

The economic development of Sussex, c.1700-1881

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This dissertation was submitted as part of the Tripos Examination in the Faculty of History, Cambridge University, June 2009.

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List of abbreviations

GIS: Geographical Imaging Software

PRA: Parish Register Abstracts

PST: Primary, Secondary, Tertiary

Acknowledgements

I am grateful to Tony Wrigley of the Cambridge Group for the History of Population and Social Structure for permitting me to use his revised and unpublished population estimates for English counties and the rapes within Sussex for 1761-1851.

I would like to thank Leigh Shaw-Taylor, also of the Cambridge Group, for allowing me to use occupational datasets of evidence collected by the Group. These include the Rose's Act series of 1813-20; the 1851 census series by Registration District as well as by town; and the 1881 census. I would also like to thank Shaw-Taylor for permitting me to cite an unpublished population density map produced using figures generated by Wrigley, as well as for providing me with national figures for occupational structure in the nineteenth century.

I would like to thank Max Satchell of the Cambridge Group who showed me how to use GIS and provided me with shapefiles for Sussex to which I could map my data.

Finally, Joe Barker helped me take digital photographs of parish registers in the East and West Sussex Record Offices, and Peter Kitson of the Cambridge Group made my abstractions of occupational data from these images into a database searchable by the PST system. I am grateful to them both for their help.

Chapter One: Introduction

For the county of Sussex in the south-east of England, the eighteenth and nineteenth centuries were characterised by a rapid rate of demographic growth, the like of which was otherwise experienced only in regions undergoing significant economic structural change. According to an unpublished revision by E.A. Wrigley of county population estimates he put forward in his recent paper, 'English county populations in the later eighteenth century,' Sussex was the fifth fastest-growing region in the country in the second half of the eighteenth century, behind only the industrial counties of Lancashire and the West Riding of Yorkshire; Surrey, a metropolitan hinterland; and the East Riding of Yorkshire. Using Wrigley's new estimates, the revised population growth ratio of Sussex was 1.58 compared with 2.17 in Lancashire, 1.67 in the West Riding, 1.61 in the East Riding and 1.60 in Surrey.¹ It is possible to explain the majority of these demographic regimes by the structural development of their regional economies. However, it is surprising that Sussex, which was a predominantly agricultural county with a developing seaside leisure industry, could have sustained such a rapid rate of population growth. The economic history of Sussex has received little attention in the historiography of the industrial revolution. This dissertation will therefore be an opportunity to explore the development of the Sussex economy during the eighteenth and nineteenth centuries in order to put its demographic regime into context.

Our current knowledge of Sussex in this period is fragmentary, based predominantly on urban histories of a limited scope. The importance of the seaside to the regional

¹ The figures cited derive from a file containing population estimates revised by E.A. Wrigley after the publication of his article: E.A. Wrigley, 'English county populations in the later eighteenth century', *Economic History Review*, 60: 1 (2007), p.31.

economy is evident in the numerous studies of individual resort towns. These describe the growth of seaside watering places such as Brighton, Eastbourne, and Hastings into destinations for wealthy Londoners seeking the restorative health benefits and opportunities for leisure that the coast could offer. As transport links improved in the mid-nineteenth century with the railway, the nature of demand at the seaside shifted because travel was no longer the monopoly of the rich. As a result, urban histories tend to diverge; watering places grew more specialised, tapping different social levels of demand. J.K. Walton in his book, *The English Seaside Resort: A Social History, 1750-1914* attempts to broaden the focus of these urban histories of single towns, producing a general assessment of the social and economic characteristics of resort development.² However, Walton's study considers the seaside leisure industry without really assessing the contribution that these towns made to the regional economic structure of which they were only a part.

The most comprehensive analysis of the economic geography of Sussex is that edited by Kim Leslie and Brian Short, *An Historical Atlas of Sussex*.³ This book focuses on features of geography, the economy, demography, and transportation development at the county level. Its findings are necessarily limited, however, by the fact that it pre-dates the embarkation of the Cambridge Group for the History of Population and Social Structure on their ESRC Funded Project, *Male Occupational Change and Economic Growth 1750-1851*, part of the ongoing study, *The occupational structure of Britain, 1379-1911*.⁴ This venture has made available national demographic and

² J.K. Walton, *The English Seaside Resort: A Social History 1750-1914* (Leicester: Leicester University Press, 1983).

³ K. Leslie and B. Short (eds.), *An Historical Atlas of Sussex* (Chichester: Phillimore & Co Ltd, 1999).

⁴ L. Shaw-Taylor (Principal Investigator) and E.A. Wrigley (Co-investigator), *Male Occupational Change and Economic Growth 1750-1851*, funded by the ESRC, completed 2005; L. Shaw-Taylor

occupational data for the eighteenth and nineteenth centuries in machine-readable format, and has the potential to allow a comparison of local and national trends which was simply unfeasible before. This dissertation continues the focus of Leslie and Short on the economic geography of Sussex, using occupational evidence made available by the project as well as data that I have collected personally to analyse the changing structure of the economy c.1700-1881.

The ability to use occupational data in the study of economic history has encouraged fresh consideration of the industrial revolution, a subject which has been dominated in the last twenty years by aggregative studies of British national product and debates concerning their validity. The revision by Crafts of the economic growth rates hypothesised by Deane and Cole reduces their estimate of 0.45% growth in 1700-60 to 0.31%, and 1.61% in 1801-31 to just 0.52%, suggesting that the economy in the period of the classic industrial revolution grew more gradually and much earlier than was previously thought.⁵ However, Berg and Hudson question Crafts's calculations and call for a broader consideration of economic development, emphasising the importance of regional specialization.⁶ The ongoing project of the Cambridge Group for the History of Population and Social Structure offers a new evidential basis for the study of the industrial revolution. Undertaking regional and national studies of occupational structure enables the consideration of social and economic change on many levels. In a report published in 2006, Shaw-Taylor and Wrigley present the preliminary findings of the project, which appear to support the gradualist view of the

(Principal Investigator) and E.A. Wrigley (Co-investigator), *The Changing Occupational Structure of Nineteenth-Century Britain*, funded by the ESRC and Leverhulme Trust, ongoing.

⁵ Figures produced by N.F.R. Crafts cited by J. Hoppit, 'Counting the industrial revolution', *Economic History Review*, 43:2, 173-193 at p.175.

⁶ M. Berg and P. Hudson, 'Rehabilitating the Industrial Revolution', *Economic History Review*, 45:1, 24-50 at p.26.; P. Hudson, 'The regional perspective' in P. Hudson (ed.), *Regions and Industries*, 5-38 at pp.20-23.

industrial revolution.⁷ They suggest a new chronology of economic change that encompasses developments in the early modern period, arguing that the north-west of England and London had already industrialised by the mid-eighteenth century. Furthermore, they state that it was not until after 1815 that agricultural regions showed any sign of industrialisation. 1750-1815, the period emphasised by the dramatic view, was in fact between two 'waves' of industrialization and it was the service sector which experienced uninterrupted and largely universal growth.⁸ This dissertation by evaluating the economic development of Sussex through occupational evidence, adds to the regional studies conducted by the Cambridge Group, and contributes to the debate surrounding the nature and pace of economic development in the industrial revolution. In the light of the national importance of the service sector, Sussex is a county of particular interest with its burgeoning seaside resort economies adapted to visitors' recreation and relaxation.

This dissertation is structured as follows. Firstly, the nature of population growth in Sussex is explored in depth, focusing particularly on its internal concentration. Knowledge of the location of demographic change is indispensable in ascertaining the impact that local economic development had on wider growth. Chapter Two describes the evidential basis for the demographic analysis which is presented in Chapter Three. The remainder of the dissertation analyses occupational data in order to comprehend the structure of the economy of Sussex during the industrial revolution. Chapter Four justifies the study of occupational evidence in economic history and describes the sources from which it derives. Chapter Five then discusses the occupational structure

⁷ L. Shaw-Taylor and E.A. Wrigley, 'The occupational structure of England c.1750-1871: A preliminary report', 1-44 at p.38.
[<http://www.geog.cam.ac.uk/research/projects/occupations/introduction/summary.pdf>, accessed June 2008]

⁸ Shaw-Taylor and Wrigley, 'A Preliminary Report', p.39.

of Sussex in the nineteenth century in comparison to that of England and Wales, before a more detailed investigation of its internal dynamics is made by Chapters Six, Seven, and Eight. These chapters consider the relative importance of the three economic sectors by parish c.1817-1881, enabling a comparison to be made of occupational structure both before and after the introduction of the railway. Chapter Nine draws the study of the occupational structure of Sussex to a close by focusing on the eighteenth century. The conclusion then explores economic change in Sussex throughout the period c.1700-1881 and returns to the question of why the population of this county increased so rapidly between 1761 and 1801.

Chapter Two: Eighteenth century demography: Sources and Methods

Demographic expansion in Sussex during the industrial revolution is fundamental to the history of the economic development of the county, but unfortunately it is not straightforward to quantify. From 1801 when the decadal census was established, there exists a comprehensive series of population data which can be used to ascertain demographic trends at the parochial level in Sussex. For the eighteenth century, however, the historian is reliant on parish registers from which population estimates are not self-evident but may be estimated. Much information may be gleaned about the rate of baptisms, marriages, and burials, but what proves contentious for historians is how best to employ these data in order to calculate population estimates.

The first to utilise late eighteenth-century parish registers for the creation of population totals was John Rickman who oversaw the collection of the earliest census returns. Rickman employed the 1801 census data to calculate for that year a ratio between the frequency of baptisms, marriages and burials to the size of the population. This ratio he deemed to be unchanging. Using the opportunity that the 1801 census presented, Rickman included questions designed to gather parish register data for selected years in the eighteenth century. This information is known collectively as the Parish Register Abstracts, or PRA. Rickman then applied his 1801 ratio to the frequencies of baptisms, marriages and burials in the PRA to generate new population estimates for the years 1761, 1771, 1781 and 1791.⁹

⁹ Wrigley, 'English County Populations', pp.35-37.

The work of Rickman went largely unchallenged by demographers until the critique put forward by Wrigley in an article published in 2007.¹⁰ Through this work, Wrigley questions the reliability of Rickman's technique for its dependence upon the unlikely assumption that crude rates of birth, marriage and death were constant.¹¹ He also argues that Rickman's sources cannot sustain the level of quantitative analysis he uses. A reliable series of marriage data exists from 1754 after the implementation of Hardwicke's Act of 1753 necessitated that all weddings take place in a parish church and be detailed in their registers. Wrigley argues that this series alone is comprehensive enough for analysis. He proffers an alternative method for the estimation of eighteenth-century population totals based on the application of the 1801 ratio between the frequency of marriage and population size to Rickman's PRA data.¹² Admittedly this methodology is also guilty of assuming a stable crude rate of marriage, but to have only one variable fluctuating as opposed to Rickman's three is to significantly limit the potential for distortion. Moreover, Wrigley claims that the national population estimates produced by an earlier project of the Cambridge Group for the History of Population and Social Structure which did not employ marriage data may be used to reduce county-level totals, if when aggregated, they prove to be too high, or vice versa.¹³

Wrigley has taken marriage totals from the PRA for the period 1754-1801 and - using a moving average to smooth out the results of any anomalous years - extrapolated from them a series of population estimates across the country to the level of the hundred for the years 1761, 1771, 1781 and 1791. The hundreds were the

¹⁰ Wrigley, 'English County Populations', pp.35-69.

¹¹ Wrigley, 'English County Populations', p.37.

¹² Wrigley, 'English County Populations', p.41.

¹³ Wrigley, 'English County Populations', p.43.

administrative units used in the PRA. They consisted of a number of parishes, and were grouped into larger units known as rapes. The PRA for Sussex are unusual because data is only recorded to the level of the rapes. As a result, Wrigley's population estimates exist for the six rapes of Chichester, Arundel, Bramber, Lewes, Pevensey and Hastings, with further totals for the separate urban entities, Brighton Town, Lewes Borough and Chichester City. These spatial units are not well suited to the exploration of the internal trends in Sussex. The rapes, being large north-south strips tend to cut across rather than compliment the economic geography which runs east-west, masking any disparity between parochial growth rates which would be indicative of local structural change.

In order to produce eighteenth century population estimates at an appropriate spatial level for Sussex requires the registers of each parish within a rape to be studied, and the annual frequency of marriages to be counted for the period 1754-1799. Over five weeks I completed this process of data collection for the 139 parishes which make up the eastern rapes of Lewes, Pevensey, and Hastings as well as Lewes Borough. It would have been preferable to conduct this research for all six of the rapes, but this was unfortunately unfeasible due to constraints of time and money. However, even with partial coverage of the county, this exercise greatly improves our ability to assess the internal characteristics of demographic expansion in Sussex before 1801.

The method used to apportion the population estimates produced by Wrigley for each rape between their component parishes essentially relies on the assumption made throughout his analysis that the frequency of marriage was proportional to the size of

the population studied.¹⁴ The population total for each rape has been divided up between the units using a nine-point moving average of annual marriage totals for the years 1761, 1771, 1781 and 1791. In small parishes where the number of weddings was low and irregular, random variation is a problem. The potential for distortion can be minimised, however, if the spatial area of the units used is increased, so small contiguous parishes have been aggregated to a level at which their collective counts stabilise. These grouped parishes are referred to as 'quasi hundreds,' for they are of a similar area to the administrative hundreds, but their composite parishes differ. The danger posed by anomalous and temporary fluctuations in the marriage data has also been offset by using a long, nine-point moving average of the marriage totals.

Having described their origins, the following chapter presents the newly-distributed population totals and discusses the nature and geography of demographic expansion in Sussex in the later-eighteenth century.

¹⁴ Wrigley, 'English County Populations', p.41.

Chapter Three: The internal dynamics of demographic expansion in Sussex, 1761-1851

This chapter looks at the internal character of demographic expansion in Sussex in the period 1761-1851 using the quasi hundred population estimates for 1761-1791, as well as census population totals for 1801-1851 aggregated to the level of the rapes in the west and quasi-hundreds in the east of the county for comparability. This data is presented in map form, which is arguably the clearest way to appreciate the dynamics of population growth. Due to the fact that the units vary significantly in their area, the type of analysis possible is more limited. It would be misleading, for example, to consider absolute population change when the western half of the county is divided into four units, compared to thirty-five in the east. As a result, this chapter considers the change in population density and percentage population growth, which are proportional calculations accounting for variation in unit area.

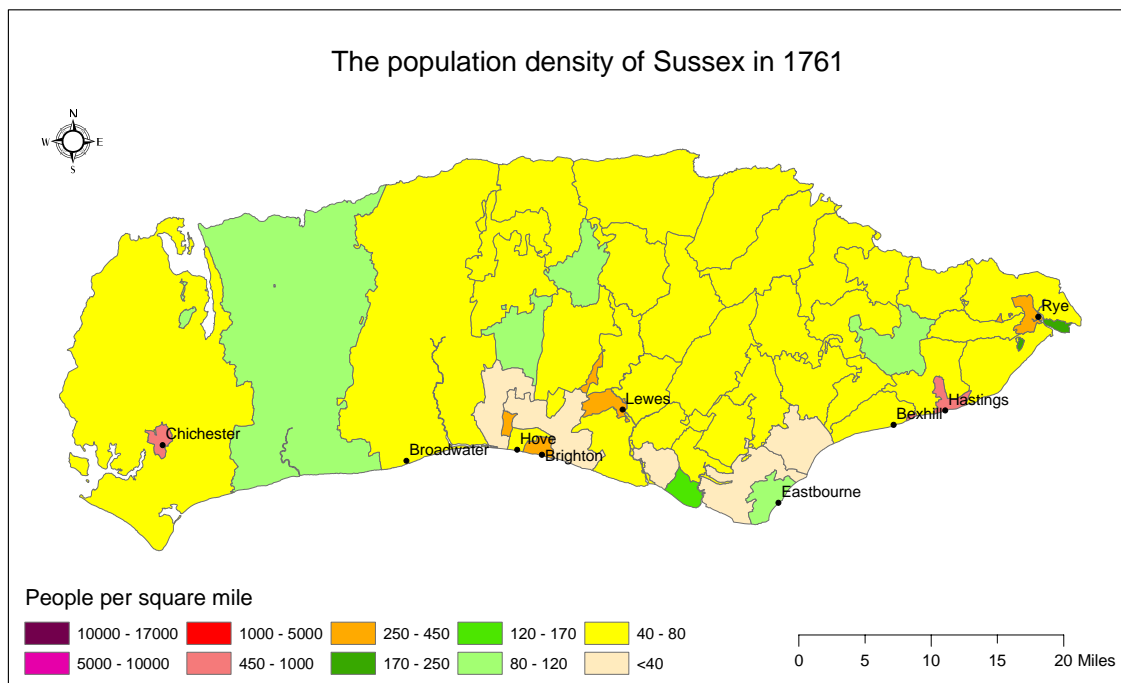


Figure 1

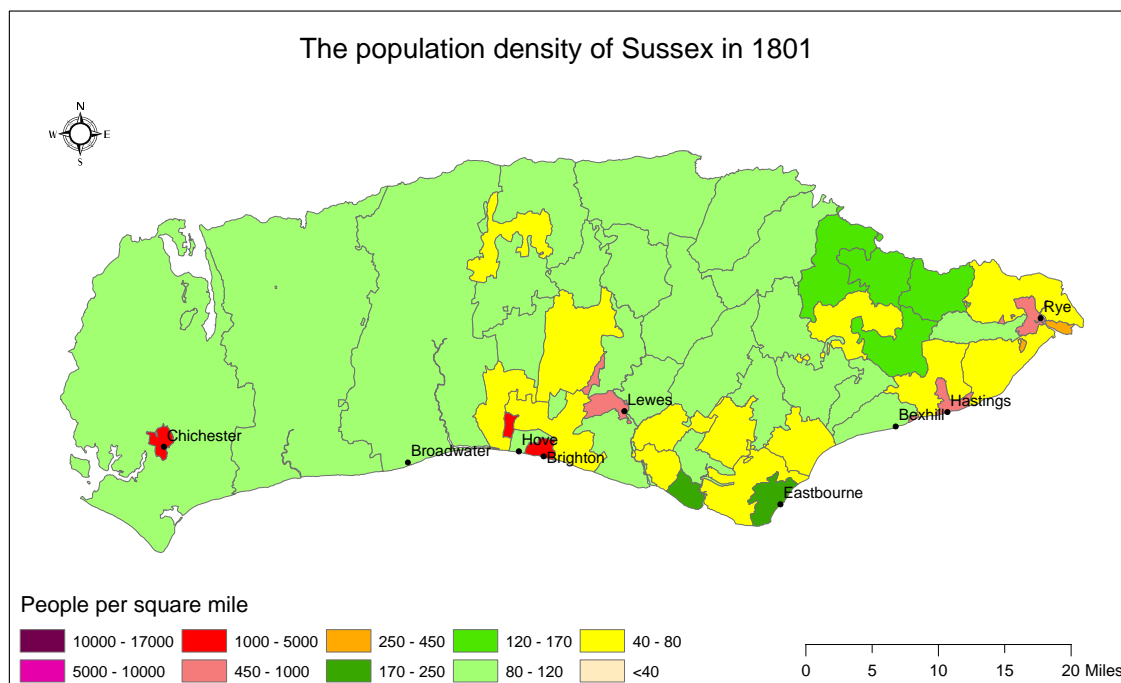


Figure 2

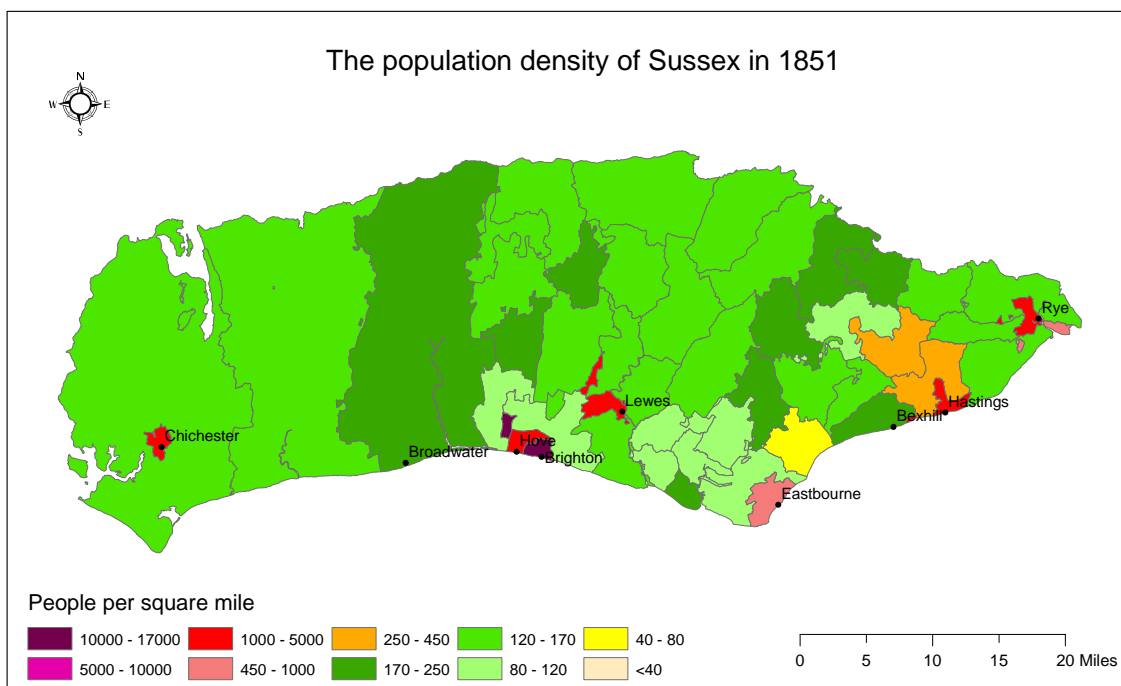


Figure 3

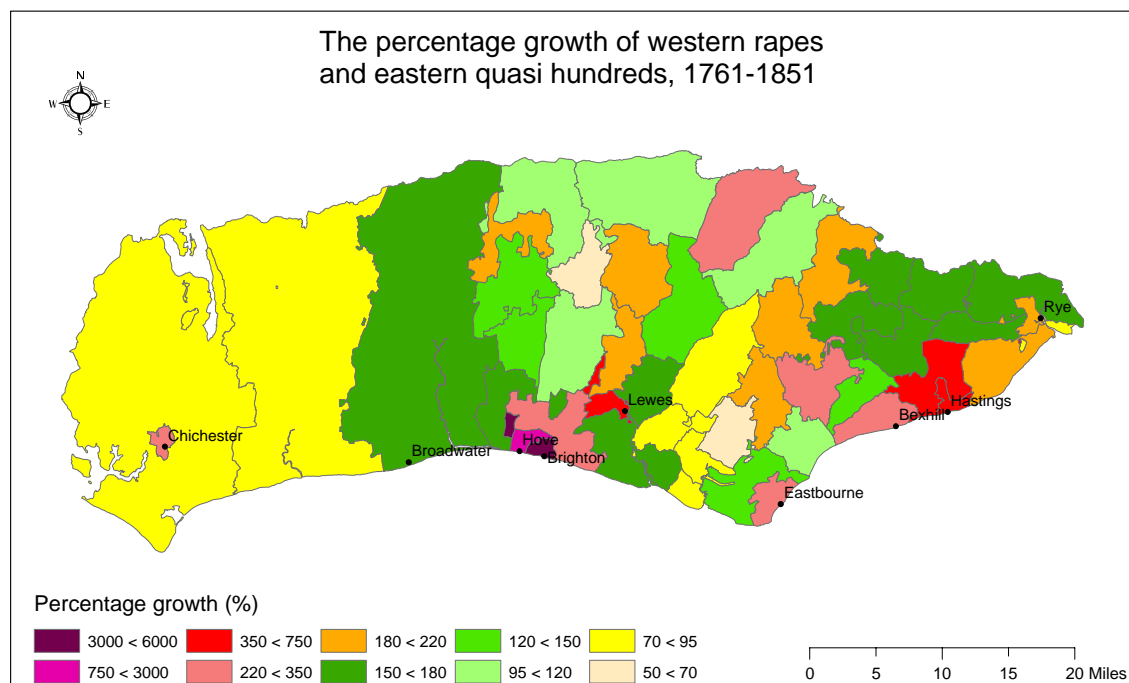


Figure 4

According to the work of Wrigley on county-level population density per square mile between 1600 and 1801, the demographic expansion of Sussex did not follow a linear progression. In 1751 the population density of the county was very low by national standards, having declined since 1700. Between 1751 and 1801, however, the county experienced rapid growth, reaching a point of greater comparability with the south-east and the rest of the country by 1801.¹⁵ Using my population estimates for the quasi hundreds in the east and Wrigley's for the western rapes, as well the census from 1801, the population density of Sussex between 1761 and 1851 has been calculated and mapped. Figures 1, 2, and 3 illustrate population density levels within Sussex in 1761, 1801, and 1851 respectively, showing the changing distribution of the expanding county population.

These population density maps highlight a disparity between the demographic regimes on the coastline and those further inland. By 1851, the coast of Sussex was dotted with units of high population density which correspond to the location of emergent seaside resorts including Brighton, Hastings, Eastbourne, and Rye. Between 1761 and 1801 the resort which underwent the fastest growth was Brighton, which was the most densely populated town in Sussex at the turn of the nineteenth century. By 1801, however, Figure 2 demonstrates that other coastal towns were beginning to expand as they too became resorts, including Eastbourne, Hastings, and Rye. In a pattern sustained throughout the period 1761-1851, the units neighbouring these highly populous coastal towns had the lowest densities in the county. It is likely that seaside resort expansion was in part fuelled by the short-distance migration of people from the rural surroundings in search of new urban employment opportunities.

¹⁵ I am grateful to L. Shaw-Taylor of the Cambridge Group for the History of Population and Social Structure for allowing me to use this unpublished map, 'England county population density per square mile 1600-1801', the data for which was produced by E.A. Wrigley, also of the Cambridge Group.

Inland, the distribution of the expanding population appears to have been remarkably even and upward from 1761. Figure 4 shows the percentage growth of each spatial unit between 1761 and 1851. The quasi hundreds in which the most rapid increase occurred contain the developing seaside resorts of Brighton and Hastings, perhaps unsurprisingly, as well as the county towns of Lewes and Chichester. Looking further inland, it is clear from Figure 4 that expansion was not as even as it appears in Figures 1-3. The percentage growth of the interior quasi hundreds was low by comparison to the coast and rather uneven, particularly in the Weald. This region in the north-west of Sussex had once been highly populated relative to the rest of the county, but had lost ground by the eighteenth century. During the early modern period, the area had a thriving industrial economy producing iron and textiles. It attracted large numbers of migrants in search of employment and by 1640 Cynthia Herrup states that the Weald boasted the highest population density in Sussex.¹⁶ However, this area went through a process of deindustrialization during the seventeenth century which reduced the influx of migrants as employment opportunities dried up. This would have slowed the rate of population growth considerably by 1700, and may have contributed to the overall decline in population density found at the county-level by Wrigley in 1700-1751.

This chapter has highlighted the difference between coastal and inland demographic expansion between 1761 and 1851. A key question this raises is whether the rapidity of population growth in Sussex in this period was a county-wide phenomenon or solely the result of seaside resort development. One way to assess this is to exclude Brighton, the foremost resort economy in the south-east, from the calculation of

¹⁶ C.B. Herrup, *The Common Peace: Participation and the Criminal Law in Seventeenth-Century England* (Cambridge: Cambridge University Press, 1987), pp.15-16

county-level population growth ratios for 1761-1801 and 1801-1851. The results of this exercise indicate that the driver of expansion changed. In the first period the population growth ratio for Sussex differs only slightly with Brighton removed, falling from 1.58 to 1.52. This would have been enough to cause Sussex to slip back from fifth to eighth in Wrigley's revised rankings of the fastest-growing counties in England between 1761 and 1801, yet the rate of expansion without Brighton would still be comparable only with those of the north-western industrial or metropolitan economies. Therefore, in the later-eighteenth century overall county-level expansion was not driven by resort growth. After 1801 this changed as the seaside resort industry was established more fully. The population growth ratio of Sussex between 1801 and 1851 falls from 2.05 to just 1.73 with Brighton removed. Sussex was the ninth fastest-growing county in England with Brighton, expanding at a rate comparable with the industrial and metropolitan regions. Without Brighton, however, the growth rate of the county would have been mediocre. Therefore, the take-off of resort development in the nineteenth century accounts for the high rate of population growth that Sussex achieved between 1801 and 1851.

In conclusion, the development of seaside resorts is not enough to explain why Sussex was the fifth fastest-growing county in England 1761-1801. The leisure industry did not drive population growth until the nineteenth century, when the county was comparably less significant at just ninth place nationally. This necessitates an exploration of the economy of the county in order to see how demographic growth was sustained. This will take the form of occupational structural analysis. The next chapter discusses the validity of using occupational data to analyse economic change before another examining the occupational structure of Sussex in national context. A

series of chapters will then follow, investigating the distribution of the workforce between the primary, secondary, and tertiary sectors of the economy within each parish c.1817-1881.

Chapter Four: An introduction to occupational structure

The nature of economic development in the industrial revolution is the subject of much debate. Crafts and Harley have produced estimates of gross domestic product which indicate gradual economic growth only. However, Berg and Hudson argue GDP does not show regional structural change. The ESRC and Leverhulme Trust Funded Project, *The occupational structure of Britain, 1379-1911* led by Shaw-Taylor and Wrigley of the Cambridge Group for the History of Population and Social Structure is exploring the use of occupational data collected from parish baptism registers and the published census to approximate economic structural development. They are in the process of creating machine-readable occupational datasets capable of a high level of disaggregation down to the parish. This study of the economic development of Sussex benefits from the use of a number of these databases covering the nineteenth century. As a result it is possible to assess internal structural change, as well as to compare the occupational structure of Sussex to other regions in this period.

The distribution of human capital in an economy reveals a great deal about its structure. Wrigley has developed the classification scheme used by the Cambridge Group by which all occupational descriptors collected from parish register or census sources are categorised according to their economic contribution. This is the Primary, Secondary, Tertiary system, or PST system. By this scheme, the labour force is divided into three sectors: those dealing directly with raw materials are in the primary sector; those producing goods are in the secondary sector; whilst those providing services comprise the tertiary sector. Wrigley argues that the distribution of the population across these sectors reflects the nature of demand in an economy.

Typically, in an underdeveloped economy, expenditure is concentrated on the commodities necessary for subsistence, stimulating employment in the primary sector above all others. By contrast, a society with a more advanced economy and higher per capita income tends to develop a more varied occupational structure. This is because wealthier populations are likely to increase their spending on luxury goods relative to subsistence items, stimulating secondary and tertiary sector employment.¹⁷

Occupational descriptors covering the eighteenth and nineteenth centuries are found in two main source types: parish baptism registers and the census. This dissertation uses occupational evidence from both. Much has already been collected and made machine-readable for the nineteenth century by the Cambridge Group, and this dissertation benefits from the use of three of their national datasets coded by the PST system. The first of these contains occupational descriptors collected from parish baptism registers for 1813-1820. This period of abstraction was chosen because it followed Rose's Act of 1812 which transformed the previously intermittent baptismal record of paternal occupations into a reliable data series. Whilst it is unfortunate that the minority group of non-conformists are not covered by this source, it is unlikely that their occupational structure would have differed enough to render their representation by the Anglican community problematic.

The decadal census established in 1801 provides a reliable series of occupational data after 1851, with the additional benefit of covering women as well as men. Some historians question the extent to which female servants were under-recorded in the census, although does not change the fact that the census is the best source of

¹⁷ E.A. Wrigley, *Poverty, Progress, and Population* (Cambridge: Cambridge University Press, 2004), p.135.

nineteenth-century occupational data available.¹⁸ Coded census datasets for 1851 and 1881 have been provided by the Cambridge Group. For the purposes of this dissertation male occupational structure is studied in these years for comparability with the parish baptism register data which only recorded fathers' occupations.

In order to assess the economic development of Sussex through the industrial revolution it was desirable to use occupational data for the eighteenth century. Following the Marriage Duty Act of 1695 there was a period of more widespread recording of fathers' occupations in parish baptism registers. In Sussex the number of parishes with an unbroken series of occupational data is small relative to the coverage in 1813-20, but nevertheless it is the best available for the eighteenth century. This series has not yet been collected nationally, but I have followed the method of abstraction used by Shaw-Taylor and Wrigley, photographing the baptism registers of thirty-three Sussex parishes at the turn of the eighteenth century before extracting the occupational data from them. This evidence for Sussex c.1700 provides a useful starting point with which the nineteenth century occupational data may be compared.

The codification of the occupational descriptors of both the baptism register and census sources according to the PST system makes comparative work possible.

However, it cannot be forgotten that the three economic sectors used by this classification scheme were not contemporary categories, but constructs designed by Wrigley to make sense of an overwhelming number of occupational descriptors.

Assigning an economic sector to the raw occupational data is not always straightforward. The classification of labourers is problematic, for example, due to the

¹⁸ L. Shaw-Taylor, 'Diverse experiences: the geography of adult female employment in England and the 1851 census' in *Women's Work in Industrial England: Regional and Local Perspectives* ed. N. Goose (Hertfordshire: Local Population Studies, 2007), 29-51, p.41.

disparity between the quality of baptism register and census records. From the mid-nineteenth century, the census defined labourers as 'agricultural' or 'general'. By the PST system, the former are primary sector workers, whilst the latter are secondary. However, the baptism registers c.1700 and c.1817 made no such distinction. The labouring population of Sussex at these dates was large, representing almost half of the adult male workforce c.1817 and a third c.1700. If assigned to the wrong economic sector, labourers could alter the occupational structure of the county significantly.

The potential for distortion that the misallocation of the 1813-20 labouring population could cause is minimised in this dissertation by using a correction based on the ratio of agricultural to non-agricultural labourers found either in the 1831 or 1851 census, depending on the purpose of the analysis. There is a precedent for this approach in the work of Niraj Modha on Middlesex in which he applies an 1831 census ratio to his 1813-20 labourers and divides them across the primary and secondary sectors accordingly.¹⁹ Although it is problematic to assume that the ratio between agricultural and non-agricultural labourers was constant, it is unlikely that the occupational structure of a county could have shifted considerably in the period between c.1817 and 1831. For each parish in Sussex, the ratio between agricultural and general labourers has been calculated and used to distribute the 1813-20 labouring population between the primary and secondary sectors. However, the 1831 census defined non-agricultural labour to include fishing, quarrying, and mining, which are primary occupations by the PST system. In Sussex, where mining and quarrying were not

¹⁹ N. Modha, 'The male occupational geography of Middlesex in the nineteenth century', Part II dissertation for the History Tripos, University of Cambridge, 2006, pp.33-34. [<http://www.geog.cam.ac.uk/research/projects/occupations/abstracts/dissertationmodha.pdf> accessed June 2008].

economically significant, the potential for distortion by the application of the 1831 ratio to the 1813-20 data is limited geographically to isolated coastal towns where the fishing industry was concentrated. For internal analysis of the occupational structure of Sussex c.1817, therefore, the problem has been reduced by increasing the size of the primary sector in towns such as Brighton, Hastings, and Eastbourne to offset the contribution that fishing made to their local economies.

The following chapter analyses the occupational data for the nineteenth century with a view to understanding the economic development of Sussex in relation to the rest of England and Wales. The national figures presented have been produced by Shaw-Taylor, and were calculated using a back-projected ratio of agricultural to non-agricultural labourers derived from the 1851 rather than the 1831 census. This was necessary because the potential for distortion through the misallocation of miners and quarrymen in the 1831 census is greater nationally than it is in Sussex, and more difficult to offset. For comparability, the county-level occupational structure of Sussex in the next chapter follows the same method, applying a ratio derived from the 1851 census to the 1813-20 labourers.

Chapter Five: The occupational structure of Sussex in the nineteenth century in national context

Sussex was the ninth fastest-growing county in England between 1801 and 1851, sustaining a rate of expansion which rivalled the industrial north and the metropolis. Seaside resort development accounts for this exceptional rate of growth, with over thirty percent of expansion concentrated in Brighton alone. Did these resorts have a similarly great influence on the economic structure of the county? This chapter explores the changing occupational structure of Sussex during the nineteenth century. The proportion of the adult male population working in the primary, secondary, and tertiary sectors has been calculated for three reference years: c.1817, 1851 and 1881. The shifting distribution of the workforce across the sectors between these dates provides an indication of the nature of economic development in Sussex in the nineteenth century. Data provided by Shaw-Taylor reveals the occupational structure of England and Wales c.1817, in 1851, and 1871, and enables the contextualisation of figures for Sussex.²⁰ Before moving into the comparative analysis of occupational trends which will form the basis for this chapter, it is important to discuss current thinking about national economic development in the nineteenth century.

The preliminary findings of Shaw-Taylor and Wrigley have important implications for the study of the industrial revolution. That it was a gradual, rather than a dramatic process has been largely confirmed by their hypothesis that distinct ‘waves’ of industrialization occurred between 1500 and 1900. Shaw-Taylor and Wrigley argue that the north-west and London formed the first ‘wave’, which occurred far earlier

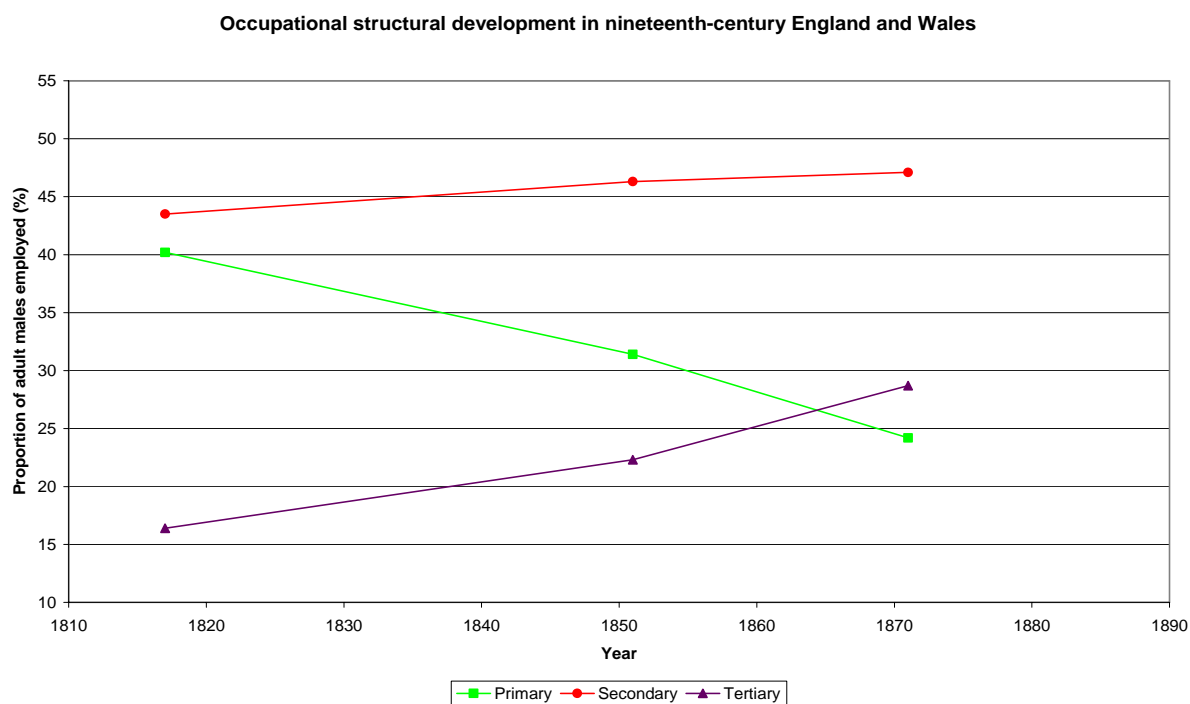
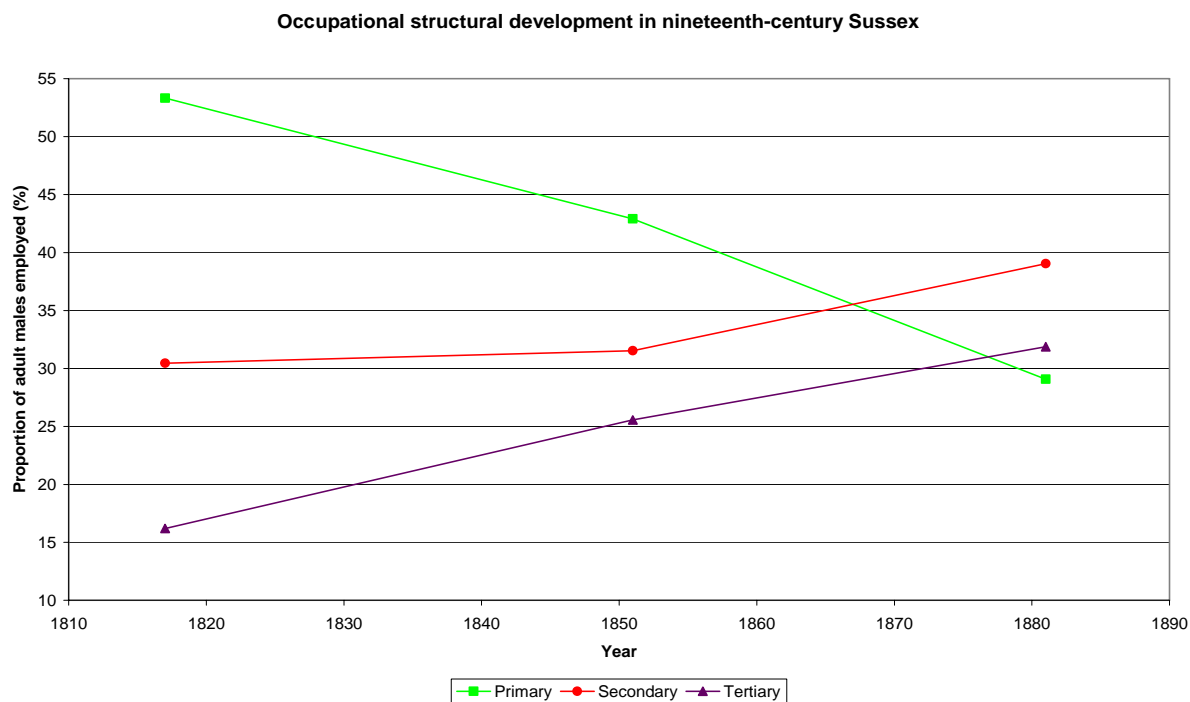
²⁰ I am grateful to L. Shaw-Taylor for providing me with his most recent national occupational figures for *The Occupational Structure of Britain 1379-1911* project.

than the classic industrial revolution of 1760-1830. The second ‘wave’ dates from 1815 when the proportion employed in secondary sector occupations rose in counties we tend to regard as more agricultural.²¹ Sussex formed part of this second wave, although its rate of demographic expansion could rival many of those that industrialised in the first.

Figure 5 is a graph showing the changing occupational structure of Sussex in the nineteenth century, plotting the relative size of the primary, secondary, and tertiary sectors of the economy c.1817, 1851, and 1881. Figure 6 presents the national trend in the nineteenth century for comparison, showing how primary sector employment fell in this period relative to that of the secondary and tertiary sectors. The British economy in the nineteenth century was characterised by improving agricultural productivity and a rising standard of living. As the demand for luxury goods and services grew, a shift of labour from the primary to the secondary and tertiary sectors was encouraged. The tertiary trend-line in Figure 6 illustrates the, ‘dramatic and continuous’ growth of the service sector described by Shaw-Taylor and Wrigley from the late-eighteenth century onwards.²²

²¹ Shaw-Taylor and Wrigley, ‘A Preliminary Report’, pp.39-40.

²² Shaw-Taylor and Wrigley, ‘A Preliminary Report’, p.1.



Figures 5 and 6

As Figure 5 illustrates, Sussex underwent the national shift away from an economy heavily focused on agricultural production to one able to sustain a higher demand for goods and services resultant from an improving standard of living. During the nineteenth century, the proportion of the adult male workforce engaged in the primary sector dropped by half in Sussex, falling from fifty-three to twenty-nine percent between c.1817 and 1881. By this later date, the secondary and tertiary sectors had expanded to employ thirty-nine and thirty-two percent of the workers respectively.

However, comparing Figures 5 and 6 indicates that there were clear structural differences between the national economy and that of Sussex. Throughout the nineteenth century, the proportion of the adult male workforce employed in the primary sector in Sussex was high by national standards. In 1817, the primary sector employed just over half of all working men compared to forty percent in England and Wales. By 1881, this had fallen to twenty-nine percent in Sussex, but remained higher than the national figure of twenty-four percent in 1871. By contrast, the secondary sector was small relative to that of England and Wales. In 1817, thirty percent of male workers in Sussex were employed in the secondary sector compared to forty-six percent nationally. By 1881 this had increased to thirty-nine percent in Sussex, but this was still far lower than the national figure of forty-seven percent in 1871. The disparity between the economic structure of Sussex and England and Wales was restricted to the proportions engaged in the primary and secondary sectors. The tertiary sector represented sixteen percent of the total male workforce c.1817 both in Sussex and nationally, rising to thirty-one and twenty-nine percent by 1881 and 1871, respectively.

The occupational structure of Sussex may be likened to those of the agricultural counties of Buckinghamshire, Bedfordshire, Cambridgeshire, Dorset, Essex, Lincolnshire, Norfolk, Rutland, and Wiltshire. All these regions had in common a dominant primary sector and the development of the secondary sector of their economies during the nineteenth century as part of the second wave of industrialization after 1815.²³ However, they could not challenge the employment levels maintained in the secondary sector in the industrial north-west and the metropolis. By 1817, the proportion of the workforce engaged in production in the industrial county of Lancashire had peaked at just less than seventy percent and was entering a new phase of decline. In the agricultural county of Bedfordshire, by contrast, the relative growth of the secondary sector was almost ten percent between c.1817 and 1881, but at thirty-five percent in 1881 it was still half the size of the sector in Lancashire. The secondary sector in Sussex followed the Bedfordshire trajectory, increasing its relative size by nine percent between c.1817 and 1881 to represent thirty-nine percent of those employed.²⁴

The rate of demographic expansion in Sussex between 1801 and 1851 was unusually high for an agricultural county. After 1801, the seaside leisure industry contributed considerably to the rapid rate of population growth in Sussex. However, the influence of the resort economies on the occupational structure of Sussex is difficult to discern at this level of aggregation. The following three chapters explore the occupational structure of Sussex by parish, focusing on the changing distribution of each sector between c.1817 and 1881.

²³ Shaw-Taylor and Wrigley, 'A Preliminary Report', pp.39-40.

²⁴ Graphs of the occupational structure of agricultural and industrial counties presented by L. Shaw-Taylor, 'The occupational structure of England and Wales in the nineteenth century', Economic History Society, Nottingham 2009.

Chapter Six: The primary sector in Sussex c.1817-1881

Adult male employment in the primary sector in Sussex fell relative to the other sectors of the economy during the nineteenth century. This chapter explores the internal dynamics of the decline by analysing occupational data for c.1817 and 1881 at a high level of disaggregation. The proportion of the adult male working population engaged in primary occupations has been calculated by individual parish and presented as maps. The comparison between them forms the first half of this chapter. The second focuses more specifically on agriculture in Sussex through the use of the Agricultural Returns of 1877, which offer information concerning the structure of landholding and the geography of arable and pastoral farming.²⁵

²⁵ J.T. Coppock, 'Agricultural Census Parish Summaries, 1877 and 1931' (computer file). Colchester, Essex: AHDS History [distributor] 2005.

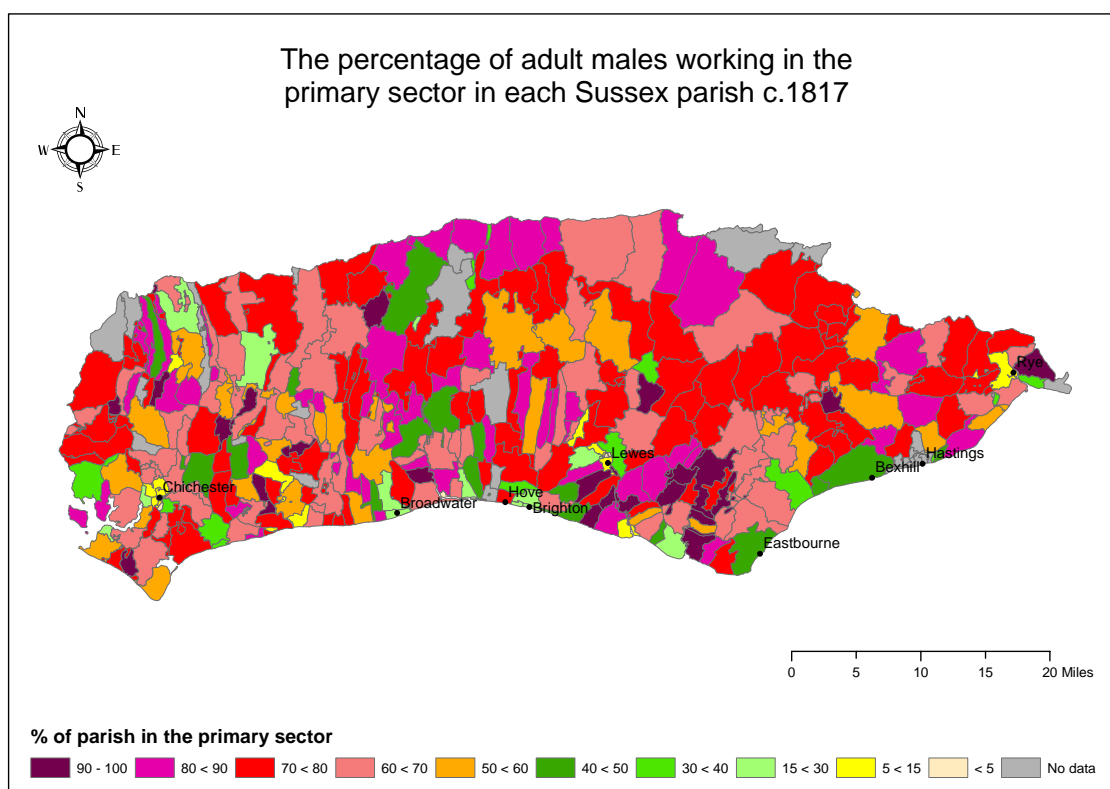


Figure 7

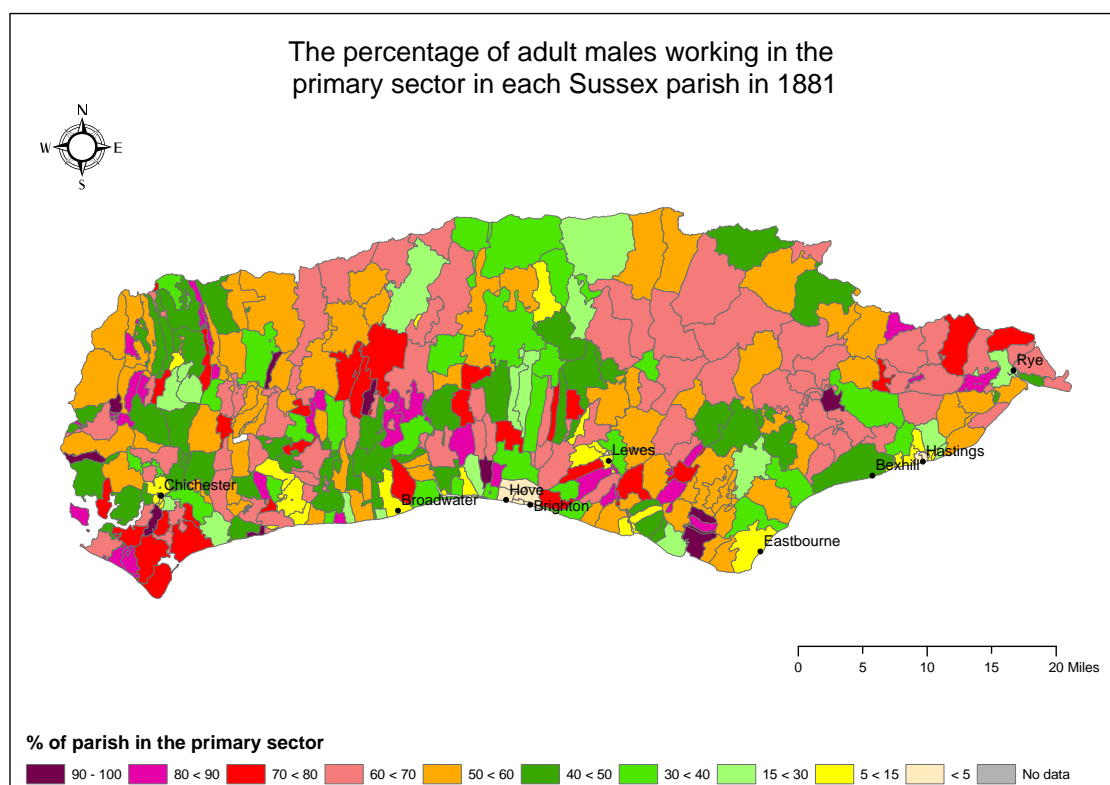


Figure 8

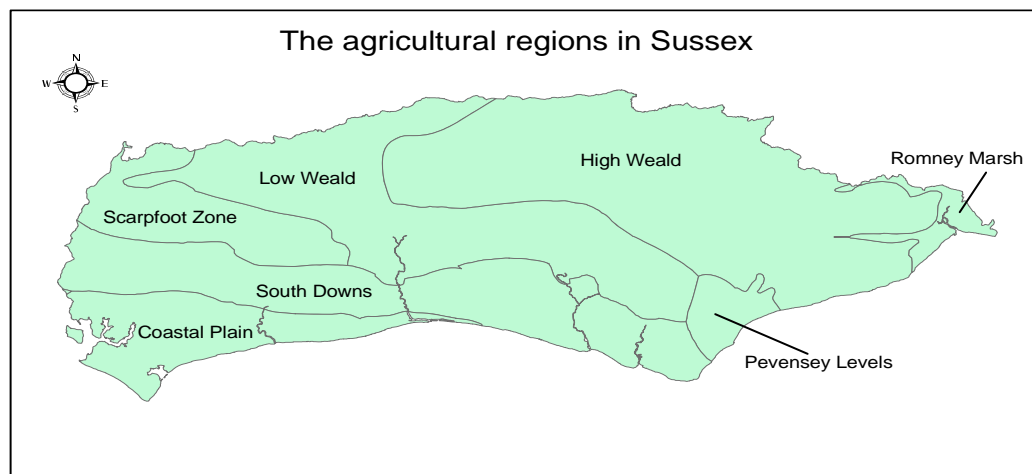
Figures 7 and 8 illustrate the proportion of the workforce in each parish engaged in primary sector employment c.1817 and in 1881, respectively. A more useful way of analysing the changing importance of the primary sector in the Sussex economy between these dates would be to map its spatial concentration. This technique was developed by Shaw-Taylor and would, in theory, highlight the parishes that made the greatest contribution to the county-level growth of the primary sector.²⁶ However, since Sussex parishes are not of equal area the spatial concentration of growth would be distorted by the larger Wealden parishes, which would appear more important than they really were simply because their population was greater. It is, therefore, more reliable to consider trends internal to each parish.

The occupational evidence mapped by Figure 7 is the Rose's Act series for 1813-20, which offers good coverage of Sussex with only a small number of parishes lacking data. The labouring population of each parish in this series has been distributed across the primary and secondary sectors according to the parochial ratios of agricultural to non-agricultural labourers in 1831. This should avoid any distortion of the occupational structure at parish level. Figure 8 maps the occupational data collected from the 1881 census dataset. This has full parish coverage and due to the categorisation of labourers as either agricultural or general at this date, the relative size of the primary and secondary sectors in each parish is reliable.

When comparing the Figures 7 and 8, the drain of labour from the primary sector between 1817 and 1881 is clear. However, the decline did not occur everywhere to the same degree. Unsurprisingly, the seaside resorts including Brighton, Eastbourne,

²⁶ L. Shaw-Taylor, 'Diverse experiences: the geography of adult female employment in England and the 1851 census' in *Women's Work in Industrial England: Regional and Local Perspectives* ed. N. Goose (Hertfordshire: Local Population Studies, 2007), 29-50 at pp.45-50.

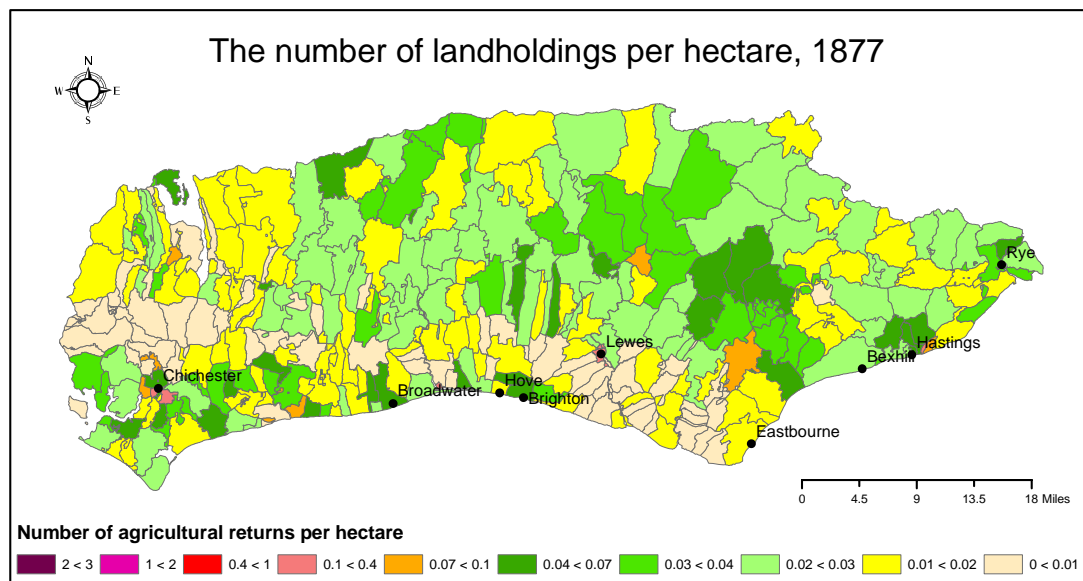
Hastings, and Rye experienced a considerable fall in the relative size of the primary sector due to their continued urbanization and specialization in the service industries in the nineteenth century. However, their expansion did not remove their requirement for subsistence commodities – if anything population growth caused it to increase. The resort towns were sustained by their importation of raw materials, stimulating primary sector employment elsewhere in the county. The hinterlands of resorts such as Brighton and Hastings show evidence of market gardening, orchards, and nurseries in the Agricultural Returns of 1877. The demand for produce may well have stimulated a wider area than this, however. A large area of the interior of Sussex in 1881 was still dominated by the primary sector in 1881, covering the High and the Low Weald, Romney Marsh, the Scarpfoot Zone, and the Coastal Plain (see Figure 9 for a map of these regions). The Agricultural Returns of 1877 can be used to explore economic activity in these areas.²⁷



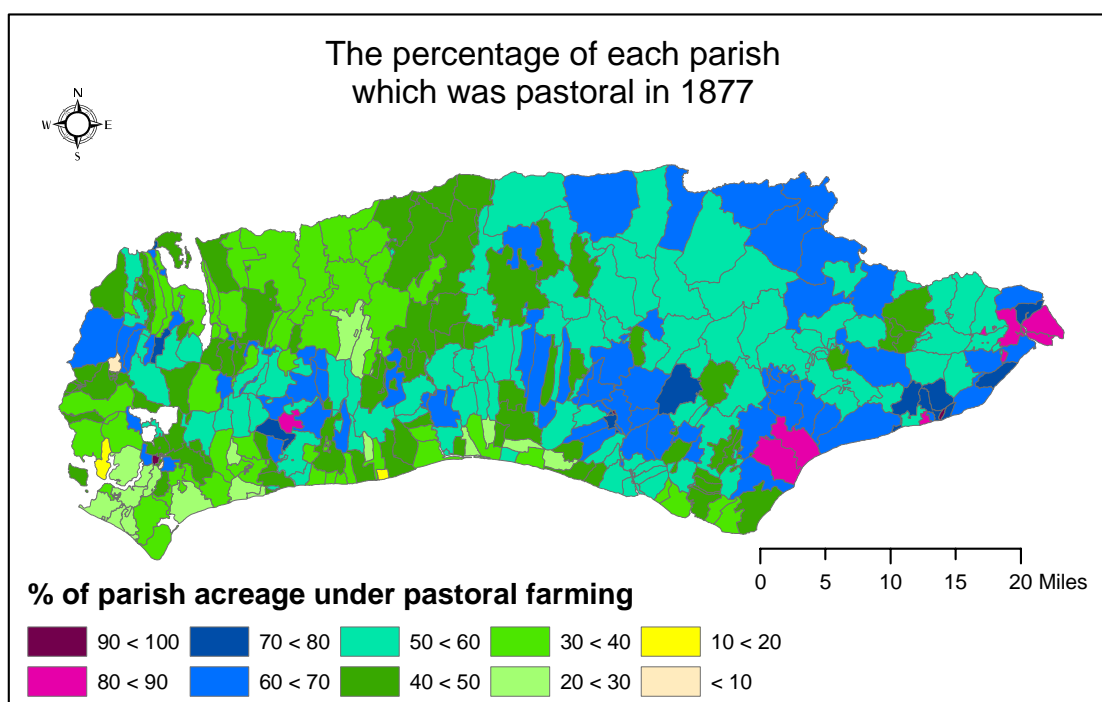
*Figure 9: The agricultural regions in Sussex: High Weald, Low Weald, Scarpfoot Zone, South Downs, Coastal Plain, Pevensey Levels and Romney Marsh.*²⁸

²⁷ Coppock, 'Agricultural Census Parish Summaries' (computer file)

²⁸ GIS shapefile adapted from Natural Character Areas (England), Natural England, 2009.



*Figure 10*²⁹



*Figure 11*³⁰

²⁹ Coppock, 'Agricultural Census Parish Summaries' (computer file)

³⁰ Coppock, 'Agricultural Census Parish Summaries' (computer file)

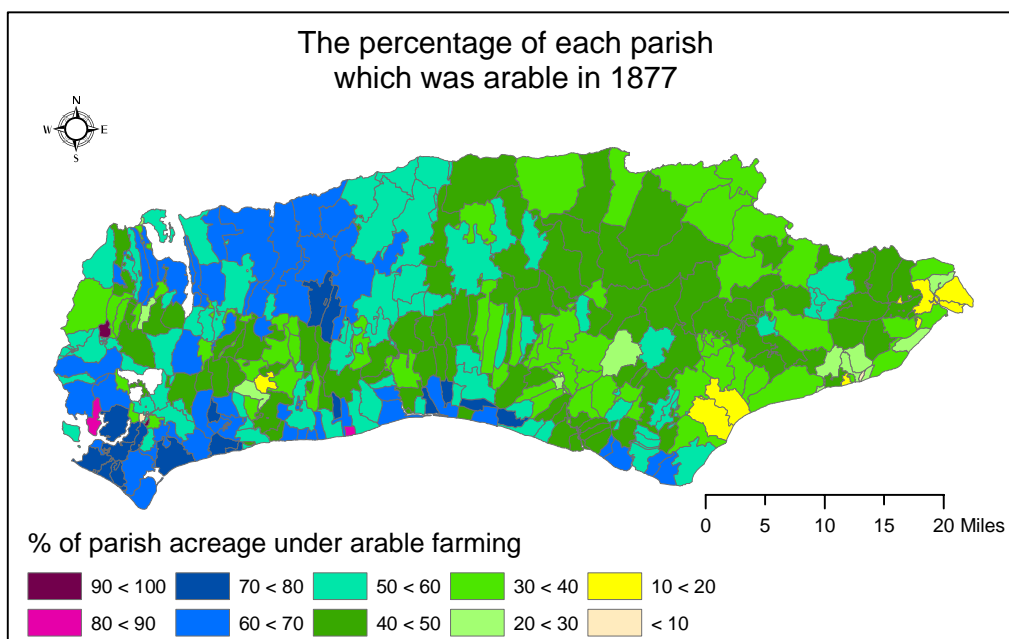


Figure 12³¹

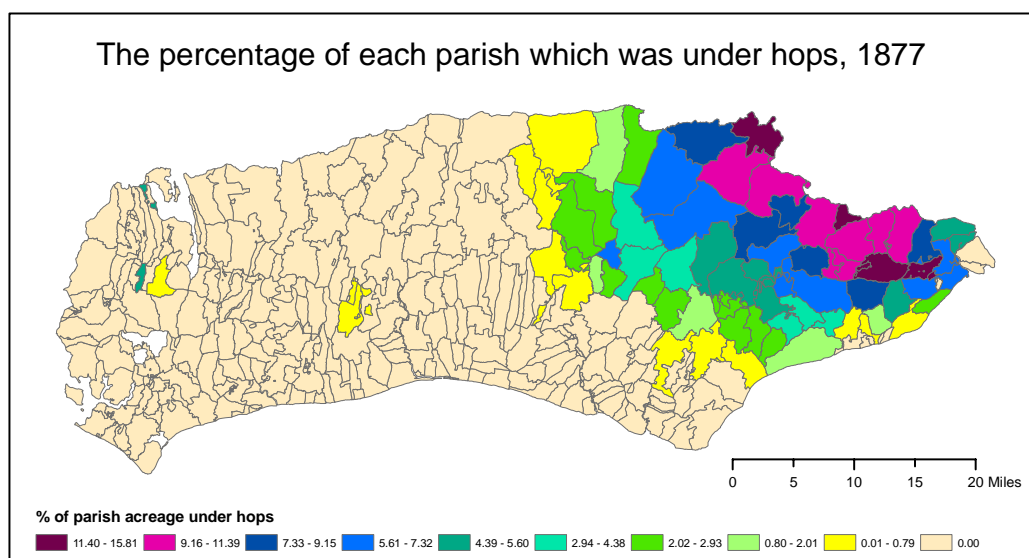


Figure 13³²

³¹ Coppock, 'Agricultural Census Parish Summaries' (computer file)

³² Coppock, 'Agricultural Census Parish Summaries' (computer file)

Figure 10 illustrates the density of landholdings in Sussex in 1877, mapping the number of agricultural returns per parish against the total acreage. The South Downs had the lowest number of returns per acre, suggesting that the average farm size in that part of the county was large. By contrast, the High and Low Weald had a far higher number of returns per acre, indicating that these regions had a considerable population of smallholders. The difference between the landholding structures in the Weald and the Downland is also evident in the work of Brian Short who uses two nineteenth-century forms of parish categorisation to look at landownership in Victorian Sussex.³³ The first is supplied by J.M. Wilson in his *Imperial Gazetteer* of 1870, in which he grouped parishes according to whether they were ‘one estate’, ‘not much divided’, ‘in few hands’, ‘sub-divided’, or ‘much sub-divided’.³⁴ The second is the idea of ‘open’ and ‘close’ parishes, the former tending to be populated by smallholders and the latter by a few large landowners. Short takes the distribution of Sussex parishes by Wilson across his five categories to approximate the number that were ‘open’ and the number, ‘close’ in the later-nineteenth century. He treats those that were ‘one estate’, ‘not much divided’, and ‘in few hands’ as ‘close’, and those that were ‘sub-divided’ and ‘much sub-divided’ as ‘open’. The findings of Short’s work support the pattern shown in Figure 10. The Downland, Scarpfoot zone, Coastal Plain, and Romney Marsh were all dominated by a few significant landowners with over sixty percent of their composite parishes ‘close’ in 1870. By contrast, he found that the wealden parishes were more divided, with seventy percent of those in the High Weald, and sixty percent in the Low Weald ‘open’ at that time.³⁵

³³ B. Short, ‘Landownership in Victorian Sussex’, in *An Historical Atlas of Sussex* ed. Leslie and Short, 98-99 at p.98.

³⁴ Cited by Short, ‘Landownership’, p.99.

³⁵ Short, ‘Landownership’, p.98.

What effect if any did the nature of landownership have on farming in the nineteenth century? Using the Agricultural Returns of 1877, it is possible to calculate for every parish the percentage of the total acreage given over to arable and pastoral farming. Arable land is defined here as being either that which was under crops, left fallow or ploughed; pastoral land was under grass, but this excludes the fallow. Figure 11 is a map showing the proportion of each parish which was pastoral in 1877, whilst Figure 12 presents the proportion that was arable in that year. What is particularly interesting about these maps, is that the High Weald and the South Downs, despite having such contrary landownership structures, were both areas engaged in pastoral farming. The South Downs specialised in sheep-farming during the nineteenth century, for which it was well-adapted because the ‘open’ parishes with wealthy landowners could provide the high capital outlay and large acreage for grazing required. Pastoral farming was pursued in the High Weald rather because the soil was too poor for arable cultivation. The wealden soil was poorly-drained and lacking in minerals, making the region best-suited to cattle-rearing and the cultivation of hardy fodder crops such as oats, according to Brandon and Short.³⁶

Soil quality was fundamental to cropping and stocking decisions in Sussex. Romney Marsh and the Pevensey Levels stand out in Figure 11 as having had the highest proportion of land under livestock in 1877. The waterlogged soils of the marshlands were unsuited to arable cultivation, and these areas focused instead on rearing sheep and cattle respectively. Figure 12 shows the geography of arable farming, and highlights the Low Weald and the Coastal Plain as regions of prominence. Wheat was grown in both places, whilst the latter also cultivated barley. The Low Weald,

³⁶ P. Brandon and B. Short (eds.), *The South East from AD 1000* (London: Longman, 1990), p.321; Brandon and Short, *The South East*, p.202.

however, shared the poor soil quality of the High Weald, which suggests that it was not being farmed effectively.³⁷ The Coastal Plain, by contrast, was well-suited to arable farming due to its argillic brown earth soils, which both drained well and were fertile.

If the pastoral farming of the High Weald was the rational response to infertile soils, is it possible that the proliferation of smallholders in these parishes in the nineteenth century was an inherited social structure? The Weald in the early modern period was a successful industrial region and the destination for a large immigrant population looking for employment. By 1640, Herrup argues that the region had the highest population density of the entire county.³⁸ When deindustrialization occurred during the seventeenth century it is likely that the return by many to subsistence farming would have put considerable pressure on landed resources. Short argues that 'open' parishes had a greater tendency towards overpopulation than 'close' communities because they lacked the authority of wealthy landlords to prevent unsustainable levels of migration. As a result, they also tended to have higher levels of poverty.³⁹ The link between population density and immiseration is also one made by Herrup, who claims that eight of the nine poor houses built in Sussex between 1590 and 1640 were in the Weald.⁴⁰ The fragmentation of landholdings evident in the 1877 returns may well be linked to the overpopulation of the region after its failed industrialization in the sixteenth century. If so, it was further exacerbated by the demographic expansion of Sussex after the mid-eighteenth century, when the population in the Weald again grew causing the invasion of the common land. According to Brandon, the short-term

³⁷ D. Robinson, 'Soils' in *An Historical Atlas* ed. Leslie and Short, 4-5 at p.4.

³⁸ Herrup, *The Common Peace*, pp.15-16

³⁹ Short, 'Landownership', p.98.

⁴⁰ Herrup, *The Common Peace*, pp.15-16.

solution to overpopulation of squatting on the commons led to the foundation of new settlements.⁴¹ This will have contributed to the high number of holdings per acre existent in 1877.

Despite its overwhelmingly pastoral nature, one crop was grown successfully in the Weald as is illustrated by Figure 13. This is a map presenting the percentage of each parish in Sussex under hops in 1877, and it shows clearly that the cultivation of hops was concentrated in the southern half of the High Weald, where it was connected to the Kentish hop area. According to Short, hop farming doubled in the High Weald between 1821 and 1874 and came to represent a quarter of national production.⁴²

Hops were a high risk, but high profit crop, which required the in-migration of a lot of seasonal labour around harvest time. However, there is no clear correlation between the fastest-growing parishes in the High Weald and those which by the 1870s had a good proportion of their acreage given over to hop cultivation. It added to the diversity of the local economy, but did not drive expansion.

To conclude, primary sector employment declined in Sussex, but not universally.

What enabled the proportions engaged in the secondary and tertiary sectors to grow rapidly in the nineteenth century was the ability of the primary sector to produce enough food and raw materials to support a higher population. With the development of transport links throughout the nineteenth century in the form of turnpike roads and railways, areas long-isolated became accessible and commercialised. The Weald is one of the best examples of this, developing a hop industry supplying the national market. As the 1877 Agricultural Returns indicate, agricultural work was well adapted

⁴¹ P. Brandon, *The Sussex Landscape* (London: Hodder and Stoughton, 1974), p.194.

⁴² B. Short, 'Agricultural Regions' in *An Historical Atlas*, ed. Leslie and Short, 96-7 at p.97.

regionally. Therefore, the nineteenth century did not just see the decline of primary sector employment, but the further development of regional specialization and integration in the manner of an advanced organic economy.⁴³

⁴³ E.A. Wrigley, *Continuity, Chance, and Change: The Character of the Industrial Revolution in England* (Cambridge: Cambridge University Press, 1990), pp.34-68.

Chapter Seven: The secondary sector in Sussex c.1817-1881

Between c.1817 and 1881, the share of the secondary sector in adult male employment in Sussex rose by nine percent. This chapter focuses on the internal dynamics of this county-level increase. As in the previous chapter, the discussion uses maps to show the relative size of the secondary sector in each parish c.1817 and in 1881, Figures 14 and 15 respectively.

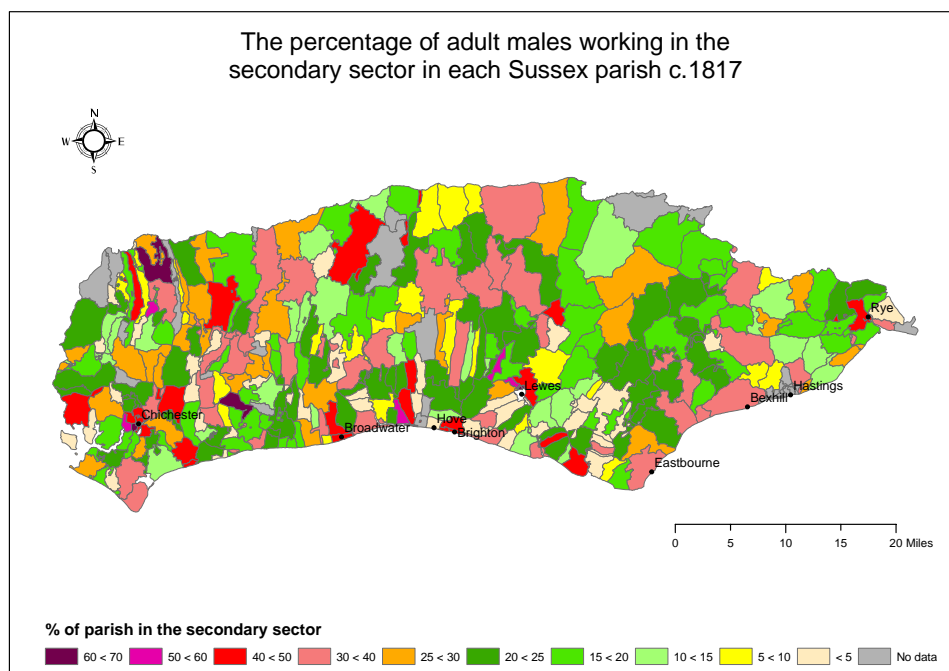
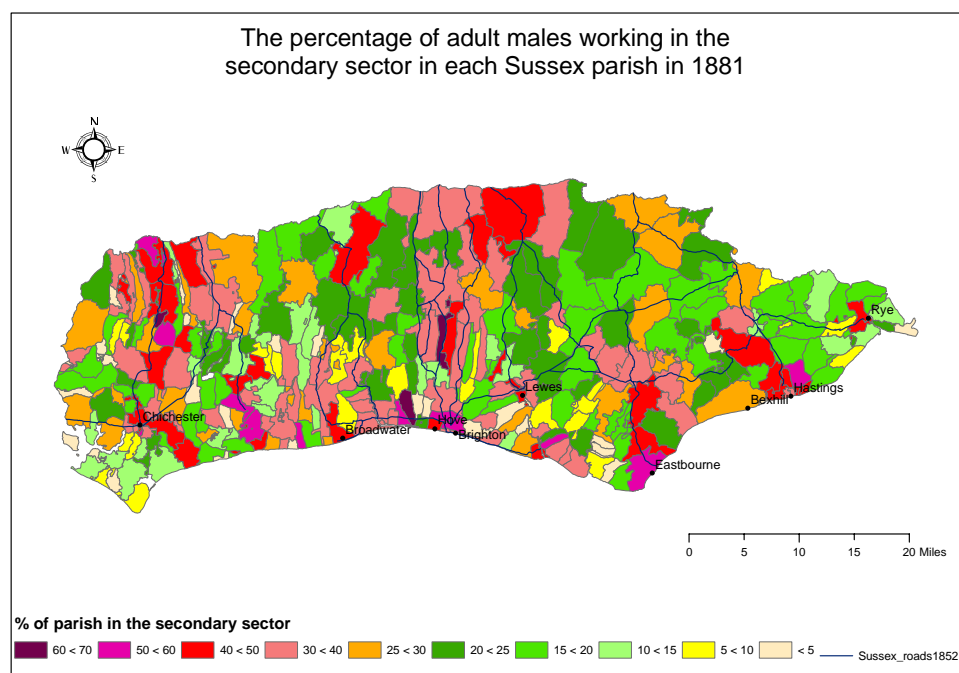


Figure 14

Figure 15⁴⁴

⁴⁴ Routes of roads mapped using a GIS shapefile of Sussex roads in 1852 created by M. Satchell using, 'County Reports of the Secretary of State for the Home Department'.

After general labourer, some of the most commonly-returned occupations in both the 1813-20 baptism register dataset and the 1881 census were trades related to building and construction, including carpentry, bricklaying and painting. During the nineteenth century, bricklaying became a strong contributor to the Sussex economy, employing 4.2% of adult male workers in 1881 compared to 2.5% c.1817. The absolute increase in the number of bricklayers between c.1817 and 1881 was 3,504. Although, by contrast the relative growth in the proportion of the adult male workforce that were carpenters was negligible at just one percent, this still translated to an absolute increase of 2,712 between c.1817 and 1881. Other popular occupations were blacksmiths, shoemakers and tailors, but although their numbers increased absolutely, their relative contribution to the economy declined during the nineteenth century. Shoemakers, for example, fell as a proportion of the adult male workforce from 3.21% c.1817 to just 1.95% by 1881.

In Figure 14, the resort towns are highlighted as having had a comparatively high proportion of their male population working in the secondary sector c.1817. Figure 15 shows that by 1881 this pattern was particularly pronounced. The expansion of the seaside leisure industry in Sussex generated a great deal of the demand for building and construction work during the nineteenth century. With their economies founded upon their status as centres of luxury, resorts invested in ornate squares, assembly rooms, theatres, music halls, and piers. Housing the growing number of residents and visitors was also a necessity which increased the demand for builders. Anthony Dale quantifies the exponential growth in the provision of housing in Brighton in the early nineteenth century using the census. In 1801 he states that 1,282 houses were in

habitation; by 1821 this had risen to 3, 947; and by 1831, 7,770.⁴⁵ A dataset of occupational data in urban Sussex provides evidence of the secondary sector work carried out in Brighton in the mid-nineteenth century. In 1851, five percent of all male workers in Brighton were carpenters; another five percent were bricklayers; and a further three percent were painters, plumbers, or glaziers. These were the second, third and sixth most commonly-returned occupations. This suggests that the secondary sector grew in relative importance in resort economies due to their demands for new and improved facilities and accommodation.

The demand generated by resort expansion also stimulated industrial development elsewhere in Sussex. During the nineteenth century, the production of bricks and tiles for building projects increased significantly. In 1817, sixty-five men were employed making bricks and tiles in Sussex, representing just 0.4% of the secondary sector workforce. By 1851, however, the number employed had risen to 526 and brick and tile production became the thirteenth most commonly-returned secondary sector occupation in the census, representing 1.92% of all secondary sector employees. Molly Beswick uses a map produced by Susan Rowland to show the distribution of brickyards and potteries across the county in the eighteenth and nineteenth centuries in Sussex. This appears to show that they were concentrated in the High and Low Weald, extending down to the coastline around Hastings.⁴⁶ This map is problematic because it illustrates the number of brickyards per parish without taking into account the fact that the area of individual parishes varies significantly. Those in the north-west of the county tend to be much larger and, therefore, the relative importance of the Weald may well be somewhat exaggerated. However, it was certainly a site well-

⁴⁵ A. Dale, *Fashionable Brighton: 1820-1860* (London: Country Life Limited, 1947), p.15.

⁴⁶ M. Beswick, 'Brick, Tile and Pottery Manufacture' in *An Historical Atlas*, ed. Leslie and Short, 106-7 at p.107. Map produced by S. Rowland.

adapted to the production of bricks and tiles, with a pool of labour available and large quantities of wood for the kilns. Beswick claims that the industry developed considerably after c.1840 because the arrival of the railway made it easier to traverse the Weald, which had until then been impassable for much of the year due to the waterlogged clay. As a result, the region was able to produce bricks and tiles which could be transported by rail to the resorts where demand was greatest. That the industry thrived in Sussex is evident in the foundation of the new settlement, Burgess Hill, around the brickyards between Eastbourne and Hastings.⁴⁷

The improvements to the road network in Sussex through turnpiking as well as the introduction of the railway during the nineteenth century were developments which are categorised by the PST system as tertiary. However, transportation may be said to have stimulated the secondary sector in two ways. Firstly, the building of roads, railway lines and railway stations required construction workers. Investment in improved transportation in Sussex was largely focused upon ameliorating external access to the coastal resorts, particularly from London. Therefore, part of the secondary sector workforce living and working in resort towns in the mid-nineteenth century was there to construct the transport infrastructure. A slum quarter developed near the station in Brighton to house the railway workers. Some would have been involved in service provision, but others were labourers engaged in secondary construction projects. From 1852, the town had become an important site for producing steam engines for the London, Brighton and South Coast Railway Company. In 1851, 111 men in Brighton returned their occupation as building engines

⁴⁷ Beswick, 'Brick, Tile and Pottery' in *An Historical Atlas*, ed. Leslie and Short, 106-7 at p.106.

and machines and by the end of the nineteenth century Brian Austin states that the site employed around 2,000 people.⁴⁸

Another way in which transportation stimulated the secondary sector was indirect, providing regions previously isolated with access to wider markets, stimulating industrial development and increasing the employment of labour for production. When the spatial maps of the secondary sector c.1817 and in 1881 (Figures 14 and 15) are compared, regional pockets of industrial development are apparent. These appear to have run from the coastline in the south to the north, along the lines of the main communication routes to London, the turnpike roads and the railway. *The occupational structure of Britain 1379-1911* project led by Shaw-Taylor and Wrigley has data relating to the construction of turnpike roads which can be mapped using Geographical Imaging Software (GIS).⁴⁹ The routes of the main roads in existence in Sussex in 1852 are shown in Figure 15, and may be said to correlate well with areas of high levels of secondary employment in 1881. Unfortunately, data of the railway lines is not yet available in a form which can be mapped in this way. However, the routes traced by Susan Rowland for *An Historical Atlas of Sussex* also correlate with regions of heightened secondary sector development.⁵⁰

To conclude, Sussex was not an industrial county like Lancashire or the West Riding of Yorkshire. The shift evident between c.1817 and 1881 suggests that it was part of the second ‘wave’ of industrialization experienced in the agricultural counties after

⁴⁸ B. Austin, ‘Industrial Sussex’, in *An Historical Atlas*, ed. Leslie and Short, 104-5 at pp.104-5.

⁴⁹ A GIS shapefile of Sussex roads in 1852 created by M. Satchell was made available to me. It derives from the County Reports of the Secretary of State for the Home Department, Session 1851 in the Nineteenth Century House of Commons Sessional Papers, Paper series: Command Papers and Accounts and Papers; Paper numbers: 1458-9; Volume XLIV, p. 207 and p.233.

⁵⁰ J. Farrant, ‘Growth of Communications, 1840-1914’ in *An Historical Atlas*, ed. Leslie and Short, 80-1 at p.81. Map by S. Rowland.

1815.⁵¹ Rather than the development of new secondary industries, Sussex seems to have experienced instead the expansion of those long-established, such as carpentry, bricklaying and brick- and tile-making to fulfil the demands of the new service-centred resort economies. By comparing Figures 14 and 15 it appears that the relative growth in the secondary sector in Sussex was greatest in the coastal resorts, or in the parishes through which the roads and railways ran.

⁵¹ Shaw-Taylor and Wrigley, 'A preliminary report', pp.39-40.

Chapter Eight: The tertiary sector in Sussex c.1817-1881

Shaw-Taylor and Wrigley argue that the tertiary sector grew consistently from the later-eighteenth century in much of the country.⁵² The service sector in Sussex is shown in Chapter Five to have matched this national trend, having increased from 16.2% to 31.9% of the adult male workforce between c.1817 and 1881. This chapter examines the geography of tertiary sector employment by comparing the parochial occupational structure c.1817 and in 1881, focusing in particular on the role of the seaside resorts.

⁵² Shaw-Taylor and Wrigley, 'A preliminary report', p.1.

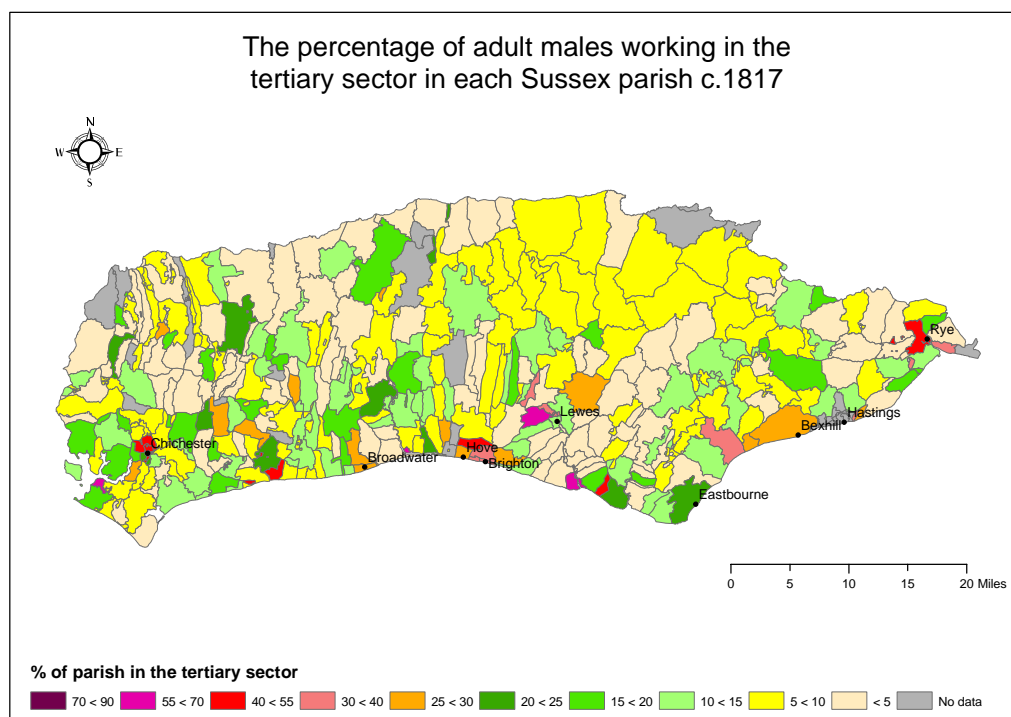
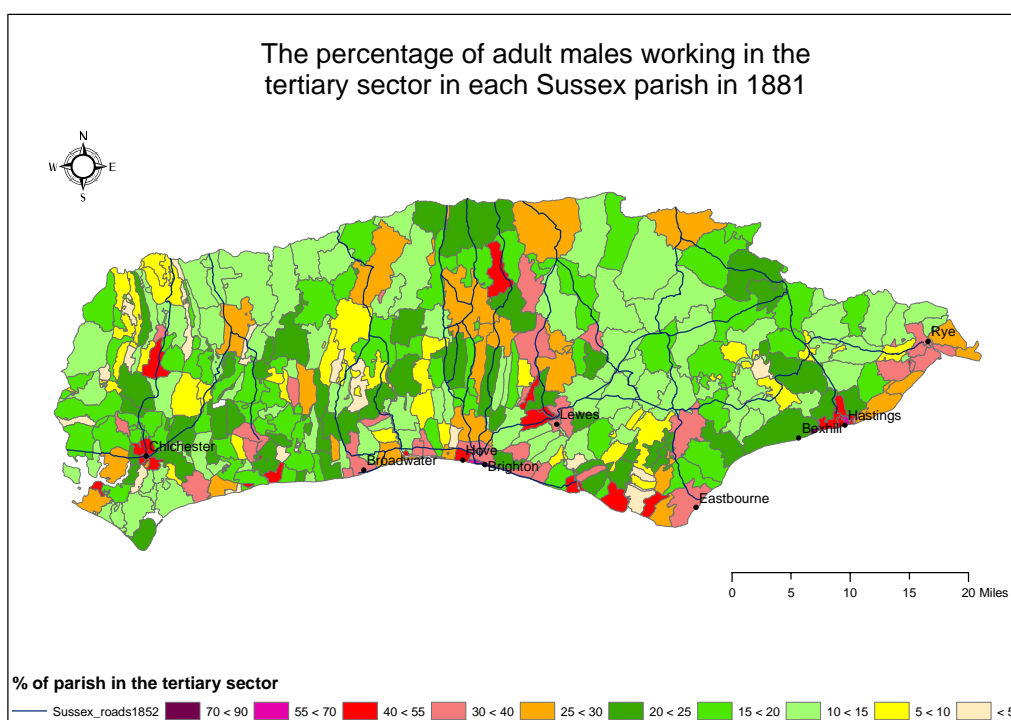


Figure 16

Figure 17⁵³

⁵³ GIS shapefile of Sussex roads in 1852 created by M. Satchell using, 'County Reports of the Secretary of State for the Home Department'.

Figure 16 illustrates the percentage of the working male population in each parish engaged in a service occupation c.1817. It shows that for the vast majority of the county in the early nineteenth century, the tertiary sector made only a small contribution to parochial occupational structure. Only 1.98% of men employed in Sussex were mariners, which was the most commonly-returned tertiary occupation c.1817. Market towns in the interior often had a more developed tertiary sector, such as Chichester and Lewes where the service industries employed 36.89% and 33.25% of the population, respectively. The developing resort economies situated on the south coast such as Rye, Winchelsea, and Brighton also had high levels of tertiary sector employment, at 49.32%, 34.98%, and 34.97% of the adult male workforce.

Figure 17 presents the proportion of the male workforce engaged in the tertiary sector in each parish in 1881 and makes for an interesting comparison with Figure 16.

Between the dates of these two maps, it is clear that the service sector grew considerably across the county. However, by 1881 the coastline was even more clearly defined as a region in which parochial occupational structures leant considerably towards the tertiary sector. Some settlements, such as Brighton, already had this tendency c.1817, whilst for others it developed through the course of the nineteenth century to reach prominence by 1881, as was the case in Hastings. The growth of the tertiary sector in Sussex is related strongly to the expansion of the seaside leisure industry.

Seaside resorts were one manifestation of eighteenth century urban living, catering for the demands of wealthy visitors for recuperation and entertainment. Until the mid-

eighteenth century, inland spas such as Bath and Cheltenham were the focus of this elite trade, but the benefits to the constitution of the air and seawater were advocated widely after Dr Richard Russell's, *Dissertation on the Use of Sea Water in Diseases of the Glands* was published in 1750. As a result, the coastline drew the attention of wealthy Londoners, and due to the proximity of the county to the metropolis, this was focused on Sussex in particular. Brighton benefited directly from the work of Dr Russell because he would send his wealthy patients there for seawater cures from his practice in Lewes. However, it was the royal visits by the Duke of Gloucester in 1765 and the Prince Regent in 1783 which gave Brighton the edge over Bath, according to Anthony Dale. He argues that the Regency period was one of fundamental importance for the town because then, with the presence of the Prince Regent it was not only was it the social focus of the court, but also a political centre.⁵⁴

Visiting Brighton was a socially exclusive experience due to the prohibitive cost of travel in the eighteenth century. The quality of Sussex roads was very poor at this time and led to coachmen demanding to be paid not by the distance travelled, but the time taken, according to Herrup.⁵⁵ With resort development grew the demand for improved roads, which caused turnpike trusts to be established. By 1800, ten to twelve coaches ran daily between Brighton and London, increasing to twenty-eight by the summer of 1811 and sixty-two by September 1822.⁵⁶ Over these years, times reduced and so did costs. This facilitated the wealthy and middling sorts' access considerably, but it was not until the arrival of the railway in 1841 that the seaside became a destination for the London working classes.

⁵⁴ Dale, *Fashionable Brighton*, pp.14-15.

⁵⁵ Herrup, *The Common Peace*, p.19.

⁵⁶ E.W. Gilbert, *Brighton, Old Ocean's Bauble* (London: Methuen, 1954), p.116.

Seaside resorts adapted to the needs of consumers of lower social status and means through what Clark and Houston label, 'cultural pluralism'.⁵⁷ Coastal resorts grew more specialized, catering for a chosen level of demand. Eastbourne and Bexhill were more conservative and focused on the elite market. According to W.H. Johnson, the councils of both resorts passed by-laws to prevent the sort of promenade spectacles seen in Brighton in the later nineteenth century, which included sand art, Punch and Judy shows and juggling.⁵⁸ This supports the belief of Clark and Houston that the adoption of new cultural forms was as much about the town as it was about class - it shows that economic development was not an organic process, but dependent on those in local government.⁵⁹ Brighton was a sprawling resort by the mid-nineteenth century, with a vast population of 66546 people in 1851. As a result, it had the capacity to retain the higher class entertainments desired by aristocratic visitors, whilst also appealing to the day-trippers arriving by train from London.

For 1851 the occupational structure of individual towns in England and Wales has been made machine-readable by the project run by the project led by Shaw-Taylor and Wrigley, *The occupational structure of Britain, 1379-1911*. The only towns for which there is data in Sussex are Brighton and Chichester, which cannot be said to have been representative of the urban areas in the county. However, it is interesting to use this data to compare the occupational structure of Brighton to that of the rest of non-metropolitan, urban England and Wales. Although seaside resorts catered for different social classes, they all had developed tertiary sectors, and therefore the 1851 data for Brighton illuminate resort patterns. In 1851, the proportion of the population -

⁵⁷ P. Clark and R.A. Houston, 'Culture and leisure 1700-1840' in *The Cambridge Urban History of Britain II, 1540-1841*, ed. Clark (Cambridge: Cambridge University Press, 2000), 575-613 at p.604.

⁵⁸ W.B. Johnson, *Seaside Entertainment in Sussex* (Seaford: S.B. Publications, 2001), pp.13-14.

⁵⁹ Clark and Houston, 'Culture and leisure,' pp.602-3.

male and female - engaged in primary sector work was the same in Brighton as it was in the rest of non-metropolitan, urban England and Wales at around four percent. However, the economy of Brighton was more strongly focused on the tertiary sector, which represented 60.84% of the workforce compared to 43.27% elsewhere. As a corollary to this, the secondary sector in Brighton employed a lower proportion than it did elsewhere, at just 35.57% compared to 52.52%. Whilst the tertiary sector was the most dynamic economic sector in Britain from the mid-eighteenth century according to Shaw-Taylor and Wrigley, it was comparatively more so in Brighton – and potentially other resort towns - which had an economic structure unusual for an urban environment in the mid-nineteenth century.

Resorts are also known for their ‘striking female profile,’ according to Borsay.⁶⁰ He cites the case of Bath where in 1831, for every 100 men there were 159 women. Figure 18 is a map showing the number of females per 100 males in each Sussex parish in 1851. When this is compared to the map of the tertiary sector in 1881, there is a good correlation between parishes with a considerable service sector and a female profile, many of which were seaside resorts such as Brighton and Hastings. There are two reasons for this pattern. Firstly, resorts required servants to wait on wealthy visitors. When the occupations of female workers in Brighton are compared with those of female workers in the rest of urban England and Wales in 1851, this is clear. In Brighton, 40.49% were domestic servants (including both general servants and housekeepers), compared with 22.78% in other towns. Secondly, resorts tended to attract a high number of spinsters and widows who paid for the facilities from sums

⁶⁰ P. Borsay, ‘Health and leisure resorts, 1700-1840’ *Urban History of Britain II*, ed. Clark, 775-803 at p.795.

they inherited. In 1851, 11.78% of Brighton women were returned as, ‘annuitants’ compared to just 4.87% in the rest of urban England and Wales.

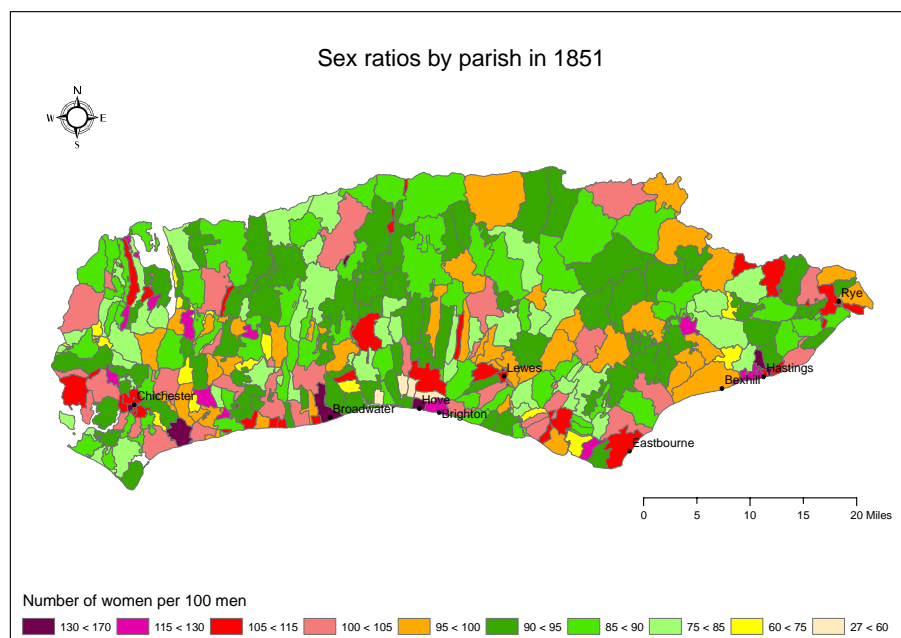


Figure 18

	Primary (%)	Secondary (%)	Tertiary (%)
Brighton: Men	97.87	80.71	39.41
Brighton: Women	2.13	19.29	60.59
Not Sussex: Men	97.22	75.55	49.33
Not Sussex: Women	2.78	24.45	50.67

Table 1: A table comparing the contribution of men and women to the primary, secondary and tertiary sectors in Brighton and Sussex in 1851

Since the sex ratio evidence shows that there was often a surplus of women in areas with service-based economies, it raises the question of whether Figures 16 and 17 may be limiting our understanding of the development of the tertiary sector by focusing only on men. Using the 1851 data on urban England and Wales it is possible to ascertain the contribution that the sexes made to each economic sector. The results are presented in the Table 1. Men carried out over ninety-seven percent of all primary sector work in both Brighton and the rest of urban England and Wales. The secondary sector was also overwhelmingly masculine in both, although slightly more so in the resort. By contrast, over sixty percent of all service sector work was carried out by women in Brighton - ten per cent higher than in the rest of urban England and Wales. More than eighty percent of female workers in the resort were employed in the tertiary sector. Clearly, female influence over the tertiary sector was very high in Brighton, and in future it would be very interesting to analyse the occupational structure of Sussex considering the contribution of both sexes.

There were a number of reasons why the work of women was not considered in this dissertation. Firstly, it would have been impossible to sustain the comparative analysis between c.1817 and 1881 including female occupational descriptors because the baptism data provides employment details of the father only. Secondly, the census is a problematic source of occupational descriptors for women. Many are likely to have been omitted, but the extent of the under-recording is unknown. The 1851 census was collected on the principle that, 'The profession of wives...living with their husbands and assisting them...need not be set down', but this excluded a considerable female

contribution to the economy.⁶¹ Helena Wojtczak investigates the nature of female work in Sussex in her book, *Women of Victorian Sussex: Their Status, Occupations, and Dealings with the Law, 1830-1870*. She reveals that women were involved in a wide variety of jobs, some of which were feminized, such as laundry, running lodging houses and hotels, and assisting in shops. Others inherited their husband's or father's businesses and ended up continuing trades generally considered the preserves of men, such as the two sisters living in Battle in the 1850s who became silversmiths when their father died.⁶² As Shaw-Taylor argues, this does not change the fact that the census is the best source of occupational data available for the nineteenth century.⁶³ However, it was beyond the scope of this dissertation to deal with the issue of female under-recording in the census.

It is arguable that were women considered as well as men in the occupational structure analysis, the importance of the tertiary sector in the seaside resorts may well have been higher. As it is, there is a significant correlation between the tertiary sector and a high rate of population growth in the resorts along the south coast in the nineteenth century, such as Brighton, Eastbourne, Hastings, and Rye. It is no coincidence that the 1851 census was the first to treat resorts as an independent category of settlement, stating that they '...have expanded more rapidly than any other group of English towns'. In Chapter Three the county-level growth ratios for Sussex in 1761-1801 and 1801-1851 were re-calculated leaving out the influence of the phenomenal expansion of Brighton. In the first period the resort alone was not enough to explain away the high rate of growth which made Sussex the fifth fastest-

⁶¹ H. Wojtczak, *Women of Victorian Sussex: Their Status, Occupations, and Dealings with the Law 1830-1870* (Hastings: The Hastings Press, 2003), p.48.

⁶² Wojtczak, *Women of Victorian Sussex*, p.60.

⁶³ Shaw-Taylor, 'Diverse experiences', p.41.

growing county in England. However, in the first half of the nineteenth century, Brighton was responsible for thirty percent of county-level expansion, without which Sussex would not have grown at a rate comparable with the industrial regions. It is, therefore, reasonable to argue that the tertiary sector, through its dominant presence in the fastest-growing towns in the county, was of fundamental importance to the economic development of Sussex in the nineteenth century.

Another aspect of Figure 17 suggests that the growth of the resort towns had a direct impact on the occupational structure of the central interior of Sussex. In 1881, the county seems to have been bisected by a vertical strip of parishes with a relatively sizable tertiary sector in between the Low and High Weald - a feature which is not apparent c.1817. This concentration of the tertiary sector appears to fall along the main communication routes from London to Brighton on the south coast, by both rail and road, rather as the secondary sector did in 1881. The route that the railway took was motivated by the connection of the resorts to the capital. Captain Alderson produced a report in 1837 advising the best way for a railway line to take. In this he stated that in, '...the country passed through...containing neither manufacturing nor mineral districts, the towns present only the usual traffic of an agricultural population, and are, as compared with Brighton, of minor importance.'⁶⁴ Consequently, a direct route was chosen between Brighton and the metropolis, and travellers considered the journey dull. *The Railway Excursionist's Handbook to Brighton* written by R.S. Lundie in 1851 complains that, 'On the Brighton line you see no human habitations save a few cottages.'⁶⁵ Clearly, the resort towns were the most dynamic feature of the Sussex economy in the nineteenth century and warranted high capital investment.

⁶⁴ Gilbert, *Brighton Old Ocean's Bauble*, p.136.

⁶⁵ R.S. Ludie, *The Railway Excursionist's Handbook to Brighton*, 1851 cited by Gilbert, *Brighton Old Ocean's Bauble*, pp.144-5.

This indirectly stimulated the economic development of parishes along the railway line, which shifted from an agricultural occupational structure, to one with a higher proportion of the adult male population in secondary and tertiary sector employment.

Chapter Nine: The occupational structure of Sussex in the eighteenth century

This chapter returns to a county-level analysis of trends in occupational structure, extending the discussion back to the turn of the eighteenth century. As was mentioned in Chapter Four, in order to consider a wider period I have collected occupational data for Sussex c.1700 from the surviving baptism registers of thirty-three parishes which have a period of sustained occupational recording dating from the Marriage Act of 1695. The process of collecting this data for the whole country is underway, but it is not possible to compare the findings for Sussex c.1700 with any national trend currently.

There are a number of problems with the occupational evidence for Sussex at the turn of the eighteenth century. The first of these is its incomplete coverage of the county. Only thirty-three parishes have a surviving series of descriptors sufficiently large to use for analysis with the PST system, compared to the 289 parishes of the Rose's Act series of 1813-20. These thirty-three parishes could be treated as a sample representative of county-level trends, derived as they are by the random chance of survival and occupational recording. However, the surviving registers tend to cover parishes that were largely agricultural in the nineteenth century and would exaggerate the importance of the primary sector c.1700 if assumed to be representative. In order to compare the occupational structure from c.1700-c.1817 directly, therefore, only data from these thirty-three parishes are used at both dates.

As is the case c.1817, the labouring population in the parish baptism registers at the turn of the eighteenth century was not categorised as agricultural or non-agricultural.

A third of the adult male workforce in the thirty-three parishes for which there is data were recorded as labourers. The potential for the distortion of the occupational structure by misallocation of these men is, therefore, high. For the 1813-20 Rose's Act series, a correction based on the ratio of agricultural to non-agricultural labourers in 1831 or 1851 has been applied. To back-project these ratios onto the c.1700 evidence would be problematic because it assumes a constancy in occupational structure which is unconvincing. However, the alternative methodology of treating all labourers as agricultural is no more favourable considering that the deindustrialization of the Weald was coming to an end at the turn of the eighteenth century, according to Short, and there may well have been some secondary sector labourers.⁶⁶ This chapter conducts a sensitivity analysis, investigating the potential for distortion of the occupational evidence by these two approaches to the labouring population c.1700.

Figures 19 and 20 are graphs showing two alternative occupational structures for the thirty-three parishes for which there is data c.1700 and c.1817. In Figure 19, the labouring population of c.1700 has been distributed according to the 1831 ratio of agricultural to non-agricultural labourers in each individual parish. The labourers in Figure 20 however, are all included in the primary sector. Neither can offer more than a simplified suggestion of the overall trends, for the data derives from an unrepresentative sample of parishes and there is no intermediate occupational evidence available between c.1700 and c.1817. Nevertheless, to compare these graphs raises some interesting issues.

⁶⁶ B. Short, 'The de-industrialization process: a case study of the Weald, 1600-1850' in P. Hudson (ed.) *Regions and Industries: A perspective on the Industrial Revolution in Britain* (Cambridge: Cambridge University Press, 1989), 156-174 at p.169.

The occupational structure of thirty-three Sussex parishes c.1700-c.1817 using the 1831 ratio of agricultural to non-agricultural labourers to distribute the labouring population across the primary and secondary sectors c.1700

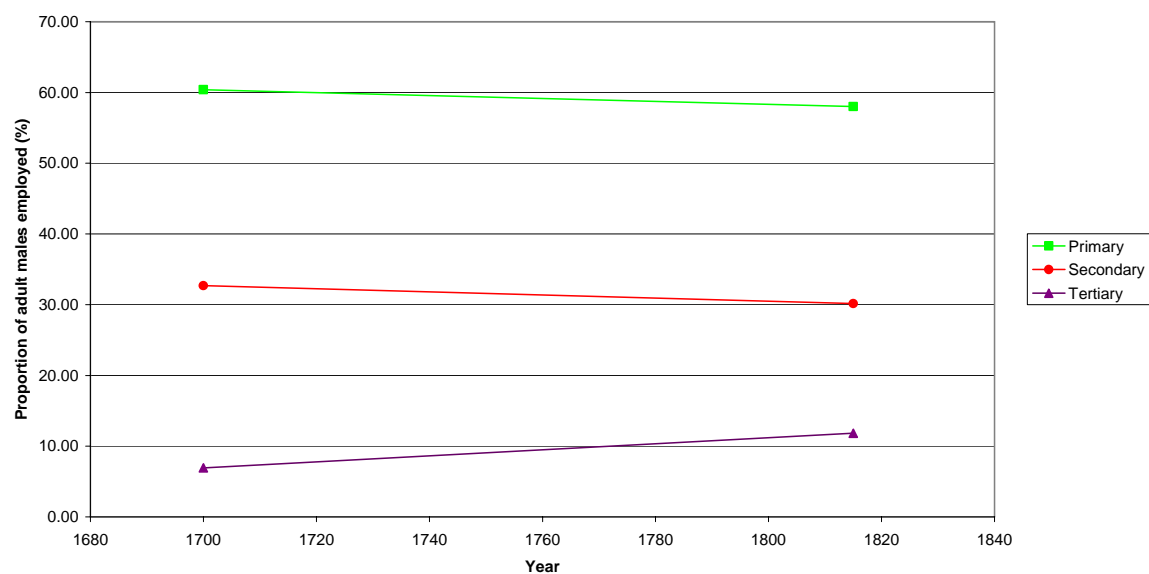


Figure 19

The occupational structure of thirty-three Sussex parishes c.1700-c.1817 assuming all labourers worked in the primary sector c.1700

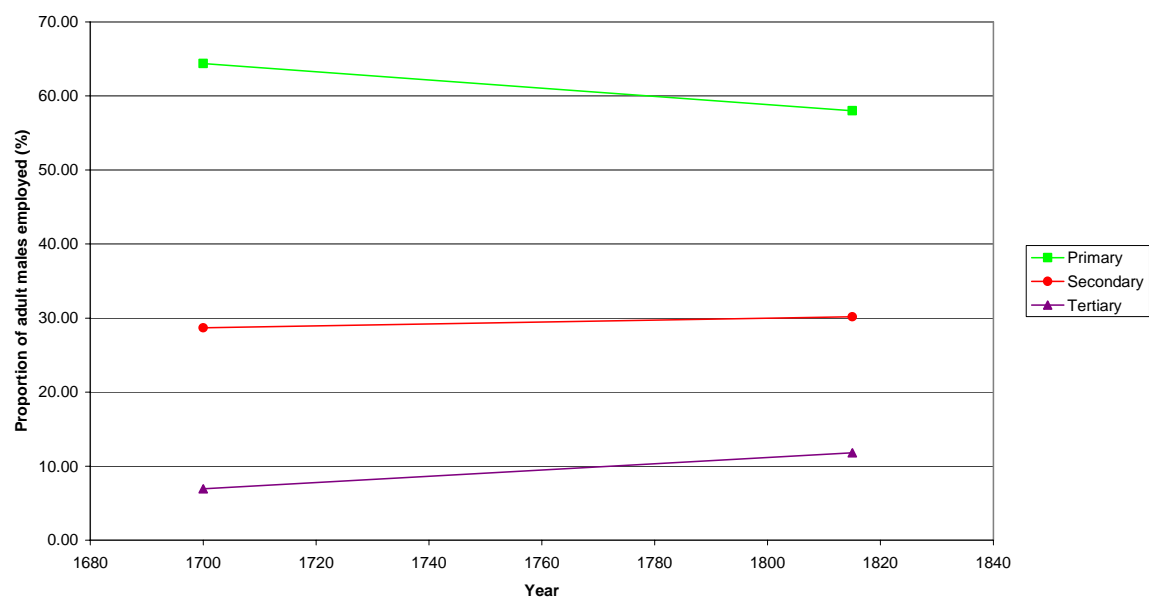


Figure 20

The primary sector fell during the eighteenth century in both graphs, although to a lesser extent in Figure 19 than in Figure 20. It is unsurprising that the proportion engaged in the primary sector is higher in Figure 20 at 64.37% than in Figure 19 at 60.39%, for Figure 20 was calculated based on the assumption that all labourers worked in the primary sector. The fact that the difference between the percentages is relatively small makes it possible to conclude confidently from these graphs a downward trend in the relative importance of the primary sector during the eighteenth century. However, the shift of labour out of the primary sector was modest, and without intermediate data between c.1700 and c.1817 it is difficult to be sure that the decline was sustained throughout the eighteenth century.

The trend in the relative size of the secondary sector is unclear from these graphs. When the labouring population c.1700 is included in the primary sector as in Figure 20, the secondary sector appears to increase from employing 28.70% to 30.16% of the adult male workforce c.1700-c.1817. However, when the 1831 ratio is applied to the c.1700 labourers as in Figure 19, the secondary sector appears to fall from 32.68% to 30.16%. It is likely that Figure 20 under-estimates the relative importance of the secondary sector c.1700, but it does not follow that the downward trend of Figure 19 is more accurate. The disparity between the percentages is again small, suggesting that there was no significant growth or decline in the proportion of the workforce employed in the secondary sector between c.1700 and c.1817.

By contrast, the tertiary sector grew most decisively during the eighteenth century by almost five percent. This supports the finding of Shaw-Taylor and Wrigley that the relative importance service sector increased in all regions in England from the late

eighteenth century. It is not possible to tell without intermediate data exactly when the rise in the tertiary sector began in Sussex, however.

The occupational structure of Sussex in the eighteenth century may well have been influenced by the process of Wealden deindustrialization which was coming to an end by the turn of the eighteenth century. According to Short, this region in the north-west of Sussex was the site of significant industrial activity in the early modern period. During the sixteenth century Sussex built up a reputation as one of the foremost counties for iron production due to its Wealden industry, as well as having success in textiles. However, the county failed to make the transition from proto-industrial to industrialized region in what Shaw-Taylor and Wrigley call the 'first wave', and as a result was rendered unable to compete. During the seventeenth century textile production ceased in the face of rival regions such as West Riding of Yorkshire, and whilst iron-working continued a while longer, it could not survive in Sussex once imported Swedish pig iron undercut local prices.⁶⁷

The deindustrialization of the Weald may have had long-term implications for the economy and demography of the county. When the iron industry was at its height in Sussex at the turn of the seventeenth century, the Weald attracted a considerable migrant population in search of employment. This resulted in the region becoming the most densely populated in the county by 1640 and caused high levels of poverty, according to Herrup.⁶⁸ When the source of employment for these migrants and locals was extinguished, this can only have increased as people were forced to return to farming in a region which would have been comparatively unproductive, according to

⁶⁷ Short, 'The deindustrialization process', p.156; Shaw-Taylor and Wrigley, 'A preliminary report', pp.39-40; Short, 'The de-industrialization process,' p.164.

⁶⁸ Herrup, *The Common Peace*, pp.15-16.

Short, because the Weald had an ‘undeveloped agricultural base’. That the economy was under stress at the time of rapid demographic expansion between 1761 and 1801 is evident in the high proportion of the male population working as labourers at the turn of the eighteenth and nineteenth centuries; a third and a half respectively. It is likely that many would have had to resort to unreliable, seasonal work in the primary sector and faced long periods of reliance on parish relief when the occupational structure which had supported them in the early modern period disappeared with deindustrialization. It is not surprising, therefore, that the Weald was a focal point of the Swing riots in Sussex in 1831, during which men protested about their low weekly wages.⁶⁹

The Old Poor Law may well have contributed to the sustenance of the population of Sussex in the eighteenth century, which could explain why the high rate of expansion between 1761 and 1801 has been shown not to have been purely a resort phenomenon. Certainly in 1818, poor relief was considerable, as this extract from, *The Quarterly Review* which published ‘Reports from the Select Committee on the Poor Laws. July 1817. March 1818.’ shows:

‘Of all the counties Sussex is the most burthened with poor-rates, having been rated at 7s. 8d. on the pound in 1813...this county is also known to pay more in tythes than any other, (Hampshire excepted) that being a charge of 3s. 8d. on the rental of the land...Thus, the agriculture of Sussex, and no county is

⁶⁹ Brandon and Short (eds.), *The South East Since AD 1000*, p.235.

more entirely agricultural, has probably been burthened with about 13s. 4d. on the pound',⁷⁰

That Sussex had such high poor relief expenditure and a rapid demographic growth rate supports the connection made by Malthus between generous outdoor relief and the likelihood of populations expanding beyond their resources.⁷¹ However, further examination of the eighteenth century is required to be sure of internal change. What remains unclear is why it was that the population density of the county between 1700 and 1751 declined and then recovered by 1801 as found by Wrigley.⁷²

⁷⁰ 'Reports from the Select Committee on the Poor Laws. July 1817. March 1818.', *The Quarterly Review*, 1818.

⁷¹ T.R. Malthus and A.G.N. Flew, *An Essay on the Principle of Population and A Summary View of the Principle of Population*, (Harmondsworth: Penguin Books, 1993).

⁷² I am grateful to L. Shaw-Taylor of the Cambridge Group for the History of Population and Social Structure for allowing me to use this unpublished map, 'England county population density per square mile 1600-1801', the data for which was produced by E.A. Wrigley, also of the Cambridge Group.

Chapter Ten: Conclusion

The economic development of Sussex between c.1700 and 1881 is best evaluated when divided into two periods, c.1700-1801 and 1801-1881. As Wrigley's county-level population growth ratios demonstrate, both periods were characterised by rates of demographic expansion high by national standards. Between 1761 and 1801 Sussex was the fifth fastest-growing county in England, and from 1801-1851 it was ninth.⁷³ However, the structure of the economy developed significantly during the nineteenth century, supporting population growth of a different nature to that in the eighteenth.

For the nineteenth century, population totals are available in the census to the level of the parish. Wrigley has produced population estimates based on marriage frequency for the second half of the eighteenth century, but it is difficult to explore the internal dynamics of growth at the level of the rape. Having counted the number of marriages contracted annually between 1754 and 1799 in the 139 parishes that made up the rapes of Lewes, Pevensey, and Hastings, as well as Lewes Borough, it has been possible in this dissertation to further disaggregate Wrigley's estimates to the level of the quasi hundreds in the east of the county. This has improved our understanding of population growth before 1801, and shown that it would be feasible in the future to carry out this exercise not only for the rest of the county of Sussex, but also in other regions.

Analysing the internal character of demographic expansion in Sussex between 1761 and 1851 using the quasi hundred population estimates suggests two types of growth

⁷³ Revised version of county-level population figures by Wrigley produced since his article, 'English County Populations'.

occurred; the swift development of resorts along the coastline and the even rise in population density in the interior. By recalculating the population growth ratio for Sussex without Brighton, it is clear that the rapid rate of expansion in the period 1761-1801 was not purely a resort phenomenon. Yet, between 1801 and 1851, Brighton contributed thirty percent of population growth in the county as a whole and was responsible, along with other seaside towns, for the rapid growth rates of the nineteenth century. This suggests considerable structural change occurred in the Sussex economy after 1801, and this has been investigated through the use of occupational data.

Occupational evidence for the nineteenth century has been collected by the Cambridge Group for the History of Population and Social Structure for their ongoing project, *The occupational structure of Britain 1379-1911* led by Shaw-Taylor and Wrigley. Access to this data was provided for this dissertation, and in addition to this, I have collected occupational evidence from thirty-three parishes in Sussex c.1700 which has made it possible to compare the occupational structure existent at the turn of the eighteenth century with that of the nineteenth. This enables the study of the economic history of Sussex over a longer period, which is useful in the light of the gradualist interpretation of development in the industrial revolution. As a result, it has been possible to find evidence in Sussex of the growing importance of the service sector seen in the other regional studies carried out by Shaw-Taylor and Wrigley. This adds weight to their claim that tertiary sector development was dynamic across England and Wales from the later-eighteenth century.⁷⁴

⁷⁴ Shaw-Taylor and Wrigley, 'A Preliminary Report', p.1.

The study of the occupational structure of Sussex in the eighteenth century has proved interesting because it is unable to account for the phenomenal rate of demographic expansion between 1761 and 1801. Sussex was overwhelmingly agricultural in the eighteenth century, and showed little sign of structural development before 1801. One possible reason for this is that the county suffered social and demographic dislocation after the early-modern deindustrialization of the Weald, which left the region overpopulated, with a large number of labourers returning to agriculture and resorting to poor relief. It is likely that population growth in the later-eighteenth century was supported by the Old Poor Law, which was generous in its outdoor relief to the able-bodied unemployed. Further investigation of poor relief in Sussex is therefore needed. That economic change cannot be explored solely through occupational structure is something which has been acknowledged by Shaw-Taylor and Wrigley, who state that their work should be used in conjunction with a broad range of approaches to the history of the industrial revolution.⁷⁵ In the case of Sussex, the absence of an occupational structure capable of explaining population growth in 1761-1801 provides a stimulus for further research into poor relief in the county.

Demographic expansion in Sussex in the period 1801-1851 can be explained by occupational structural change, however. Poor relief in the nineteenth century grew far less generous after 1834 with the implementation of the New Poor Law. This severely limited the availability of outdoor relief to the able-bodied. The fact that population expansion in this period remained rapid despite this is a sign that the economy of the county had developed by this point in a way which enabled the population to be supported effectively through employment. Between 1801 and 1851,

⁷⁵ Shaw-Taylor and Wrigley, 'A Preliminary Report', p.38.

the growth of coastal resort towns contributed significantly to county-level demographic expansion in Sussex. This is reflected in the rising relative importance of the secondary and tertiary sectors of the economy that created the physical environment and provided the services for wealthy visitors to enjoy.

Throughout the nineteenth century the occupational structure of the county was driven by the demand centred on the resort towns. Improved transportation links connecting London with the coastline stimulated the interior of the county indirectly. The Weald, a region long-isolated by waterlogged roads was able to develop a hop industry of national importance, for example. The occupational structure of parishes situated along the route of the railways and roads grew more varied with the trade passing through. Secondary industries were also stimulated directly by the development of the seaside, such as brick- and tile-manufacture in the Weald which supplied many of the construction projects linked to resort expansion. This period saw the monopoly that the primary sector had had since the county deindustrialized in the seventeenth century begin to lose ground to the secondary and tertiary sectors. Therefore, the resorts may explain the majority of demographic expansion between 1801 and 1851, but their growth was facilitated by the specialization and integration of the rest of the county.

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 Burton with Coates, 1703-1705
 Chichester St Olave, 1695-1699
 Chichester St Peter the Less, 1699-1700
 Chichester St Peter the Great, 1699-1700
 Cuckfield, 1699-1703, 1708, 1790-1800
 Didling, 1739-1745
 Donnington, 1699-1702
 Duncton, 1701-1706
 Egdean, 1699-1742
 Fernhurst, 1700-1706
 Fittleworth, 1701-1745
 Heyshott, 1698-1706
 Horsted Keynes, 1695-1707
 Hunston, 1699-1703
 Hurstpierpoint, 1700-1706
 Linchmere, 1703
 Lodsworth, 1702-1705
 Petworth, 1696-1702
 Poling, 1699-1706
 Rusper, 1696-1706
 Slaugham, 1701
 Slinfold, 1708-1713
 Stedham, 1698-1706
 Steyning, 1701-1706
 Storrington, 1701-1703
 Tortington, 1700-1711
 Trotton, 1698-1799
 Upper Beeding 1699-1706
 West Thorney, 1701-1703.

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 East Dean near Eastbourne, 1698-1705
 Eastbourne, 1704-1705
 Ewhurst, 1698-1706
 Glynde, 1777-1799

Iden, 1698-1709
 Lewes St John the Baptist Southover, 1716-1718
 Selmeston, 1697-1705
 Telscombe, 1699-1709
 Ticehurst, 1702-1720
 Winchelsea St Thomas the Apostle, 1700-1701.

I also counted the number of marriages per year that were recorded between 1754 and 1799 in the parish registers for the 52 parishes of the rape of Pevensey; the 39 parishes of the rape of Lewes; the 42 parishes of the rape of Hastings; and the 6 parishes of Lewes Borough:

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- Database of the 1831 Census of occupations in Sussex parishes.
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- Database of the 1851 Census of occupations in urban England and Wales.
- Database of the 1881 Census of occupations in Sussex.
- Revised county-level population estimates created by Tony Wrigley of the Cambridge Group

This database was created for me by Peter Kitson of the Cambridge Group for the History of Population and Social Structure from my abstraction of occupational descriptors from surviving parish registers c.1700:

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