Philip Rees (London: Croom Helm, 1977): 211-27.
- King, Steven, 'It Is Impossible for Our Vestry to Judge His Case into Perfection from Here'; Managing the Distance Dimensions of Poor Relief, 1800-40', *Rural History* 16 (2005): 161-89.
- , 'Migrants on the Margin? Mobility, Integration and Occupations in the West Riding, 1650-1820', *Journal of Historical Geography* 23 (1997): 284-303.
- , 'Pauper Letters as a Source', *Family and Community History* 10 (2007): 167-70.
- , *Poverty and Welfare in England, 1700 - 1850. A Regional Perspective* (Manchester University Press, 2000).

- King, Steven , and Alannah Tomkins, 'Conclusion' in *The Poor in England 1700-1850. An Economy of Makeshifts*, ed. Steven King and Alannah Tomkins (Manchester: Manchester University Press, 2003): 258-79.
- Krause, J. T., 'The Changing Adequacy of English Registration, 1690-1837' in *Population in History*, ed. D. V. Glass and D. E. C. Eversley (London: 1965): 379-93.
- Kusssmaul, A. S, 'The Ambiguous Mobility of Farm Servants', *Economic History Review* 34 (1981): 222-35.
- Kusssmaul, Ann, *A General View of the Rural Economy of England 1538-1840* (Cambridge: Cambridge University Press, 1990).
- Landau, Norma, 'The Laws of Settlement and the Surveillance of Immigration in Eighteenth-Century Kent', *Continuity and Change* 3 (1988): 391-420.
- Langford, A. W, 'Some Herefordshire Medical History', *Transactions of the Woolhope Naturalists' Field Club* 36 (1958): 56-65.
- Laslett, P., 'Signifying Nothing: Traditional History, Local History, Statistics and Computing', *History and Computing* 11 (1999): 129-34.
- Laslett, Peter, *The World We Have Lost, Further Explored* (3rd edn; London: Methuen, 1983).
- Lawton, R, 'Population Changes in England and Wales in the Later Nineteenth Century: An Analysis of Trends by Registration Districts', *Transactions of the Institute of British Geographers* 44 (1968): 55-74.
- , 'Rural Depopulation in Nineteenth-Century England' in *English Rural Communities: The Impact of a Specialised Economy*, ed. Dennis Mills (London: Macmillan, 1973): 195-219.

- Lawton, R., 'Population Movements in the West Midlands 1841-1861', *Geography* 43 (1958): 164-77.
- Lawton, Richard, 'Regional Population Trends in England and Wales, 1750-1971' in *Regional Demographic Development*, ed. John Hobcraft and Philip Rees (London: Croom Helm, 1977): 29-70.
- Lawton, Richard, and Colin G. Pooley, *Britain 1740 -1950. An Historical Geography* (London: Edward Arnold, 1992).
- Leeson, R.A., *Travelling Brothers: The Six Centuries' Road from Craft Fellowship to Trade Unionism* (London: Granada, 1979).
- Levene, Alys, 'Poor Families, Removals and 'Nurture' in Late Old Poor Law London', *Continuity and Change* 25 (2010): 233-62.
- , 'What Can Dade Registers Tell Us About Infant Mortality in the Late Eighteenth Century?' *Local Population Studies* 76 (2006): 31-42.
- Levine, David, 'Sampling History: The English Population', *Journal of Interdisciplinary History* 28 (1998): 605-32.
- Lewis, S, *Worcestershire General and Commercial Directory, 1820* (Worcester: S. Lewis, 1820).
- Long, Jason, 'Rural-Urban Migration and Socioeconomic Mobility in Victorian Britain', *Journal of Economic History* 65 (2005): 1-35.
- Long, Moira, and Bessie Maltby, 'Personal Mobility in Three West Riding Parishes, 1777-1812', *Local Population Studies* 24 (1980): 13-25.
- Long, P. J, and W. V Awdry, *The Birmingham and Gloucester Railway* (Gloucester: Allan Sutton, 1987).

- Lord, Evelyn, 'Communities of Common Interest: The Social Landscape of South-East Surrey, 1750-1850' in *Societies, Cultures and Kinship, 1580-1850. Cultural Provinces and English Local History.*, ed. Charles Phythian-Adams (Leicester: Leicester University Press, 1993): 131-99.
- Lundh, Christer, 'Servant Migration in Sweden in the Early Nineteenth Century', *Journal of Family History* 24 (1999): 53-73.
- Lyes, D C, *The Leather Glove Industry of Worcester in the Nineteenth Century* (Worcester: Worcester City Council, 1973).
- Maltby, Bessie, 'Easingwold Marriage Horizons', *Local Population Studies* 2 (1969): 36-39.
- , 'Parish Registers and the Problem of Mobility', *Local Population Studies* 6 (1971): 32-42.
- Marshall, J. D., *The Tyranny of the Discrete. A Discussion of the Problems of Local History in England* (Aldershot: Scholar Press, 1997).
- Mathias, Peter, *The First Industrial Nation: An Economic History of Britain 1700-1914* (2nd edn; London: Methuen, 1983).
- Maynard, John, 'The Last Labourers' Revolt in Worcestershire, 1830-1831', *Midland History* 32 (2007): 110-27.
- Meldrum, Tim, *Domestic Service and Gender, 1660-1750* (London: Longman, 2000).
- Miller, C., 'The Hidden Workforce: Female Field Workers in Gloucestershire, 1870-1901', *Southern History* 6 (1984): 139-55.
- Mills, D. R., *Lord and Peasant in Nineteenth-Century Britain* (London: Croom Helm, 1980).
- Mills, D. R., and K. Schurer, 'Migration and Population Turnover' in *Local Communities in the Victorian Census Enumerators' Books*, ed. Dennis Mills and Kevin Schurer (Local Population Studies Supplements; Oxford: Leopard's Head Press Ltd, 1996): 218-28.

- Mingay, G. E., *Parliamentary Enclosure in England. An Introduction to Its Causes, Incidence and Impact, 1750-1850* (London and New York: Longman, 1997).
- Mitson, Anne, 'The Significance of Kinship Networks in the Seventeenth Century: South-West Nottinghamshire' in *Societies, Cultures and Kinship, 1580-1850. Cultural Provinces and English Local History*, ed. Charles Phythian-Adams (Leicester: Leicester University Press, 1993): 24-76.
- Moch, Leslie Page, 'Networks among Bretons? The Evidence for Paris, 1875-1925', *Continuity and Change* 18 (2003): 431-55.
- , *Paths to the City: Regional Migration in Nineteenth-Century France* (Beverly Hills, London and New Delhi: Sage Publications, 1983).
- Moore-Colyer, R J, 'The Small Land Occupier in East Northamptonshire, Ca. 1650-1850', *Midland History* 23 (1998): 84-104.
- Moses, Gary, 'Reshaping Rural Culture? The Church of England and Hiring Fairs in the East Riding of Yorkshire C. 1850-80', *Rural History* 13 (2002): 61-84.
- , 'Rustic and Rude': Hiring Fairs and Their Critics in East Yorkshire C. 1850-1875', *Rural History* 7 (1996): 151-75.
- Nair, Gwyneth, *Highley: The Development of a Community, 1550-1880* (Oxford: Blackwell, 1988).
- Nair, Gwyneth, and David Poyner, 'The Flight from the Land? Rural Migration in South-East Shropshire in the Late Nineteenth Century', *Rural History* 17 (2006): 167-86.
- Newman Brown, W., 'A Note on the Linking of Information from the Registers of Four Parishes', *Local Population Studies* 22 (1979): 53.
- Nicholas, Stephen, and Peter R. Shergold, 'Internal Migration in England, 1818-1839', *Journal of Historical Geography* 13 (1987): 155-68.

- Norton, Susan L., 'The Vital Question: Are Reconstituted Families Representative of the General Population?' in *Genealogical Demography*, ed. Bennett Dyke and Warren T. Morrill (New York: Academic Press, 1980): 11-22.
- Ottaway, Susannah, and Williams, Samantha, 'Reconstructing the Life-Cycle Experience of Poverty in the Time of the Old Poor Law', *Archives* 23 (1998): 19-29.
- Pain, A. J., and M. T. Smith, 'Do Marriage Horizons Accurately Measure Migration? A Test Case from Stanhope Parish, County Durham', *Local Population Studies* 33 (1984): 44-48.
- Parton, A., 'Poor-Law Settlement Certificates and Migration to and from Birmingham, 1726-57', *Local Population Studies* 38 (1987): 23-29.
- Patten, John, 'Patterns of Migration and Movement of Labour to Three Pre-Industrial East Anglian Towns', *Journal of Historical Geography* 2 (1976): 111-29.
- Pelham, R. A., 'The Immigrant Population of Birmingham, 1686-1726', *Transactions of the Birmingham Archaeological Society* 61 (1937): 45-82.
- , 'The West Midland Iron Industry and the American Market in the Eighteenth Century', *University of Birmingham Historical Journal* 2 (1949): 141-62.
- , 'The Worcester and Birmingham Canal', *University of Birmingham Historical Journal* 5 (1955): 60-82.
- Perkins, John, 'Birth-Baptism Intervals in 68 Lancashire Parishes, 1646-1917', *Local Population Studies* 85 (2010): 11-27.
- Perkyns, Audrey, 'Age Checkability and Accuracy in the Census of Six Kentish Parishes 1851-1881', *Local Population Studies* 50 (1993): 19-38.
- , 'Birthplace Accuracy in the Censuses of Six Kentish Parishes, 1851-1881' in *Local Communities in the Victorian Census Enumerators' Books*, ed. Dennis Mills and

- Kevin Schurer (Local Population Studies Supplements; Oxford: Leopard's Head Press Ltd, 1996): 229-45.
- , 'Migration and Mobility in Six Kentish Parishes, 1851-1881', *Local Population Studies* 63 (1999): 30-70.
- Phythian-Adams, Charles, 'Introduction: An Agenda for English Local History' in *Societies, Cultures and Kinship, 1580-1850. Cultural Provinces and English Local History*, ed. Charles Phythian-Adams (Leicester: Leicester University Press, 1993): 1-23.
- Poole, Anthony, 'Baptismal Delay: Some Implications from the Parish Registers of Cranbrook and Surrounding Parishes in the Kentish Weald', *Local Population Studies* 65 (2000): 9-28.
- Pooley, Colin G., and John C. Doherty, 'The Longitudinal Study of Migration: Welsh Migration to English Towns in the Nineteenth Century' in *Migrants, Emigrants and Immigrants. A Social History of Migration*, ed. Colin G. Pooley and Ian D. Whyte (London and New York: Routledge, 1991): 143-73.
- Pooley, Colin, and Jean Turnbull, 'Migration and Mobility in Britain from the Eighteenth to the Twentieth Century', *Local Population Studies* 57 (1996): 50-71.
- , *Migration and Mobility in Britain since the Eighteenth Century* (London: University College London Press, 1998).
- Pooley, Colin, and Ian Whyte, 'Approaches to the Study of Migration and Social Change' in *Migrants, Emigrants and Immigrants. A Social History of Migration*, ed. Colin G. Pooley and Ian D. Whyte (London and New York: Routledge, 1991): 1-15.
- Popp, Andrew, 'From Town to Town: How Commercial Travel Connected Manufacturers and Markets During the Industrial Revolution', *Journal of Historical Geography* 35 (2009): 642-67.

- Probert, Rebecca, and Liam D'Arcy Brown, 'The Impact of the Clandestine Marriages Act: Three Case-Studies in Conformity', *Continuity and Change* 23 (2008): 309-30.
- Razzell, P., 'Evaluating the Same-Name Technique as a Way of Measuring Burial Register Reliability in England', *Local Population Studies* 64 (2000): 8-22.
- Razzell, P. E., 'The Evaluation of Baptism as a Form of Birth Registration through Cross-Matching Census and Parish Registration Data: A Study in Methodology', *Population Studies* 26 (1972): 121-46; in Razzell, 1994 chapter 4, pp. 82-118.
- Razzell, Peter, *Essays in English Population History* (London: Caliban Books, 1994).
- , 'Further Evaluation of Anglican Baptism as a Form of Birth-Registration through Cross-Matching Census, Parish and Civil Register Data' in *Essays in English Population History*, ed. Peter Razzell (London: Caliban Books, 1994): 119-49.
- , 'The Growth of Population in Eighteenth-Century England: A Critical Reappraisal', *Journal of Economic History* 53 (1993): 743-71; in Razzell, *Essays in English Population History*, 1994, chapter 7 pp. 173-206.
- , 'Infant Mortality in London, 1538-1850: A Methodological Study', *Local Population Studies* 87 (2011): 45-64.
- , 'Living Same-Name Siblings in England, 1439-1851', *Local Population Studies* 87 (2011): 65-69.
- Reay, Barry, 'Before the Transition: Fertility in English Villages, 1800-1880', *Continuity and Change* 9 (1994): 91-120.
- , 'Kinship and the Neighbourhood in Nineteenth-Century Rural England: The Myth of the Autonomous Nuclear Family', *Journal of Family History* 21 (1996): 87-104.
- , *Microhistories: Demography, Society and Culture in Rural England, 1800-1930* (Cambridge: Cambridge University Press, 1996).

- , *Rural Englands: Labouring Lives in the Nineteenth Century* (Basingstoke: Palgrave Macmillan, 2004).
- Redford, Arthur, and W. H Chaloner, *Labour Migration in England, 1800-1850* (2nd edn; Manchester: Manchester University Press, 1964).
- Richards, Eric, 'An Australian Map of British and Irish Literacy in 1841', *Population Studies* 53 (1999): 345-59.
- , 'How Did Poor People Emigrate from the British Isles to Australia in the Nineteenth Century?' *Journal of British Studies* 32 (1993): 250-79.
- Robin, Jean, *The Way We Lived Then* (Aldershot: Ashgate, 2000).
- Rogers, Colin D, and John H Smith, *Local Family History in England, 1538-1914* (Manchester: Manchester University Press, 1991).
- , *Local Family History in England, 1538-1914* (Manchester and New York: Manchester University Press, 1991).
- Rössler, Horst, 'The Dream of Independence: The "America" Of England's North Staffordshire Potters' in *Distant Magnets: Expectations and Realities in the Immigrant Experience, 1840-1930*, ed. Dirk Hoerder and Horst Rössler (New York and London: Holmes and Meier, 1993): 128-59.
- Rowlands, Marie B., 'Continuity and Change in an Industrialising Society: The Case of the West Midlands Industries' in *Regions and Industries: A Perspective on the Industrial Revolution in Britain*, ed. Pat Hudson (Cambridge: Cambridge University Press, 1989): 103-31.
- , *Masters and Men in the West Midland Metalware Trades before the Industrial Revolution* (Manchester: Manchester University Press, 1975).

- Roy, Ian, and Stephen Porter, 'The Population of Worcester in 1646', *Local Population Studies* 28 (1982): 32-43.
- Ruggles, Steven, 'The Limitations of English Family Reconstitution: *English Population History from Family Reconstitution, 1580-1837*', *Continuity and Change* 14 (1999): 105-30.
- , 'Migration, Marriage and Mortality: Correcting Sources of Bias in English Family Reconstitutions', *Population Studies* 46 (1992): 507-22.
- Saville, John, *Rural Depopulation in England and Wales, 1851-1951* (London: Routledge and Kegan Paul, 1957).
- Saxby, Michael J., 'Age at Baptism in the Parish of St Nicholas, Pevensey, 1761-1800', *Local Population Studies* 61 (1998): 57-59.
- , 'Ages at Baptism in the Parish of All Saints, Sudbury, 1809-1828: A New Approach to Their Interpretation', *Local Population Studies* 70 (2003): 49-56.
- Schofield, R., 'Traffic in Corpses: Some Evidence from Barming, Kent (1788-1812)', *Local Population Studies* 33 (1984): 49-53.
- Schofield, R. S., 'Age-Specific Mobility in an Eighteenth-Century Rural English Parish', *Annales de Démographie Historique, Paris* (1971): 261-74; in Clark and Souden.
- Schofield, R. S., 'Age-Specific Mobility in an Eighteenth-Century Rural English Parish' in *Migration and Society in Early Modern England*, ed. Peter Clark and David Souden (London: Hutchinson, 1987): 253-66.
- , 'Dimensions of Illiteracy, 1750-1850', *Explorations in Economic History* 10 (1973): 437-54.

- Schrover, Marlou, 'Living Together, Working Together: Concentrations Amongst German Immigrants in the Netherlands in the Nineteenth Century', *Continuity and Change* 18 (2003): 263-85.
- Schürer, Kevin, 'The Role of the Family in the Process of Migration' in *Migrants, Emigrants and Immigrants. A Social History of Migration*, ed. Colin G. Pooley and Ian D. Whyte (London and New York: Routledge, 1991): 106-42.
- Schwarz, Leonard, 'Hanoverian London: The Making of a Service Town', *Proceedings of the British Academy* 107 (2001): 93-110.
- , 'Residential Leisure Towns in England Towards the End of the Eighteenth Century', *Urban History* 27 (2000): 51-61.
- Scott Smith, David, 'Child-Naming Practices as Cultural and Familial Indicators', *Local Population Studies* 32 (1984): 17-27.
- Shakesheff, Tim, 'Wood and Crop Theft in Rural Herefordshire, 1800-1860', *Rural History* 13 (2002): 1-17.
- Shakesheff, Timothy, *Rural Conflict, Crime and Protest. Herefordshire, 1800-1860* (Woodbridge: Boydell Press, 2003).
- Sharpe, Pamela, 'Literally Spinsters: A New Interpretation of Local Economy and Demography in Colyton in the Seventeenth and Eighteenth Centuries', *Economic History Review* 44 (1991): 46-65.
- , 'Locating the 'Missing Marryers' in Colyton, 1660-1750', *Local Population Studies* 48 (1992): 49-59.
- , 'Poor Children as Apprentices in Colyton, 1598-1830', *Continuity and Change* 6 (1991): 253-70.

- , 'Population and Society, 1700-1840' in *1540-1840*, vol. 2, ed. Peter Clark (The Cambridge Urban History of Britain; Cambridge: Cambridge University Press, 2000): 491-528.
- , 'The Women's Harvest: Straw-Plaiting and the Representation of Labouring Women's Employment, C. 1793-1885', *Rural History* 5 (1994): 129-42.
- , 'Women's Names: Some Problems for Reconstitution Analysis', *Local Population Studies* 59 (1997): 60-61.
- Shaw-Taylor, Leigh, 'Labourers, Cows, Common Rights and Parliamentary Enclosure: The Evidence of Contemporary Comment C. 1760-1810', *Past and Present* 171 (2001): 95-126.
- , 'Parliamentary Enclosure and the Emergence of an English Agricultural Proletariat', *Journal of Economic History* 61 (2001): 640-62.
- Sheppard, June, 'Out-Migration 1821-1851 from a Wealden Parish: Chiddingley', *Local Population Studies* 59 (1997): 13-25.
- Sheppard, June A., 'The Provenance of Brighton's Railway Workers, 1841-1861', *Local Population Studies* 72 (2004): 16-33.
- Sill, Michael, 'Mid Nineteenth-Century Labour Mobility: The Case of the Coal-Miners of Hetton-Le-Hole, County Durham', *Local Population Studies* 22 (1979): 44-50.
- Slack, Paul A, 'Vagrants and Vagrancy in England, 1598-1664', *Economic History Review* 27 (1974): 360-79.
- Smith, K. J. , and N. J. Williams, ed., *Warwickshire Apprentices and Their Masters, 1710-1760*, vol. XXIX (Dugdale Society; Oxford: Oxford University Press, 1975).

- Smith, Richard, 'Charity, Self-Interest and Welfare: Reflections from Demographic and Family History' in *Charity, Self-Interest and Welfare in the English Past*, ed. Martin Daunton (London: University College London Press, 1996): 23-49.
- Smith, Richard M, 'Linking the Local and the General in Population History: Prioritising Migration', *Local Population Studies* 81 (2008): 9-10.
- Snell, K D M, *Parish and Belonging: Community, Identity and Welfare in England and Wales, 1700-1950* (Cambridge: Cambridge University Press, 2006).
- Snell, K. D. M., 'Agricultural Seasonal Unemployment, the Standard of Living, and Women's Work in the South and East, 1690-1860', *Economic History Review* 34 (1981): 407-37.
- , *Annals of the Labouring Poor: Social Change and Agrarian England, 1660-1900* (Cambridge: Cambridge University Press, 1985).
- , 'English Rural Societies and Geographical Marital Endogamy, 1700-1837', *Economic History Review* 55 (2002): 262-98.
- , 'Pauper Settlement and the Right to Poor Relief in England and Wales', *Continuity and Change* 6 (1991): 375-415.
- Snell, Keith D. M., 'Parish Registration and the Study of Labour Mobility', *Local Population Studies* 33 (1984): 29-43.
- Solar, Peter M, and Jan Tore Klovland, 'New Series for Agricultural Prices in London, 1770-1914', *Economic History Review* 64 (2011): 72-87.
- Song, Byung Khun, 'Agrarian Policies on Pauper Settlement and Migration, Oxfordshire 1750-1834', *Continuity and Change* 13 (1998): 363-89.

- Souden, David, 'East, West - Home's Best'? Regional Patterns in Migration in Early Modern England' in *Migration and Society in Early Modern England*, ed. Peter Clark and David Souden (London: Hutchinson, 1987): 292-332.
- , 'Movers and Stayers in Family Reconstitution Populations', *Local Population Studies* 33 (1984): 11-28.
- Souden, David, and Gabriel Lasker, 'Biological Inter-Relationships between Parishes in East Kent: An Analysis of Marriage Duty Act Returns for 1705', *Local Population Studies* 21 (1978): 30-39.
- Southall, Humphrey R., 'The Tramping Artisan Revisited: Labour Mobility and Economic Distress in Early Victorian England', *Economic History Review* 44 (1991): 272-96.
- Spencer, David, 'Reformulating the 'Closed' Parish Thesis: Associations, Interests, and Interaction', *Journal of Historical Geography* 26 (2000): 83-98.
- Spufford, M., *Contrasting Communities: English Villagers in the Sixteenth and Seventeenth Centuries* (Cambridge: Cambridge University Press, 1974).
- Stephens, W. B., 'Illiteracy in the North-East Coalfield, C. 1830-1870', *Northern History* 37 (2000): 215-37.
- Stephens, W.B., *Education, Literacy and Society, 1830-70: The Geography of Diversity in Provincial England* (Manchester: Manchester University Press, 1987).
- Stewart, James I, 'Economic Opportunity or Hardship? The Causes of Geographic Mobility on the Agricultural Frontier, 1860-1880', *Journal of Economic History* 69 (2009): 238-68.
- , 'Migration to the Agricultural Frontier and Wealth Accumulation, 1860-1870', *Explorations in Economic History* 43 (2006): 547-77.

- Stobart, John, 'Personal and Commercial Networks in an English Port: Chester in the Early Eighteenth Century', *Journal of Historical Geography* 30 (2004): 277-93.
- Styles, Philip, 'A Census of a Warwickshire Village in 1698' in *Studies in Seventeenth-Century West Midlands History* (Kineton: The Roundwood Press, 1978): 90-107.
- Tan, Elaine S, 'the Bull Is Half the Herd': Property Rights and Enclosures in England, 1750-1850', *Explorations in Economic History* 39 (2002): 470-89.
- Tate, W.E., 'A Hand List of English Enclosure Acts and Awards. Part 15: Herefordshire', *Transactions of the Woolhope Naturalists Field Club* (1941): 183-94.
- Taylor, J. S., 'The Impact of Pauper Settlement 1691-1834', *Past and Present* 73 (1976): 42-74.
- Taylor, P.A. M, 'Emigrants' Problems in Crossing the West, 1830-70', *University of Birmingham Historical Journal* 5 (1955): 83-102.
- Thane, Pat, 'Old People and Their Families in the English Past' in *Charity, Self-Interest and Welfare in the English Past*, ed. Martin Daunt (London: University College London Press, 1996): 113-38.
- Thomson, David, 'Age Reporting by the Elderly and the Nineteenth-Century Census', *Local Population Studies* 25 (1980): 13-25.
- Tilley, Peter, 'Creating Life Histories and Family Trees from Nineteenth-Century Census Records, Parish Registers and Other Sources', *Local Population Studies* 68 (2002): 63-81.
- Tillott, P. M., 'Sources of Inaccuracy in the 1851 and 1861 Censuses' in *Nineteenth-Century Society. Essays in the Use of Quantitative Methods for the Study of Social Data*, ed. E. Anthony Wrigley (Cambridge: Cambridge University Press, 1972): 82-133.

- Tinley, Ruth, and Mills, Dennis, 'Population Turnover in an Eighteenth-Century Lincolnshire Parish in Comparative Context', *Local Population Studies* 52 (1994): 30-38.
- Tomkins, Alannah, and King, Steven, 'Introduction' in *The Poor in England 1700-1850. An Economy of Makeshifts*, ed. Steven King, and Tomkins, Alannah (Manchester: Manchester University Press, 2003): 1-38.
- Tranter, N, 'Population and Social Structure in a Bedfordshire Parish: The Cardington Listings of Inhabitants, 1782', *Population Studies* 21 (1967): 261-82.
- Turnbull, G.L., 'Provincial Road Carrying in England in the Eighteenth Century', *Journal of Transport History* 4 (1977): 17-39.
- Turner, M., 'Arable in England and Wales: Estimates from the 1801 Crop Returns', *Journal of Historical Geography* 7 (1981): 291-302.
- Turner, William, 'Patterns of Migration of Textile Workers into Accrington in the Early Nineteenth Century', *Local Population Studies* 30 (1983): 28-34.
- Ullathorne, Graham, 'Migration from Derbyshire to Hallamshire: The Evidence of the Cutlers' Company Records, 1624 to 1814', *Northern History* 41 (2004): 81-109.
- Vann, Richard T., 'Unnatural Infertility, or, Whatever Happened in Colyton? Some Reflections on *English Population History from Family Reconstitution 1580-1837*', *Continuity and Change* 14 (1999): 91-104.
- Wall, Richard, 'Economic Collaboration of Family Members within and Beyond Households in English Society, 1600-2000', *Continuity and Change* 25 (2010): 83-108.
- , 'Real Property, Marriage and Children: The Evidence from Four Pre-Industrial Communities' in *Land, Kinship and Life-Cycle*, ed. Richard M. Smith (Cambridge: Cambridge University Press, 1984): 443-79.

- Wallis, Patrick, et al., 'Leaving Home and Entering Service: The Age of Apprenticeship in Early Modern London', *Continuity and Change* 25 (2010): 377-404.
- Wareing, John, 'Changes in the Geographical Distribution of the Recruitment of Apprentices to the London Companies, 1486-1750', *Journal of Historical Geography* 6 (1980): 241-49.
- , 'Migration to London and Transatlantic Emigration of Indentured Servants, 1683-1775', *Journal of Historical Geography* 7 (1981): 356-78.
- Warren, Ian, 'London's Cultural Impact on the English Gentry: The Case of Worcestershire, C. 1580-1680', *Midland History* 33 (2008): 156-78.
- Watson, Rex, 'A Study of Surname Distribution in a Group of Cambridgeshire Parishes, 1538-1840', *Local Population Studies* 15 (1975): 23-31.
- Watt, Kathleen, 'Making Drain Tiles A "Home Manufacture": Agricultural Consumers and the Social Construction of Clayworking Technology in the 1840s', *Rural History* 13 (2002): 39-60.
- Wegge, Simone A, 'To Part or Not to Part: Emigration and Inheritance Institutions in Nineteenth-Century Hesse-Cassel', *Explorations in Economic History* 36 (1999): 30-55.
- Weiss, Kenneth M., et al., 'Wherefore Art Thou Romio? Name Frequency Patterns and Their Use in Automated Genealogical Assembly' in *Genealogical Demography*, ed. Bennett Dyke and Warren T. Morrill (New York: Academic Press, 1980): 41-61.
- Wells, Roger, 'Migration, the Law, and Parochial Policy in Eighteenth and Early Nineteenth-Century Southern England', *Southern History* 15 (1993): 86-139.
- White, Martin B., 'Family Migration in Victorian Britain: The Case of Grantham and Scunthorpe', *Local Population Studies* 41 (1988): 41-50.

Whiteman, Anne, and Mary Clapinson, ed., *The Compton Census of 1676: A Critical Edition* (Records of Social and Economic History, N.S.; London: Oxford University Press for The British Academy, 1986).

Whittle, Jane, 'Population Mobility in Rural Norfolk among Landholders and Others, C. 1440- C. 1600' in *The Self-Contained Village: The Social History of Rural Communities, 1250-1900*, ed. Christopher Dyer (Hatfield: University of Hertfordshire Press, 2007): 28-45.

Whyte, Ian, 'Cumbrian Village Communities: Continuity and Change, C. 1750 - C. 1850' in *The Self-Contained Village: The Social History of Rural Communities, 1250-1900*, ed. Christopher Dyer (Hatfield: University of Hertfordshire Press, 2007): 96-113.

———, *Migration and Society in Britain, 1550-1830* (Social History in Perspective; Basingstoke: Macmillan Press, 2000).

Williams, I. L, 'Migration and the 1881 Census Index: A Wiltshire Example', *Local Population Studies* 69 (2002): 67-73.

Williams, Phyllis, *Whitbourne, a Bishop's Manor* (Whitbourne: Published by the Author, 1979).

Williams, Samantha, 'Earnings, Poor Relief and the Economy of Makeshifts: Bedfordshire in the Early Years of the New Poor Law', *Rural History* 16 (2005): 21-52.

Winchester, Ian, 'The Linkage of Historical Records by Man and Computer: Techniques and Problems', *Journal of Interdisciplinary History* 1 (1970): 107-24.

Wise, Michael J., 'Birmingham and Its Trade Relations in the Early Eighteenth Century', *University of Birmingham Historical Journal* 2 (1949): 53-79.

Wojciechowska, Bogusia, 'Brenchley: A Study of Migratory Movements in a Mid Nineteenth-Century Rural Parish', *Local Population Studies* 41 (1988): 28-40.

- Woledge, Henry S., and Michael A. Smale, 'Migration in East Yorkshire in the Eighteenth Century', *Local Population Studies* 70 (2003): 29-48.
- Woods, R., 'Mortality in Eighteenth-Century London: A New Look at the Bills', *Local Population Studies* 77 (2006): 12-23.
- Woods, Robert, 'Mortality and Sanitary Conditions in The "Best Governed City in the World" - Birmingham, 1870-1910', *Journal of Historical Geography* 4 (1978): 35-56.
- , *The Population History of Britain in the Nineteenth Century* (Cambridge: Cambridge University Press, 1995).
- Woodward, Donald, 'Early Modern Servants in Husbandry Revisited', *Agricultural History Review* 48 (2000): 141-50.
- Woollard, M., 'The Classification of Multiple Occupational Titles in the 1881 Census of England and Wales', *Local Population Studies* 72 (2004): 34-49.
- Wright, Alan, 'Birth-Baptism Intervals in Whickham Parish, County Durham C. 1770-1820', *Local Population Studies* 71 (2003): 81-87.
- Wright, S. J., 'Sojourners and Lodgers in a Provincial Town: The Evidence from Eighteenth-Century Ludlow', *Urban History* 17 (1990): 14-35.
- Wrightson, K., *Earthly Necessities: Economic Lives in Early Modern Britain* (New Haven and London: Yale University Press, 2000).
- Wrigley, E. A., 'English County Populations in the Later Eighteenth Century', *Economic History Review* 60 (2007): 35-69.
- , 'Family Reconstitution' in *An Introduction to English Historical Demography from the Sixteenth to the Nineteenth Century*, ed. D. E. C Eversley et al. (London: Weidenfeld and Nicolson, 1966): 96-159.

- , ‘Rickman Revisited: The Population Growth Rates of English Counties in the Early Modern Period’, *Economic History Review* 62 (2009): 711-35.
- Wrigley, E. Anthony, ‘The Effect of Migration on the Estimation of Marriage Age in Family Reconstitution Studies’, *Population Studies* 48 (1994): 81-97.
- , ‘Family Limitation in Pre-Industrial England’, *Economic History Review* 19 (1966): 82-109.
- , ‘How Reliable Is Our Knowledge of the Demographic Characteristics of the English Population in the Early Modern Period?’ *The Historical Journal* 40 (1997): 571-95.
- , ‘Introduction’ in *Identifying People in the Past*, ed. E. Anthony Wrigley (London: Edward Arnold, 1973): 1-16.
- , ‘Mortality in Pre-Industrial England: The Example of Colyton, Devon, over Three Centuries’, *Daedalus* 97 (1968): 546-80.
- , ‘No Death without Birth: The Implications of English Mortality in the Early Modern Period’ in *Problems and Methods in the History of Medicine*, ed. R. Porter and A. Wear (London: Croom Helm, 1987): 351-66.
- , ed., *Identifying People in the Past* (London: Edward Arnold, 1973).
- Wrigley, E. Anthony, et al., *English Population History from Family Reconstitution, 1580-1837* (Cambridge: Cambridge University Press, 1997).
- Wrigley, E. Anthony, and Roger S. Schofield, ‘Nominal Record Linkage by Computer and the Logic of Family Reconstitution’ in *Identifying People in the Past*, ed. E. Anthony Wrigley (London: Edward Arnold, 1973): 64-101.
- , *The Population History of England. 1541-1871. A Reconstruction* (Cambridge: Cambridge University Press, 1989; tr. from 1981, Edward Arnold, London).

- Wrigley, E.A, 'A Note on the Life-Time Mobility of Married Women in a Parish Population in the Later Eighteenth Century', *Local Population Studies* 18 (1977): 22-29.
- , 'A Simple Model of London's Importance in Changing English Society and Economy, 1650-1750', *Past and Present* 37 (1967): 44-70.
- Wyatt, Grace, 'Migration in South West Lancashire: A Study of Three Parishes', *Local Population Studies* 27 (1981): 62-64.
- , 'Population Change and Stability in a Cheshire Parish During the Eighteenth Century', *Local Population Studies* 43 (1989): 47-54.
- Yamamoto, Chiaki, 'Two Labour Markets in Nineteenth-Century English Agriculture: The Trentham Home Farm, Staffordshire', *Rural History* 15 (2004): 89-116.
- Yelling, J. A., *Common Field and Enclosure in England 1450-1850* (London: Macmillan, 1977).
- Zelinsky, Wilbur, 'The Hypothesis of the Mobility Transition', *Geographical Review* 61 (1971): 219-49.