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RURAL SETTLEMENT AND POPULATION IN ENGLAND
BETWEEN 1676 AND 1851:

AN EXPERIMENT IN HISTORICAL GEOGRAPHY

BY

ROSALYN J. LEIGHTON

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ABSTRACT

RURAL SETTLEMENT AND POPULATION IN ENGLAND BETWEEN 1676 AND
1851: AN EXPERIMENT IN HISTORICAL GEOGRAPHY

BY

ROSALYN J. LEIGHTON

SUBMITTED FOR THE DEGREE OF MASTER OF ARTS

IN THE YEAR 1995

Any observant traveller will see within Britain contrasts in rural settlement, with some landscapes dominated by villages and others by single farmsteads. Such contrasts were observed by topographers as early as the Elizabethan period and are deep rooted. This study examines on a very broad scale, in part national, in part local regional, the linkages between settlement and population. To complicate matters, population is examined at three dates, 1676, 1801 and 1851. This demands that the analyses consider correlations between the real levels of population, the spatial patterns within these distributions, the dynamics of change and the evolving landscape of settlement. Both synthesis and analysis are involved: the synthesis of work by other scholars to generate a national view in the first part of the study, and in the second part, the analysis of several local regional contexts. The conclusions are summarised in a model, highlighting the broad through time links between settlement and population.

THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF DURHAM
FOR THE DEGREE OF MASTER OF ARTS

1995

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CHAPTER ONE

CHAPTER ONE

INTRODUCTION

"... a great deal of work has still to be done on the elementary facts about the human geography of our country in its historical dimension."¹

Written by Peter Laslett, in 1965, in his book, *'The World We Have Lost'*, this statement still stands today. So much still needs to be established or proved about our society's past, especially ways of life and how they affected the development of the country as a whole. Some of these, perhaps only lingering for a few centuries, have nevertheless left clear traces of their former presence fossilised in the landscapes we see today. Changes in society are reflected in the ancient field systems still detectable on the moorlands, in the forts of Roman occupation and deserted medieval villages such as Wharram Percy. This visual evidence of Britain's social history stretches through the centuries, to the more recent sites of industrial archaeology, such as at Ironbridge and Coalbrookdale, two of the most important seats of the 'Industrial Revolution'.

One of the most fundamental questions we can ask of our geographical past is based upon this observation: what linkages exist between the varied settlement patterns seen within British landscapes and the patterns of population growth and decline? As population increases, new settlements and houses are created. Therefore, diverse bonding factors must exist between the two, assuming that increases cannot always be accommodated within the existing building stock. The precarious circumstances of the settlement pattern, especially the nucleated village, are summed up by M. Beresford:

"A village was as mortal as a man."²

Any archaeologist or historical geographer becomes aware that settlements have come and gone with great ease throughout history, depending on the needs of the population at a given time. These needs, which have changed constantly with time and changing tastes, have also played a large part in influencing the distribution of settlement. Examples of such changes are many. The enclosure movement brought about a degree of settlement dispersion in previously highly nucleated areas. Conversely, areas where dispersion had always been dominant, saw the superimposition of a far more nucleated pattern with

¹P. Laslett, *The World We Have Lost* (London: Methuen, 1965), p. 54.

²M. Beresford, *The Lost Villages of England* (London: Lutterworth Press, 1954), p. 151.

the advent of large scale industry. New industrial settlements sprang up to satisfy the need for an 'on the spot' supply of labour, whilst the movement of migrants from country to town, in a bid to find gainful employment, inevitably left at least some empty houses behind. Underlying all physical changes in the settlement pattern, we see the ever-changing needs and desires of the country's population.

As the title suggests, this thesis is very much an experiment covering the relationship between settlement and population. Consequently, it should be stressed that the majority of the maps used are by no means final versions. The aim of this study is to explore broad correlations between these two major distribution patterns and highlight the most important of the causal linkages. Finally, in Chapter Seven, a model of these relationships is postulated, with the intention that it can be used in further studies of this kind.

The study is approached from both a national and a regional point of view. At the national level, data on nucleated and dispersed settlement, terrain, farming types, deserted villages and population density are considered and some preliminary relationships are established between them. This is mainly based in one 'time plane', (the mid-nineteenth century), using population data for 1851. However, the dynamics of change are also addressed to an extent, especially concerning the distribution of population from the seventeenth century through to the mid-nineteenth century.

Causal factors underlying the distributions of settlement and population can be separated into two main categories, primary and secondary. Primary factors, e.g. elements of influence that are not human induced, are few. Terrain is the main primary factor, which is of course strongly connected to altitude, orography and climate. Although strictly a secondary causal factor, farming can be considered to be closely related to this congregation of primary forces, as it is greatly influenced by the land. However, as time has progressed, human society has had a far greater control over farming, with the development of improvements in techniques. Secondary factors are highly dependent on man, e.g. landownership, industrial development, migration, enclosure and transport. The causal factors considered here at the national level are mainly primary factors, with some excursion into secondary. The backbone of this initial study is work by J.C. Dewdney and B.K. Roberts, although distributions mapped by others, e.g. J. Thirsk, F.V. Emery and R. Lawton and C.G. Pooley are also utilised.

With some broad correlations established, the focus of the study then moves to the regional level, in order to allow a more detailed examination of the population and settlement data. The word 'regional' is used in this thesis to describe study regions that cover at least two counties or ridings. Three study regions are analysed: the West Midlands, Cumberland and Westmorland and the three ridings of Yorkshire. The dimension of temporal change becomes much more of a key

element here and causal factors behind the two main distributions of population and settlement are considered in far greater depth, including primary and secondary factors.

Data used at the regional level is much more varied. Changes in the population between the dates of 1676 and 1851 are used as a starting point for the three chosen study regions. Three sets of data are used for this: returns from the 1851 and 1801 censuses and the Compton Census of 1676. Scholars such as T.H. Hollingsworth have called for a greater use of the ecclesiastical censuses, in preference to parish registers.³ Reliability has always been a question of the utmost importance, when dealing with surveys that were really only initiated to obtain information about religion. However, A. Whiteman's painstaking work on the 1676 figures allows them to be used with some confidence.⁴ The similarity of the distribution patterns that emerge, to those produced from the 'more reliable' 1801 and 1851 censuses, is striking. This speaks volumes in favour of the continued use of this particular ecclesiastical census in the study of historical demography.

Patterns produced on population maps plotted for the three census dates are analysed from a static and a dynamic point of view. The relationship of these distributions to the settlement pattern and factors behind both of these are then considered. As already mentioned, both primary and secondary factors are investigated and those identified as the most influential are discussed in further detail. The findings from these three regional studies are strikingly similar. Hence, the conclusion culminates in the production of a model, highlighting the relationships of population distribution, settlement patterns and the factors that link them.

³T.H. Hollingsworth, *Historical Demography* (London, 1969).

⁴Anne Whiteman (ed.), *The Compton Census of 1676*, The British Academy's Records of Social and Economic History, New Series X (Oxford: Oxford University Press, 1986).

CHAPTER TWO

CHAPTER TWO

THE NATIONAL PICTURE

This chapter seeks to establish a broad understanding of the national distribution of population and settlement, in the mid-nineteenth century. The division of the country into three main settlement provinces is crucial to observations made and questions raised (Figures 2.1 & 2.2)¹. The distribution of settlement, both nucleated and dispersed, is first considered. Comparisons are then made with other maps of importance, including the physical landscape, farming types and deserted villages, in order to ascertain how far these distributions control or are controlled by the settlement pattern. The distribution patterns of population density for 1851 are examined, using the work of J.C. Dewdney and B.K. Roberts, and possible relationships between these patterns and those already established earlier in the chapter are explored. The dynamics of change are then considered, using three maps produced by other scholars for national population distribution. These range from estimates for the beginning of the seventeenth century to the situation in 1851. Finally, questions are raised, to be dealt with in more detailed examinations at the regional level in Chapters Four, Five and Six.

'Province' describes a definite sphere of action, an area with its own identifiable characteristics. England and Wales have been divided by B.K. Roberts into three main settlement provinces: Central, South-Eastern, and Northern and Western.² Here, we are more concerned with the content of the provinces, rather than the question of the exact delineation of their boundaries. A glance at the map of nucleated settlement distribution shows that the three main areas outlined as separate settlement provinces stand out, even without the visual aid of the drawn boundary (Figure 2.3). The Central Province, also termed the "Great Village Belt", is beautifully distinct in contrast to the provinces on either side, where far fewer nucleations are found. However, a closer examination of the pattern suggests the presence of further definable areas, sub-provinces, wholly to be expected when working with tracts of land of this size.

As well as the great concentration of nucleations in the Central Province, which is by no means internally homogeneous,

¹These are discussed in more detail below.

²This work, as yet unpublished, was undertaken for English Heritage as part of their Monument Protection Programme. Dr S. Wrathmell is a co-worker dealing with the archaeological dimension.

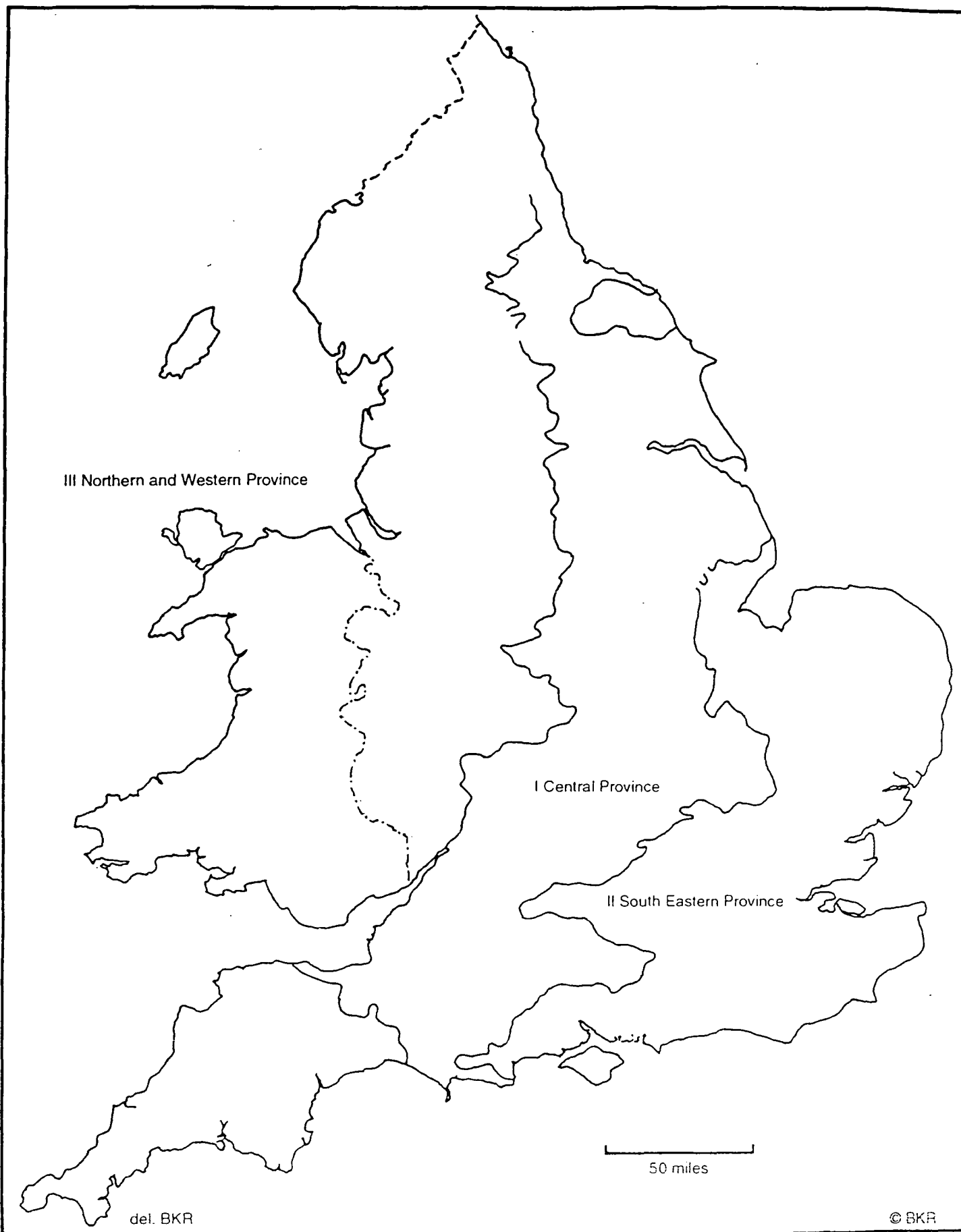


Figure 2.1 Settlement provinces in England and Wales.

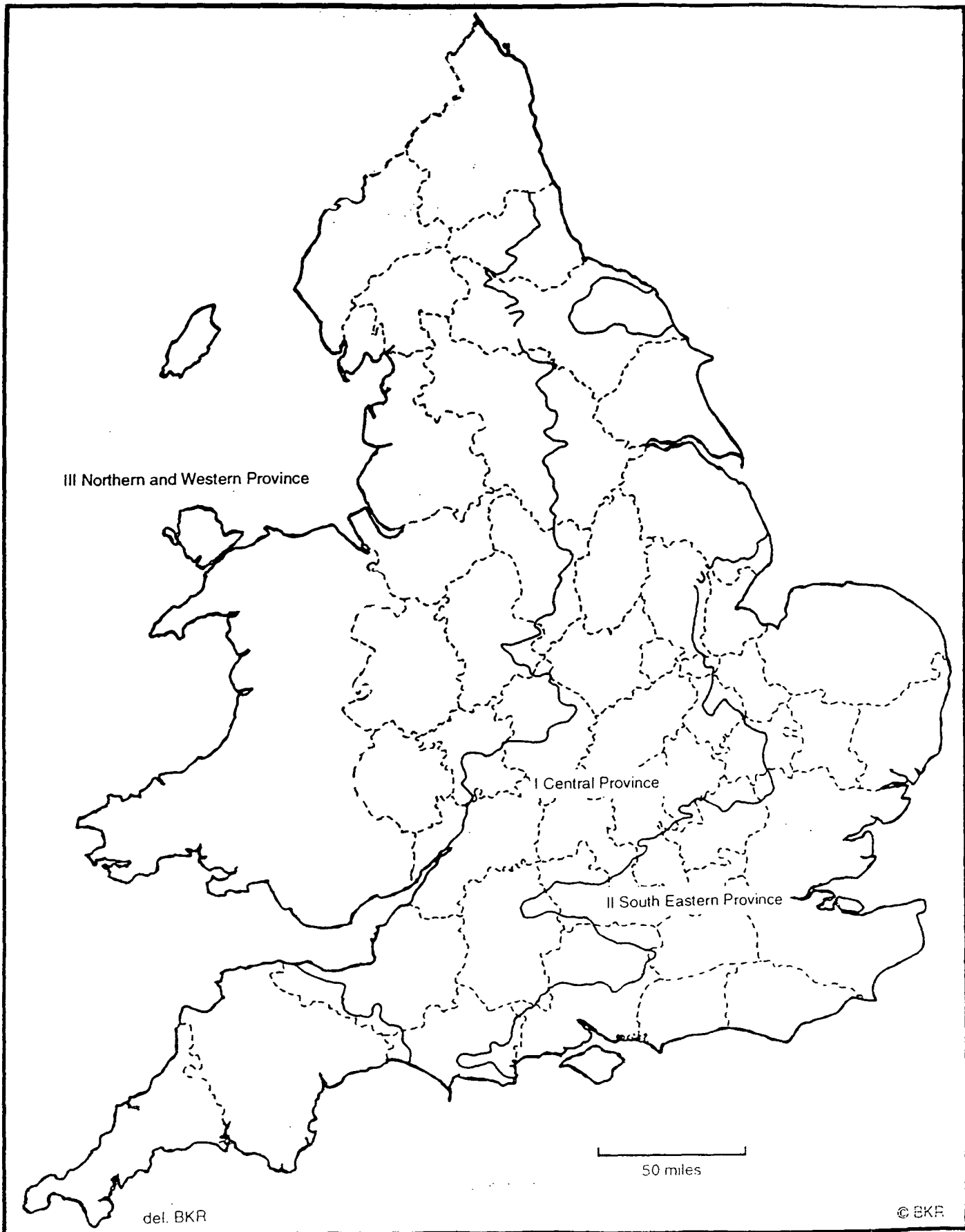


Figure 2.2 Settlement provinces and pre 1972 county boundaries.

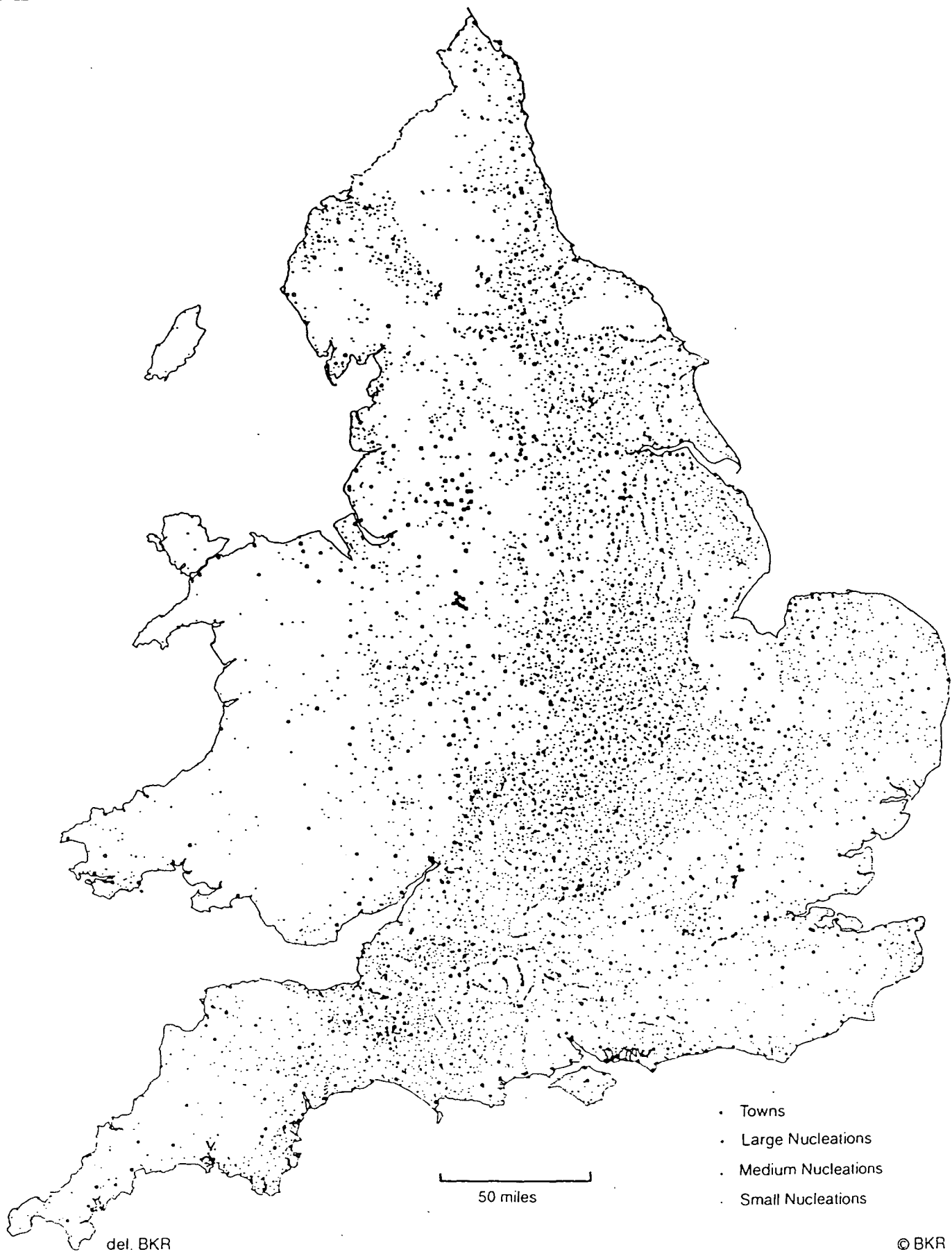


Figure 2.3 Nucleated settlement in mid-nineteenth century England and Wales.

other smaller 'pockets' dominated by nucleation can be detected within the two other provinces. Those areas worthy of mention include, northern East Anglia, northern and eastern Cumbria, the south coast of Devon and areas within Lancashire and Staffordshire. Also of note are the two great concentrations of towns, one being around Stoke and the other around Manchester. Both are in the Northern and Western Province and both are the result of industrial development rather late in the history of the settlement system. Nowhere else in England and Wales is there such a large number of towns in such close proximity to each other. The large size of most of the towns in question is no doubt a product of the growing trend towards urban industrialisation. But, these were not the only two industrial areas in the country, so why is this 'phenomenon' unique to these areas? Most of the Staffordshire towns in question in fact grew up around the booming pottery industry of the time and it is highly likely that it was the nature of this industry that affected the settlement pattern. The pottery factories required large labour forces, causing a concentration of the area's population in the towns. This is in comparison to such industries as coal mining which superimposed a large number of industrial villages on the already existing settlement pattern, rather than forcing the huge labour force required into a handful of urban centres. Similarly, the textile industry around Manchester relied heavily on towns. This was mainly for finishing and marketing products, whilst the majority of production took place in the surrounding villages and countryside. This had the effect of producing a more evenly distributed population throughout the area, compared to the highly concentrated pottery industry.

As noted above, within the three main settlement provinces of mid-nineteenth century nucleations, there are sub-provinces of nucleations in Provinces Two and Three. Conversely, there are areas where nucleations appear to be sparse, in comparison to the rest of the Central Province in which they are situated (Figure 2.4). In such vast swathes of countryside, as covered by the three provinces, sub-provinces will almost definitely become apparent in distributions of any kind. For all of the distributions considered in this chapter, there will have been a multitude of causal factors which initiated or inhibited growth, and further stimuli to the development of these original patterns. Therefore, there will always be areas which differ from those around them, when instigation and growth has been so complex. These differences may manifest as sub-provinces within main provinces of distribution, but it must also be remembered that very different causal factors may create very similar distributions.

One major problem arises when using the nucleated settlement map. The 'white' areas may represent two situations: areas of total dispersion or areas which are inhospitable to any human habitation whatsoever. A newly produced map of dispersion, by B.K. Roberts, demarcates areas of nucleation (where extremely low densities of dispersion exist), dispersion, absence of settlement and the countless gradations in between (Figure 2.5). As could be expected, this map is extremely complex,

ENGLAND: SETTLEMENT PROVINCES,
SUB-PROVINCES & LOCAL REGIONS

Based upon 19th. C. source material (the Old Series One Inch to One Mile maps) this map defines local regions, sub-provinces and provinces which can be defined on the basis of their settlement characteristics.

Each sub-province is designated by a short code, e.g. CINMD., for use within a computer filing system.

SOUTH-EASTERN PROVINCE

- EWASH. Wash.
- EANGL. Angles
- ETHAM. Thames
- EWALD. Weald
- EWEX. East Wessex

CENTRAL PROVINCE

- CWRTD. Wear and Tees
- CHUTE. Humber-Tees
- CEYKS. East Yorkshire
- CPNSL. Pennine Slope
- CLNSC. Lincolnshire Scarplands
- CTRNT. Trent Valley
- CEMID. East Midlands
- CINMD. Inner Midlands
- CCTSV. Cotswold Scarp and Vale
- CWEXW. West Wessex

NORTHERN AND WESTERN PROVINCE

- WCVPN. Cheviots and Pennines
- WCHEV. Cheviots
- WPENN. Northern Pennines
- WPENS. Southern Pennines
- WCUSL. Cumbria and Solway Lowlands
- WLALO. Lancastrian Lowlands
- WCNPL. Cheshire Plain
- WSHSP. Shropshire Hills and Severn Par.
- WWMID. West Midlands
- WWYTE. Wye-Teme
- WSWPN. South-West Peninsula

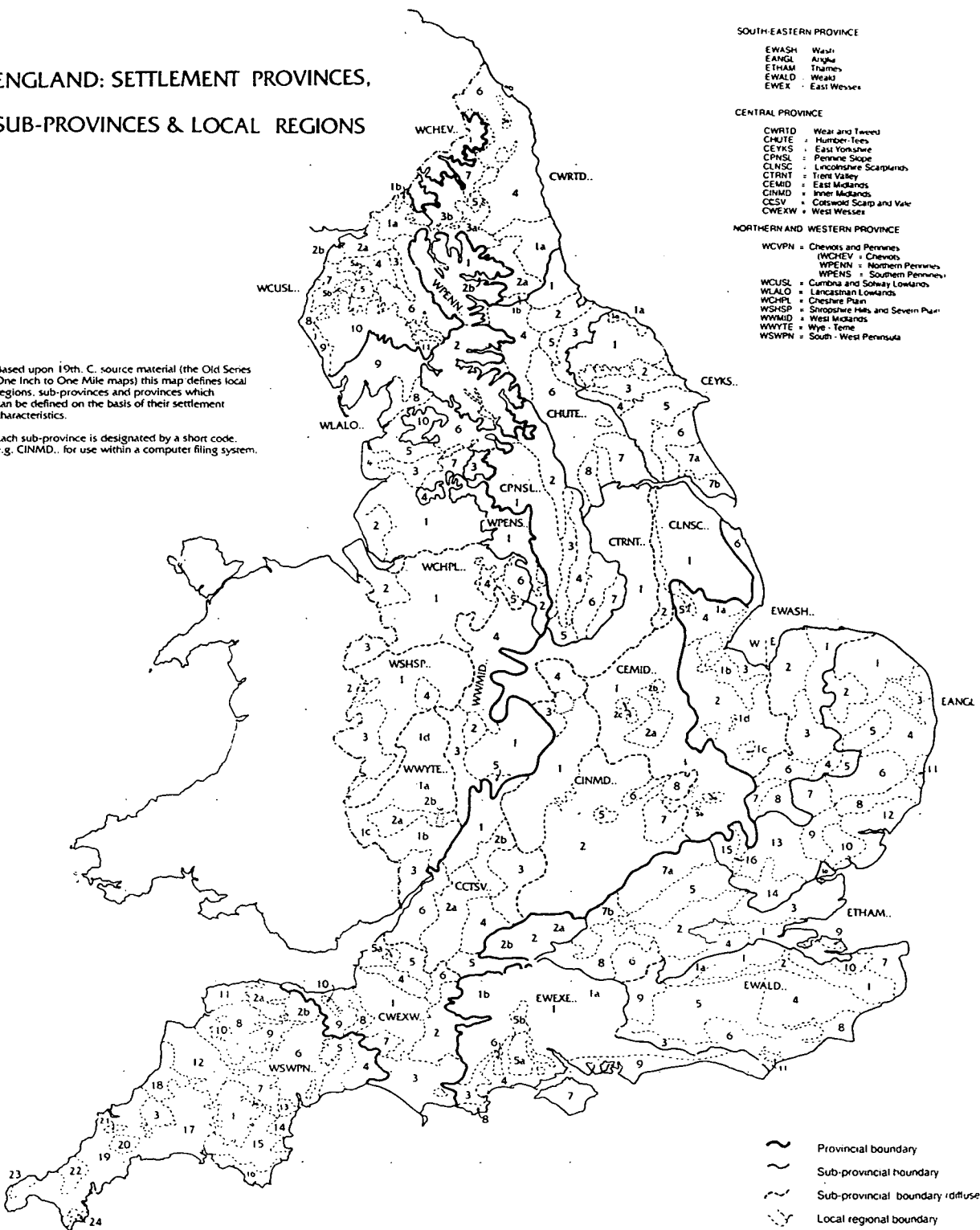
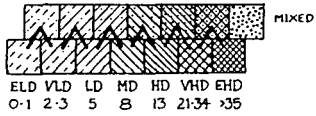


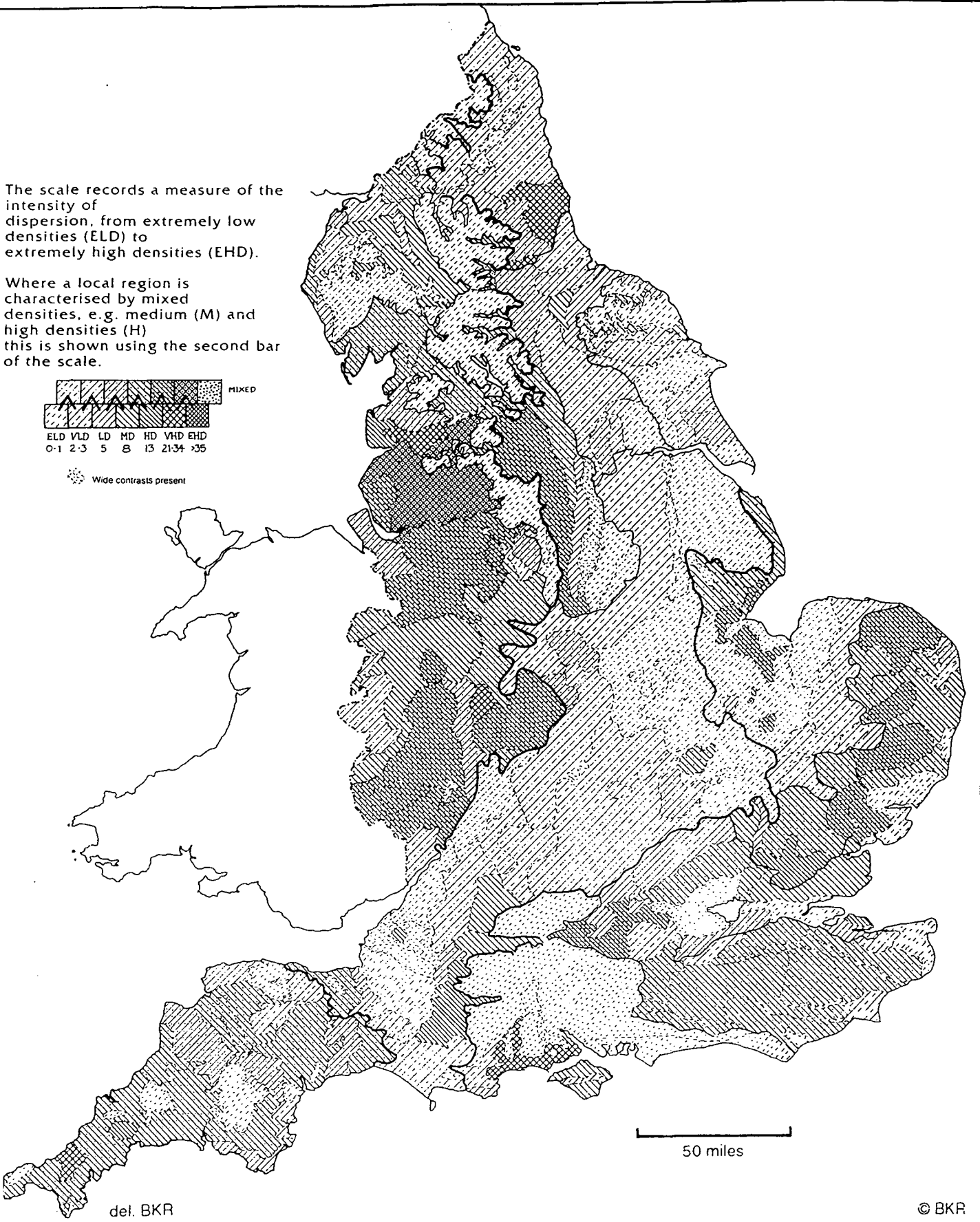
Figure 2.4 Settlement provinces, sub-provinces and local regions in England.

The scale records a measure of the intensity of dispersion, from extremely low densities (ELD) to extremely high densities (EHD).

Where a local region is characterised by mixed densities, e.g. medium (M) and high densities (H) this is shown using the second bar of the scale.



Wide contrasts present



del. BKR

© BKR

Figure 2.5 Intensity of dispersion in mid-nineteenth century England.

arising out of hundreds of years of settlement development, to reach the picture seen here in the mid-nineteenth century.

Unsurprisingly, this map of dispersion intensity is almost a mirror image of the map of nucleations. It should however be noted that although the land covered by high dispersion intensity is broadly the opposite of that covered by the distribution of nucleations, the sub-provinces of nucleation are not highlighted in any way. The Central Settlement Province shows an extremely low density of dispersion, although two exceptions to this are present within the province. One to the north, in the east of County Durham, where a very high density of dispersion exists alongside a considerable number of nucleations. A second highly dispersed area actually straddles the boundary with the Northern and Western Province, in the centre of the West Riding of Yorkshire.

Moving into the two other settlement provinces, the lack of nucleations shown on Figure 2.3 suggests the dominance of dispersion. However, the two possible situations described above are actually found to exist. Some areas show a great intensity of dispersion. In the Northern and Western Province these include parts of Lancashire, Herefordshire, Shropshire and north-west Warwickshire. Parts of Norfolk, Suffolk and Essex represent areas of extremely high density in the South-Eastern Province. Others, although in the heart of this dispersed countryside, exhibit extremely low densities of dispersion, probably due to a far more inhospitable landscape. Examples of such areas are also found on the Pennines, the Cumbrian Mountains, Dartmoor, Exmoor and The Fens.

Pulling together both the maps of nucleation and dispersion, the complex gradations between 'totally nucleated' and 'totally dispersed' can be seen. However, the existence of the former is highly questionable, certainly by the mid-nineteenth century, when enclosure within the arable lands of the Central Settlement Province had initiated at least some dispersal of settlement, previously unseen in this province.

Here, the distribution of settlement is first compared to the physical landscape of the country (Figure 2.6). This can be regarded as a primary control factor in influencing settlement, in comparison to the more human generated secondary factors such as landownership, migration and social and economic factors.

A highland/lowland split is immediately obvious in the distribution of nucleations. However, it should be realised that regionally and locally there will also be a highland/lowland division, even in overall lowland areas. There are always contrasts within an area no matter what its size. Areas of moorland, fell and rough pasture support very few nucleated settlements, if any, e.g. The Pennines, Cumbrian Mountains, North York Moors, The Cheviots and the moors of Devon and Cornwall. Nucleations actually tend to cling to the edges of highland areas, often at the foot of scarp slopes and in valley bottoms. The Eden Valley, between the Cumbrian

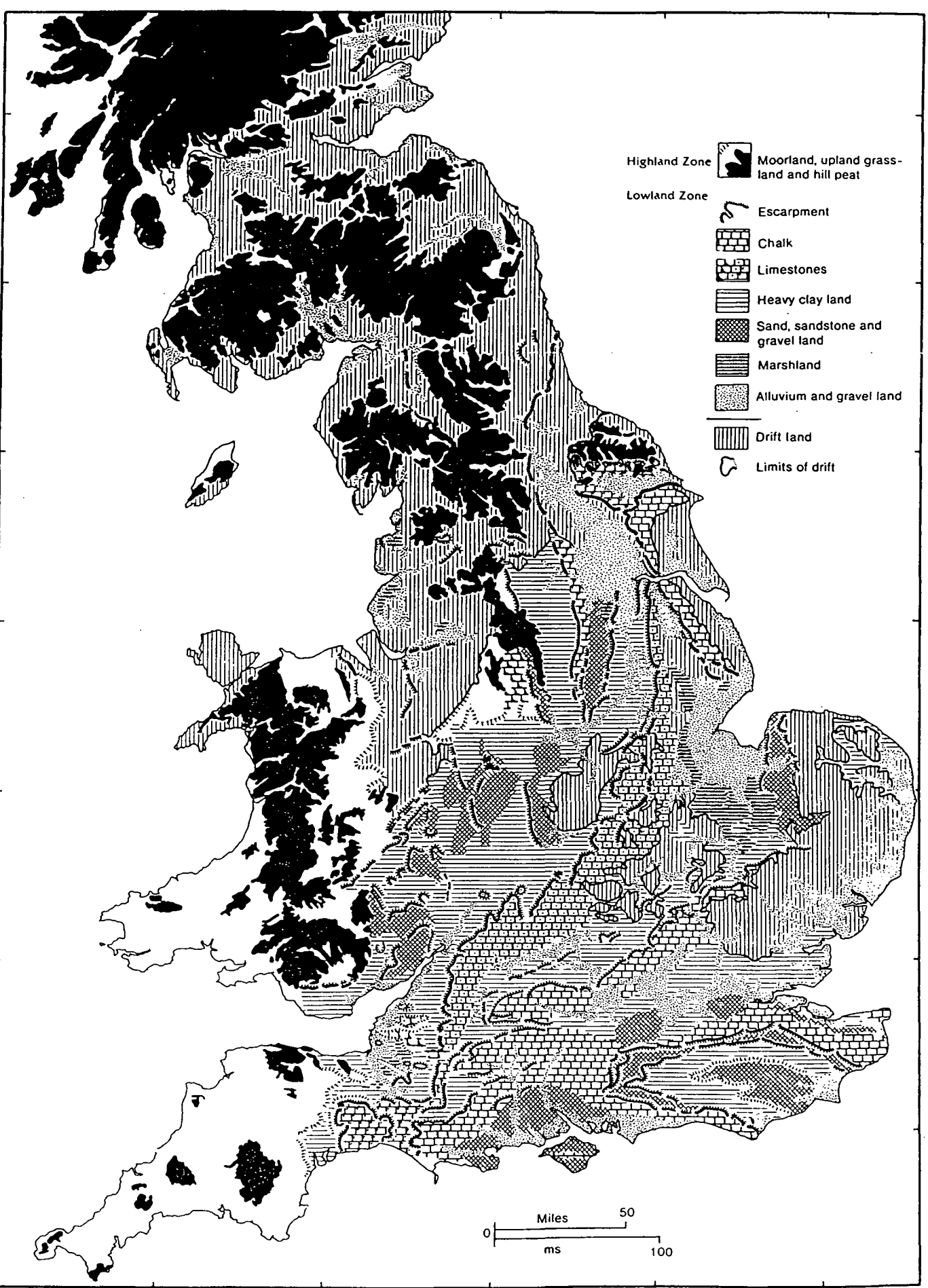


Figure 2.6 England, Wales and Southern Scotland: physical regions.

Mountains and the Pennines, forms part of the distinct north Cumbrian sub-province (Figure 2.4). This wide glaciated valley demonstrates the concentration of settlement along the valley sides tending to cluster around the 600 and 800 feet contours.

Some areas of similar terrain, although in very varied parts of the country, produce highly similar settlement patterns. The chalk based wolds and downlands, e.g. the Lincolnshire and Yorkshire Wolds and the North and South Downs, show settlement adherence to the scarp edges of the chalk escarpments. Very few settlements are actually found on the tops of the wolds and downs. This gives a rather linear distribution to the settlement pattern, with areas void of nucleations altogether. Conversely, other areas with strongly similar physical characteristics sustain very different types of settlement patterns. For example, The Fens of Lincolnshire are quite sparsely settled in comparison to the Somerset Levels. However, the edge of The Fens is heavily settled, producing a line of nucleated settlements demarcating the limits of the drier regions of the jurassic scarplands and drift covered areas to the west and south. A similar situation is found on the heathlands of England. The area of heathland in north-west East Anglia is heavily settled in contrast to the Dorset and Hampshire coastal area.

In general, there is far too much variation in the physical landscape to equate nucleations with a given type of terrain. Within the Central Province alone the land varies from glacial boulder clay to sands, sandstone and gravel lands to limestone escarpments and even some heavy claylands. It would seem, therefore, that only broad similarities exist between the nucleated settlement distribution and the terrain of the country.

There are very few clear-cut correlations between dispersion and the landscape. The highland landscape is notable in its low density of dispersion. This includes The Pennines, the Cumbrian Mountains, The Cheviots, the North York Moors and the moors of the South-West Peninsula. This combines with the lack of nucleations also noted, to show that very little settlement of any type was present in these areas. However, the chalkland wolds and downs also show low levels of dispersion, the only settlement of these areas being nucleations occurring at the scarp edges. The same is also true of the fenlands, where the majority of the dispersion is of a low density.

Thus we can conclude that the distribution of nucleated and dispersed settlement is not simply explained by physical geography. The main variations in the settlement pattern are based more on the highland/lowland split, i.e. relief and terrain, rather than differences in the actual geology of the country. Even this is unsatisfactory when it is considered that the land of both the Central and South-Eastern Provinces is of a very similar nature, yet they support almost completely different settlement patterns. This is not surprising, when the great time depth to settlement development is considered. Other factors should therefore be looked at, which combined with the physical aspects to produce

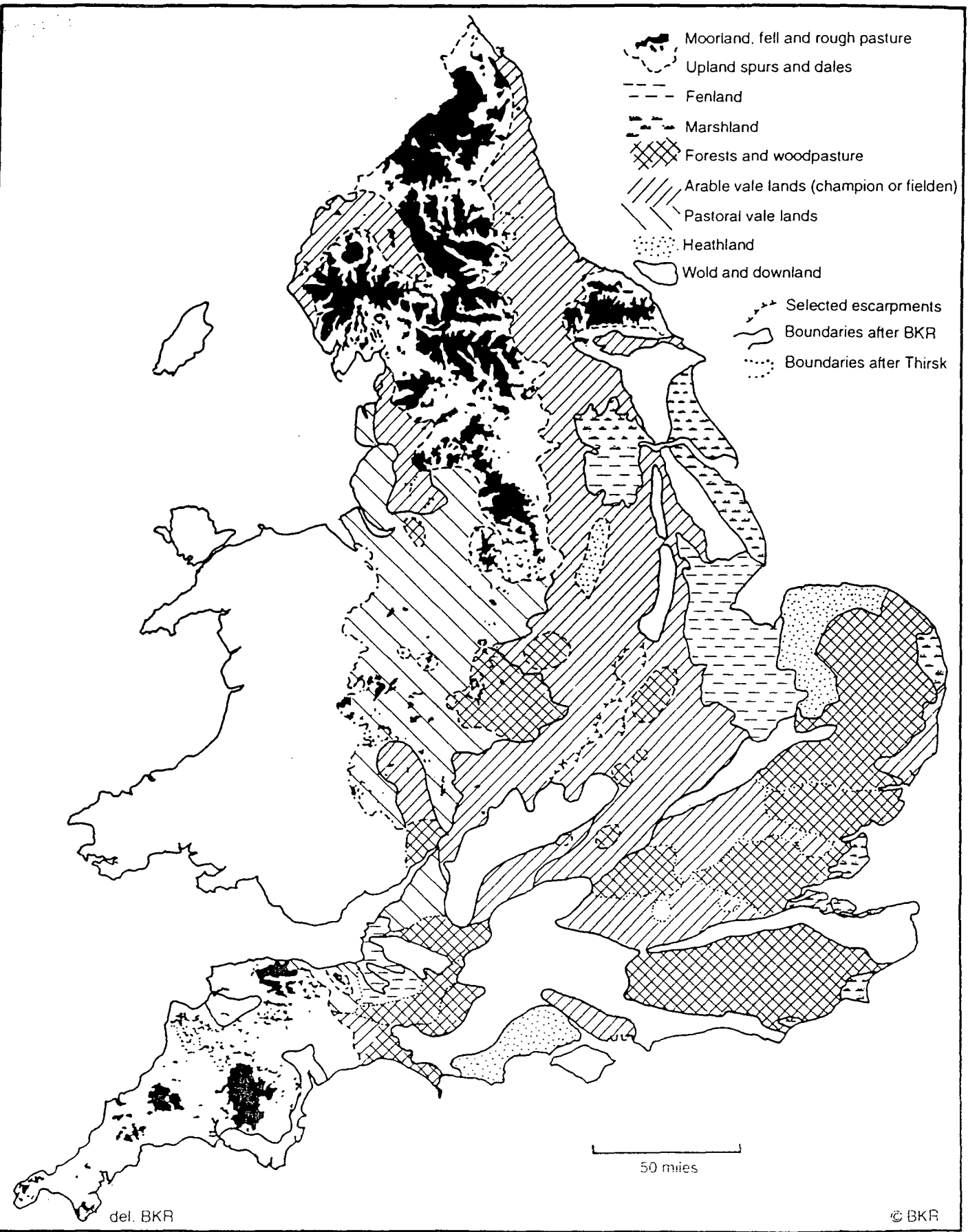
the settlement pattern seen in the mid-nineteenth century. Although there are strong correlations between farming types and the physical landscape (the two are combined to some extent on Figure 2.7, an adaptation by B.K. Roberts from J. Thirsk, 1967), the distribution of the former can be simplified far more easily into three main farming categories.

Applying the most crude divisions, there are three main historical farming types in England and Wales: Champion land (basically arable and meadow, also known as feldon); wood pasture; and open pasture (Figure 2.8). The three categories relate broadly to the quality of the land for agricultural purposes. Arable lands tend to be found on the good quality soils whilst pastoral farming is confined mainly to the poorer agricultural areas, with woodland pastures lying in the middle on the medium quality lands.

A broad tract of champion land sweeps across central England, almost totally within the boundaries of the Central Settlement Province. *Champion* is derived from the Latin *campania* and the French *champagne*, meaning 'open country' and was certainly in use in England by the fourteenth century³. The relationship of this champion land to nucleated settlement can be shown further, in the sub-provinces of nucleations in northern and eastern Cumbria and northern East Anglia. The exact reasons as to why such a heavy dominance of nucleations appeared in this particular tract of countryside is still somewhat unclear. The field systems and associated villages of the Central Province were planned landscapes, superimposed on a more ancient landscape still seen in the two other settlement provinces. At best it can be said that the three field system, the most widespread form of the old arable farming methods (covering, most notably, all of the arable Midland Shires), and other field systems, had very different requirements to the more ancient landscapes. Arable was the most labour intensive of all farming types and the farmers needed to be in close proximity to all fields where their crops lay. As in the three field system, the fields were large but all quite close to one another and each farmer had a strip within each field. Hence, it became easiest for the farming families to congregate in villages, to farm the three communal fields which were usually on the fringes of the settlement, with some pasture land beyond.

Moving away from this central tract of arable, the distinctive zones of wood pasture are evident on its peripheries. The term 'woodland' by no means denotes the thickly forested areas that we are accustomed to today. The woodland landscape was a series of small, enclosed fields. Hedges and trees growing within the fields and along their peripheries gave the appearance of 'woodland', relative to the large open stretches of champion land. In such areas the intensity of labour lay somewhere between the highly intensive arable agriculture and the low intensity of the pastoral lands. Therefore, the need for nucleation was not as acute as

³G.C. Homans, *English Villagers of the Thirteenth Century* (Cambridge, Mass: Harvard University Press, 1942), pp. 12-28.



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Figure 2.7 England: landscape types.

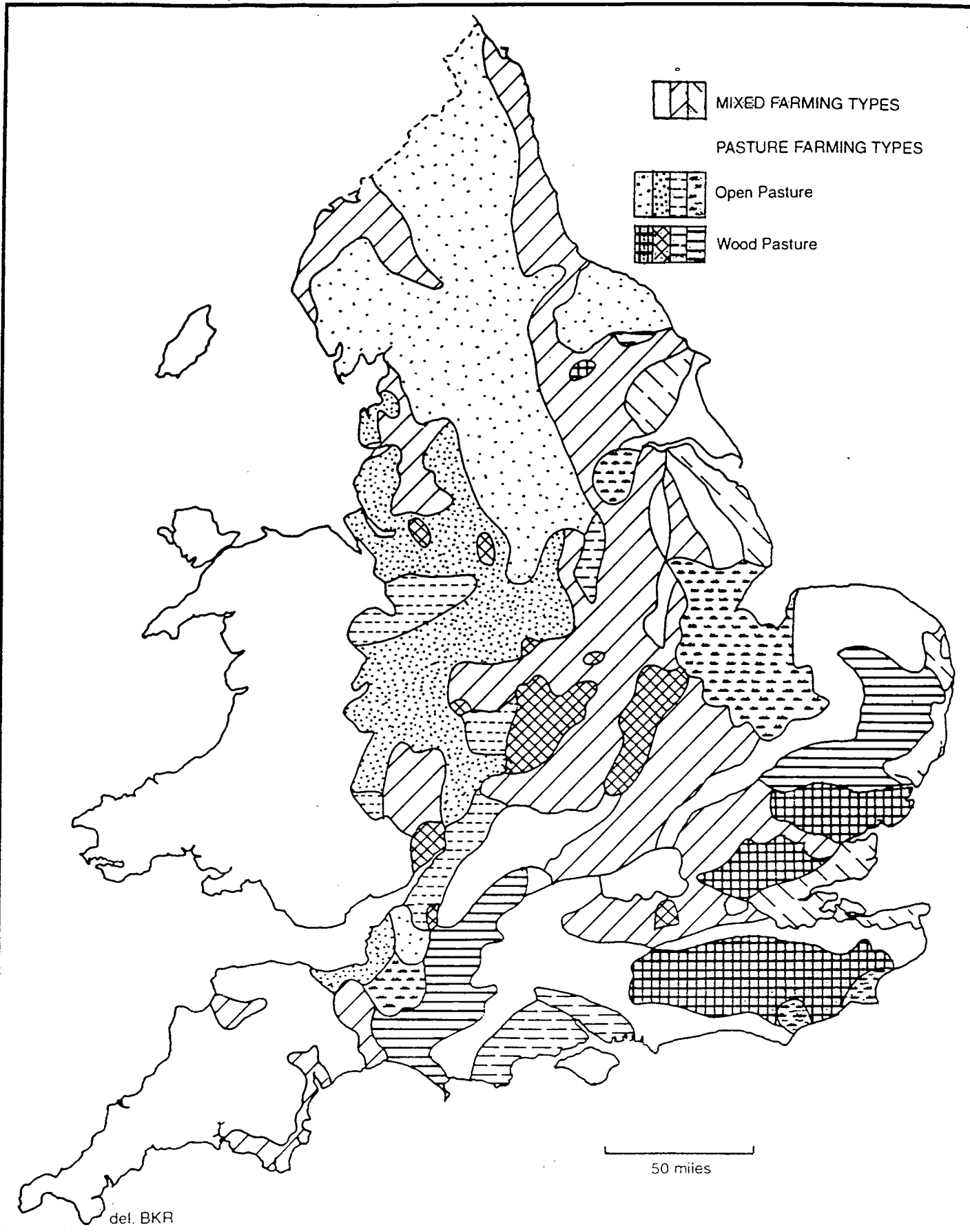


Figure 2.8 England: types of farming (after J. Thirsk 1967).

in arable areas and it can be seen that the villages of the woodland pastures are limited in their extent. The intensity of settlement dispersion in these areas varies enormously, from the strong intensity of southern East Anglia and the central West Midlands to the extremely low intensity seen within the woodland areas of Northamptonshire.

Some villages exist where there are better pastoral lands and also in areas where a more nucleated industrial landscape may have already been superimposed by the mid-nineteenth century, e.g. Cheshire, Shropshire and Staffordshire. Further north however, in the true highland areas, e.g. The Pennines, the few settlements clinging to the dales fade to areas of pure dispersion and then to totally unsettled areas on the highest land. This is due to the progressive process of colonisation of these areas, the slow movement to higher altitudes where extensive areas of land were farmed by single farmsteads. Hence areas of pastoral farming can be equated with both areas of high and low dispersion intensity. This is in general very much dependent on the altitude of the land involved. The lower areas show a higher intensity of dispersion, in comparison to the uplands, where a total lack of settlement in some parts produces a low overall intensity of dispersion.

The existence or lack of nucleations in the three different farming areas is a key question. Further, variations in the settlement pattern within areas of a similar farming type are also present. Why does the great champion belt support so many nucleations, yet land of a similar type in the south-east around London has far fewer nucleations within its bounds? Similarly, in the West Midlands, the village belt seems to end quite abruptly and quite high levels of dispersion intensity take over. Yet, travelling west from the Central Settlement Province into Herefordshire, the land is fundamentally of a similar quality.

An assessment of the distribution map of deserted villages (DV's) in relation to mid-nineteenth century settlement and the settlement provinces adds another dimension to the discussion (Figure 2.9). DV's are the product of the readjustment of the settlement pattern through time, these changes coming about to suit the settlement needs of the economy, and sometimes the population, at a given moment. Resources at a settlement could become exhausted, unprofitable or even unfashionable, prompting a move to a more desirable site.

The general distribution of DV's has, inevitably, strong associations with the pattern of nucleated settlement (Figure 2.3), as the pattern echoes that taken by the Great Village Belt, and other smaller sub-provinces of nucleation. Certainly, the greater number of DV's are found within the Central Province, with a large number also present in northern East Anglia. One very definite sub-province of nucleated settlement and arable farming does however exist, where very few deserted villages have been identified. Northern Cumbria including the Solway Plain and the Eden Valley is particularly distinct as a sub-province within the main Northern and

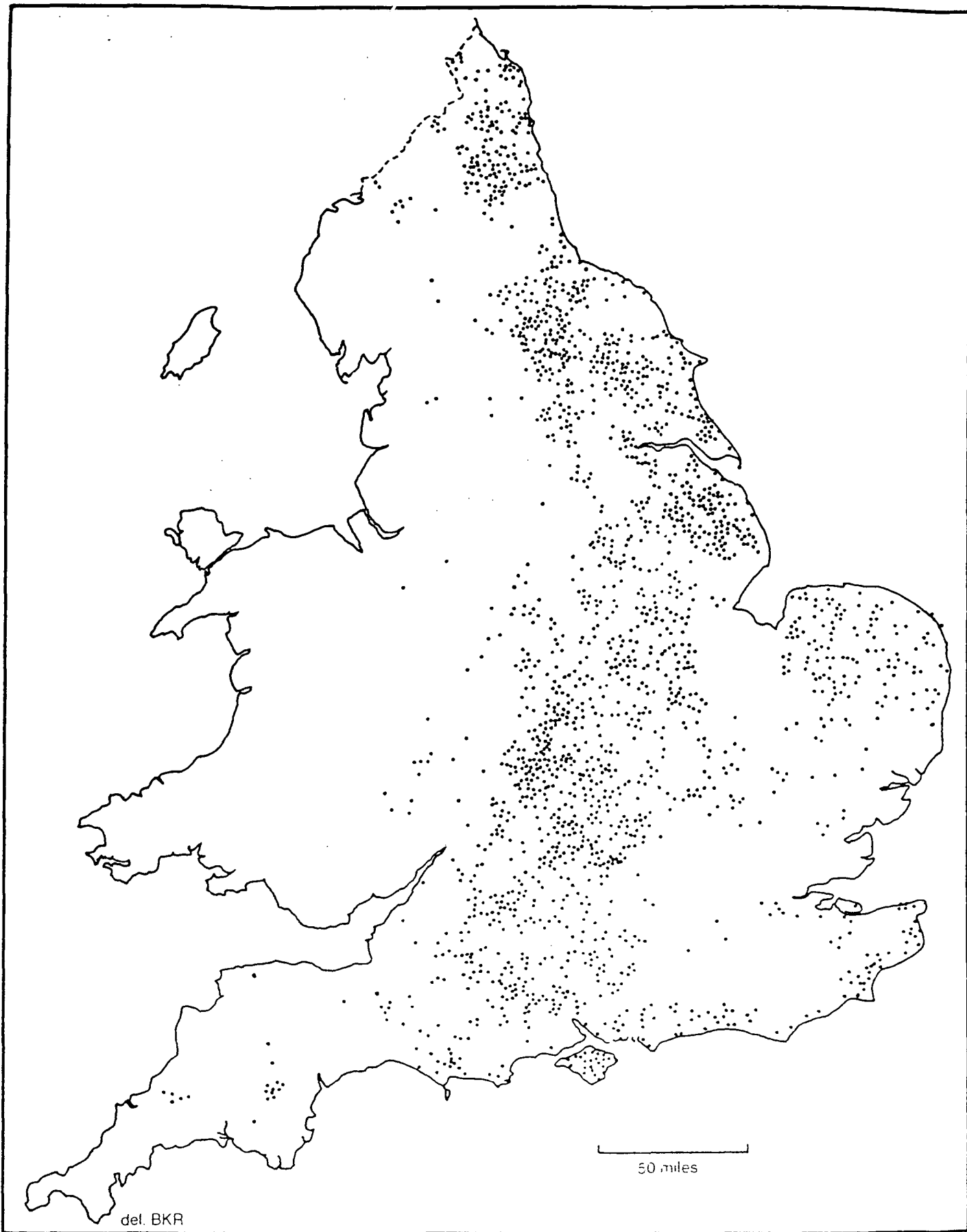


Figure 2.9 England: deserted villages.

Western Settlement Province, but a glance at the DV distribution map shows an utter lack of DV's in this area. Had the mid-nineteenth century nucleations of this area arisen purely from the industrial revolution in a previously pastoral part of the country, which had given rise to a dispersed settlement pattern, the lack of DV's would be far more understandable. There would be very few villages, medieval or otherwise, to desert. However, this was a very clear cut area of Champion land (Figure 2.8). This would suggest that the nucleations present in the nineteenth century have far deeper roots than the Industrial Revolution. As has already been noted, arable farming supported the densest areas of nucleations and also the main band of DV's, which are found broadly within the same bounds. Therefore, if Champion land and nucleations were present in this area from an earlier stage, why are there only five DV's known within northern Cumbria? This could be a case of lack of evidence as opposed to evidence of a lack. That is to say, not all counties have had the work done on DV's to produce a full enough body of evidence for direct comparison with other counties. Most county authorities lack the resources and facilities to carry out essential surveys and excavations, on which such a data base as this is so reliant.

The fact that so many DV's exist within the main village belt proves that although the settlement pattern may have changed relatively through time, the basic area dominated by nucleated settlement has remained unchanged through centuries. For each of the villages that was deserted, there are many others which carried on or grew up elsewhere. The important fact is that all of these villages were established and grew up within the same areas. This leads us to raise two fundamental questions: Why did some villages continue and flourish, whilst others died out? The answers to this are multiple and are impossible to explore here, especially when several scholars have considered the reasons of village desertion in detail.⁴ Secondly, it is probable that in order to envisage the overall density of nucleated settlement within this central belt in the High Middle Ages (i.e. between 1150 and 1350) the two distributions have to be added together, leaving the broader question of why there were once so many nucleations concentrated within this province. But what is it about these areas which encourages and supports the growth of nucleated settlement? The needs of farming the champion lands have already been considered, but why this planned landscape of communal fields (which seems to have given rise to the nucleated settlement pattern) was first established in preference to the more ancient system, is still very much an unanswered question.

Such questions aside, a quite comprehensive picture of settlement distribution in mid-nineteenth century England has been established above. It has been identified that the boundaries of the three settlement provinces are very real,

⁴see M. Beresford, *The Lost Villages of England* (London: Lutterworth Press, 1954).

but within them there are obvious sub-provinces of nucleations which deserve attention. In general, the Great Village Belt, i.e. the Central Settlement Province and several other sub-provinces of nucleation coincide with those areas of land identified as zones of mixed farming, which is in the main champion land. It is where these surviving villages are present, that DV's are usually found. Conversely, areas with a high density of dispersion are generally found outside the bounds of this Central Province, in the Northern and Western and South-Eastern Settlement Provinces. However, some parts of these two provinces show very low densities of dispersion, which is due to the lack of any settlement whatsoever in the higher upland zones. Hence, pastoral farming and areas of wasteland are generally equated with these latter two settlement provinces. It should be acknowledged that there are exceptions to this general picture, which in turn raises questions. Why are there some areas of champion land lacking the abundance of nucleations visible in the main arable belt of the Central Settlement Province? Why are the confines of the Central Province where they are, when there is land on their peripheries of comparable quality? Why is there a lack of DV's in several areas of champion land which also have a large number of nucleations?

A question to be considered in the second half of this chapter is: can these distribution maps of nucleations (both surviving and deserted) and dispersion tell us anything about the population of the mid-nineteenth century as a whole? The difficulty here is that these settlements have evolved (and some have disappeared) over very long periods of time and so their representation in one plane could be very misleading. To aid this investigation, maps of the national population distribution in 1851 prepared by J.C. Dewdney and B.K. Roberts are considered and then an attempt is made to draw comparisons between these and the distribution of settlement.

Quartile maps of the national distribution of population in 1851 at the parish level (Figures 2.10, 2.11, 2.12 & 2.13) have been produced by J.C. Dewdney, with 87, 134 and 207 persons per square mile being the dividing figures for the four quartiles:

- upper quartile over 207 persons p.s.m.
- lower, upper quartile between 134 and 207 persons p.s.m.
- upper, lower quartile between 87 and 134 persons p.s.m.
- lower quartile under 87 persons p.s.m.

The upper quartile map (Figure 2.10) highlights the most populous areas and hence the most urbanised parts of England and Wales in the mid-nineteenth century. The largest of these areas includes much of Lancashire and the West Riding of Yorkshire extending into Derbyshire, Staffordshire, Nottinghamshire and Leicestershire. Other regions of note are Tyneside and north-east Durham, Central London and its surrounding districts, part of the West Midlands around

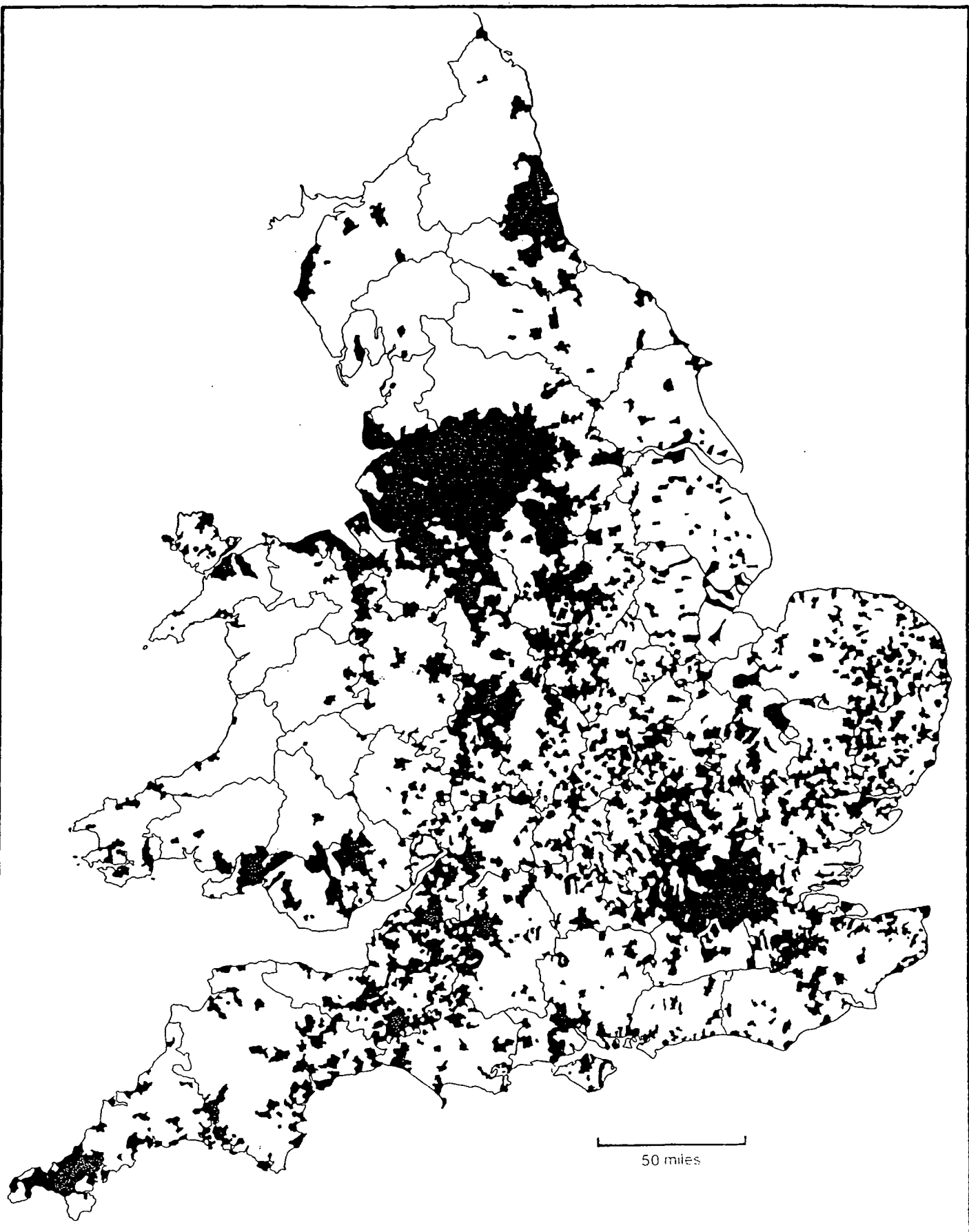


Figure 2.10 England and Wales: areas within the upper quartile of population density, 1851 (after J.C. Dewdney).

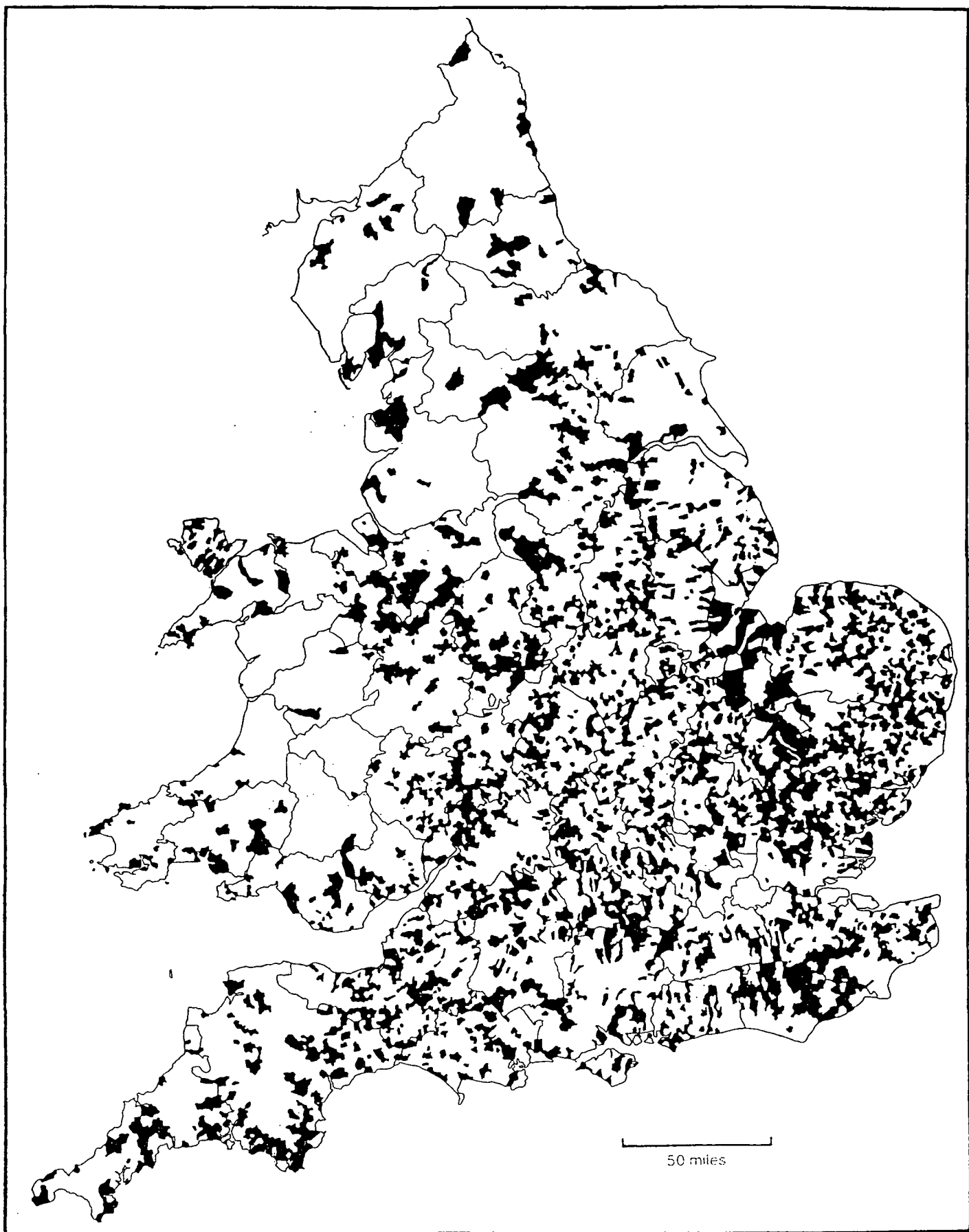


Figure 2.11 England and Wales: areas within the low upper quartile of population density, 1851 (after J.C. Dewdney).

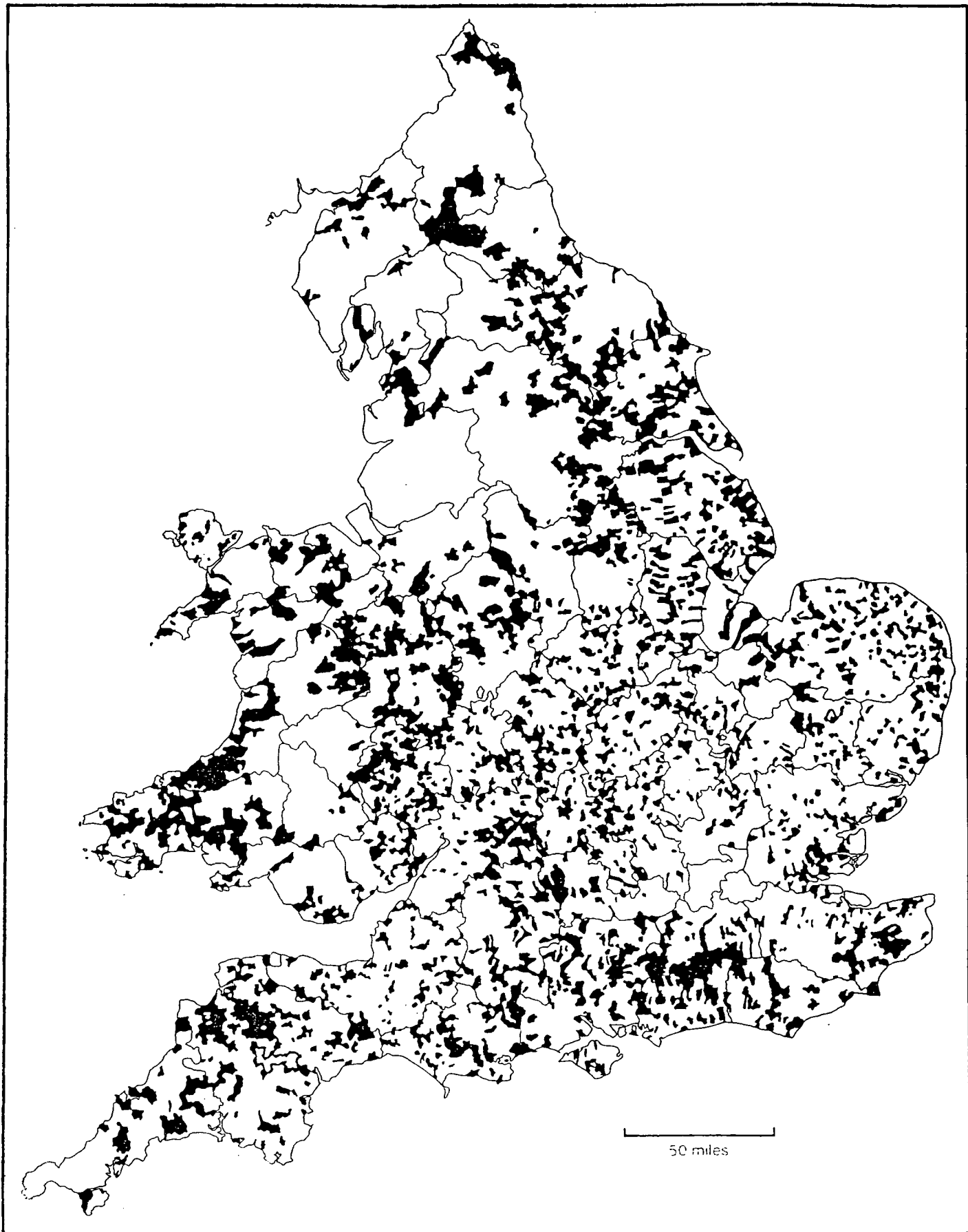


Figure 2.12 England and Wales: areas within the upper lower quartile of population density, 1851 (after J.C. Dewdney).

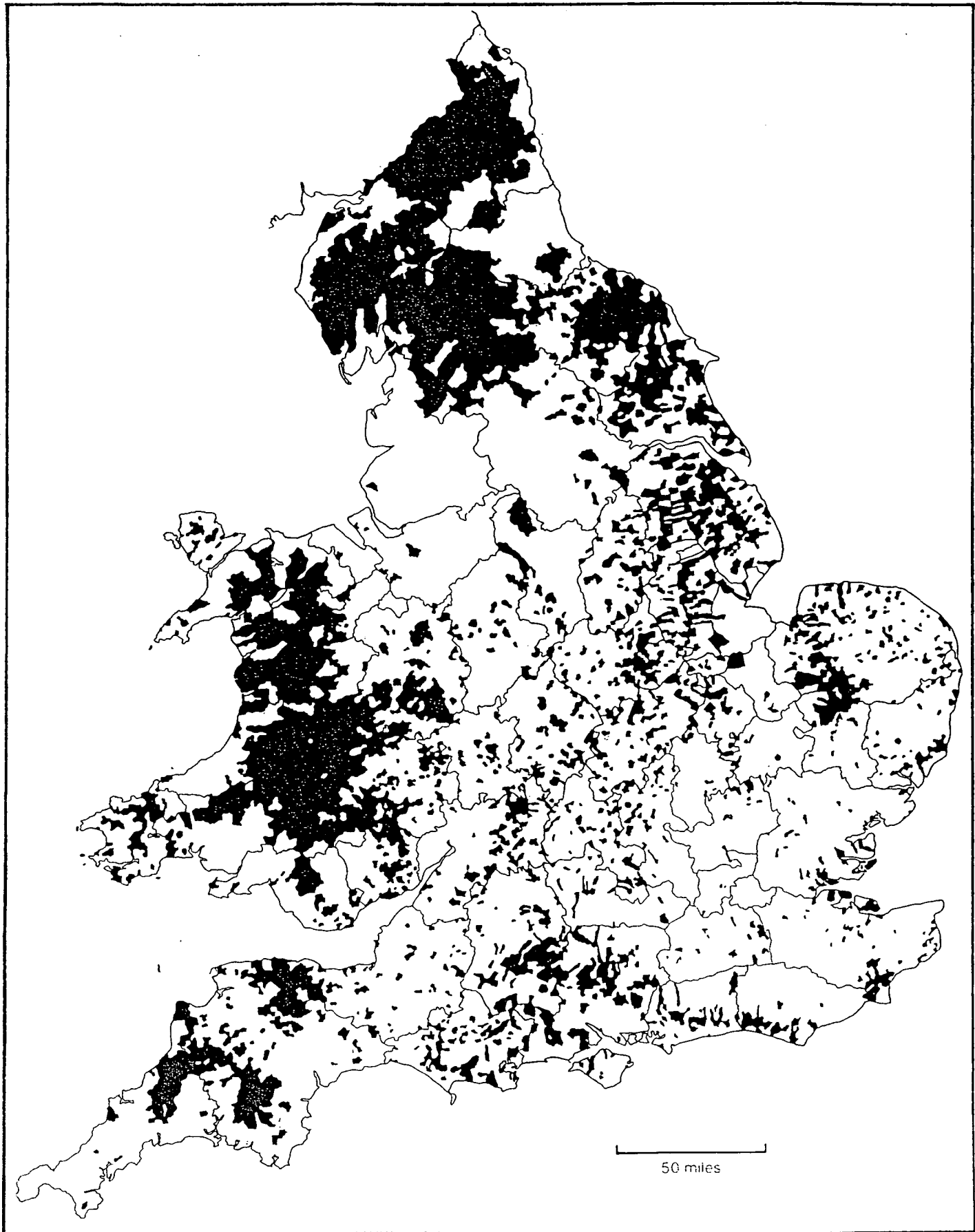


Figure 2.13 England and Wales: areas within the lower quartile of population density, 1851 (after J.C. Dewdney).

Birmingham and the south-west of Cornwall. A considerable scatter of upper quartile parishes is also found throughout much of 'lowland' England and the north and south coasts of Wales. Areas showing a prominent lack of densely populated parishes are found in the north of England, central and western Wales and parts of the South-West Peninsula.

The maps detailing parishes within the two central quartile bands (Figures 2.11 & 2.12) lack substantial areas of parishes within the same quartile. This has led to a more scattered distribution pattern on both maps, especially in central and southern England and Wales. Again, there is a general lack in the north of England and parts of Wales, although there are more parishes here within the two middle quartiles than for the upper quartile.

Finally, parishes within the lower quartile dominate much of northern England, central Wales and the moors of Devon and Cornwall (Figure 2.13). Smaller areas are found on the South Downs, the Brecklands in East Anglia and much of Lincolnshire stretching south-west into eastern Leicestershire. As could be expected, lower quartile parishes are rare in areas highlighted on Figure 2.10, i.e. where there is a high incidence of upper quartile parishes.

Thus, these national quartile maps highlight areas of extremely high and extremely low density very well. However, their detail does not allow a satisfactory classification of the more intermediate areas, generally between 87 and 207 persons per square mile. Further, for a true picture of population in England and Wales in 1851, the information on the four maps needs to be brought together to construct one clear distribution pattern.

This problem has been overcome by B.K. Roberts who has synthesised the quartile data, to produce a single distribution map based on 'quartile combinations' rather than real population density figures. This was done by preparing a base map from the lower and upper quartile maps (Figures 2.10 & 2.13), highlighting large dominant areas of very high and very low population density. The former areas are defined by a thick black line, the latter are shaded black; the focus of the map is rural settlement. The limits of both types of region are drawn so that very few parishes within other quartiles are included. Other regions were then sketched in using the lower quartile map and these boundaries were further modified through consultation with the two intermediate quartile distributions (Figures 2.11 & 2.12). This produced much smaller 'zones' where, in general, two quartile types dominate. Excluding areas of very high or very low population density, seventeen zones were identified, lettered (a) to (q) (Figure 2.14). Although the boundaries of these zones are far more subjective than those of the areas shaded black or white, the following descriptions attempt to define their quartile combinations and main characteristics.

(a) South Central

LQ & ULQ

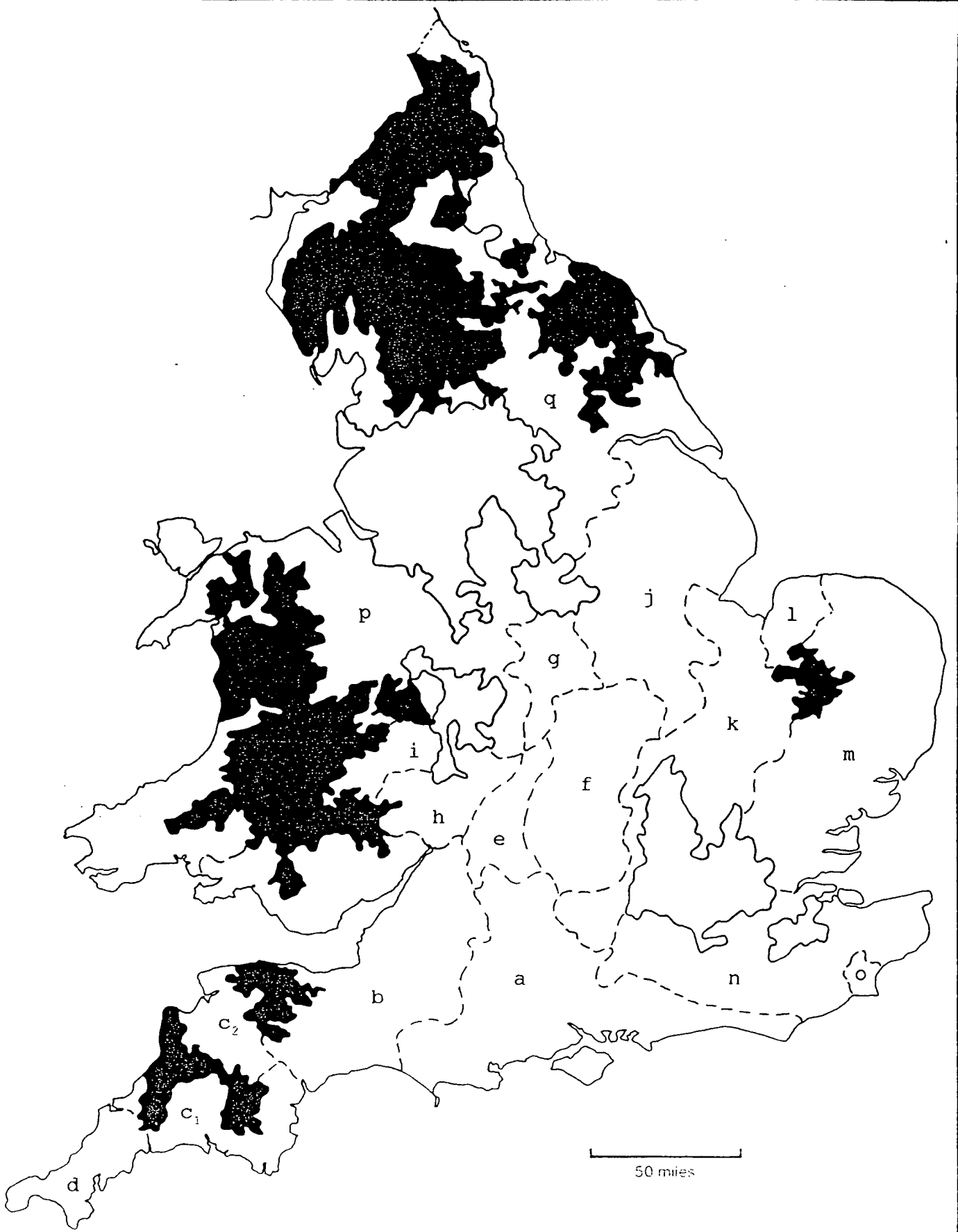


Figure 2.14 England and Wales: population density zones, 1851 (based on work by J.C. Dewdney; produced by B.K. Roberts).

There is an absence of the two upper quartiles, the exception being Southampton. The western boundary is the most clearly defined, for the zone has a tendency to merge with The Weald to the east.

(b) West Central

UQ & LUQ

This zone shows an absence of parishes within lower and upper, lower quartiles. Exmoor forms a western limit and there is a generally sharp boundary to the south east caused by the chalk escarpment (Figure 2.6). For an almost wholly rural zone, with small market towns, the densities here are noteworthy.

(c) Devon and East Cornwall

(C1) LUQ & UQ

(C2) LQ & ULQ

Including blocks of moorland supporting very low populations, this zone is generally dominated by LQ and ULQ parishes, but with a band of LUQ parishes along the southern coastal lands.

(d) Lizard

UQ & LUQ

Remarkably and presumably due to mining activity, the tip of the South-West Peninsula is almost wholly dominated by parishes within the two upper quartiles.

(e) Cotswold

ULQ & UQ

This comparatively small but pivotal zone is essentially defined by an absence of LUQ parishes, creating a void between the two dominant quartiles.

(f) Oxford

LUQ & UQ

Here, there is a very even scatter of all quartile types, but the two upper quartiles take the greatest proportion of parishes overall.

(g) North-East Midlands

mainly UQ

Although this zone can not be classed with the main areas of high density (outlined by a thick black line) due to an admixture of other quartiles, there is no obvious second category.

(h) Lower Severn

LUQ & ULQ

Dominated by parishes in the two middle quartile bands, there are clear boundaries to the east with zone (e), to the north-west with zone (i) and to the north with the purely upper quartile area.

(i) Herefordshire Borders ULQ & LUQ

The upper lower quartile predominates here and the zone has much in common with zone (h). The two zones could be seen as one South-West Central area, each differing a little in the combination of their quartiles.

(j) North-East Midlands LQ & ULQ

This is a large, relatively homogenous zone with an absence of lower, upper quartile parishes.

(k) East Midland Border LUQ & UQ

Again, a large zone with little internal variation, it is dominated by 'blocks' of the lower, upper quartile, but with a significant admixture of upper quartile parishes.

(l) North-West Anglia LQ & LUQ

A small zone, falling between (k) and (m) and having more in common with the Breckland region of lower quartile parishes to the south. The distribution of the two middle quartiles is almost even, but the lower, upper quartile seems to have the slight edge.

(m) East Anglia UQ & ULQ

This zone has a remarkably even, but fragmented distribution of upper quartile parishes, which intercalate with those of the upper, lower quartile. This zone is distinguishable from (k) on the basis of 'cell texture'.

(n) The Weald and Peripheries LUQ & ULQ

There is an indication of an internal division within this zone, with more lower, upper parishes to the east and upper, lower parishes dominating in the west.

(o) Romney Marsh LQ & ULQ

A small zone, differentiated from The Weald in the north by a dominance of parishes in the lower quartile.

(p) North-West Midlands ULQ & LUQ

A large zone, fragmented by areas of dense population, with the two dominant quartiles forming large blocks throughout. Upper quartile parishes are also present along the north-west coastlands and in a ribbon where the Welsh Border towns lie.

(q) North East England

ULQ & LUQ

This zone covers the majority of northern England which is not dominated by very dense or very sparse areas of population. Broken into blocks only by terrain, this is an essentially homogenous zone in terms of quartile characteristics.

This zoned map is extremely useful in the identification of the differing population densities, especially in the intermediate areas which are not obviously densely or sparsely populated. However, it does not provide us with an easy visual comparison between the zones. Hence, the varying zones have been shaded to give an immediate impression of the variation in population density in the country in 1851 (Figure 2.15). The shading is, like the zoning itself, not based on the actual numbers of people per square mile, but on the quartile combinations. Zones where parishes within the same two quartiles dominate are shaded in the same way, regardless of which of the two quartiles is the more prevalent. This has produced seven different levels of shading, which have no absolute numerical value, but give an overall impression of the general levels of population density, ranging from highly urbanised to totally rural.

A glance at the shaded zone map highlights the differences between the northern and western areas of the country and the south and east. Great contrasts exist within the north and west, but in the Midlands and the south the contrasts between neighbouring zones tend to be far more subtle.

Areas already shown to be sparsely settled are also seen to be sparsely populated and many large areas of low population density exist. These include: the Brecklands of East Anglia; much of central Wales stretching east into Shropshire and Herefordshire; the moorlands of the South-West Peninsula; the North York Moors extending south to cover the Yorkshire Wolds; and one large area covering the Cheviots, the Cumbrian Mountains, the Northern Pennines and their peripheries.

Large areas of dense population are fewer, but include: London extending north and west into the surrounding counties; the central Midlands; eastern parts of Northumberland and Durham; and a vast area covering parts of Lancashire, Cheshire, Staffordshire, the West Riding, Derbyshire and Nottinghamshire. Areas of dense population were also becoming quite highly urbanised by 1851, even though this was also the census date of the peak of rural settlement in England. From this date, out-migration from rural districts began to accelerate, causing a great shift in the location of the

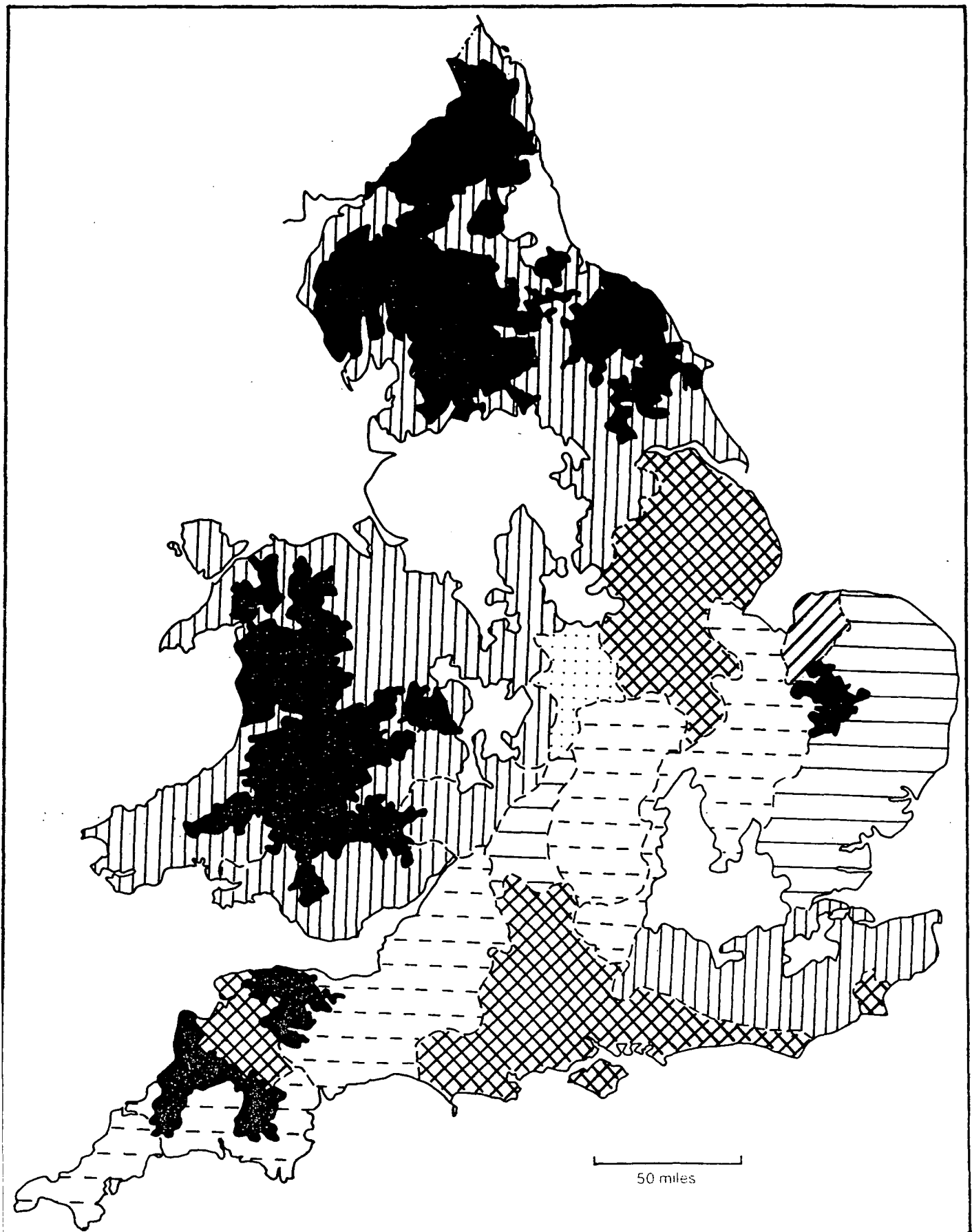


Figure 2.15 England and Wales: population density, 1851 (based on work by J.C. Dewdney; after B.K.Roberts).

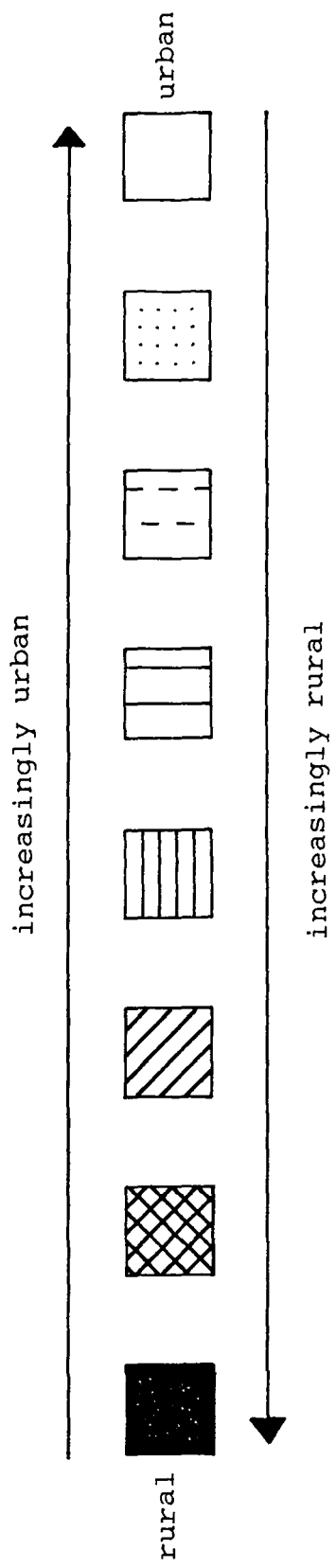


Figure 2.15 Key

population, from rural to urban, in quite a short space of time. This process had indeed already started in earnest from around the end of the seventeenth century. It is estimated that in 1700 33% of the population were resident in rural counties, but even by 1831 this had reduced to around 25%.⁵ All of the densely populated areas listed above were strongly associated with industry by the mid-nineteenth century. These industries included coal mining, iron smelting, the production of hundreds of various metal objects, ship building, textile manufacture and pottery production. Only one zone, the North-East Midlands, which includes western Leicestershire and central Warwickshire, comes close to the densities of population seen in these principal areas of dense population. This high level of population is again probably due mainly to industry, with two coalfields (North Warwickshire and Charnwood) found within the zone and the dominance of the stocking industry in western Leicestershire.

Outside this main core of densely populated areas, two more zone groups display quite high levels of population density. Almost all of these zones are situated south of an imaginary line, drawn from the Wash in the north-east to the head of the Severn Estuary, thus showing them to be predominantly lowland areas (Figure 2.6). These zones cover most of East Anglia, an area stretching from the southern edge of the Fens to the limits of the highly urbanised area around London and the Cotswolds and Oxfordshire extending south-west to cover the majority of the South-West Peninsula. As noted previously in the zone descriptions, a much lower density of population could be expected in Devon and Cornwall, which are predominantly rural counties. However, a high level of population density is highlighted on the two zone maps (Figures 2.14 & 2.15) and must relate in part to the mining of tin on the South-West Peninsula, while in the neighbouring county of Somerset heavy densities of population in some parishes (Figure 2.16) can be linked to coal mining and textile manufacture.

Moving away from these zones, the land becomes more rural. Zones of lower population density cover the Welsh borderlands, the south Pennines including the Peak District in Derbyshire, the Wealden area, a small area north of the Brecklands in East Anglia and the remainder of northern England which is not included in the more dominant areas of very high or very low density. Moving further down the scale, the zones closest to the 'black' sparsely populated areas include much of Lincolnshire, north Devon, the chalklands of the South Downs and the small area of Romney Marsh on the south-east coast. These less densely populated zones tend to be on the peripheries of the larger, more sparsely populated areas of the north and west and on areas which are dominated, although not totally covered, by a chalk-based landscape, e.g. the South Downs and a large part of Lincolnshire.

⁵P. Deane and W.A. Cole, *British Economic Growth, 1688-1959*, 2nd. edn. (Cambridge: Cambridge University Press, 1967), pp. 106-22.

SOMERSET: PARISH BOUNDARIES IN THE M. 19th. CENTURY

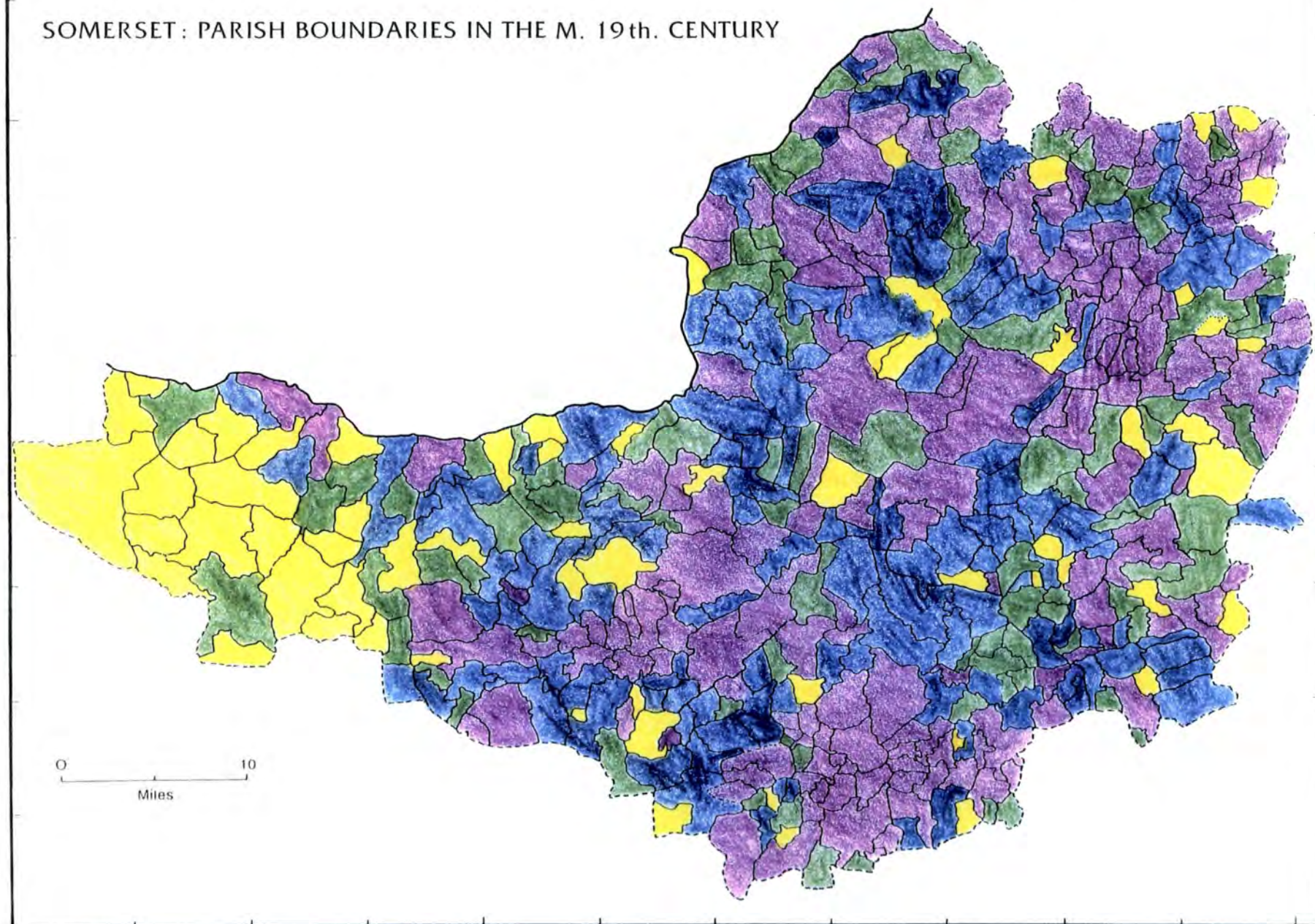
per
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207

134

87



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Figure 2.16 Somerset: population density, 1851.

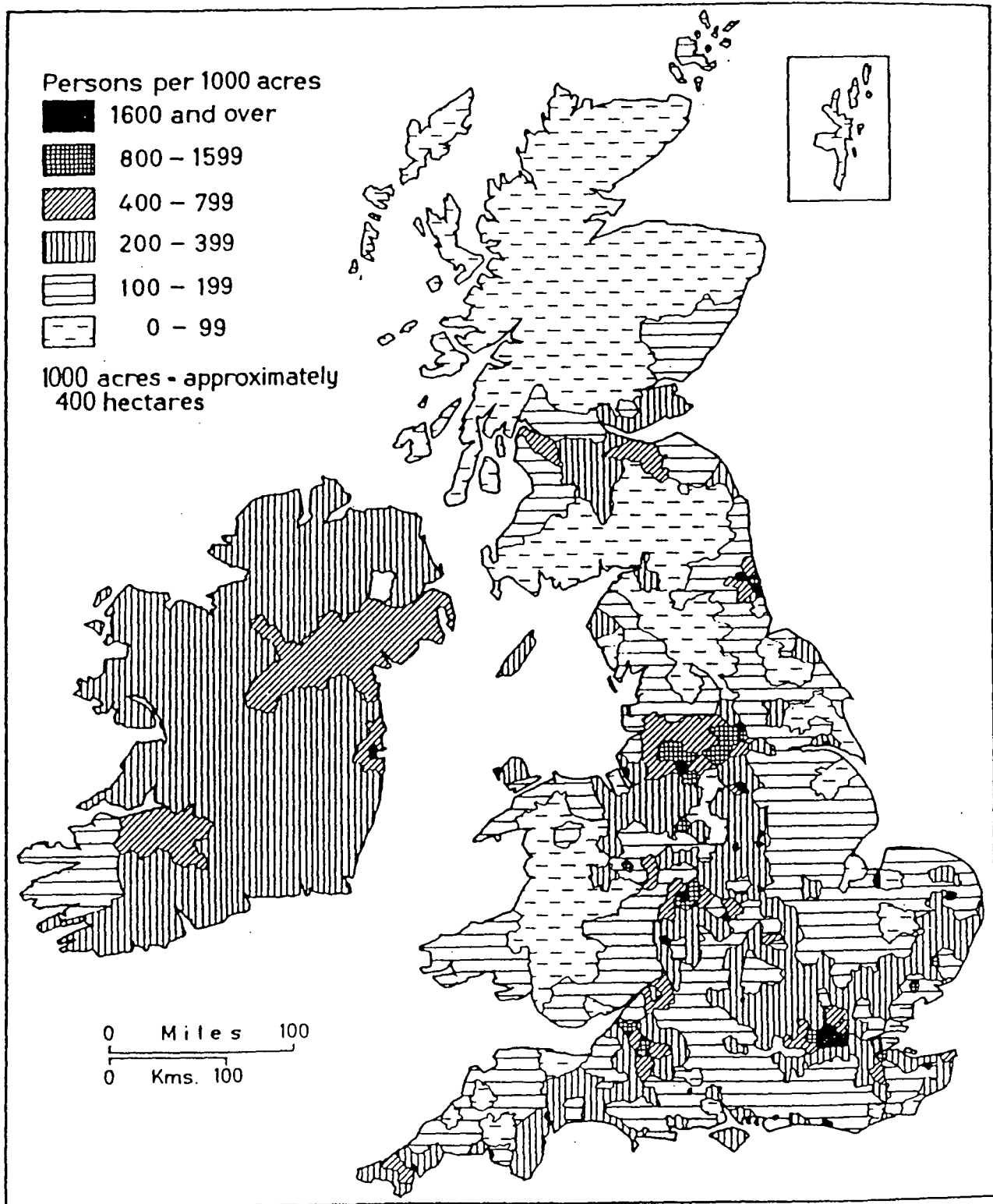


Figure 2.17 British Isles: population density, 1851 (from Lawton, 1964, p.228).

Therefore, except for the totally rural, i.e. sparsely populated areas and the periphery zones around these areas, there are no immediate correlations of population density with settlement distribution, the terrain or farming types. These areas of sparse population have strong connections with the highlands of England and Wales. It has already been established that here a lack of nucleations coupled with low dispersion densities proves that there is a general void of settlement altogether, hence giving rise to these low population densities. Although some of the chalkland areas do seem to produce quite low population densities, they tend to be part of much larger population zones which also encompass other types of terrain. Further, many of the chalkland landscapes in the country display very varied levels of population densities, even though their settlement patterns are quite similar and, overall, strong correlations are hard to find. This is also true for much of the rest of the country, where ties between the distribution of settlement and population are difficult to establish.

There are two possible explanations behind this. Either the criteria used to separate these two maps (Figure 2.14 & 2.15) into zones are not precise enough to produce a comprehensive pattern or the scale used, i.e. at the national level, is too general and ultimately too small to reveal any true correlations between population and settlement. In order to discount the former of these two possibilities, a comparison is made here with a map of population distribution in 1851 by R. Lawton⁶ (Figure 2.17), also based on the population returns from the 1851 census.

To prove that the zoning of the maps used is not at fault, the patterns found on Figure 2.17 should ideally be very similar to those on Figure 2.15 as the same information source has been used. On the whole, the patterns are indeed very similar, especially for the very low and very high density areas. With some minor differences, areas covered by high levels of population are very similar in their extent, consisting of a large area in Lancashire and the West Riding, the core of the West Midlands, Tyneside and North Durham and London. The low density areas in particular correlate quite closely, including central Wales, much of northern England, the moors of the South-West Peninsula and the Brecklands in East Anglia. Also highlighted are the starkly contrasting areas of very high and very low density in the north and west and the more subtle changes between zones in the Midlands and the south. This is to the extent that Figure 2.17 makes the distribution in the Midlands and south look rather 'flat' with only pockets of varying density. This is in comparison to the larger, more varied zones produced by B.K. Roberts' adaption of J.C. Dewdney's maps.

⁶R. Lawton in J.W. Watson and J.B. Sissons, *The British Isles: A Systematic Geography* (London: Nelson, 1964), p. 228.

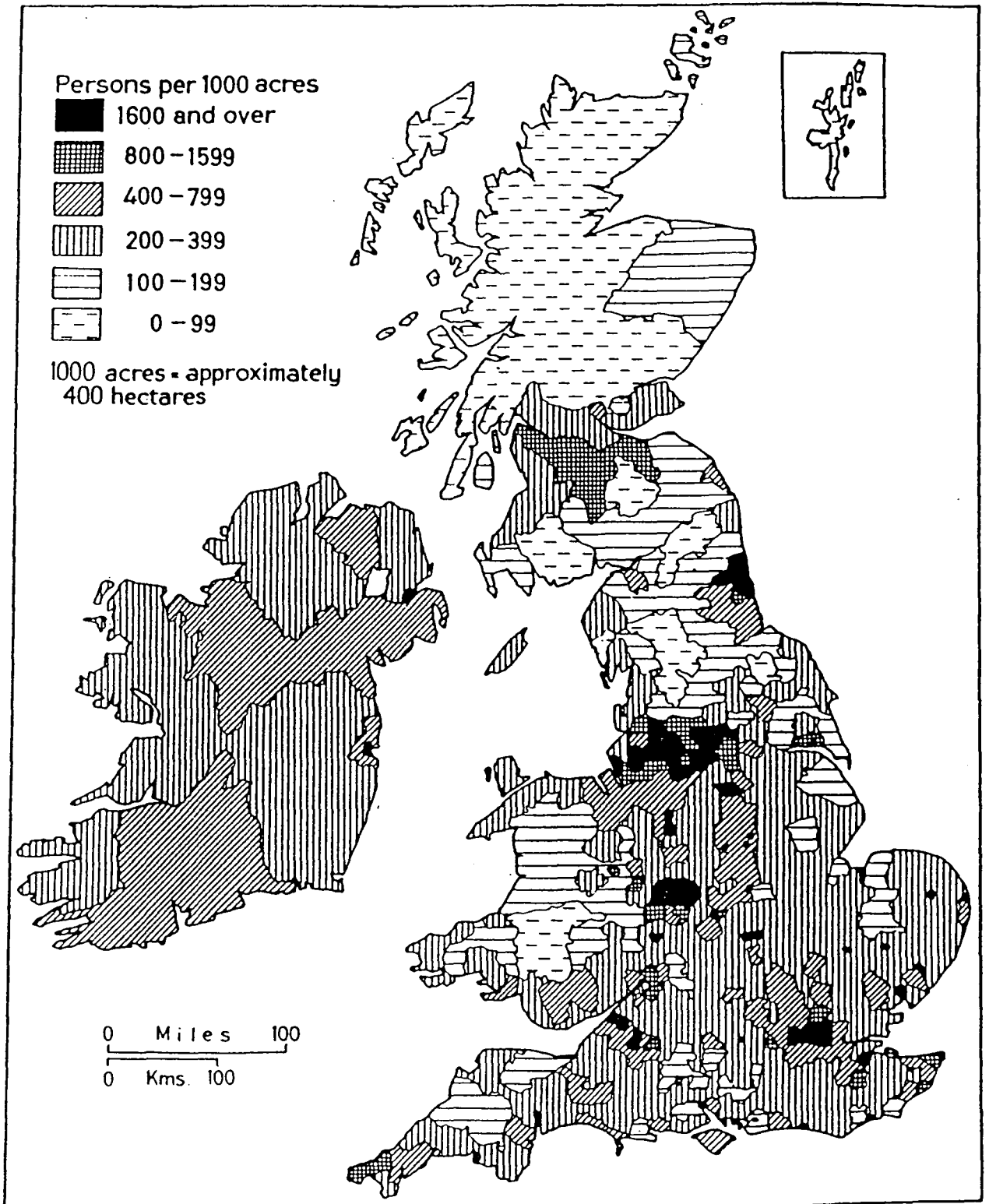


Figure 2.18 British Isles: population density, 1801 (from Lawton, 1964, p. 228).

Therefore, Figures 2.14 and 2.15 are not only proved to be true representations of the 1851 census data, but the patterns produced are in many ways far more usable than those of Figure 2.17. This is mainly due to the way the raw data have been interpreted and displayed. R. Lawton has used the actual figures of persons per thousand acres and has mapped these figures within the bounds of the various registration districts in England and Wales.⁷ B.K. Roberts, on the other hand, has split the country by the varying mix of quartiles within different zones, thus showing that the more interpretative and slightly less specific treatment often produces more useful results, provided it derives from the solid and subtle foundations of an analysis originally conducted at the parish scale.

Overall, we are left with the conclusion that it is the scale of the national map itself that is masking more obvious correlations between population and settlement, if indeed any further links exist. This can only be overcome by carrying out some more detailed investigations into the relationship of population and settlement at the regional level, i.e. at a larger scale. This is discussed further in the conclusion to this chapter.

One further problem also exists with the analyses made thus far. All of the distributions considered in this chapter have been in one plane only and the question of temporal change has not been addressed. The map of deserted villages (Figure 2.9) has already gone some way to show that there were changing elements in the settlement pattern. Here, an attempt is made to highlight the broad changes in the national distribution of population between 1851 (Figures 2.15 & 2.17), 1801 (Figure 2.18⁸) and 1600 (Figure 2.19⁹).

As could be expected, there was a great increase in the overall population of the British Isles between 1801 and 1851. Certainly in 1801 there were far greater expanses of land supporting very low population densities, especially in the north and west of England. However, the bases for all of the densely populated areas of 1851 can already be seen by 1801. On Figure 2.18 these bases appear as small nuclei of dense population with quite large peripheries of a relatively lower density. But by 1851 these nuclei have developed in extent, to include the previously peripheral areas and hence forming much larger areas of dense population. In the north of England most of the population increase between the two census dates took

⁷In Scotland and Ireland, however, county boundaries have been used.

⁸Lawton, p. 228.

⁹F.V. Emery, 'England circa 1600', in H.C. Darby (ed.), *A New Historical Geography of England* (Cambridge: Cambridge University Press, 1973), pp. 248-301. The map is found on p. 252 and is based on John Rickman's estimates in *Census of 1841: Enumeration Abstract*, 36 (P.P. 1843, xxii).

place in coastal areas, leaving the central cores of the area still quite sparsely populated.

As already mentioned, the differences of population density in the Midlands and the south are very subtle in 1851, in comparison to the highly contrasting areas of the north and west. This has resulted in the rather homogenous pattern of average and high densities seen on Figure 2.17. However, in 1801 this part of the country displays a far more definite distribution pattern, with a band of high density cutting through the centre of England (Figure 2.18). This stretches from Lancashire in the north-west, across the Midlands, to London and southern East Anglia, with a more minor extension running south west, into the counties of Somerset and Devon. Many of these areas of average population in the Midlands and the south, i.e. within the two central categories of shading (200-400 persons per square mile), saw little increase by 1851 and remained within the same density band. Hence, although the overall picture is one of a definite increase in population between 1801 and 1851, some areas maintained very even levels of population from one period to the next.

Turning to the map of population around the year 1600¹⁰, this provides a further, if less dependable, aspect to the changes seen in population with the progression of time (Figure 2.19). This map was produced to cover England only, using the county unit to calculate differing population densities. Levels of population are given solely in terms of their deviance from the mean of 87.6 persons per square mile. To give some sort of scale to this figure in terms of mid-nineteenth century population, 87 was the figure calculated by J.C. Dewdney to separate the two lower quartiles of population in 1851. These 1600 estimates, produced by John Rickman in 1841, should, however, be treated with far more caution than the returns made in the censuses of the nineteenth century.¹¹

However, taking the patterns produced for 1600 at face value, the general distribution of population is not too far removed from the patterns seen in 1801. This is especially true if the differences between the two methods of displaying the data are taken into account. There is a definite concentration of the population in the south-east of the country, stretching from East Anglia in the north to London and Kent in the south. High densities are also seen in the south-west, in the counties of Somerset and Devon, in Lancashire and in various parts of the East and West Midlands. There are, of course, substantial areas of sparse population, mainly in the north and west of the country, although the counties of Hampshire and Sussex on

¹⁰Although this date is outside the main study period of this thesis, it was felt that this was one of the better analyses of seventeenth century population, as few exist at a national scale (Emery, pp. 250-4).

¹¹The reliability of the 1801 and 1851 census returns is discussed in more detail in Chapter Three.

the south coast can also be included in this category. Again, as in 1801, the majority of the 'average' population areas lie to the south-east of a line drawn from the Wash to the Severn Estuary. In general, the highland/lowland split seen in many of the distribution maps already consulted in this chapter, is again highlighted in this population distribution for the turn of the seventeenth century. Further, a very similar picture emerges to that seen in 1801, though at a cruder level of presentation.

Hence, although the distribution maps for population in 1600, 1801 and 1851 obviously vary in terms of the levels of population density, the actual patterns produced do seem to be perpetuated to a certain extent, from period to period. However, as for the relationship of the distribution of settlement and population density, to comment successfully on these similarities and differences, it is necessary to focus on smaller regions, whilst working in more detail. At best, only general trends can be identified in the extensive fields of population and settlement when working within the national framework.

In conclusion, many questions have been raised in the course of this chapter, which can only be answered through more detailed studies, at a regional level. Further, it has been impossible to discuss here all of the factors behind the distributions of settlement and population. Hence, the next chapters are devoted to the study of population and settlement at a regional level. The causal factors behind the distributions are looked into more deeply and questions raised through the national study are also addressed. These questions include:

1. What factors lie behind the distributions of settlement and population? In this chapter, we have already looked at the primary factors of the land and its use in farming. However, the secondary, more human influenced factors need to be investigated, e.g. land ownership, industrial development and migration.

2. What have been the effects of temporal change on these distributions? This has only been touched on briefly so far, prompting the need for a more extensive examination of population and settlement between 1676 and 1851.

3. The most important question, what is the relationship of the distribution of nucleated and dispersed settlement (and hence the three settlement provinces) to the distribution of population throughout the chosen study period?

The following chapter forms an introduction to these regional studies and discusses the data sets used in the investigation of population from 1676 to 1851. Chapters Four, Five and Six then deal with the three chosen regions in turn.

CHAPTER THREE

CHAPTER THREE

REGIONAL STUDIES: THE DATA SETS

It has been established through work done at a national level in Chapter Two, that there is a need for more detailed investigations into the distributions of settlement and population, their relationship to one another and the influential factors behind them. Therefore, for a greater understanding of these distributions and relationships between 1676 and 1851, several study regions have been selected for a more concentrated and detailed analysis. The aim of these regional studies is to provide answers to the some of the questions raised in the previous chapter. The three main questions to emerge from Chapter Two are: What are the causal factors behind the distributions of settlement and population? What were the effects of temporal progression on these distributions? What is the relationship of settlement and population through the chosen study period?

The three areas chosen for regional analysis were: The West Midlands (including the counties of Warwickshire, Worcestershire and parts of Shropshire, Staffordshire, Derbyshire, Leicestershire, Northamptonshire, Oxfordshire, Buckinghamshire, Gloucestershire and Herefordshire), Yorkshire (the three ridings) and Cumberland with Westmorland. Pre 1974 county boundaries are used throughout. The West Midlands was chosen as it is a very large area containing within it great complexities of population distribution (as shown by the national distribution map for 1851 in Chapter Two) and settlement. Further this area straddles the boundary of the north-western and central settlement provinces. Yorkshire again is a large enough area to exhibit great internal variations in settlement and population, ranging from the sparsely populated North York Moors to the industrial areas of the West Riding. Cumberland and Westmorland provides something of a contrast to the first two areas, dominated by moorland with a very low population count in comparison to much of the rest of England. However, a more detailed examination of the area highlights much more profoundly the subtle differences within it, from the industrial coastal tract to the purely pastoral lakeland.

The aim of this chapter is to give an introduction to the study of population and settlement at a regional level. The data employed in the study is scrutinised, covering how it was dealt with and put to use and the problems encountered in its utilisation. The maps produced are considered in Chapters Four Five and Six.

Work done at a national level in Chapter Two relied wholly on J.C. Dewdney's population density maps for 1851; however the

more detailed analyses at the study area level employed returns from three different sources :

- 1851 Census of Great Britain¹
- 1801 Census of Great Britain²
- 1676 The Compton Census³

The first two were readily available as published governmental documents. The Compton Census figures were taken from Volume Ten of the British Academy's Records of Social and Economic History. For the purposes of this exercise, only the crude population totals are used in the analysis.

The data gathered from these sources were plotted county by county onto parish maps of the study areas (for returns from the 1851 Census, this was a process of replotting distributions already mapped by J.C. Dewdney) using quartiles and octiles. On the whole the octile maps were too detailed to identify 'regions', i.e. groups of parishes situated together that were within the same density range. In fact at this level of resolution no real patterns were discernible. On the basis of this, the octile maps were on the whole rejected for this study. The quartile maps were used to identify local regional contrasts, purely on the basis of the population variations appearing within each distribution. For further clarification of patterns and a more general view of population density, maps were produced by dividing the density distribution into two at the median value. Later other maps were prepared e.g. the 1676 population as a percentage of the 1851 population, showing the variation of growth between parishes from 1676 to 1851 and also parishes which experienced population decline in that period. For the West Midlands only, a map was produced using the 1676 population figures, but within the 1851 quartiles. This highlighted areas of extremely high population density, i.e. those parishes that in 1676 had already reached population levels that were the average or even as high as those present in 1851. This method was not used for the two other study areas, as in 1676 very few of their parishes reached density levels comparable to those of 1851.

Little, if any, of the published work on population distributions based on census returns reaches this threshold of detail. As seen in Chapter Two, R. Lawton has produced a great deal of work using many of the early censuses, especially the 1851 Census. However, although his work is detailed, examining all the returned census information including population, migration, employment, sex ratios etc., it is very much at a national level. For the size of study

¹Census of Great Britain 1851, Population Tables, Volume I (London: H.M.S.O., 1852).

²Census of England and Wales 1801, Abstract of the Answers and Returns, Part One (London, 1801).

³Whiteman, 1986.

region dealt with in this thesis, most of the previously produced work reaches no further than the administrative boundaries of 1951.⁴ Alternatively, incredibly detailed studies exist, covering very small areas of the country.⁵ This study attempts to strike a balance between the two, using the perspective of the former and incorporating the detail of the latter. Thus the approach to use of the figures and to the interpretation of the distribution maps produced, is very much a new idea and not a tried and tested method.

It is necessary to consider in detail the data sets which form an important basis for this work. Of prime importance is: extent of coverage with regards to Britain and reliability of figures returned in census material. The way in which the data were approached and handled is discussed and the problems encountered are noted. The three sets of data are dealt with retrogressively, although the 1801 material was actually last to be chosen for use, as it was felt that a step was required to bridge the temporal gap between the two sets of data already under analysis.

1851 Census Data

This is regarded as the first modern census.⁶ It was the first time that a social structure could be considered, as information was required on the relationship of every person to the head of the household. Further, returns included actual ages, places of birth (helpful in analysing patterns of migration) and numbers attending places of worship. Total population for Great Britain in 1851 was calculated at 21,121,967. Already existing boundaries e.g. those of the parish, were taken into account when creating the enumeration districts. Many boundaries were already established for administrative areas of the New Poor Law of 1834 and were utilised along with their staff, employed to deal with poor relief. Population figures for each parish were often returned in townships as the parish was usually divided into two or three townships. This was especially common in the north of the country where the parish tended to cover a large area and the townships within it were very definite areas.

⁴e.g. G. Dury, *The East Midlands and The Peak*, (London: Thomas Nelson and Son Ltd., 1963), pp. 192-193.

⁵e.g. S. Sogner, 'Aspects of the demographic situation in seventeen parishes in Shropshire, 1711-1760', *Population Studies*, XVII, 1963, pp. 126-46; D.E.C. Eversley, 'A survey of population in an area of Worcestershire from 1660 to 1850 on the basis of parish registers' in, *Population In History* (London, 1965), pp. 394-419.

⁶R. Lawton, 'Population' in J. Langton and R.J. Morris (eds.), *Atlas of Industrializing Britain*, (London: Methuen, 1986), pp. 10-29.

As J.C. Dewdney had already plotted population densities separately for each county in Great Britain, this was a case of merely replotting the data for the required parishes within the study areas. Due to the national coverage of Dewdney's work, the quartile and octile values had thus been calculated for the whole of the country as opposed to being for the study areas only. However, it was found in the case of Cumberland and Westmorland that further calculations were needed to produce a more varied pattern for discussion, producing quartile and octile values for that area alone.

West Midlands :- The plotted data produced a good pattern i.e. one containing plenty of visual variation. This does not mean that the pattern was simple, it was on the contrary very complex. However, this is far superior to an over-simplified map, for which little can be said or argued. It therefore seemed unnecessary to replot the West Midlands population densities using 'natural breaks'. This is a step to be taken if the quartile values produce a far too homogenous pattern and are perhaps masking a more relevant distribution. The method was used for Somerset in 1851, a data set that was later rejected due to lack of 1676 data. To produce a graph detailing each parish density value would be a very time consuming exercise, especially with no guarantee that any natural breaks would exist.

Cumberland and Westmorland :- The first maps were plotted in the same way as the other regional population distributions, using the national octile and quartile levels. However, as this region was so under-populated in comparison to much of the rest of the country, the pattern produced was extremely 'flat', i.e. showing few clear-cut local contrasts. This was especially true for Westmorland, although the Cumberland coast and Carlisle area showed more variation. It was felt that if a study of the region as a whole was to be made, comparing the 1851 patterns to those of 1801 and 1676, more contrast was needed between parishes for 1851. Therefore a second set of maps was plotted for the area. The octile and quartile values were calculated using the Cumberland and Westmorland data only (the same method used for 1801 and 1676) and were notably lower than those for the whole country in 1851. The maps produced highlighted the differences in population distribution far more acutely. For the parish of Greyrigg, the area of the town of Kendal was calculated and the population plotted separately, as the population of the town distorted the picture of the large and very rural parish with an otherwise low population density. This method was also adopted for the parish of Brigham where the town of Cockermouth again affected the low rural population density.

Yorkshire :- As the largest county in the country, split into three ridings (North, East and West), Yorkshire formed an excellent study area on its own, comparable in size and more importantly in variation of landscape, to the West Midlands. Hence the application of J.C. Dewdney's national quartiles and octiles to the population distribution rendered a good visual pattern with plenty of variation.

1801 Census Data

This was the first census in Great Britain, with John Rickman undertaking the job of Superintendent. A product of the Napoleonic Wars and the resulting worries about the level of population, it was constructed from a series of basic tally sheets and recorded only the fundamental demographic facts. It did, however, include ten yearly parish register abstracts, from 1700 onwards for baptisms and burials (from 1780-1801 the abstracts were yearly) in the hundreds and wapentakes of the country. Marriage information was also included from 1753 on a yearly basis. The population total arrived at for Great Britain in the census year was 10,917,433.

The 1801 census was chosen to provide an intermediate step between 1676 and 1851. The density values were calculated and plotted for two study areas only, the West Midlands and Cumberland and Westmorland. Yorkshire was left out mainly due to time constraints. Further, it was discovered using the two other study regions (and also data calculated for Somerset in 1851 and 1801, omitted from the final study due to lack of figures for 1676) that the 1851 and 1801 distributions were very similar. The quartiles and octiles were identified individually for each study area. The differences between these two sets of figures should be noted as an indicator of the overall levels of population in the two regions, the octile values for Cumberland and Westmorland being considerably lower than those for the West Midlands, showing the latter area to be generally far more populous in 1801 (Table 3.1). The few parishes which remain blank (for the West Midlands this is 20) are so thinly spread as not to affect interpretation of the distributions. For most of these parishes the name is entered in the census returns, but the numerical column remains blank.

WEST MIDLANDS	CUMBERLAND AND WESTMORLAND
193	141
144	86
119	69
103	60
88	50
74	37
56	24

Table 3.1 Octile values of persons per square mile, 1801.

West Midlands :- As for the 1851 distribution, the quartile map produced a sufficiently detailed pattern to be a useful means of interpreting the population distribution. Similarly

the octile map was useful as a detailed support to the quartile map, but was too complex to glean any general population patterns. It was felt that a map of natural breaks would not further illuminate the picture for 1801. In addition, the huge difference between the range of density values of the various counties (or part counties) rendered a very constant and unbroken graphical distribution.

Cumberland and Westmorland :- As in the West Midlands, the quartile map highlighted a good distribution and the more complex octile map was used for clarification of larger areas only. No natural breaks appeared on the graph distribution, therefore preventing such a plot cartographically. As for 1851, Kendal was calculated and plotted separately from the rest of the parish.

1676 Census Data

The returns for the Compton Census are far more complicated than those for 1851 and 1801, warranting a much lengthier account of the history and accuracy of the source. The returns for many areas of the country are missing e.g. the Diocese of Bath and Wells, i.e. Somerset, therefore study regions where there is at least partial coverage were chosen: West Midlands, Yorkshire and Cumberland and Westmorland.

In the January of 1676 the Archbishop of Canterbury, Gilbert Sheldon, sent out inquiries whilst passing the responsibility of the census to Henry Compton, Bishop of London and Provincial Dean. It is said that the motivation for the census came from Lord Treasurer Danby who wanted solid figures to persuade Charles II that the vast majority of the population were still faithful to the Church of England.

The census basically gives the number of conformists, popish recusants and Protestant dissenters by parish. Purely a religious head count, no other information was asked for and none was collected. It is unclear as to how many diocesan heads knew that they were to count both males and females over the age of sixteen. Only the Bishops of Lincoln and Norwich inquired about this and it seems no instructions were distributed generally.

There is evidence from all diocese of the different ways of handling the question. Even within the single diocese there was great variation e.g. the Diocese of Lincoln. In the Diocese of Hereford nearly every deanery makes its returns in a different style, attesting to the great confusion over what was required. It must therefore be stressed that if uniformity of method cannot be assumed, then neither can uniformity of results.

Even though the questions were hazy, in the end the accuracy of the returns was still very much dependent on the extent of the conscientiousness of the incumbents and the church wardens. There has been scepticism in the past of blocks of returns where the bulk of the numbers end in '0'. However,

rounding up was probably quite normal, even after a careful count, to allow for errors. Further, it was quite usual in the seventeenth century to count in scores, therefore rounding would probably take place to the nearest score or half score. Therefore this cannot be taken as a true indicator of inaccuracy or estimation, including estimation due to superstition of counting heads, which is often used to argue the invalidity of Compton Census figures.⁷ No evidence whatsoever has been found in any of the diocesan returns that there was opposition to the census for superstitious reasons. Accuracy would also depend on the size and type of parish. A small parish containing a compact village would be much easier to survey than a large parish with much dispersed and often very isolated settlement. The physical problems of a parish could not have been insurmountable, but a lazy incumbent could use them as justification for inaccurate returns.

Omissions of persons probably included vagrants, prisoners, lodgers, soldiers and sailors, although a few parishes seem to have sailors listed amongst their numbers. Also unclear is whether large houses with their own chapels and even the parson's own house were included in the tallies. With such queries in mind, it is probably correct to say that even the most accurate of incumbents returned an underestimated count of their parish population.

The omission of whole parishes and chapelries (and hence a lack of data) is, for an extensive variety of reasons, a far greater concern and a much more widespread problem. Firstly, there is much uncertainty about the inclusion of chapelries in the count. Some were separate units altogether, others were in total co-existence with the parish. Where possible, A. Whiteman in her critical edition of the census, has indicated where chapelries or indeed other parishes are included in one single count. The existence of extra-parochial areas, for which no count was made, is the second of several reasons for lack of parish data, and considerable parts of the West Midlands study area fall into this category (Figure 3.1).

The more complicated the ecclesiastical pattern of jurisdiction, the less complete the picture for 1676. An example of this is taken from the West Midlands study area, in the Diocese of Lichfield and Coventry. Here, excluded from the count were individual prebendaries, the parishes in the peculiars of:

- a) The Dean and Chapter of Lichfield
 - b) The Dean of Lichfield
 - c) The Bishop of Lichfield
 - d) The deaneries
- plus, the Royal Peculiars of Bridgenorth, Penkridge, Shrewsbury St. Mary and Wolverhampton (Figure 3.1).

Omissions apart, even the simple task of relating the 1676 parish names to the newer ones on the parish maps used can be

⁷Whiteman, pp. lviii-lix.

a problem. Also, it must be remembered that unlike the other two sets of census data dealt with, the returns are not on a county basis and a diocese may contain several counties, whole or part (Figure 3.2). Further, as this was an ecclesiastical census the data were returned by parish only; townships were not considered.

There has always been much scepticism about the use of the Compton Census as an indicator of population. However, research carried out recently on the validity of the figures suggests that their reliability is far greater than previously considered.⁸

In the past, one of the main arguments against its use was the lack of other data for the same period (even for the same century) to act as a comparison or check. However, work done on the 1603 returns of communicants, recusants and non-communicants (ordered by Whitgift) reveals a general pattern comparable to the 1676 results, if the change in population over 73 years is taken into account. Similarly, demographic work on the Protestation Returns (1641-42) revealed a pattern close to that produced from the 1676 returns.⁹

As for 1801, the differences between the octile values for the three regions act as a broad indicator to the general levels of population within the areas in 1676 (Table 3.2).

WEST MIDLANDS	CUMBERLAND AND WESTMORLAND	YORKSHIRE
141	69	107
97	55	76
81	50	59
69	37	50
60	32	43
51	26	36
39	20	28

Table 3.2. Octile values of persons per square mile, 1676.

The West Midlands' values are notably higher than those for Cumberland and Westmorland (around double in most cases), with the values for Yorkshire lying somewhere in between. This points to the West Midlands being the most populous of the study regions in 1676, followed by Yorkshire, with Cumberland and Westmorland being the least populous of the three. This is a useful generalisation with regards to the validity of the returned figures, particularly when it is appreciated that the

⁸Ibid., pp. lix-lxxvi.

⁹Ibid., pp. lix-lxiv.

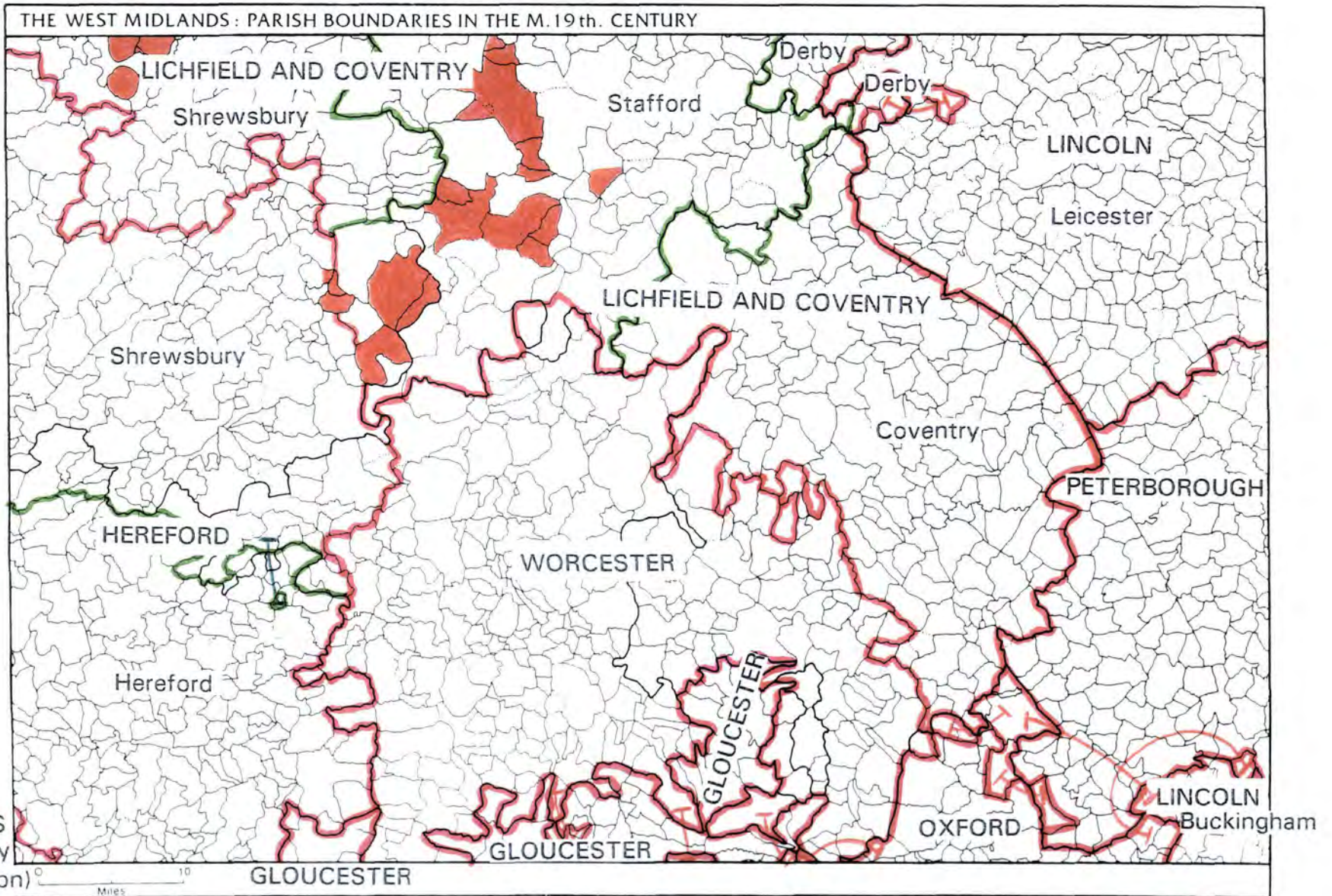


Figure 3.2 West Midlands: Diocese and archdeaconries, 1676.



HEREFORD

Archdeaconry



Hereford

Diocese



Royal Peculiars

Figure 3.2 Key

incumbents of the three regions were not in a position to create deliberately massaged figures.

West Midlands :- It is the complex pattern of peculiars that is the major contributor to the problem of lack of data, within this specific study area. Although the Diocese of Lichfield and Coventry is by far the most complicated in terms of omissions, the rest of the study area contains similar problem areas (the map of deaneries and peculiars attests to this). However, for two sets of peculiars in the Lincolnshire Diocese, returns were made separately. These were the Banbury Peculiars of the Dean and Chapter of Lincoln in Oxfordshire (although Banbury as a parish is missing), and the Jurisdiction of Rothley in Leicestershire (Figure 3.1).

These omissions of peculiars and extra-parochial parishes, coupled with parishes for which data is missing or for which data was not collected go to total a considerable number of parishes within the study area (Table 3.3).

COUNTY	No. PARISHES	% OF COUNTY
BUCKINGHAMSHIRE	4	16%
DERBYSHIRE	0	0%
GLOUCESTERSHIRE	6	11%
HEREFORDSHIRE	5	3%
LEICESTERSHIRE	23	13%
NORTHAMPTONSHIRE	11	8%
OXFORDSHIRE	4	9%
SHROPSHIRE	25	13%
STAFFORDSHIRE	46	55%
WARWICKSHIRE	34	16%
WORCESTERSHIRE	4	2%

Table 3.3 Based on information from *The Compton Census of 1676*, (Whiteman, ed.), 1986.

The table shows the number of parishes (within the bounds of the West Midlands study area) by county, for which there was no information available for whatever reason. This is also expressed as a percentage, i.e. the number of parishes for which there is no data as a percentage of the total number of parishes within the study area. Staffordshire is obviously a particular problem, especially when only a small area of the county is actually included in the study area. Conversely, Worcestershire is impressive in its completeness considering the whole of the county is within the bounds of the West Midlands.

Turning to the actual use of the figures available for the West Midlands in 1676, several major problems were at first encountered. The population densities were calculated and plotted using the basic raw data from the census (i.e. taking

the total population for the parishes as being the sum of the numbers in the three returned categories), with a multiplier of 1.5 used to allow for children under 16 years of age. The figure of 1.5 was chosen based on the presumption that 33% of the total population of the time was children. This is slightly lower than Gregory King's estimate of 40%, allowing for the general static if not falling population of the period.¹⁰ Of course the use of the same multiplier on all parishes can not give precise figures, but should indicate the general size of a parish at the time. However, when the information was plotted onto a map, the pattern produced indicated that there were problems with returns from some of the deaneries. The distribution highlighted a great trough of low population density in the southern half of the Archdeaconry of Coventry, and the Deanery of Kineton in the Worcester Diocese (Figure 3.1). In amazing contrast, the neighbouring county of Northamptonshire (i.e. the Diocese of Peterborough (Figure 3.2)) had a generally very high population density with a large percentage of the parishes lying within the high upper quartile. Overall, a very marked pattern of population was produced for this south-eastern part of the study area.

The problem with the Northamptonshire data was first corrected. It would seem from information available that the figures returned for the Diocese of Peterborough were corrected at the time by the bishop, to allow for children under the age of 16. Therefore, the multiplying factor employed elsewhere in the study region was not used for this diocese on the second plot.

It is mainly the work done by A. Whiteman¹¹ on the comparison of the Protestation Returns with the Compton Census figures that brought to light the fact that some areas of the Diocese of Lichfield and Coventry returned totals that did not include women. One example is the Archdeaconry of Coventry, where it is suspected that only 2 out of 19 parishes sampled, returned figures that included women. Yet, in the neighbouring Stafford Archdeaconry at least 15 of 26 sampled seem to have made correct returns.

Also, it is suspected that several deaneries in the Diocese of Worcester returned numbers for male adults only. However, Protestation Returns evidence is not as abundant for this area except for the deaneries of Kineton of Warwick, which are actually within the borders of Warwickshire. It seems that the general tendency in the Kineton Deanery was to return figures of men only. Yet in the Deanery of Warwick, most parishes returned figures that included women. It is suspected that the practice of discounting women in the census was prevalent amongst other parishes in the Diocese of Worcester e.g. the

¹⁰Ibid., p. lxvii.

¹¹Ibid., pp. lxi-lxiv.

Deanery of Worcester, but as documentary evidence is lacking for these areas to enable a comparison, it cannot be proven.¹²

Accordingly, it was decided that there should be adjustment made to figures from deaneries where evidence was substantial enough to support this. For the Deanery of Kineton and the Deaneries of Arden, Coventry, Marton and Stonely (collectively the Archdeaconry of Coventry), a multiplier of 3 was used instead of 1.5, to account for women as well as children.¹³

The resulting corrected map was far more balanced than that produced by the first plot, the only area still really under question being the Deanery of Worcester. As for the 1851 and 1801 plots, the quartile maps were felt to be of the most use and no natural breaks were readily spotted on the graphical representation of the data.

Cumberland and Westmorland :- Within this study region, peculiars were far less of a problem than in the West Midlands. For deaneries within the Diocese of Carlisle (Carlisle, Alnedale, Westmorland and Cumberland) entries existed for all parishes, although for 26 of these no figures were entered. The greatest problem was lack of data for a sizeable part of the study region. The bulk of the south-west was within the Diocese of Chester for which only two returns still exist, both for parishes in Lancashire. Taking into account the unentered figures for the Diocese of Carlisle and the missing data for the Diocese of Chester, around half of the study region is covered by 1676 data. There is a possibility that this may have affected the calculation of the quartile intervals. However the missing data is balanced in its extremes, from the sparsely populated moors in Westmorland to the populous Cumberland Coast, as is the data that exists, suggesting that the quartile figures calculated may not be too different from those which would have been produced for the full data set. Further, as already mentioned, the quartile values produced are in keeping with what could be expected for this area in 1676.

From work done by A. Whiteman, comparing the returns with the Protestation Returns of 1641-2, it has been discovered that the bulk of the incumbents returned figures of men and women over the age of sixteen, with only some inconsistencies in the Deanery of Carlisle.¹⁴ Hence a multiplying factor of 1.5 was used on the returned figures, to allow for children. The maps produced some strong patterns in the areas for which data existed.

Yorkshire :- As in the West Midlands, problems were caused by the large number of peculiar jurisdictions within the Diocese

¹²Ibid., p. 171.

¹³Ibid., p. lxvii.

¹⁴Ibid., pp. 618-9.

of York. This diocese covered the East Riding, the bulk of the West Riding and half of the North Riding. The peculiars included those of:

- (a) The Dean of York
- (b) The Dean and Chapter of York
- (c) A Prebendary of York
- (d) The Bishop of Durham
- (e) The Dean and Chapter of Durham (Figure 3.3).

Further, the areas of the West and North Ridings not within the Diocese of York were covered by the Diocese of Chester, for which only two Lancashire returns survive.

This lack of data for the north-west of the study region, along with the complex pattern of peculiars already mentioned, means that around one third of the region is without data for 1676. However, as the area of Yorkshire as a whole is so vast, it is unlikely that this lack of data affected the calculation of the quartile values.

Whiteman's comparison of the raw data set with the Protestation Returns has shown that, on the whole, counts of men and women over sixteen were made, rather than counts of the whole population, men only or just households.¹⁵ A multiplier of 1.5 was therefore used to allow for children in the population. The resulting maps, although incomplete due to lack of data, produced plenty of interesting distributions for discussion.

In the three chapters to follow, the quartile maps produced from all three censuses are examined individually, noting particularly large areas of either high or low population density. For the West Midlands only, a further map, of parishes in 1676 which had already reached population levels more typical of 1851, adds to the picture.

Maps dividing the parishes at the median value are analysed providing a more general picture of the distribution patterns. As can be seen in Chapter Two, both the West Midlands and the Yorkshire study regions straddle the North-western and Central Settlement Provinces, whilst the Cumberland and Westmorland region is wholly within the North-western Settlement Province. Therefore, where relevant, the approximate boundaries of these national settlement provinces are superimposed onto the above maps. This enables comparisons to be drawn between the provinces, with regard to patterns of population distribution. It should, however, be noted that a very definite sub-province does exist in the north of the Cumberland and Westmorland study region, covering much of the Eden Valley and the Solway Plain. This was taken into consideration, although its limit was not marked on the maps.

Studies of the dynamics of population within the three regions during the period 1676 to 1851 are tackled in two

¹⁵Ibid., p. 566.

YORKSHIRE (NORTH RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

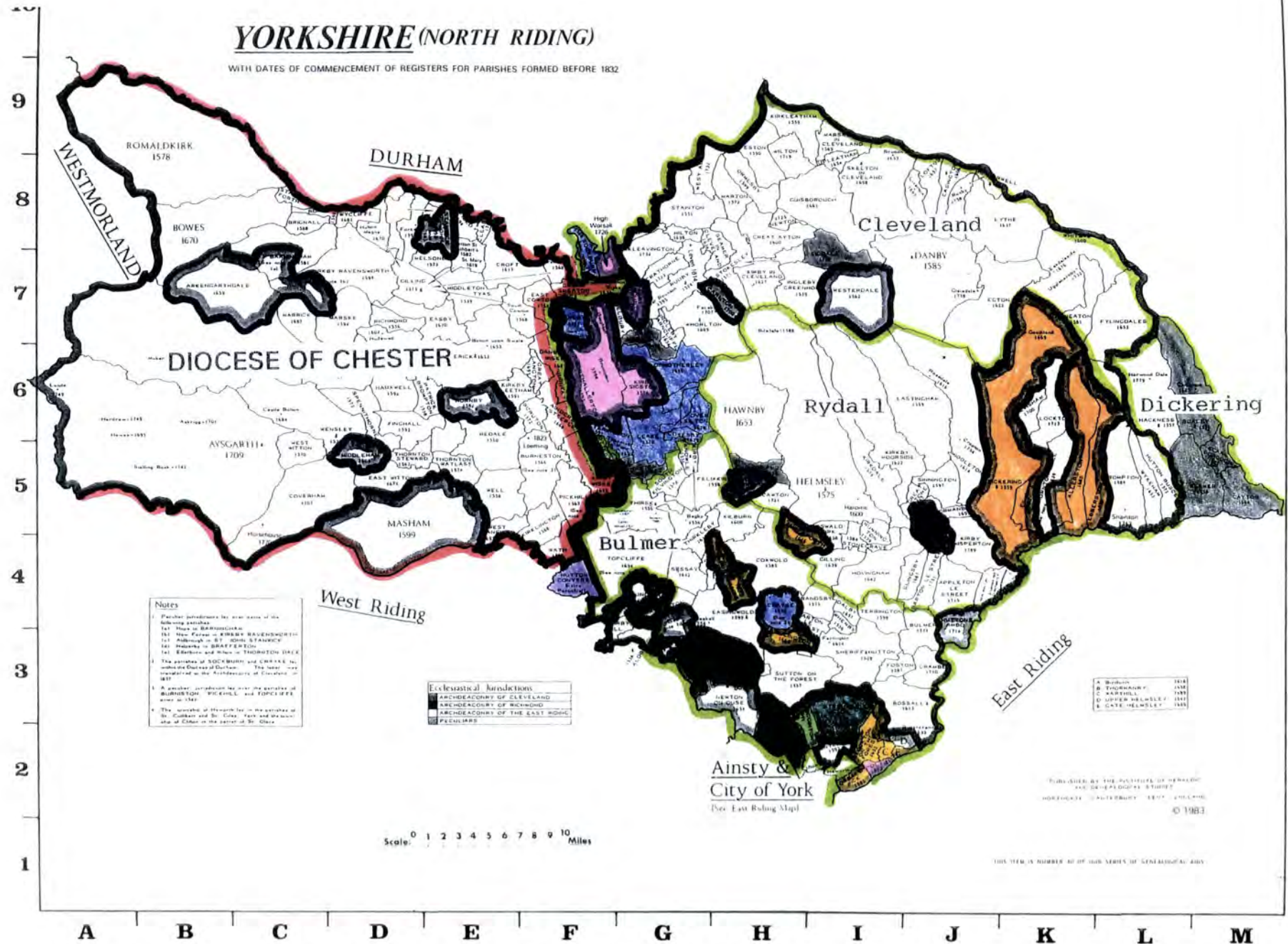


Figure 3.3a Yorkshire: Deaneries and peculiar jurisdictions, 1676.

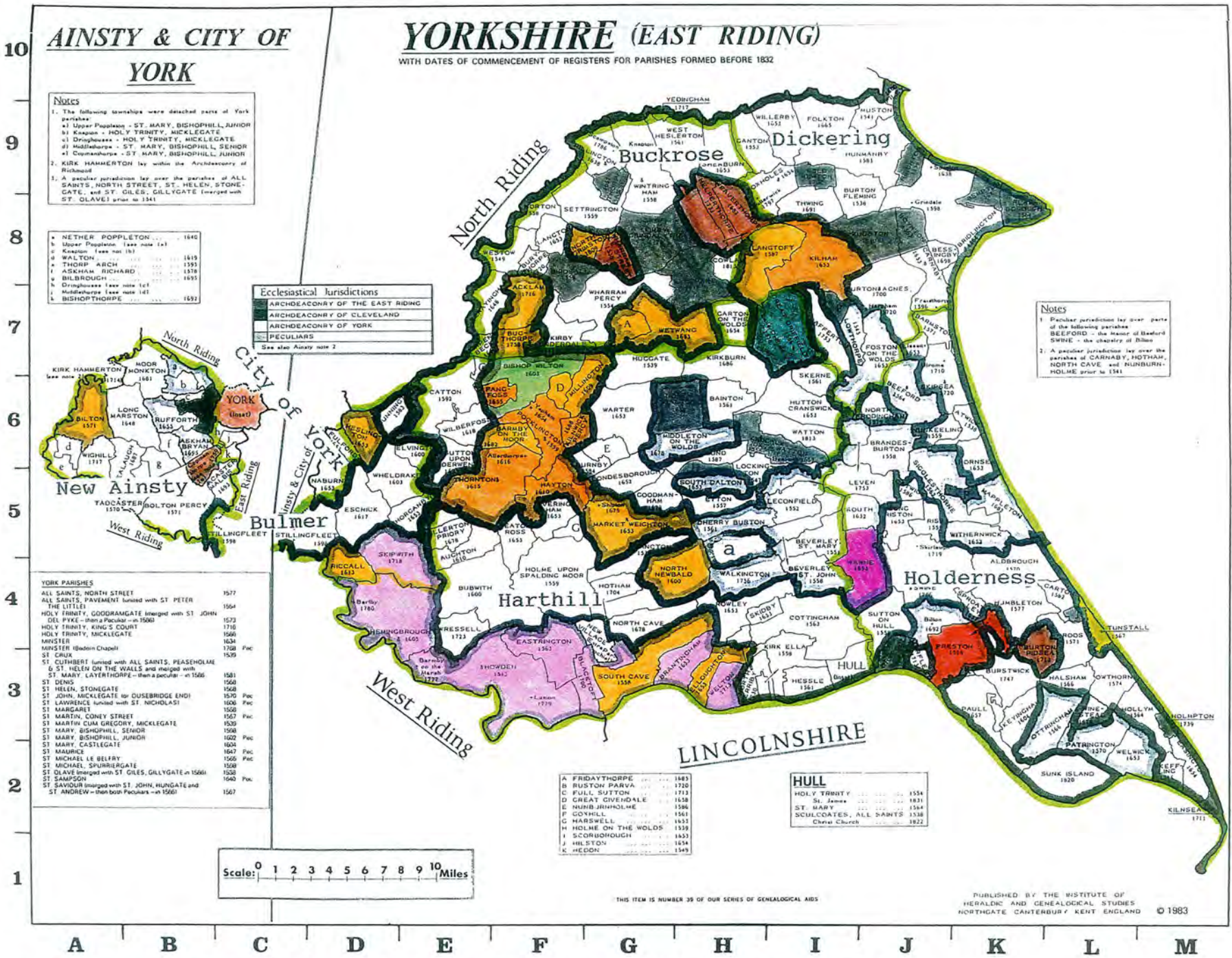


Figure 3.3b Yorkshire: Deaneries and peculiar jurisdictions, 1676.

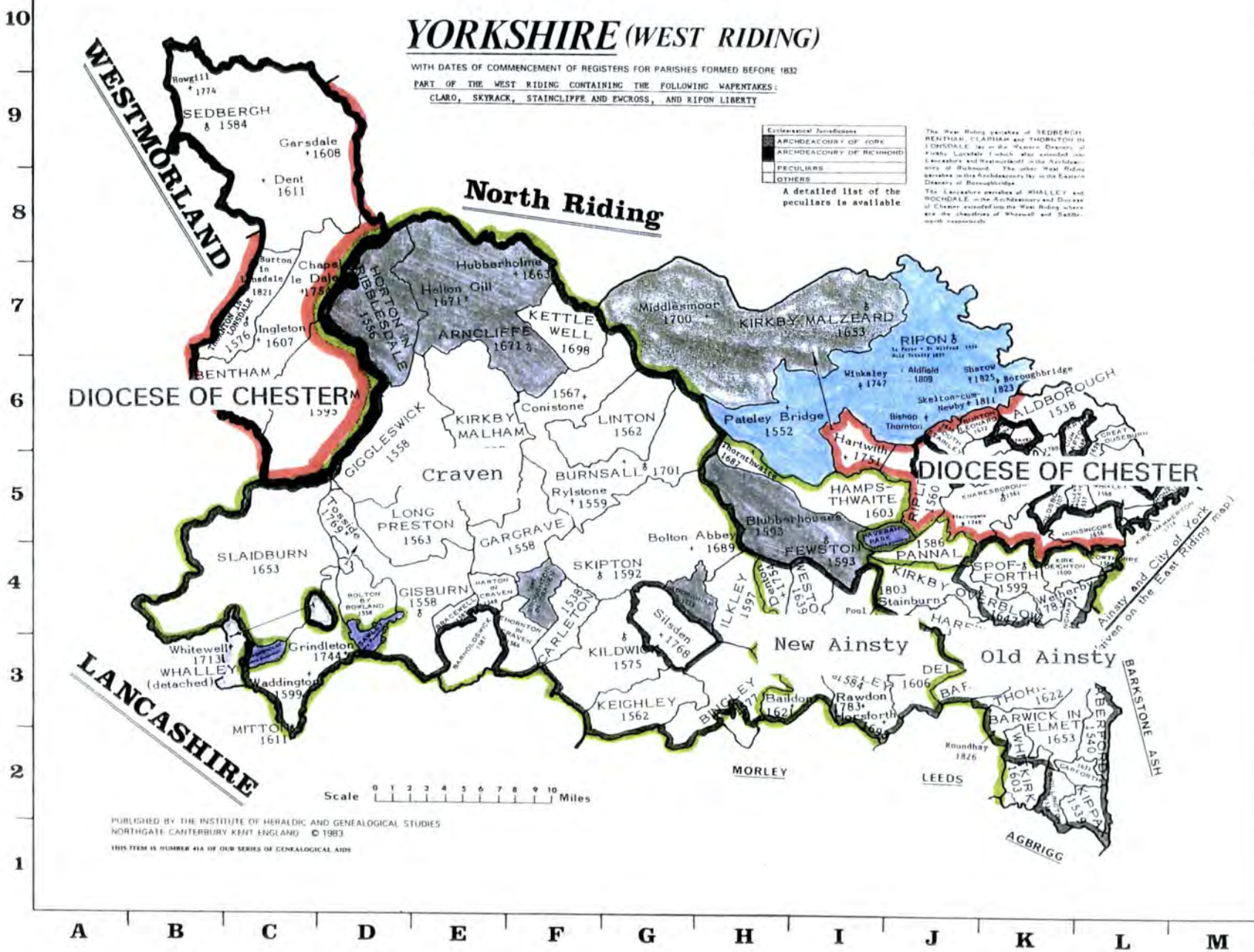


Figure 3.3c Yorkshire: Deaneries and peculiar jurisdictions, 1676.





	Extra-parochial
	No information
	Dean and Chapter of York
	Dean of York
	A prebendary of York
	Treasurer of York
	Precentor of York
	Sub-dean of York
	Succentor of York
	Chancellor of York
	Archdeacon of the West Riding
	Liberty of Ripon
	Bishop of Durham
	Dean and Chapter of Durham
	Other peculiar

Figure 3.3 Key

different ways. Firstly, the quartile maps for the three dates were compared and contrasted (1851 and 1676 only, for Yorkshire), in order to highlight both changes and continuity in the distribution patterns between the three periods. It could be suggested that problems of direct comparison are unavoidable, as the quartiles of the 1851 data set were calculated at a national level, when those for 1801 and 1676 were produced for the separate study areas only. This of course does not refer to Cumberland and Westmorland, for which quartiles were calculated separately for 1851. However, the similarity and continuity shown by the maps produced, seems to indicate that this is a minor hindrance for Yorkshire and the West Midlands. This is probably due to the large size of these two study regions and the resulting wide ranging population levels within them. Secondly, actual changes in population levels are considered, using the maps showing percentage change of the calculated populations in 1676 and 1851. These maps highlight areas of low, average and high growth, as well as parishes which experienced population decline over the elapsing 175 years.

CHAPTER FOUR

CHAPTER FOUR

THE WEST MIDLANDS

In the discussion that follows, the maps produced from the data detailed in Chapter Three are dealt with retrogressively. A picture is built up of the region at each census date, with the distributions analysed in their own right. An attempt is then made to look at the changes experienced over time, from 1676 to 1851. The factors underlying the spatial and temporal changes in the distribution of population are considered in the final section of the chapter.

1851

(Figure 4.1) Several areas of high density (i.e. in the upper quartile, with over 207 persons per square mile) dominate the map, with the largest being centred somewhere between Dudley and Birmingham. Around 22 miles east to west and 14 miles north to south, it stretches to Sutton Coldfield in the north-east, Kings Norton in the south-east, to Kinver in the south-west and to Codsall in the north-west. Two 'tongues' extend down from this main nucleus, one south from Kinver stretching some 26 miles as far as Great Malvern in Worcestershire. The second is south from around Halesowen to Studley in Warwickshire and Feckenham in Worcestershire, covering in the region of 15 miles. A third extension to this area projects north-west into Shropshire as far as Lilleshall and Wellington. To the west of this is another sizeable area of densely populated parishes, mainly within eastern Leicestershire, but also including areas in north-eastern Warwickshire and southern Derbyshire. These parishes almost form a ring around an area of less dense population, with an extension into Warwickshire as far south as Coventry. Other smaller areas of high density can be found in northern Oxfordshire, from Cropredy to Deddington at the southern edge of the study area, a distance of around 14 miles. Also on the edge of the study area, a spread of parishes in Northamptonshire and Buckinghamshire is of note, although the true extent of the area can only be discovered by studying the national map (Figure 2.15).

Substantial areas of low density (under 87 persons per square mile) are not as numerous as those of high density. Notable areas are mainly within the eastern half of the study region. The largest, in southern Shropshire, runs almost unbroken from the eastern border of the county to the western edge of the study area (i.e. from Dowles in the east to Wentnor and Lydbury North in the west), about 25 miles. From Pitchford in the north it covers around 18 miles to Stoke St. Milborough in the south. Another much smaller area of low density is on the Shropshire/Herefordshire border, from Aymestrey in

THE WEST MIDLANDS: PARISH BOUNDARIES IN THE M. 19th. CENTURY

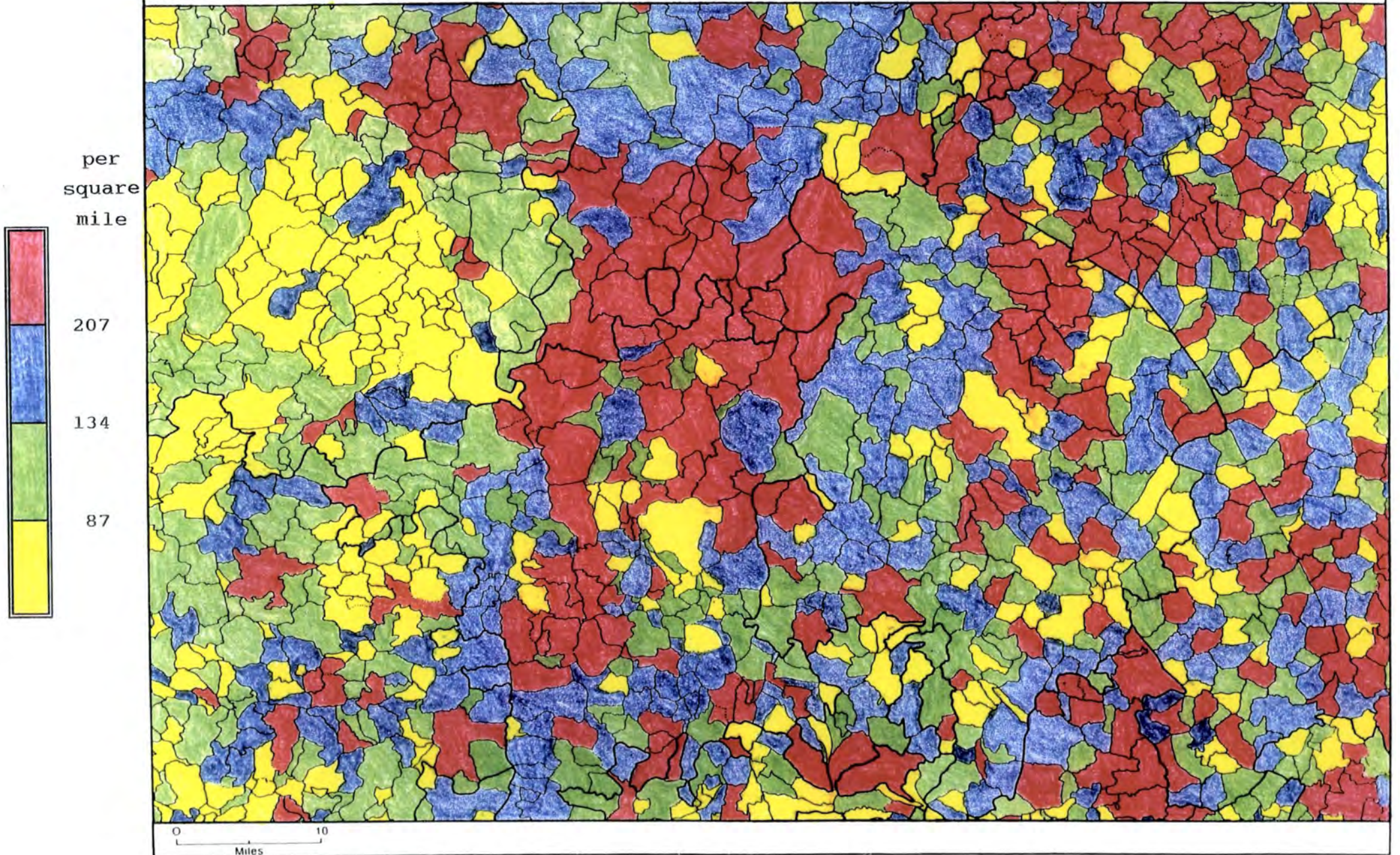


Figure 4.1 Population density, 1851.

Herefordshire to Bromfield in Shropshire. Again, this area may indeed be a lot larger, but constraints are set by the window effect of the study region. In north-eastern Herefordshire, a small area of low density, about 10 miles across and 8 miles long, exists around Bromyard. In the south of the study area, 2 more regions of low density are identifiable, one south of Hereford and one in northern Gloucestershire. Both may well be parts of much larger areas to the south. In the eastern half of the West Midlands, the only group of parishes sizeable enough to refer to, occurs in the south-east of Leicestershire, on the eastern edge of the map.

The complexity of the pattern produced is understandable when fitted into the broader national picture (Figure 2.15). From a glance at the national map it is obvious that this is the most complicated area throughout the whole of England and Wales, in terms of population distribution. Areas of the lowest density (to the west of the study area) and the highest density (mainly Birmingham and the proto-conurbation of the Black Country) are evident. Further, the east of the study area is a meeting point for no less than seven areas of differing densities. It is this multiple junction which is at the crux of the complex pattern seen at the county level.

The overall pattern then is one of generally high density, with few areas of low density to provide a counterpoint. Areas of high population are particularly dominant in the eastern and central areas of the study region, whilst areas of low population are mainly confined to the western sector.

Putting aside the real values of population density, a more general pattern presents itself, best demonstrated using the map which divides the parishes at the median (Figure 4.2). There is a marked difference between the visual impact of the eastern and western half of the West Midlands. In the east of the study area, neighbouring parishes within different quartile bands produce a 'patchwork' appearance. This is as opposed to a more uniform pattern in the west, where there are much larger blocks of parishes of the same population density. The boundary between these two areas corresponds very closely with the boundary line of the Central and the Northern and Western settlement provinces. Further to this, the study area can be split into three main regions from west to east:

Area One: The west of the study area, basically within the counties of Shropshire and Herefordshire. Here the bulk of the parishes fall short of the median population density.

Area Two: This in the main corresponds with the counties of Staffordshire and Worcestershire and the very north west corner of Warwickshire. The reverse to area one, most of the parishes are above the median value.

Area Three: This remaining area takes in the eastern part of the study area including most of Warwickshire, Leicestershire, Northamptonshire, Derbyshire, Oxfordshire, Buckinghamshire and Gloucestershire. This takes on the already mentioned

THE WEST MIDLANDS : PARISH BOUNDARIES IN THE M. 19th. CENTURY

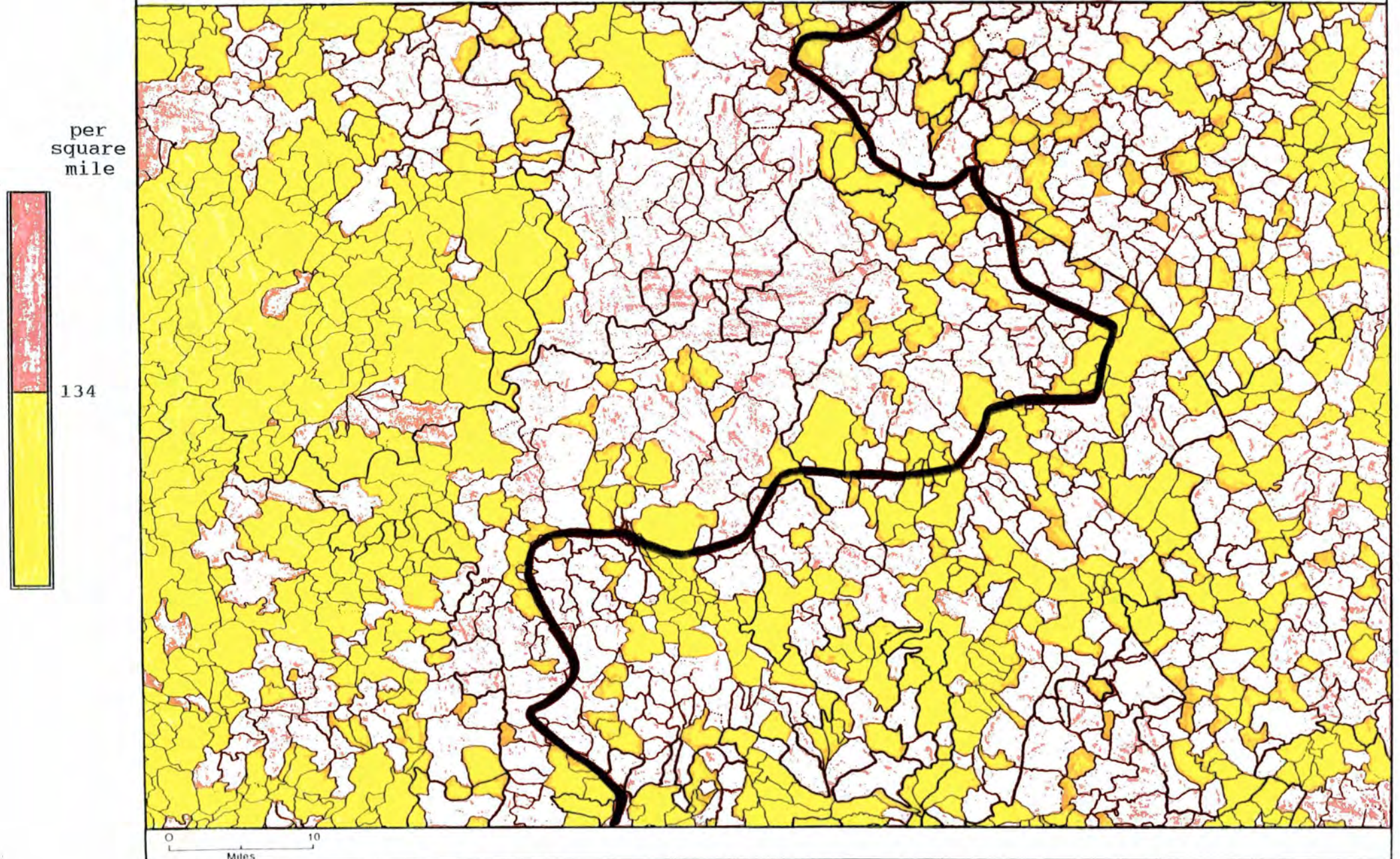


Figure 4.2 Population density and boundary of settlement provinces, 1851.

'patchwork' appearance; an almost equal balance of parishes above and below the median, with a very mixed distribution.

Areas One and Two lie to the west of the Central Settlement Province boundary and Area Three is substantially to the east.

1801

(Figure 4.3) Half a century earlier, the census data for 1801 reveal several groups of parishes which are large areas of high density population. One centres on Dudley and includes areas in northern Worcestershire, southern Staffordshire and north-western Warwickshire. It is around 25 miles in diameter, from Walsall and Bloxwich in the north to Bromsgrove in the south, and from Coleshill in the east to Wombourne in the west. Two smaller areas, one in central Staffordshire and one in eastern Shropshire, can almost be classed as extensions of this area. A second area, almost a southerly extension of the first, stretches for some 25 miles down the eastern side of Worcestershire, from Kidderminster to Leigh, Powick and Kempsey. The majority of northern Oxfordshire included in the study area falls into the category of high density, as do many parishes within the bounds of Northamptonshire. Leicestershire is particularly notable for a large proportion of densely populated parishes. The parishes in question form a broad ring in the north and west of the county, with a more linear extension (approximately 12 miles in length) from its southern edge down into Warwickshire as far as Coventry.

Only two areas of low population density, one much smaller than the other, are particularly noticeable for this period. The remainder of the parishes in the low lower quartile are much more mixed into the general distribution, especially in the eastern half of the study area. The larger of the two areas is in southern Shropshire, stretching from the eastern edge of the county, to the western edge of the study area, some 32 miles. The average distance north to south is 15 miles, the most northerly parish being Acton Burnell and the most southerly, Stoke, St. Milborough. The second area worthy of mention is much smaller, around 10 by 5 miles in the north-west of Herefordshire, just reaching over the border into north-western Worcestershire.

Again, as for the 1851 distribution, the general pattern produced in the West Midlands is that of a major split at the border of the two settlement provinces. Within the Central Settlement Province the balance between parishes above and below the median is approximately equal and their distribution is very mixed. Quite the opposite occurs in the Northern and Western Settlement Province, where parish after parish is within the same density range as its neighbour, so producing a pattern whereby huge tracts of land are of a similar population density. This Northern and Western Province can be further split into two (again by a north-south boundary), the eastern half, where parishes above the median dominate, and the western half, where areas of low population dominate (Figure 4.4).

THE WEST MIDLANDS: PARISH BOUNDARIES IN THE M. 19th. CENTURY

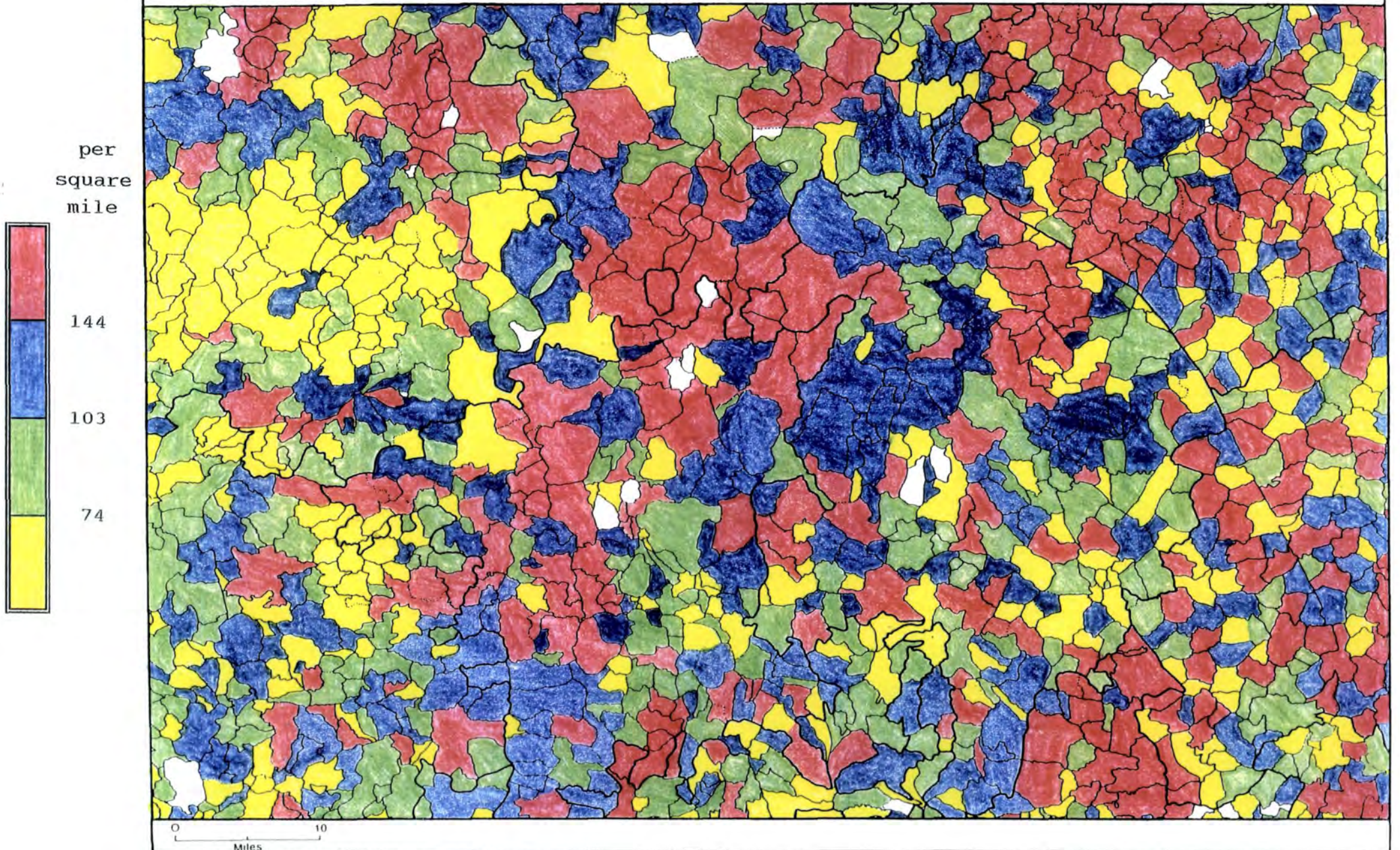


Figure 4.3 Population density, 1801.

THE WEST MIDLANDS : PARISH BOUNDARIES IN THE M. 19th. CENTURY

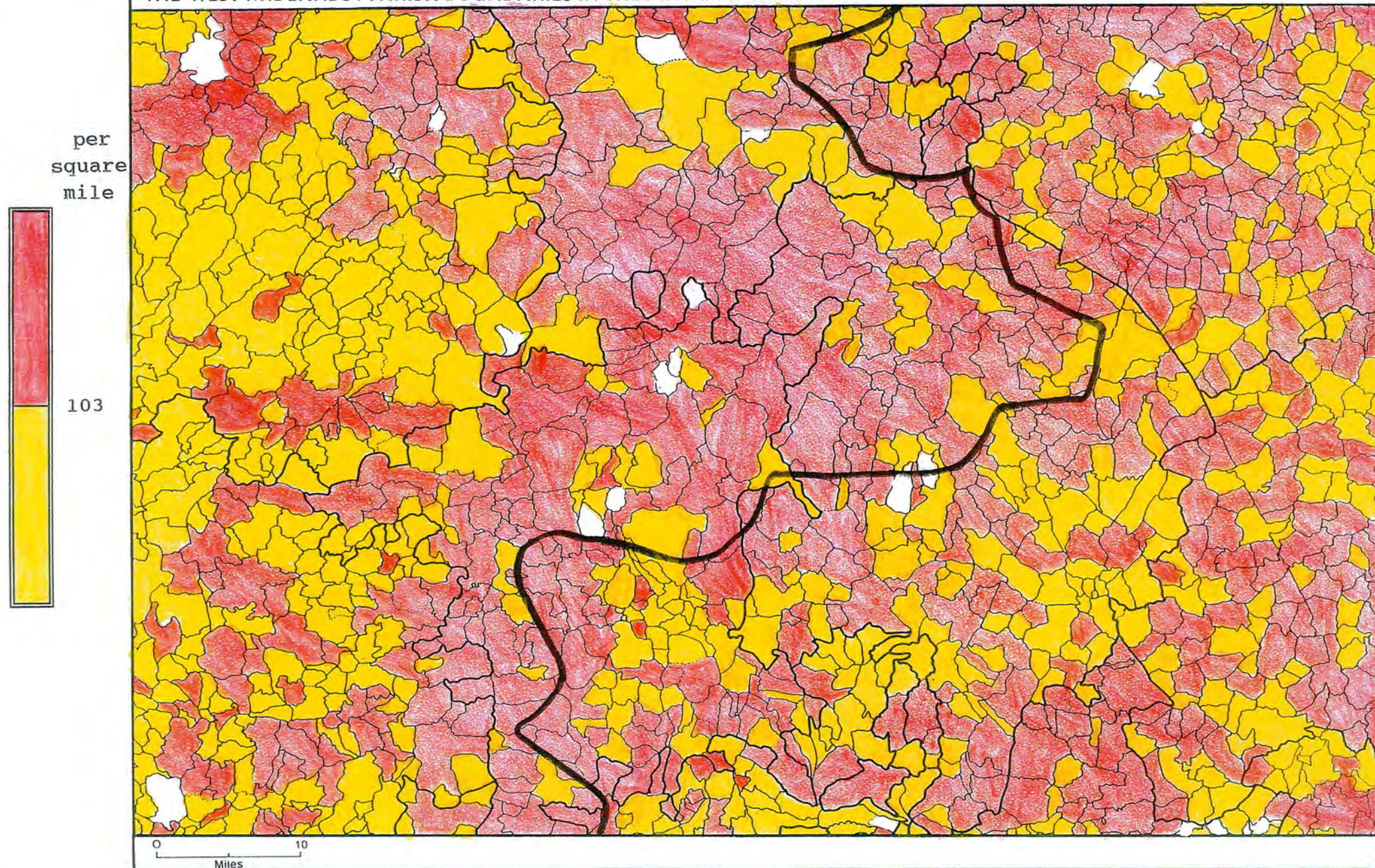


Figure 4.4 Population density and boundary of settlement provinces, 1801.

(Figure 4.5) For this period, an already complex distribution pattern is made even more difficult to understand due to the lack of data for several parishes, especially in southern Staffordshire. Further, although it is suspected that the Deanery of Worcester made returns for men only, there is not enough evidence to warrant correction to the figures. Therefore, the population densities plotted for this small area of Worcestershire can not be taken to give a wholly correct picture.

The majority of the areas within the high upper quartile are in the eastern half of the study area. The largest of these areas extends south from Measham and Stretton-en-le-Field (southern Derbyshire) to Solihull and Coventry (Warwickshire), being around 32 miles north to south and 23 miles east to west. The map of octiles for 1676 shows that of all the areas of high population density identified on the quartile map, this is the only area where the parishes are constantly of a particularly high density (i.e. over 141 persons per square mile). A much smaller region of high density is found to the west of this first area, running for some 25 miles north-east to south-west from Walsall and Bloxwich in Staffordshire to Ribbesford and Bewdley in Worcestershire. A third area is in the south east of the West Midlands, comprising mainly of Oxfordshire parishes, from Cropredy in the north to the southern edge of the study area (around 16 miles), but also extending east-west into parts of Warwickshire and Northamptonshire. Many Northamptonshire parishes are within the high upper quartile, but a significant block is difficult to distinguish. In Leicestershire there is a great band of densely populated parishes, running from north-west to south-east in the northern corner of the study area. This band extends unbroken for approximately 28 miles, with a less defined band projecting north and west from its centre. This almost forms a ring and takes a much more definite form if parishes in the low upper quartile are also included.

There are several large groupings of parishes of low population density. Such a group exists in southern Shropshire, around 22 miles north to south and 20 miles east to west. Two other areas of similar size are obvious, one running from the parish of Yardley (north-eastern Worcestershire) to Loxley (south-western Warwickshire), and a second in western Worcestershire. This may be due in part to the low returns of the Deanery of Worcester, but even so, the parishes immediately surrounding the deanery are also of a low density. As it stands, this area runs the full length of the eastern side of the county.

A further plot was made using the 1676 population figures, but setting them within the 1851 quartile bands (Figure 4.6). The resulting map shows those parishes that had already reached very high levels of population density by 1676, thus further detailing the values of parishes shown to be in the

THE WEST MIDLANDS : PARISH BOUNDARIES IN THE M. 19th. CENTURY

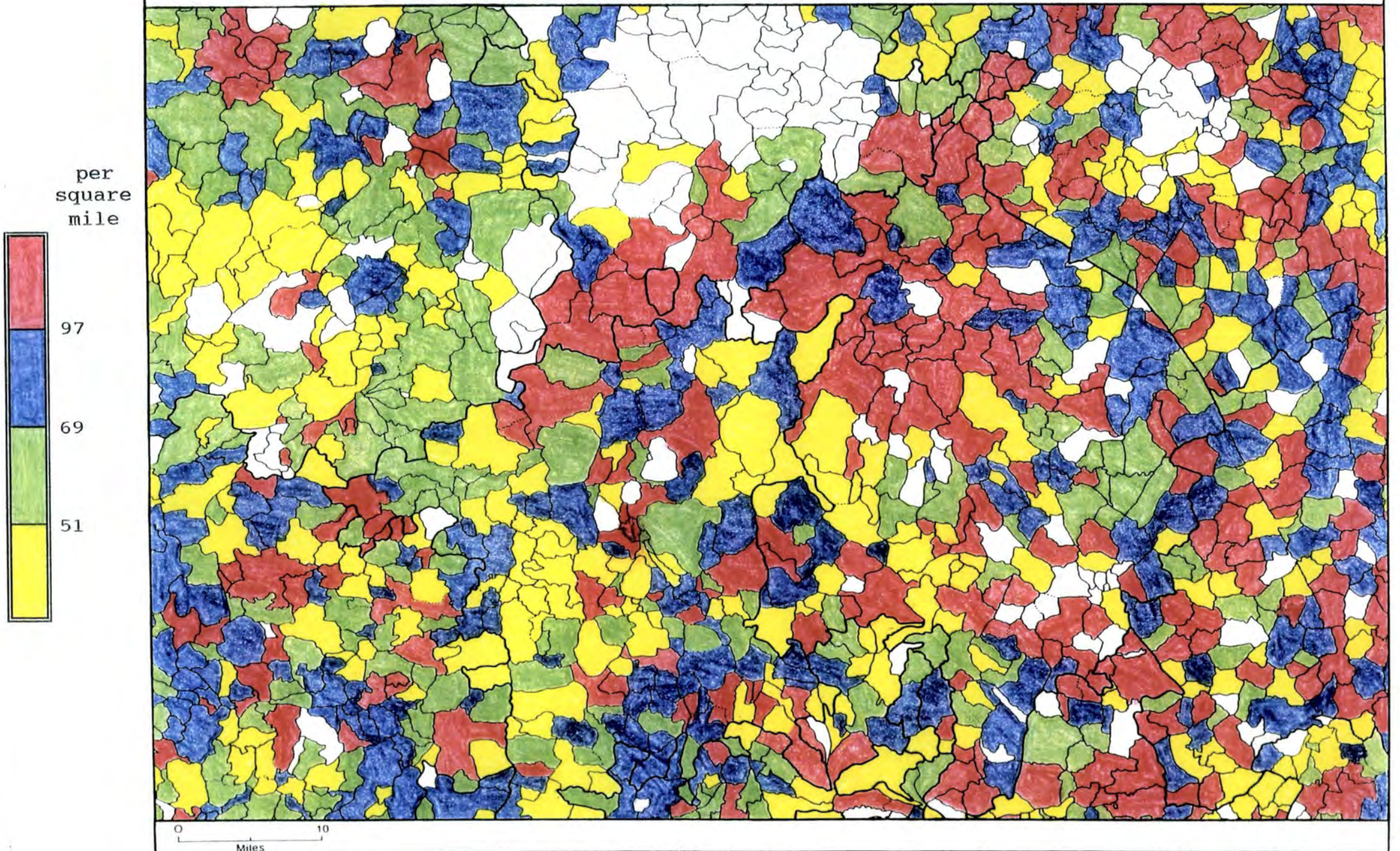


Figure 4.5 Population density, 1676.

THE WEST MIDLANDS: PARISH BOUNDARIES IN THE M. 19th CENTURY

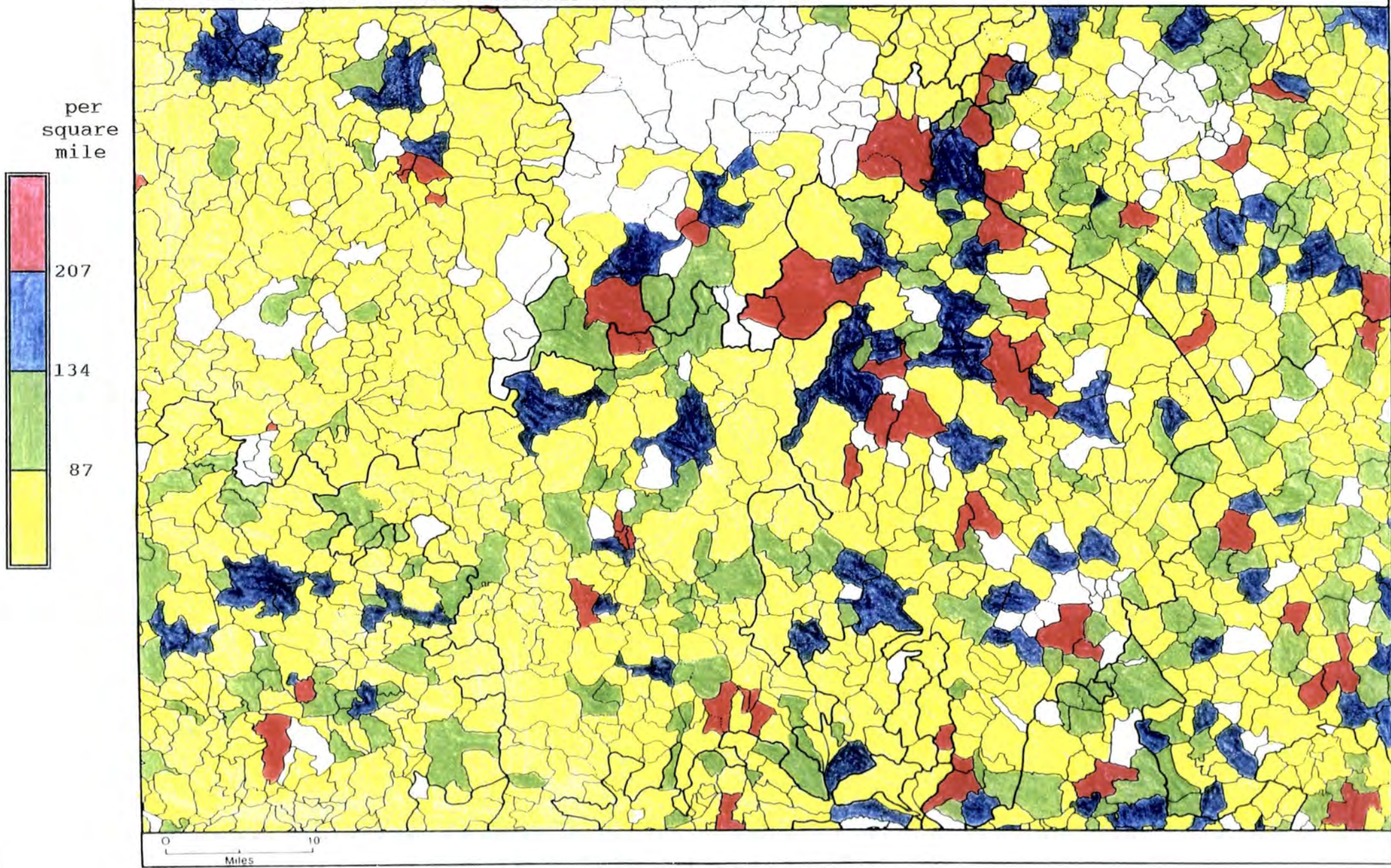


Figure 4.6 1676 population figures within 1851 quartiles.

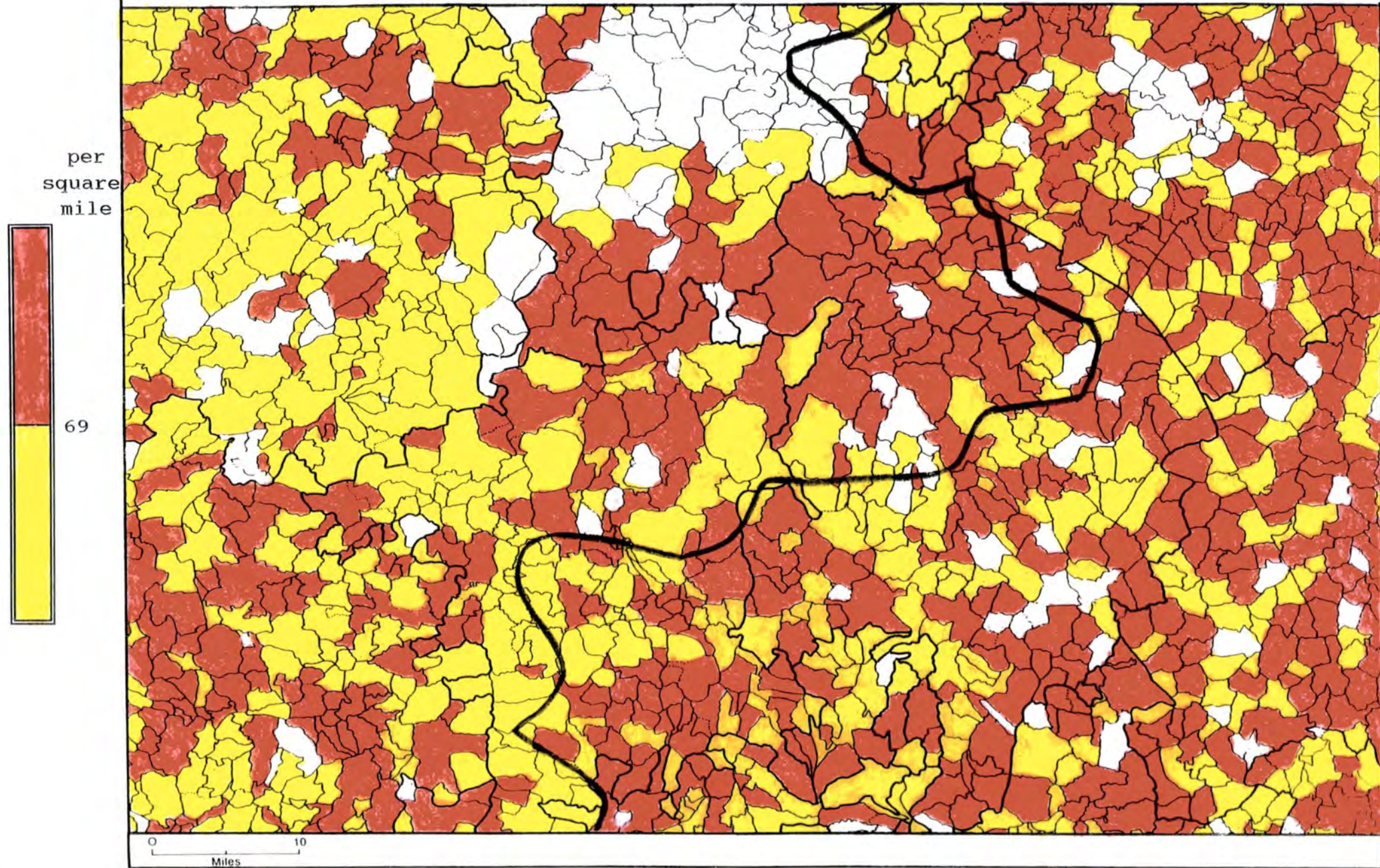


Figure 4.7 Population density and boundary of settlement provinces, 1676.

high upper quartile on the original 1676 quartile map. By 1676, a surprisingly high number of parishes in the West Midlands had reached density levels comparable to those found in 1851. The bulk of these highly populated parishes is in the east of the study area, and there is also an obvious break running north-south through eastern Shropshire and western Worcestershire. To the west of this break, only a very small number of parishes are of a density comparable with parishes in 1851. Further, the few parishes that are in this category are in the main found to be in the lowest of the three significant quartiles i.e. between 87 and 134 persons per square mile. Of note are two areas in the centre of the study area, one centred on Dudley and the larger of the two almost totally in northern Warwickshire. A large proportion of the parishes here are already within the two upper quartiles of the 1851 range (i.e. over 134 persons per square mile), and 15 of the parishes have over 207 persons per square mile. Another important feature of the map is that it emphasises the ring of densely populated parishes in Leicestershire far better than does the 1676 quartile map.

Even as early as 1676, the western boundary of the Central Settlement Province is a significant divide in the pattern of population distribution. As seen in 1851 and 1801, to the east of the boundary, parishes above and below the median value are thoroughly mixed, so giving a 'patchwork' appearance to the distribution. To the west, the parishes are much more separated into large 'blocks' of either low or high density. The actual pattern within the Northern and Western Province can be split: a huge area of above median density dominates the smaller central eastern portion, whilst the remaining part of the study area is generally below the median population density, although Herefordshire displays a little more variety in the mix of the two categories. Despite this, the natural split of the West Midlands into three key areas is unquestionable (Figure 4.7).

Patterns of Change, 1676-1851

Obviously, over a period of 175 years we must expect to see changes to the patterns of population density within the study region. This time span, coupled with a myriad of factors generating change, which were acting on different areas at different times, could be expected to change the 1676 distribution unrecognisably, almost certainly by 1801 and quite definitely by 1851. Table 4.1 details the major factors which had the possibility of causing change to the distribution of population throughout the study period.

FACTORS		POTENTIAL FOR CHANGE	
		1676-1801	1801-1851
ENCLOSURE	champion zone	-	-
	commons		-
LANDOWNERSHIP	emparking	-	-

	village depopulation	-	-
	village growth	+	+
MIGRATION/ EMIGRATION	out	-	--
	in	+	++
INDUSTRIAL DEVELOPMENT	extraction	+	++
	manufacturing	+	++
	services	+	++
	technological change	+	+
IMPROVED COMMUNICATION	canals	+	+
	railways		+
URBAN GROWTH		+	++

TABLE 4.1 Potential factors behind population change 1676-1801 & 1801-1851. The +/- signs denote positive/negative effects on population.

However, the continuity of relative population density throughout the three chosen periods is quite remarkable. It must, of course, be remembered that the *actual* population figures were very different in each of the census years (Table 4.2a & b gives some examples of this change). But a comparison of relative distribution within the parishes at each census date gives an amazingly constant feel to the basic population *distribution* of the West Midlands throughout the study period.

COUNTY	1676 ¹	1801	1851
WARWICKSHIRE	54,666	208,190	475,013
WORCESTERSHIRE	53,066	139,333	276,926
SHROPSHIRE	93,549	167,639	229,341
HEREFORDSHIRE	57,564	89,191	115,489
LEICESTERSHIRE	65,834	130,081	234,957

Table 4.2a Total population figures by county, 1676, 1801 and 1851.

PARISH	1676	1801	1851
WOLSTON	341	577	1209
NORTHFIELD	464	1313	2460
LEIGHTON	236	338	322
YAZOR	270	195	222
MISTERTON	197	341	589

¹Estimations from Whiteman, p. ciii.

Table 4.2b Total population figures for five parishes, 1676, 1801 and 1851, selected from the above counties.

Beginning first with the two more reliable censuses, the broad similarities of distribution between 1801 and 1851 are particularly noteworthy. Continuity between both high density and low density areas for the two periods is widespread when the two maps are consulted (Figures 4.1 and 4.3). There are no great shifts in focus of either high or low density areas, with the exception that the 'proto-conurbation' of Birmingham and the Black Country had, by 1851, made a further expansion into the surrounding countryside. Nevertheless, when the effects of rapid industrial expansion and the accompanying 'population explosion' and labour migrations are taken into consideration, this consistency is rather surprising. In an epoch when the key word seems to have been 'change', the relative distribution of population remained almost unchanged in this outstanding industrial area. Reasons for this will be considered later.

Just as the 1801 and 1851 quartile maps are notably similar, the maps dividing the parishes at the median are almost identical (Figures 4.2 and 4.4). Hence, the boundary of the two Settlement Provinces is highlighted by the distribution for both periods. Therefore the resulting links with the 'sub-structural' distribution of nucleated and dispersed settlement, deserted villages and champion/pastoral farming are upheld from one period to the next. These deep-seated, chronologically ancient, foundations have continued to play a formative role in regional development, even when they have become mere cultural fossils.

As the patterns produced by the population distributions for both 1801 and 1851 are so alike, it seems permissible to regard the patterns produced as 'one', for the purpose of comparison with the 1676 population distribution (Figure 4.5). Once again, the broad similarity of the 1676 distribution with that of 1801/1851 is obvious, although not as pronounced as that between 1801 and 1851. However, we must allow for the greater time interval and any difficulties with the 1676 data which may have affected the distribution pattern e.g. in western Worcestershire.

The general 'scatter' of densely populated parishes e.g. in Northamptonshire and Oxfordshire, is once again very similar, with the bulk of these parishes remaining unchanged from the high upper quartile throughout the study period. Other more obvious areas, such as the ring of highly populated parishes in Leicestershire are also strongly visible from 1676 into the nineteenth century. Changes can be seen in the north of the study area. This is mainly due to an increase in size of high density areas between 1676 and the nineteenth century as, for example, in two areas in Shropshire, one around Shrewsbury and one to the east of the county. Both areas are apparent in 1676 but on a much smaller scale. A slight shift in location is evident for the large densely populated area in southern

Staffordshire, northern Worcestershire and northern Warwickshire. The region around Dudley, so notable in the nineteenth century, is still obvious in 1676, but again covers a much smaller area. However, where this region stops just to the east of Birmingham in the nineteenth century, in 1676 it extends much further east to include a large area of northern Warwickshire.

A much greater shift in distribution can be seen in the areas of low density. Two areas stand out as being vastly different in 1676, including western Worcestershire where data problems occurred. The area changes from low density in 1676 to high density in the nineteenth century. A second area of low density, stretching from north-western Worcestershire into south-eastern Warwickshire, appears much larger in 1676. This too may be a data problem, but other factors should be considered. The large area of sparse population in southern Shropshire is apparent in both periods, although there is a slight alteration in its shape by the nineteenth century.

Looking at the median divided map for 1676 (Figure 4.7), the similarity to the 1801/1851 pattern is striking. The only differences are in western Worcestershire (which has already been highlighted as a problematic area), and in Herefordshire where the balance between 'high' and 'low' parishes changed between the two periods. Here, many more parishes had population densities above the median value in 1676 than in the nineteenth century.

Turning to the maps produced of 1676 population as a percentage of 1851 population, this picture of temporal progression is further illuminated. Two maps were plotted:

- (a) splitting the information into six percentage bands, including 100%+ (Figure 4.8)
- (b) splitting the information into three bands (Figure 4.9)

The second map was the most useful, providing a far more general picture. However, map (a) was a detailed support and highlighted parishes which had experienced population decline between the two dates (areas shaded black).

The three categories of map (b) basically corresponded to:

1. above average growth
2. average growth (this band was so nearly centred on the mean of the data set, i.e. 50%, that the parishes within it were regarded as having experienced 'normal' growth within the time period)
3. below average growth (including parishes which had suffered a decline)

Areas of above average growth are numerous. The largest covers parts of southern Staffordshire, northern Worcestershire and northern Warwickshire around Dudley and Birmingham and extends to the southern border of western Worcestershire. Two other areas of note are north-eastern Shropshire and western Leicestershire stretching south-west into Warwickshire and west into Derbyshire.

THE WEST MIDLANDS: PARISH BOUNDARIES IN THE M. 19th. CENTURY

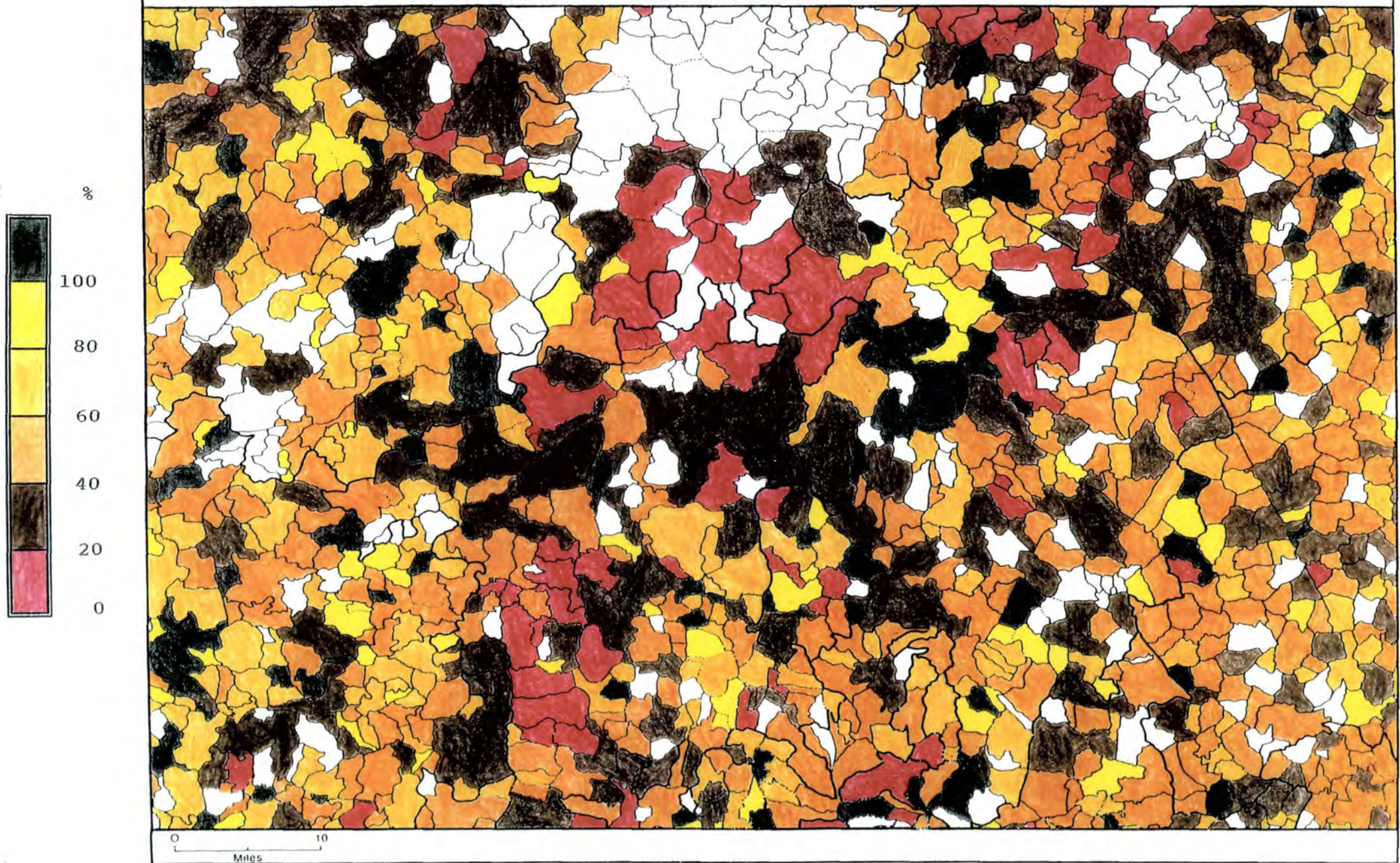


Figure 4.8 Population change: 1676 population as a percentage of 1851 population.

THE WEST MIDLANDS : PARISH BOUNDARIES IN THE M. 19th. CENTURY

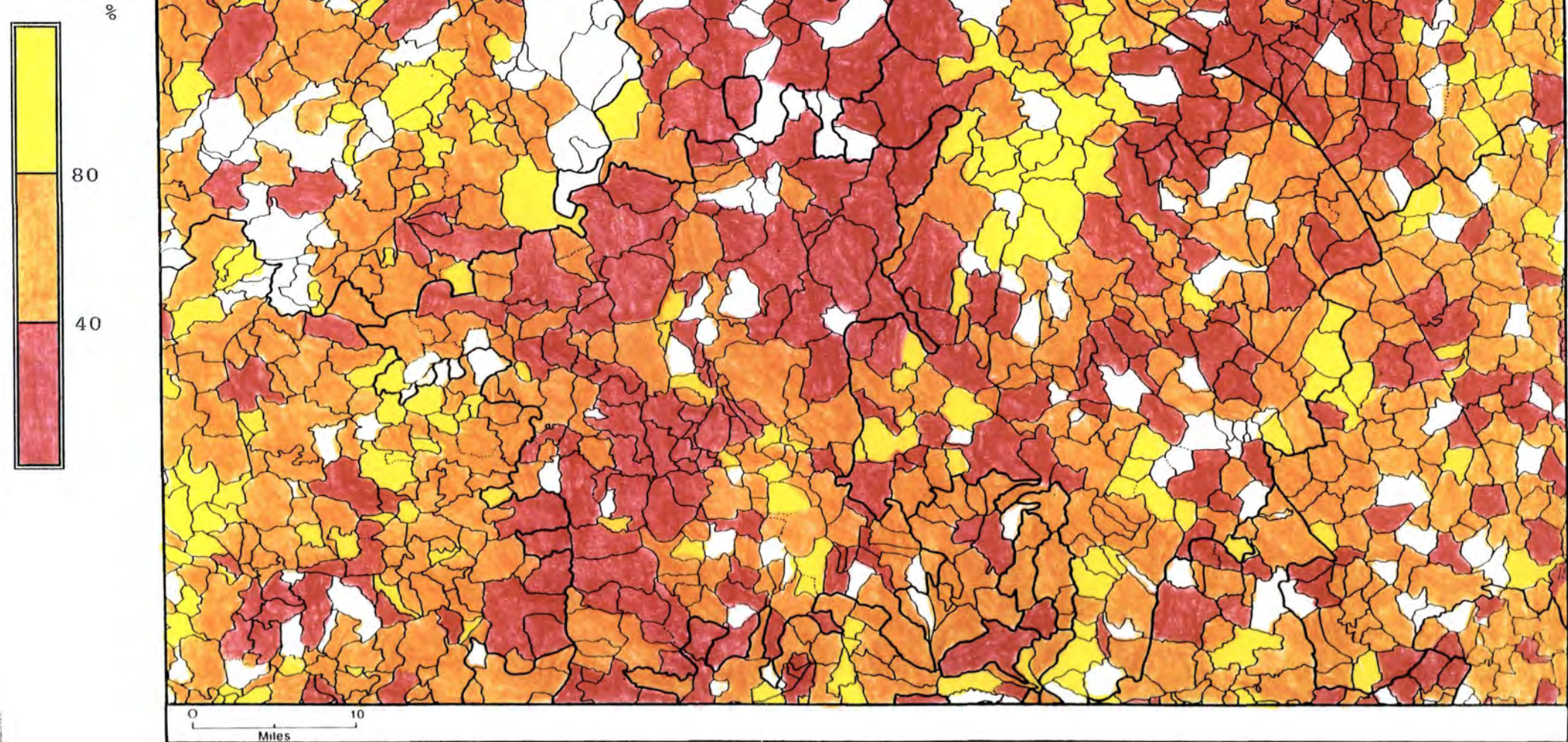


Figure 4.9 Population change: 1676 population as a percentage of 1851 population.

Areas of below average growth are few, with a limited spread of such parishes throughout the study region. The only substantial area of this kind is in northern Warwickshire, just reaching into south-western Leicestershire and southern Derbyshire. Further, at least half of the parishes included in this area actually experienced population decline within the 175 year period. Smaller areas where decline or below average growth also occurred can be seen in south-eastern Shropshire and central Herefordshire.

There is a strong similarity between the distribution pattern seen on these maps and the quartile maps of 1801 and 1851. Areas of high growth correspond to areas of high population density and areas of low growth coincide with the distribution of sparsely populated parishes.

The general picture of population in the West Midlands is one of extremely high density throughout the whole 175 year period, relative to the two other study regions of Yorkshire and Cumberland and Westmorland. By 1676 a good proportion of parishes were already highly populated, densely enough to register in the upper three quartile bands for 1851, which were calculated at the national level. This leads us to believe that factors influencing a significant rise in population were at work here from a much earlier date than in many areas of the country. The most likely reason for this is an early expansion in industry, well before the conventional date of the start of the Industrial Revolution.

Despite this rapid increase in population, its overall relative distribution is remarkably stable. Over a period of 175 years, when changes in industry and agriculture were in abundance, the distribution of population shows minimal change. It can only be suggested that this differential population growth is rooted much further back in time than one would perhaps expect, starting before the labour migrations that commenced in any volume with the rise of industry from around 1780 onwards (and which led to the depopulation of the countryside from 1850 onwards).

A final point to note is the remarkably clear break in the distribution pattern across the border of the Northern and Western and Central Settlement Provinces. The 'patchwork' appearance within the Central Province and the 'block' appearance in the Northern and Western Province are prevalent at all three census dates. This provokes questions of the relationship of population and settlement distribution and also farming and landscape types which have close connections with the settlement provinces' geography.

Threads of Explanation

The next step is to compare these distributions with other maps of importance e.g. physical aspects of the area including landscape type and its use in farming. Also, a key consideration for the study region is the position of the boundary of the settlement provinces and the nature of its relationship to the population distribution patterns.

For the purposes of further investigation into factors controlling the distributions, the region is split into the three areas identified earlier in the chapter (Figures 4.2, 4.4 and 4.7), i.e.

Area One 'Block' distribution; below median density.

Area Two 'Block' distribution; above median density.

Area Three 'Patchwork' distribution.

The aim of this individual analysis is to establish broad reasons behind the distribution patterns of the three areas, with regard to both the levels of population density and the overall patterns which remained so static over the 175 year period. Here, research is made into industry, agriculture and the way of life this encouraged and into land ownership (with specific reference to open and closed settlements which have very strong ties with the development of industry and population growth). Finally, conclusions are drawn on the study region as a whole, with an attempt to explain why these three areas exist and why they are so visible throughout the whole of the study period.

One fact becomes obvious as soon as a comparison is made between the population distribution maps and a simple map of the West Midlands' terrain (Figure 4.10). Although correlations between these two exist, physical factors are far from being the sole reason behind the distribution patterns. This is also seen to be true at the national level. Areas of low population show a far stronger link to the physical environs than areas of high density. This is best illustrated by the counties of Shropshire and Herefordshire, at all three census dates. These two counties make up Area One, where the bulk of the parishes have below median population density. Here, the large areas of sparse population correspond with :

- (a) highland areas e.g. The Long Mynd, Shropshire.
- (b) the scarp and vale landscape of Wanlock Edge, Shropshire and the surrounding area.
- (c) sandstone scarplands in southern Shropshire and much of Herefordshire.²

Overall, there is very little highland in the study region (Figure 2.6). The small areas that do exist are situated in the counties of Shropshire, Herefordshire and Staffordshire, all to the west of the study region, within the Northern and Western Settlement Province. Certainly none of it is of the

²The only sandstone areas supporting high populations are where the sandstone is related to coal measures, e.g. southern Staffordshire and northern Warwickshire. This emphasises the strong influence of industry on the distribution of population.

THE WEST MIDLANDS: TERRAIN TYPES

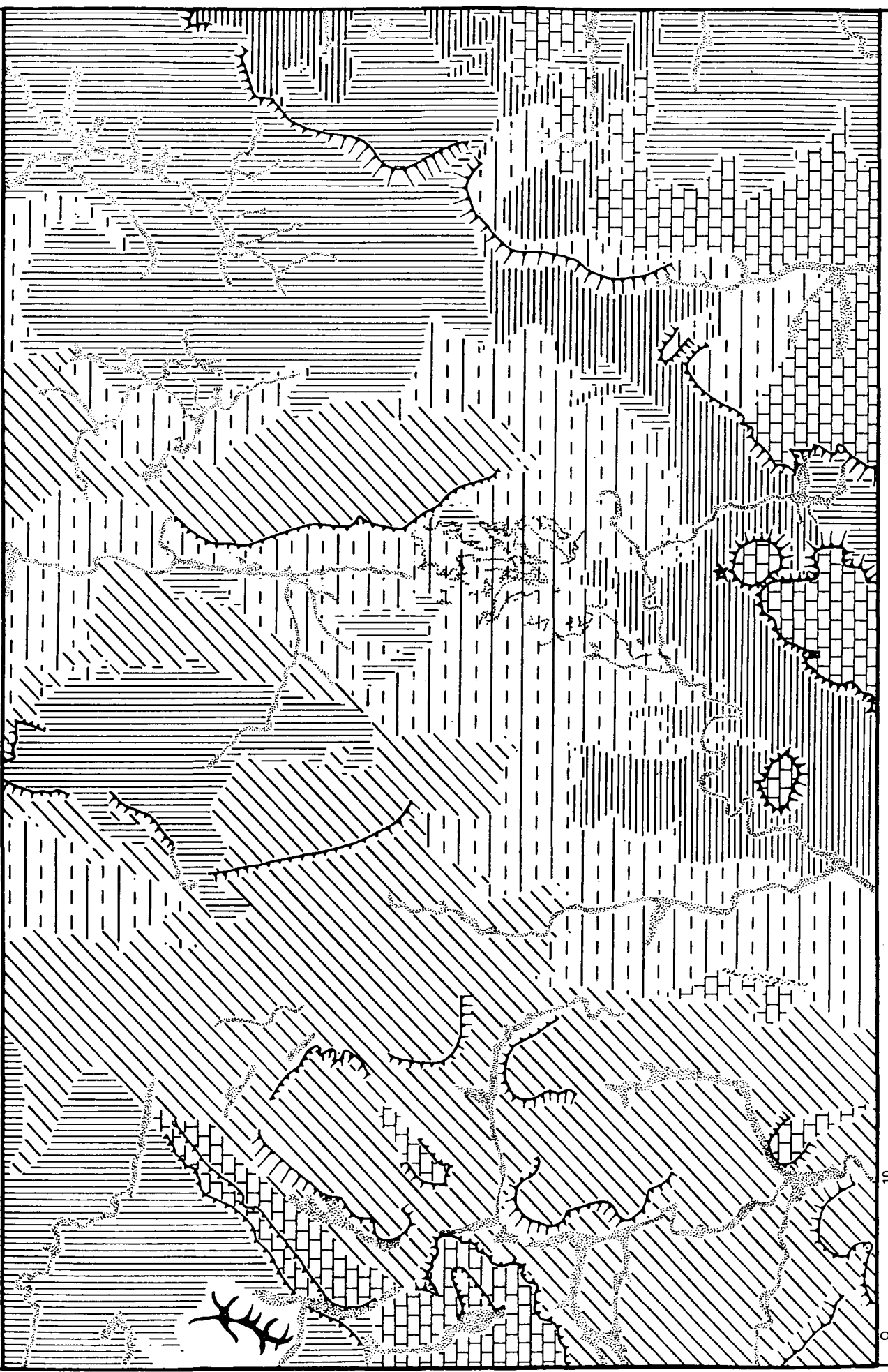


Figure 4.10 Terrain types.



Escarpments



Highland Zone



Alluvium and river terraces



Limestones



Heavy clay lands



Marls with some sandstones



Sandstone, sand and gravel land



Arden Sandstone escarpments



Malvern Hills



Drift lands, including boulder clays, sands and gravels

Figure 4.10 Key

magnitude of the highland areas found within the two other study regions of Yorkshire and Cumberland and Westmorland. However, it is obvious that in the West Midlands the upland areas are generally associated with settlement patterns dominated by dispersion. This has produced substantial numbers of sparsely populated parishes within Shropshire and Herefordshire. Other areas of low population throughout the study region include the heavy claylands of southern Worcestershire, southern Warwickshire and northern Gloucestershire.

The physical aspect of the land has great influence on its use in terms of farming. As seen in Chapter Two, the boundary of the Central Settlement Province not only defines the approximate limits of nucleated settlement, with more dispersed areas to the west of the boundary. It also broadly separates areas of pastoral and arable farming, with woodland areas occupying peripheral boundary lands, in many areas appearing to act as a buffer between pastoral and arable (Figure 2.8). In terms of settlement, these woodland areas also act as a gradation between dispersed and nucleated, where the population distribution patterns of the Midlands relate to these three main areas of settlement and farming quite specifically. The three areas identified previously in this chapter in terms of population distribution patterns broadly coincide with these farming/settlement regions. Area One (a sparsely populated area) covers the bulk of the 'pastoral lands' of the West Midlands, while the more eastern pastoral areas (where richer soils occur and a mix of pastoral and arable could be practised) tie in with the areas of woodland pasture, to make up Area Two. Here, settlement tends towards dispersion, but is mixed with some nucleations. The third area, within the Central Settlement Province where arable farming and nucleated settlement dominates, is also Area Three of population density, where the 'patchwork' pattern of distribution exists. These will now be examined in turn.

Area One :- As already mentioned, much of the population distribution of this area relates directly to the constraints of the terrain. The area is dominated by dispersed settlement, principally due to the physical problems of living in the western zone and to the nature of the farming practised in such areas. Hence, the pastoral farming of the area meant dispersal of settlement and ultimately a low density of population, except for small pockets of high population around the market towns. The bulk of the area is limestone or sandstone scarpland, not particularly conducive to champion farming. (This is, at best, an unsatisfactory explanation however, for no authorities are wholly clear about the factors generating the landscape of nucleated villages and open, communally cultivated townfields, which for so many centuries dominated the cultural landscape of the Central Province. Why this area of 'planned landscapes' appeared amid two lateral provinces dominated by ancient landscapes, remains a fundamental, unresolved research question.) The area of arable vale land in Herefordshire should, however, be noted. This is quite obvious in terms of population in 1676, showing a higher population density than the surrounding pastoral areas (Figure

4.5). However, by 1851 the area is hardly visible, apart from a few populous parishes remaining around the county town of Hereford. This change is mainly due to the decline or low growth of parishes in this area from 1676 (Figure 4.8). Indeed, throughout the whole of Area One, an obvious decline in population can be seen between 1676 and 1801 and by 1851 the bulk of the area is sparsely populated.

The dominance of the pastoral way of life gave the population of this area the opportunity to take on a second trade, due to its low labour intensity and low capital input. Further, the prevalence of the open settlement meant that there were no restrictions on the establishment and growth of industry in all but a few villages, where great landowners had full control.³ Population could also flourish here, to meet the labour demands of a growing industrial area, due to lack of control of population numbers in open villages. However, these advantages were not always capitalised on, mainly because of the absence of abundant supplies of raw materials. The area remained sparsely populated and carried on to supply an ever growing number of migrants to the industrial areas of Birmingham, The Black Country and the coalfields within Area Two.

Although it is acknowledged that rural depopulation really began on any scale around the mid-nineteenth century, a decline in the population of such areas was in fact being experienced far earlier. Just as the West Midlands saw an early rise in industry, similarly, through the influence of this expansion, the purely agricultural areas saw an earlier beginning to depopulation. From 1750 onwards, these rural areas began to see a far lower rate of population growth in comparison to the rising industrial areas.⁴ This no doubt represents the beginnings of migration into the more industrial areas of north-eastern Shropshire, southern Staffordshire, northern Worcestershire and northern Warwickshire. From this date onwards, movement from agricultural counties to industrial counties has been noted⁵ and England's transformation from being "...a large rural hinterland attached to a vast metropolis through a network of insignificant local centres"⁶ had begun. As has already been noted in Chapter Two, P. Deane and W.A. Cole observed that between 1700-1831 there was a shift in population from the rural counties in England and Wales, their population total

³see 'Area Three' for a full discussion of open and closed settlements.

⁴N. Tranter, *Population Since the Industrial Revolution: The Case of England and Wales* (London: Croom Helm, 1973), p. 47.

⁵B.A. Holderness, *Pre-Industrial England: Economy and Society From 1500-1750* (London: J.M. Dent and Sons Ltd., 1976), pp. 15-6.

⁶Laslett, p. 56.

reducing from half the national total to one third.⁷ From 1831 the difference in the rate of population growth between rural and industrial became even more acute, due to migration from the former to the latter and the resulting natural increase in the industrial areas.

To summarise, it is the dominance of the open settlement throughout the area, where, in the main, each parish was possessed of a similar situation of landownership to the next, that creates the distinctive 'block' appearance. In this pastoral area where the dual economy and the open settlement were prevalent, there was the opportunity for industrial development if the raw materials had been available. In their absence, the area was dominated by agriculture. This, along with areas of rather inhospitable landscape (in comparison to land in the east of the study region) kept the population at a low level. As industrial development began to take place in neighbouring Area Two, out-migration from Area One began to increase⁸, so further lowering the population density of the area in relation to the rest of the study region. Hence a 'block' distribution of sparsely populated parishes is produced, which increases in extent over the study period.

Area Two :- The main reason behind the overall high population of the West Midlands throughout the study period is the early rise of industry. Industrial expansion attracted migrant workers, the bulk of whom were of a young age. Hence, they themselves increased the population, but more importantly they heightened the rate of natural increase, once settled in the industrial area. The early rise of industry and its effects on the population in the West Midlands has been noted by many scholars⁹, with the exploitation of unconcealed coal and also iron ore dating from the early fourteenth century.¹⁰

Here, the dominance of industry from an early period can be attributed to four main factors: the availability of raw materials, the nature of the agricultural economy which allowed most farmers to undertake a secondary trade, the dominance of the open settlement in this area which assisted the swift development of industry, and the lack of guilds with their complex restrictions.

By virtue of the geology of the area, Dudley, Birmingham and the surrounding land in Staffordshire, Warwickshire and

⁷Deane and Cole, pp. 106-22.

⁸shown by the number of Law of Settlement Certificates from this area (especially Shropshire) which still survive for Birmingham. See W.H.B. Court, *The Rise of the Midland Industries 1600-1838* (Oxford: Oxford University Press, 1965), p. 49.

⁹e.g. Tranter, p. 47.

¹⁰R. Millward and A. Robinson, *Landscapes of Britain: The West Midlands* (London: Macmillan, 1971), p. 52.

Worcestershire could not have avoided becoming an industrial heartland. Three coalfields dominated the area: South Staffordshire, North Warwickshire and the East Shropshire field on the edge of Area Two. A fourth field was also in close proximity in Leicestershire at Charnwood Forest. Many of the coalfields' seams were exposed, providing easy access for the miners, before technology advanced to allow exploitation of concealed seams. This ease of exploitation also meant that mining began at an early date, as attested to in records dating as far back as 1315 for Wednesbury.¹¹ Iron ore was also readily available. Of note were outcrops at Dudley, Wednesbury and Walsall. The physical aspect of the area was further important in yielding a good supply of running water, which became increasingly important in the eighteenth century, and large amounts of timber, needed to fuel industries and also provide such items as pit props for the mines.

However, the availability of coal and iron ore was not enough on its own to encourage the early rise of industry. Agriculturally a woodland and pastoral area, the dual economy of farming and craft was strongly prevalent here. Therefore, from an early date the population found it possible to develop skills additional to farming. It was when demand grew for their industrial products that, for many, their concentration switched from farming wholly to industry. This was made possible due to the lack of restrictions imposed on industrial and population growth in these predominantly rural settlements.¹² Although some closed villages did exist in this area, they were few in comparison to the numbers in the champion lands of the Central Settlement Province, to the east of this area. Therefore, industries were established and allowed to develop. As the need for more labour arose, the settlements were able to expand to accommodate migrants from other areas and there was a resulting leap in natural increase. Further, as these 'new' industries, such as mining and iron working, expanded, there were no guilds to restrict trade and development. This was due to the positioning of most of the production units outside the main urban centres where guilds operated.

As a result of the conditions described, the opportunity for early industrial development was available. It would seem that in this area, by the end of the seventeenth century, an industrial landscape was taking shape. This was a great change from the sixteenth century, when industry was present but had made no visible mark. However, in the seventeenth century the signs of industry were not as obvious as a century later, when factories were springing up to house the new steam-driven machines. The main indication of industry in this period was a high density of single-homesteads, where production was carried out at the cottage level. This arose out of the dual

¹¹Ibid., p. 101.

¹²see 'Area Three' for a full discussion of open and closed settlements.

economy practised in these woodland areas, where industry was traditionally mixed with farming.

The effect of such heavy settlement in these industrial areas was of course a high density of people per square mile. This was noted within the area in 1677 by Yarranton, who claimed that the land within a ten mile radius of Dudley was more populous than four Midland farming counties.¹³ Although his calculation was no doubt rather generous, it gives a strong picture of high population density, which is attested to by the map of 1676 population (Figure 4.5). Even as early as 1676 then, we see the beginnings of the area which was to become known as The Black Country.

Further east, the land around Birmingham and into northern Warwickshire was also becoming an early industrial area. In 1676, the North Warwickshire Coalfield is already apparent in terms of population, stretching from Nuneaton in the north, to Coventry in the south (Figure 4.5). In this century, Birmingham itself saw a great development in metal-working and became a prominent national producer.¹⁴ It was this that finally transferred the status of Warwickshire's premier county town, from Coventry to Birmingham. From an early date, there was a high degree of specialisation in the iron industry, throughout the whole of the area. These centres of specialisation were also apt to shift, e.g. at the beginning of the study period, it would seem that the centre of nail-making moved from Birmingham to the area around Dudley and Stourbridge.¹⁵

For the seventeenth century, the equilibrium of agriculture and industry remained, the dual economy was still dominant. However, a change came with the eighteenth century when this way of life was abandoned by many, in favour of industrial employment alone. A more rapid expansion in industry began to take place and with this the population grew. Not only would the natural increase have been great, due to the large numbers present in the area already, but numbers were also swelled further by an increase in migration. At the end of the seventeenth century, Birmingham migrants were mainly from the four counties of Staffordshire, Warwickshire, Worcestershire and Shropshire. However, as the turn of the century came, workers were arriving from counties including Cheshire, Middlesex, Leicestershire, Lancashire and Derbyshire.¹⁶ This great rise in population can be seen by 1801 (Figure 4.3), in

¹³W.G. Hoskins, *The Making of the English Landscape* (Harmondsworth: Penguin Books, 1986), pp. 211-212.

¹⁴Court, p. 33.

¹⁵R.A. Pelham, 'The growth of settlement and industry, c.1100-c.1700' in *Birmingham and its Regional Setting* (Birmingham: The British Association, 1950), pp. 135-58.

¹⁶ Court, p. 49. Taken from Law of Settlement certificates still surviving for Birmingham.

an increase in actual figures and in the expansion of the highly populated area around Dudley and Birmingham, further into the surrounding countryside.

It was during the period 1676 to 1801 that the industries began to move out of the home and into the factory, where the new machines powered by steam could be housed. This move was not as clear-cut as perhaps it sounds and there was a great overlap, with some interdependency even, before the foundations of the modern industrial landscape were laid solidly. It was this move to the factories which prompted the expansion of the populous core of parishes around Dudley and Birmingham. Many factories were built outside the towns, where a supply of falling water was more readily available, e.g. in 1765 Matthew Boulton's Soho factory was built to the north of Birmingham, on the site of Handsworth Manor. At this time the area was still rural, hence expansion into the countryside by the industrial heartland was taken a step further.

The industries of the area began to boom, due to the nation's ever-increasing demand for coal and iron and the untransferability of these raw materials. The construction of the canal network of the area, begun in the 1760's, furthered the industrial success of the area, making Birmingham a huge inland port serving much of the country. The dominance of the industries again fuelled a rise in population, the high rates of in-migration adding to the already large natural increase. This can be seen by 1851 (Figure 4.1), when the dominance of the whole area in terms of population is very self-evident and the industrial age of Birmingham and the Black Country was at its peak.

As in Area One, the 'block' distribution pattern of this area is due to the prevalence of the open settlement. However, here the bulk of the area is highly populated, quite the opposite of Area One. This is a result of almost perfect conditions for industrial development: open settlements, the dual economy and an abundance of easily accessible raw materials. Therefore, the parishes of this 'block' pattern experienced industrial development *en masse* and the resulting in-migration further distinguished them from their sparsely populated neighbours in Area One.

Area Three :- Of the three areas identified from the population maps, this is by far the most complex in terms of development and reasons behind the distribution patterns produced. Set within the Central Settlement Province, this is traditionally an area of nucleated settlement and arable (champion) farming. A labour intensive occupation, arable farming left far less opportunity for secondary employment in a 'craft'. The rise of industry in this area would therefore be expected to be small scale or non-existent. However, in many parishes industry flourished, often from an early date, e.g. many Leicestershire parishes were heavily involved in the hosiery trade.

If the nature of the agriculture of Area Three worked against involvement in industry, then other factors must have been at

work here, presumably causing or allowing a surplus of labour in those parishes which became involved in industry. Conversely, parishes which remained heavily agricultural with little or no industry, must have had some constraints on their population, whereby a surplus of labour did not evolve.

This differential population growth is highlighted by the 'patchwork' pattern of the population distribution of Area Three, at all three census dates. The most likely explanation behind this is the influence of landownership differences between parishes. It has been recognised for some time that the existence of open and closed villages led to differences in population growth, industrial growth, village morphology and religious conformity.

Open villages were intrinsically those of the peasantry, where large numbers of land owners meant that the acreage of farms was small and dominance by one or a few landowners was impossible. Closed villages are usually equated with estates of the gentry, where one or a handful of landowners exercised a tight hold over the settlement, due to their controlling interest in the land. This dichotomy of open and closed has been identified in many areas of England: Leicestershire¹⁷, Northamptonshire¹⁸, Oxfordshire, Nottinghamshire and the East Riding.¹⁹ Although these counties all lie within the Central Settlement Province, where champion farming and nucleated settlement dominated, examples of both types of village existed in every county, to a greater or lesser degree.²⁰ However, it is within champion England that a more balanced mix of the two can be found, compared to pastoral areas where the open village dominated.

Although reference is made here to the simple division of open and closed, in reality the differentiation is far from being this clear-cut and an infinite number of sub-types could be identified. Mills²¹ and also Clemenson²² recognise four main categories of landownership:

- (a) peasant villages
- (b) divided townships
- (c) villages belonging to absentee landlords
- (d) estate villages

¹⁷ D.R. Mills, *Lord and Peasant In Nineteenth Century Britain* (London: Croom Helm, 1980), pp. 73-83.

¹⁸R.L. Greenall, *A History of Northamptonshire and The Soke of Peterborough* (London: Phillimore and Co. Ltd., 1979), p. 50.

¹⁹H.A. Clemenson, *English Country Houses and Landed Estates* (London: Croom Helm, 1982), pp. 79-91.

²⁰Holderness, p. 49.

²¹Mills, pp. 74-8.

²²Clemenson, pp. 79-91.

(a) and (b) are classified as open and (c) and (d) as closed, although there is much overlap between (b) and (c).

Differential population growth between open and closed villages grew out of their vastly different social structures. Large estates were in effect large farms and so due to the economies of labour supported very limited numbers. More importantly, the large landlords exercised very tight population control resulting in a shortage of cottage accommodation on their land. This trend initially began in 1601 with the introduction of the Poor Law but carried on well into the late nineteenth century. The law required each parish to provide for its poor and destitute which, for those owning large tracts of land, came as a heavy blow. Therefore, the practice soon adopted in closed villages was to limit the number of cottages, so reducing the incidence of poor rate dramatically. The problems continued for over two centuries, an attempt being made in 1834 with the New Poor Law to change the trend. This effort made little headway and the differential growth of villages was still in evidence well into the second half of the nineteenth century. From the late eighteenth century onwards the demand for farm labour was rapidly growing, but still the estate owners showed a great resistance to erecting new accommodation for labourers and some even allowed existing cottages to fall to ruin. To give an idea of the full impact of this restriction on building by landowners, Emery²³ has noted that over a period of ten years there was an increase of 1,352 cottages in 86 open parishes in Oxfordshire, whereas in 34 closed parishes over the same period, the cottage increase amounted to 7. A far more minor reason for the reduction of accommodation on estates was the result of eighteenth century emparking. Landowners were reluctant to rebuild cottages cleared for their aesthetic purposes. If rebuilding did take place it was on a much smaller scale, tenants may even have been chosen to avoid those who showed a tendency to impoverishment.

The result of this reluctance from the landowners to provide housing was the movement of surplus workers and also the poor out of closed villages, to either open villages or towns. The destitute would often squat around the edges of the commons in open settlements. Others either began working within their new parish, or within a neighbouring closed parish whilst living in the new one. This led to the development of "Gang Systems", i.e. labour migration over a relatively short distance, with agricultural workers from open settlements travelling to work on closed farms and estates. This serves to highlight that although the estate and the peasant village were two very different systems, they were very much dependent on each other for survival. The open village needed employment for its surplus labour force and the closed needed workers to fulfil agricultural jobs, especially seasonal work, such as at harvest time. Hence, we see here the beginning of differential population growth, with the initial movement of population

²³F. Emery, *The Oxfordshire Landscape* (London: Hodder and Stoughton, 1974), p. 172.

from closed to open which subsequently lead to differing rates of natural increase, further emphasising the gap between the two.

For those workers in open villages who were not involved in jobs across the parochial border and could not find work in agriculture within their own parish, jobs in industry or 'trades' (as they were then known) became an increasingly popular alternative. With such surplus populations, workers could become involved in industry, often totally divorced from the land. It was therefore in these more populous open villages that industry began and expanded. In closed villages the labour force was not available and gentlemen with estates did not see it as correct to involve themselves in industry. The development of industry in open parishes is explored further, in a more specific study of Leicestershire below.

Other products of open and closed settlements were differential morphology and diversity in religion. Due to the influx of people from closed areas, open villages took on a rather ramshackle and irregular appearance. In the main, affluence was nowhere near a level whereby the quality of the housing was high or even in good repair and overcrowding was common. The buildings within closed villages proved a stark contrast to this. Usually planned and regular, the closed village presented a neat and compact appearance, where the same building stone was used throughout the settlement. In many, doors were kept to the rear of the properties, so as to avoid gossiping women being seen. Further, improvements in building techniques, the use of new materials and progressive styles of architecture (including revivals) were pioneered here. This represented the wealth of the estate and also the social control it exerted. This control also manifested itself in religious conformity. A tight rein was kept to ensure total allegiance to the Church of England. The opposite of this is true of the open settlement where dissent could flourish freely and frequently did.²⁴ Again this is investigated further in the following study of Leicestershire. J.D. Gay²⁵ notes a broad distinction between conformity in arable areas and dissent in pastoral areas. This equates with the earlier stated fact that the bulk of closed villages lay within the champion lands and that most of pastoral England was made up of open settlements.

Leicestershire: a case study

The area of western and central Leicestershire was chosen to correspond with a study done by D.R. Mills for this county, on the subject of open and closed settlements.²⁶ This provides a foundation on which to work.

²⁴A. Everitt, *The Pattern of Rural Dissent: The Nineteenth Century* (Leicester: Leicester University Press, 1974).

²⁵J.D. Gay, *The Geography of Religion In England* (London: Duckworth, 1971).

²⁶Mills, pp. 73-83.

For Leicestershire, a strong continuity between 1676, 1801 and 1851 is seen on all population maps relating to the West Midlands. At its simplest, the pattern produced is a ring or horseshoe of parishes within the upper quartile of population density. This very stable picture of relative population distribution has also been noted by D.R. Mills in 63 townships in Leicestershire. His study shows that there was the same spatial variation of population density when figures from the 1851 Census and the 1670 Hearth Tax were plotted. He also noted further correlations with figures from 1719 and 1780.

This pattern is closely echoed by two further distribution maps, compiled by D.R. Mills in his Leicestershire study. Using the four landownership divisions mentioned earlier, he produced a map from land tax assessments and directories from the nineteenth century (Figure 4.11). Of 308 parishes examined, the breakdown was as follows:

- (a) peasant - 76
- (b) divided - 98
- (c) absentee - 95
- (d) estate - 39

Parishes containing peasant and divided settlements in the main coincided with highly populated parishes, again producing a horseshoe shape. Parishes of low population tend to be those where the estate village or absentee landlords dominated. D.R. Mills has carried out some limited work with the 1851 Census showing this correlation, but the more detailed study of population at three dates in this thesis confirms and further emphasises the link.

The second distribution pattern of notable similarity to those of population is industrial (Figure 4.12). The hosiery trade being Leicestershire's main industry, D.R. Mills plotted a map of stocking frame ownership in 1844 (based on work by W. Felkin²⁷). It is the parishes with a high ratio of frames (i.e. over 61) that again form a ring pattern which correlates with the maps of population distribution. The beginnings of the hosiery trade are rooted in seventeenth century Leicestershire. The industry started out in London and then moved to Nottinghamshire from where it expanded into Derbyshire and Leicestershire. The first frames were probably set up in Hinckley c.1640 and the first reference to a stocking frame was in 1660 in a Probate Record for the Archdeaconry of Leicestershire. This early establishment of the industry explains why differential population growth is already obvious on the population maps of 1676. By the turn of the eighteenth century around 118 villages were involved in the trade; in a survey carried out for Blackner in 1812 (an house to house enquiry made by an unknown) there were well over 11 thousand stocking frames in the county, mainly in the western half (the area contained within the West Midlands

²⁷W. Felkin, *A History of the Machine-wrought Hosiery and Lace Manufacturers* (1867, reprinted Newton Abbot: David and Charles, 1967).

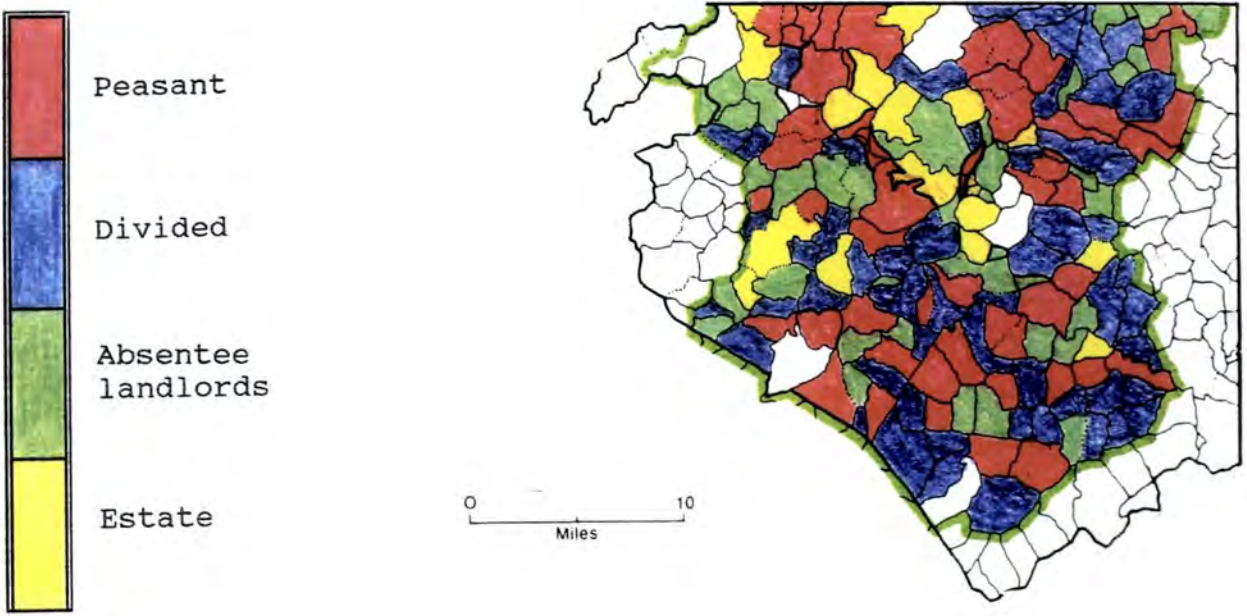


Figure 4.11 Leicestershire: Nineteenth century landownership. Based on Mills (1980).

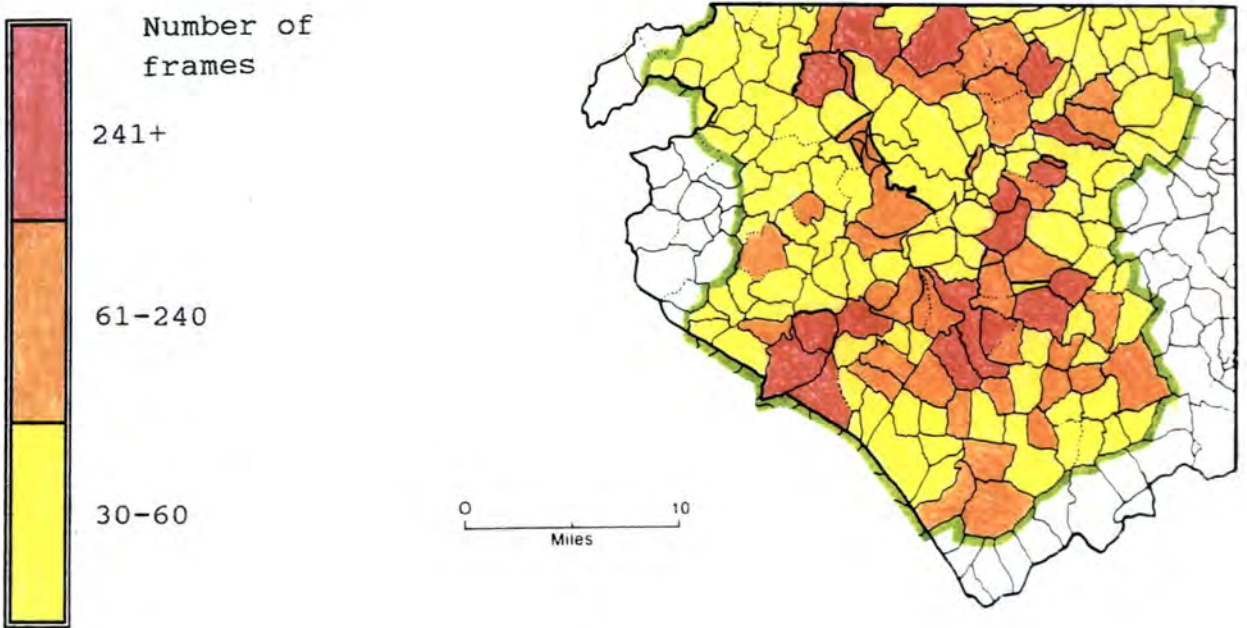


Figure 4.12 Leicestershire: Stocking frame distribution, 1844. Based on Mills (1980).

study region). At the outset the frames were quite expensive and seem to have belonged to relatively well-off villagers e.g. blacksmiths, shopkeepers, farmers. Such persons were much more readily found in open parishes where the greater population required far more services than in the closed settlements. Furthermore, it was not seen as correct for a landed gentleman to be involved in industry, especially if the site of production was to be his own estate. Therefore the industry in its initial years established itself in open parishes. In the rural districts it was originally an additional occupation combined with agriculture, but with the progression of time and the development of the industry, the peasant villages became quite heavily dependent on the stocking trade. With the movement of many from closed settlements due to lack of housing, it is probable that these industrial parishes were the first to experience an influx of homeless people looking for work. So, these already larger settlements must have increased quite rapidly through migration. Further, with the effects of natural increase on top of this, differential population growth within the county became extremely pronounced.

However, problems arose when the French Wars had drawn to a close. After a period of heightened demand due to the requirements of the army, an over expanded industry could not cope with the sudden loss of trade. The industry entered a depression and poor rates soared in those parishes financially dependent on stocking production. Further, during the boom period, many of the paupers in parishes highly involved in hosiery were apprenticed into the industry to replace all the young knitters recruited into the army. Apprentices were even brought in from the neighbouring counties. With the return of the young men when peace came, there was suddenly an overabundance of labour. Therefore, although the industrial growth of these parishes was past its peak and in many areas in a state of decline, its legacy was a group of highly populated parishes, whose natural increase would carry on to further differentiate them from the closed, agricultural settlements, where low population dominated.

Hence, the relationships between settlement type and, in turn, the structure of landownership, population change and degree of industrialization, which were suggested for Area One, are further supported by this example of Leicestershire. Other contrasts which were postulated as discriminating features of the two settlement types were religious dissent/conformity and village morphology. Again, it would seem from evidence taken from Leicestershire that these, too, follow the general rules of the open and closed dichotomy. A comparison of Figures 4.13 and 4.11 shows the correlation between dissent/conformity and landownership, around the end of the study period. Nonconformist churches are found in predominantly open parishes, whilst areas with few or no nonconformist churches correspond with closed settlements. As for all the other distribution patterns in the county at the three census dates, this is represented by a ring-shaped pattern of parishes where nonconformity was most dominant. Similarly, this pattern is still discernible in 1676 using

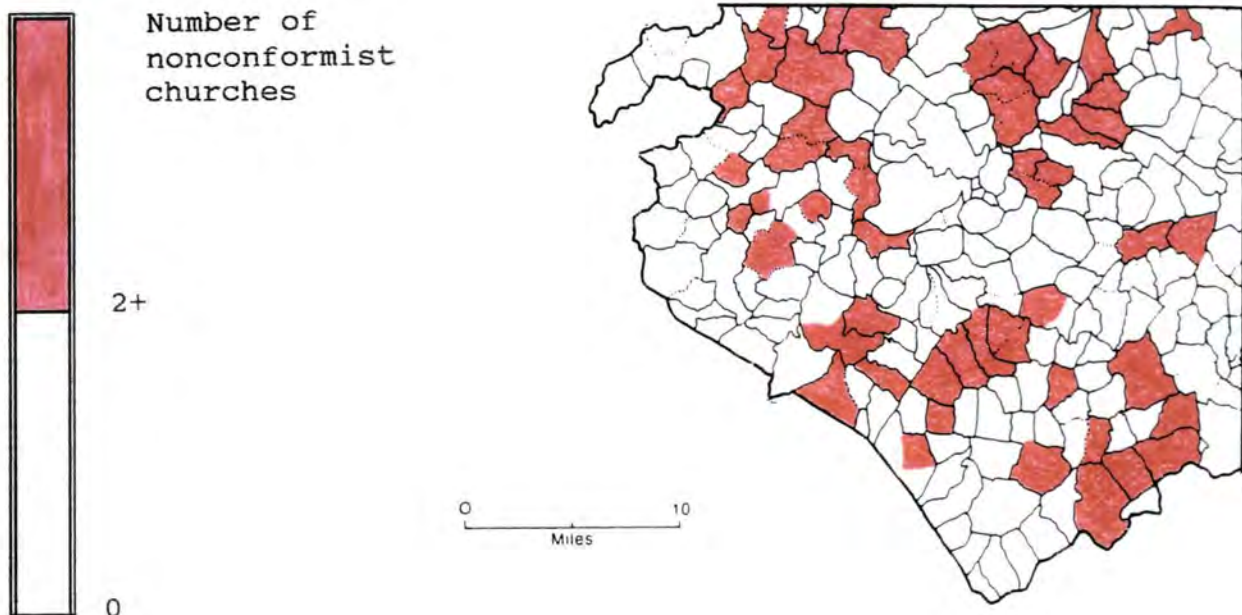


Figure 4.13 Leicestershire: Religious dissent, c.1851. Based on Mills (1980).

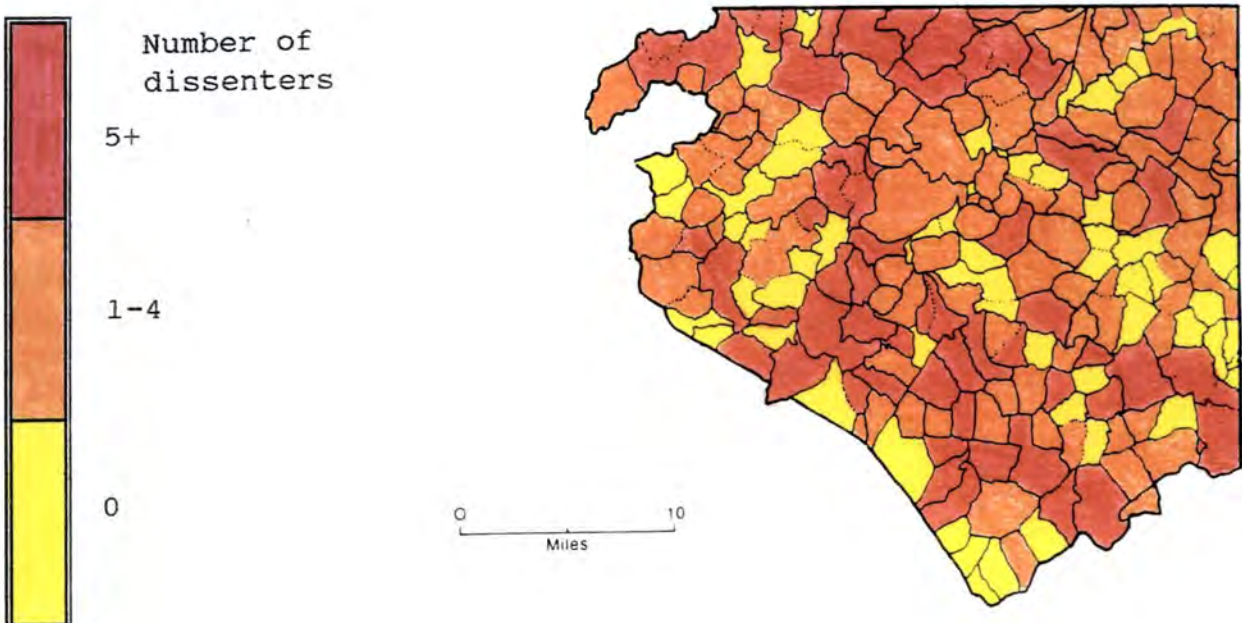


Figure 4.14 Leicestershire: Religious dissent, 1676. Based on, *The Compton Census of 1676*, Whiteman (ed.).

data from the Compton Census (Figure 4.14), once again showing strong continuity from period to period and highlighting the fact that the roots of this differentiation are deep in time.

Figures 4.15 and 4.16 highlight the intrinsic differences in the size and layout of open and closed villages. Barwell and Oadby (Figure 4.15) are large, sprawling, haphazard villages which typify the open settlement. In contrast Kirkby Mallory and Shenton (Figure 4.16) represent the closed village, small, planned and compact.

Therefore, all of the statements offered at the beginning of the section on Area Three are supported by evidence from Leicestershire. The dichotomy of open and closed shows a strong influence on: population growth, industrial growth, religious conformity and village morphology. Therefore, it can be argued that landownership is the most important factor in the differential growth of population in Area Three, producing the 'patchwork' pattern which is the keynote of the area. It is further aided by differential industrial growth (also a product of landownership), which added substantial numbers to the already populous open villages, through in-migration. The general rule (although it should be recognised that there are exceptions to this) for Area Three seems to be:

- (a) open = high population = industrial = in-migration.
- (b) closed = low population = agricultural = out-migration.

From this individual analysis of the three areas, it is obvious that landownership was the main factor in determining the 'block' and 'patchwork' distribution patterns. Through landownership, the region is initially divided into two, at the border of the Central and the Northern and Western Settlement Provinces. The former is characterised by the 'patchwork' pattern, caused by an almost equal mix of open and closed settlements. In the latter, the dominance of open over closed produces a 'block' distribution. Here, the area can again be split into two, to the west the 'block' pattern is one of sparse population, whilst the eastern portion is heavily populated.

The differences between low and highly populated parishes is mainly due to the nature of their economies. Parishes of low population tend to be those which were purely agricultural and experienced either a decline or a very limited rise in population throughout the 175 year period, as a result of out-migration to more industrial areas. Hence, areas of high population were generally industrial and experienced in-migration as their demand for labour grew. Such migration tended to occur from Area One to Area Two, whilst for Area Three migration was probably more internal with movement out of closed villages to neighbouring open ones.

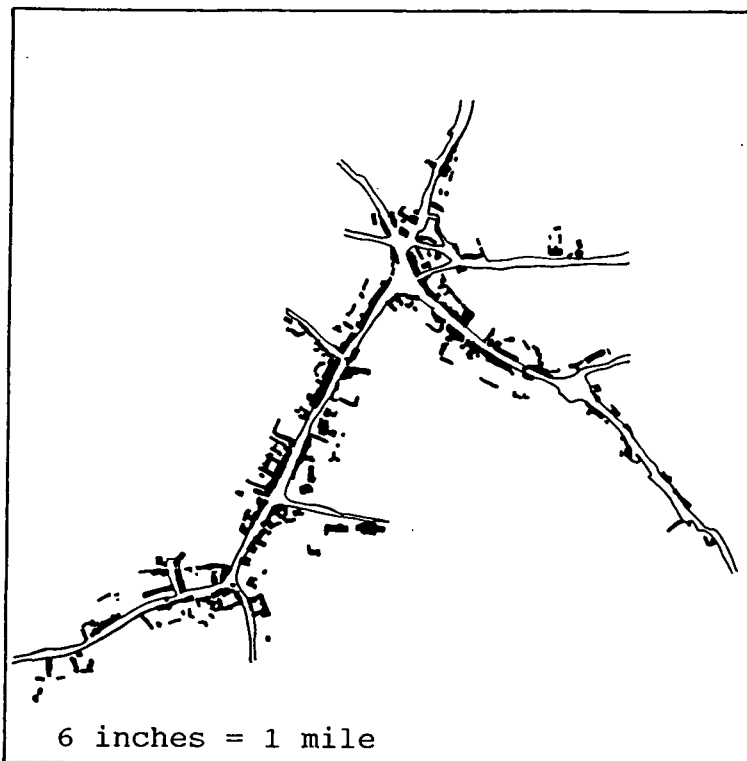


Figure 4.15a Barwell, Leicestershire: plan of an open village.

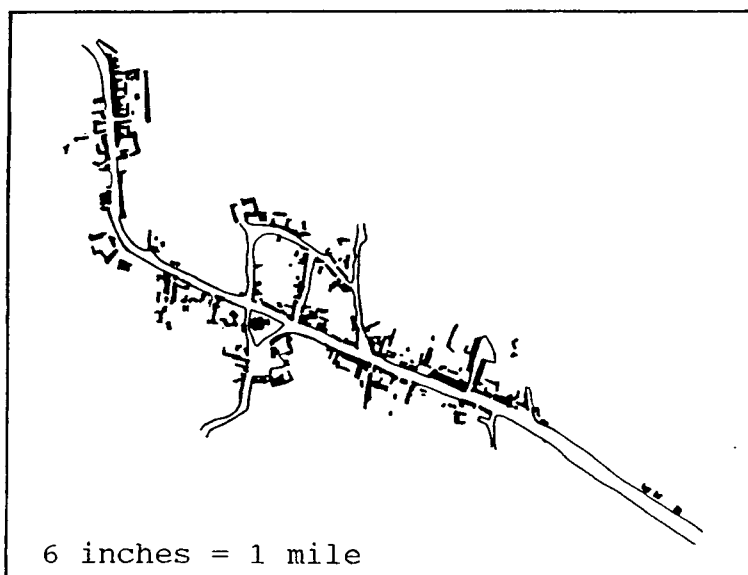


Figure 4.15b Oadby, Leicestershire: plan of an open village.

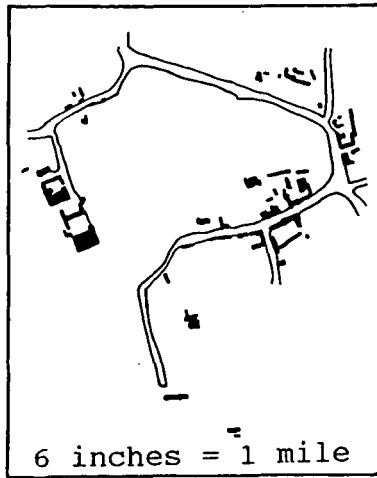


Figure 4.16a Kirkby Mallory, Leicestershire: plan of a closed village.

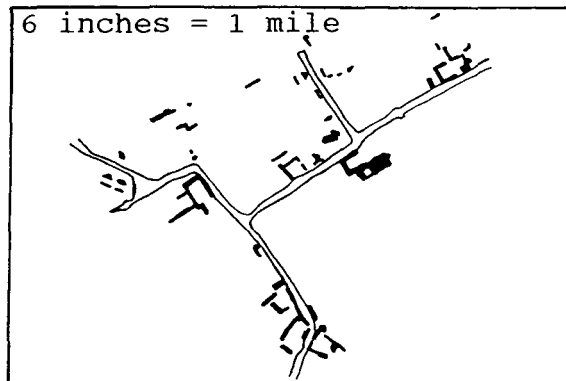


Figure 4.16b Shenton, Leicestershire: plan of a closed village.

CHAPTER FIVE

CHAPTER FIVE

CUMBERLAND AND WESTMORLAND

This chapter deals with the study region of Cumberland and Westmorland, chosen as a contrasting area to the West Midlands in both size and terrain. The chapter takes on the same format as the previous one. A retrogressive examination of the maps produced is undertaken for the three periods. The individual population distributions from the three census dates are discussed, followed by the changes which occurred over the 175 year period. Possible factors behind these static and dynamic pictures are then considered.

1851

(Figure 5.1) In 1851 the overall distribution shows an imbalance of population between the two counties involved, Cumberland being a far more populous area. Two substantial areas of relatively high population exist (over 129 persons per square mile), both in the north of the study region. The first focuses on the city of Carlisle and its surrounding area, extending for some fifteen miles east to west and around nine miles north to south. The second area is almost connected to the first, by the slightly lower populated parishes (81-129 persons per square mile) of Bowness, Holm Cultram and Bromfield on the Solway Coast. It stretches for about 20 miles along the west Cumberland Coast, from Aspatria to Egremont.

To the south of these two areas, the majority of the land is sparsely populated, with small pockets of denser population appearing around main towns, e.g. Kendal and Penrith. Vast swathes of land in the south of the region fall into the lower two quartiles and much of northern Westmorland and southern Cumberland has under 54 people per square mile.

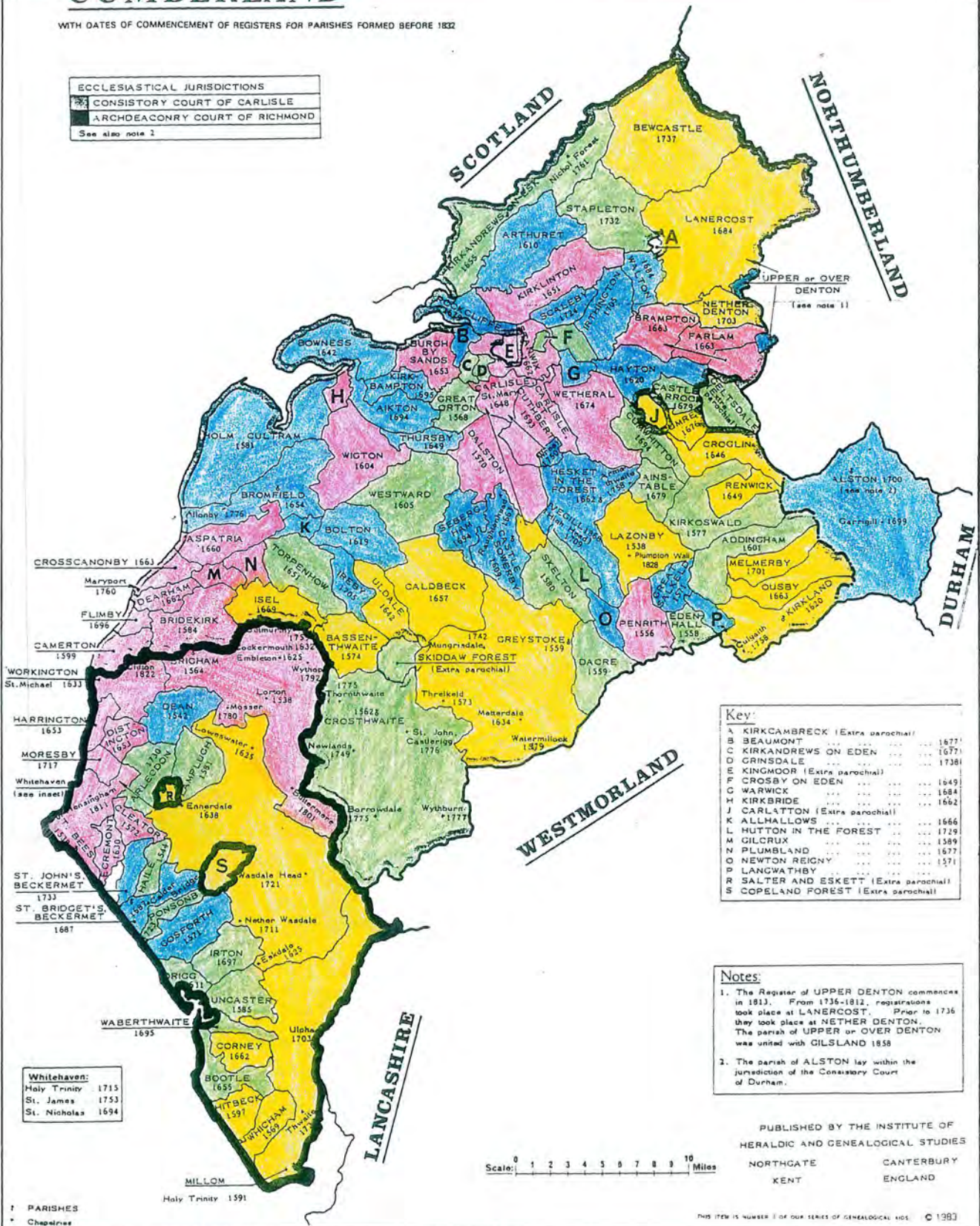
The maps dividing the parishes at the median (Figure 5.2) highlight the populous areas of the Solway Coast and the Eden Valley stretching as far south as Penrith and the low population of the inland areas to the south of the Carlisle area. They also emphasise two smaller areas of high population in Westmorland, one around Appleby (almost an extension south from Penrith) and the other around Kendal. The distribution seen here takes on a 'blocky' appearance. Large numbers of parishes of similar densities are adjacent to one another, as opposed to a more mixed distribution. The patterns seen here show a very close relationship to the terrain of the study region. The Solway Plain and the Eden Valley are dominated by high population, whilst the large area of sparse population to the south of this broadly corresponds to the Cumbrian Mountains. This is discussed more fully at a later point.

CUMBERLAND

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

ECCLESIASTICAL JURISDICTIONS	
	CONSISTORY COURT OF CARLISLE
	ARCHDEACONRY COURT OF RICHMOND

See also note 2



Key:	
A	KIRKCAMBRECK (Extra parochial) ... 1677
B	BEAUMONT ... 1673
C	KIRKANDREWS ON EDEN ... 1673
D	GRINDALE ... 1738
E	KINGMOOR (Extra parochial) ... 1649
F	CROSBY ON EDEN ... 1684
G	WARWICK ... 1662
H	KIRKBRIDE ... 1666
J	CARLISLE (Extra parochial) ... 1666
K	ALLHALLOWS ... 1719
L	HUTTON IN THE FOREST ... 1589
M	GILCRUX ... 1677
N	PLUMBLAND ... 1571
O	NEWTON REIGNY ... 1571
P	LANGWATHBY ... 1538
R	SALTER AND ESKETT (Extra parochial)
S	COPELAND FOREST (Extra parochial)

Notes:

- The Register of UPPER DENTON commences in 1813. From 1735-1812, registrations took place at LANERCOST. Prior to 1736 they took place at NETHER DENTON. The parish of UPPER or OVER DENTON was united with GILSLAND 1858
- The parish of ALSTON lay within the jurisdiction of the Consistory Court of Durham.

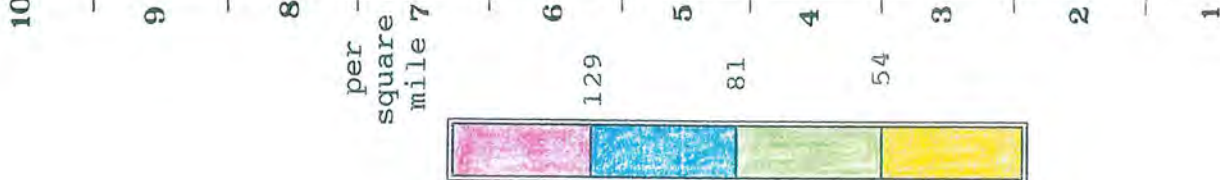
Whitehaven:	
Holy Trinity	1715
St. James	1753
St. Nicholas	1694

PARISHES
Chapels

Scale: 0 1 2 3 4 5 6 7 8 9 10 Miles

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Figure 5.1a Population density, 1851.

WESTMORLAND

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

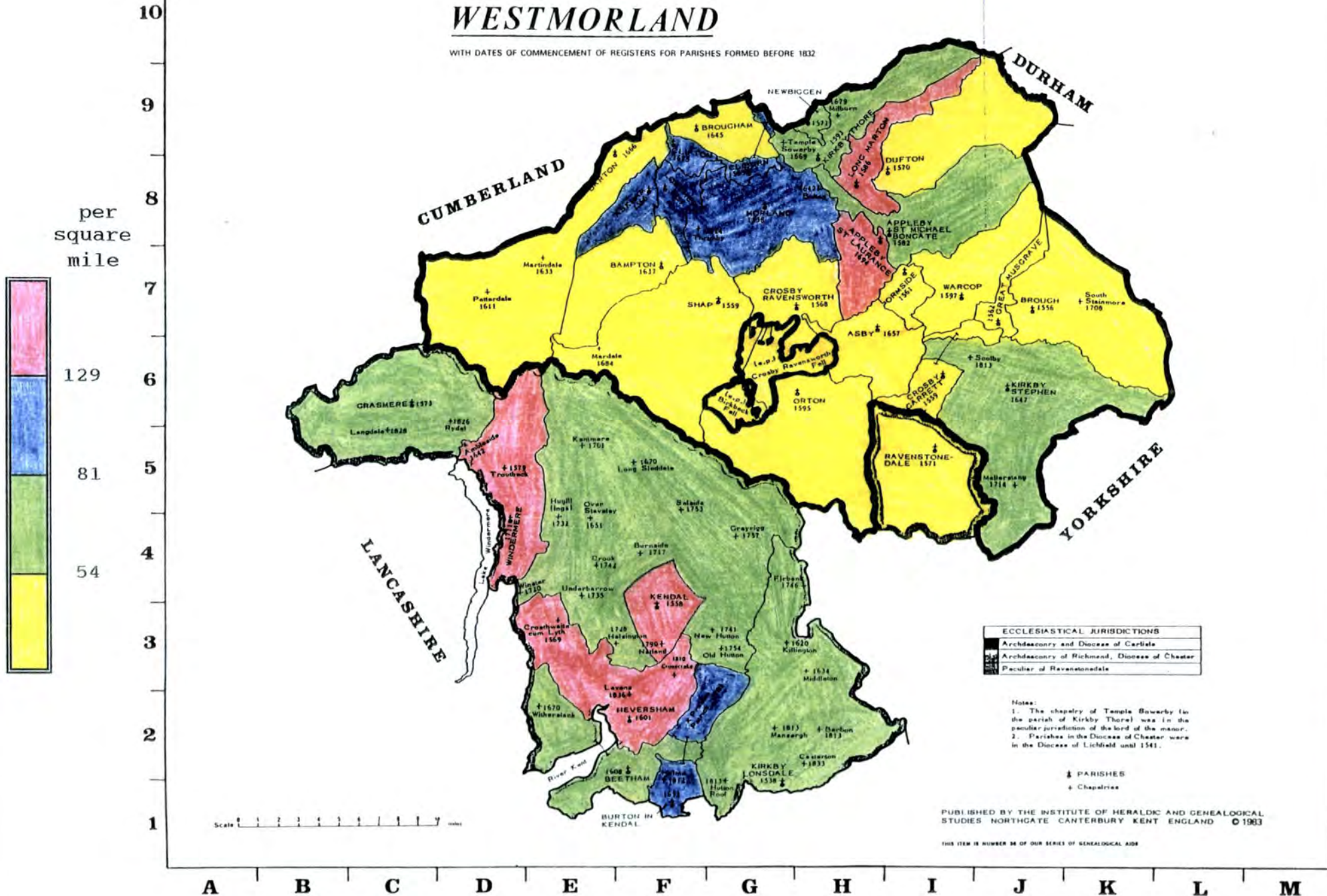
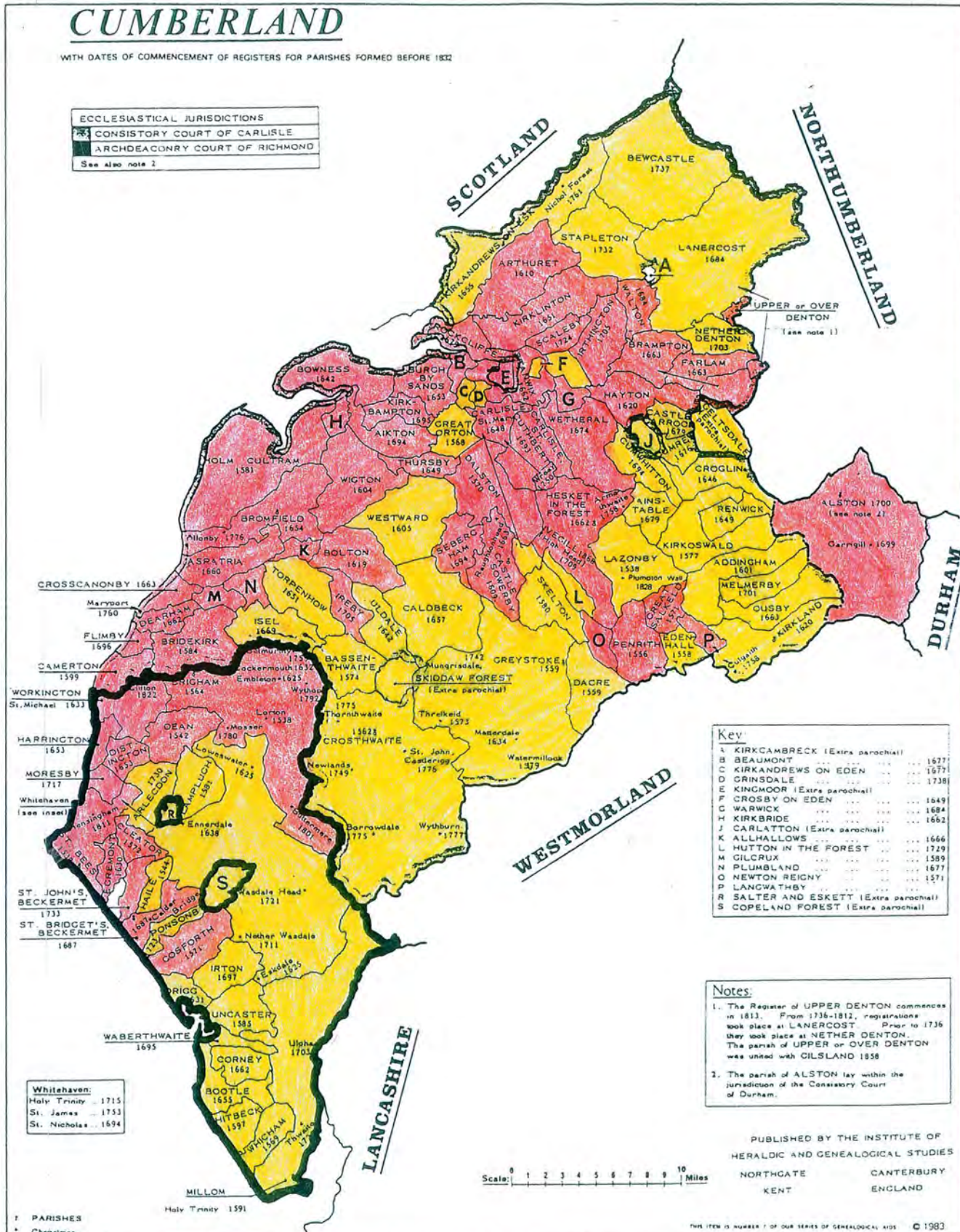


Figure 5.1b Population density, 1851.

CUMBERLAND

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

ECCLESIASTICAL JURISDICTIONS	
	CONSISTORY COURT OF CARLISLE
	ARCHDEACONRY COURT OF RICHMOND
See also note 2	



Key

A	KIRKCAMBRECK (Extra parochial)	1677
B	BEAUMONT	1677
C	KIRKANDREWS ON EDEN	1678
D	CRINSDALE	1738
E	KINGMOOR (Extra parochial)	1649
F	CROSBY ON EDEN	1649
G	WARWICK	1684
H	KIRKBRIDE	1662
J	CARLATTON (Extra parochial)	1666
K	ALLHALLOWS	1729
L	HUTTON IN THE FOREST	1589
M	GILCRUX	1677
N	PLUMBLAND	1571
O	NEWTON REICHY	1571
P	LANGWATHBY	1558
R	SALTER AND ESKETT (Extra parochial)	1558
S	COPELAND FOREST (Extra parochial)	1558

Notes

- The Register of UPPER DENTON commences in 1811. From 1736-1812, registrations took place at LANERCOST. Prior to 1736 they took place at NETHER DENTON. The parish of UPPER or OVER DENTON was united with GILSLAND 1858.
- The parish of ALSTON lay within the jurisdiction of the Consistory Court of Durham.

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Scale: 0 1 2 3 4 5 6 7 8 9 10 Miles

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Figure 5.2a Population density, 1851.

per square mile



1801

(Figure 5.3) At this date, two large and very distinct areas of high population can be seen within Cumberland, whilst two very much smaller groups of densely populated parishes are found in Westmorland. In Cumberland, an area spreading north and south from Carlisle for around 20 miles dominates the north of the county. To the south-west of this is a second area, extending from Crosscanonby to Egremont along the coast and inland from its northerly point to the parish of Crosthwaite. To the south of the study region, in Westmorland, a small area of high population exists centred on the parish of Heversham and includes Kendal. To the north of the county a small number of parishes stand out, from Appleby, St. Laurance moving west. However, the bulk of these parishes fall into the second quartile rather than the first.

As in 1851, large areas of the study region, mainly to the south, are sparsely populated. This includes the majority of Westmorland and two large areas extending north into Cumberland. This huge area of under-populated land stretches up to 60 miles east to west and 45 miles north to south.

The median divided maps (Figure 5.4) emphasise the four areas of high population within the study region, two in Cumberland and the two smaller areas in Westmorland. The great areas of sparse population that dominate the south of the region, become clearer and more striking on these maps. As for 1851, the sub-province of nucleated settlement is echoed by the arc of parishes of above median density in the north and west of the region. Also, the 'block' distribution is again evident.

1676

(Figure 5.5) Unfortunately, at this time, deficiencies in the data make the identification of distribution patterns rather difficult. Once again, the parishes in the vicinity of Carlisle are highlighted as one of the more populous areas of the study region. From the few parishes for which data are available along the west coast, it seems probable (although it cannot be said for definite) that this area is yet again one of high population, as already seen in 1851 and 1801. Moving south, the region is far less populous, especially in the county of Westmorland. Also of note is the north of Cumberland, from Bewcastle south-west, where a substantial area has less than 26 people per square mile. Again, an arc shape of relatively high density presents itself on the median split maps (Figure 5.6). This would probably extend down the West Cumberland Coast if data were available. Further, the 'blocky' appearance seen for 1851 and 1801 is also present here.

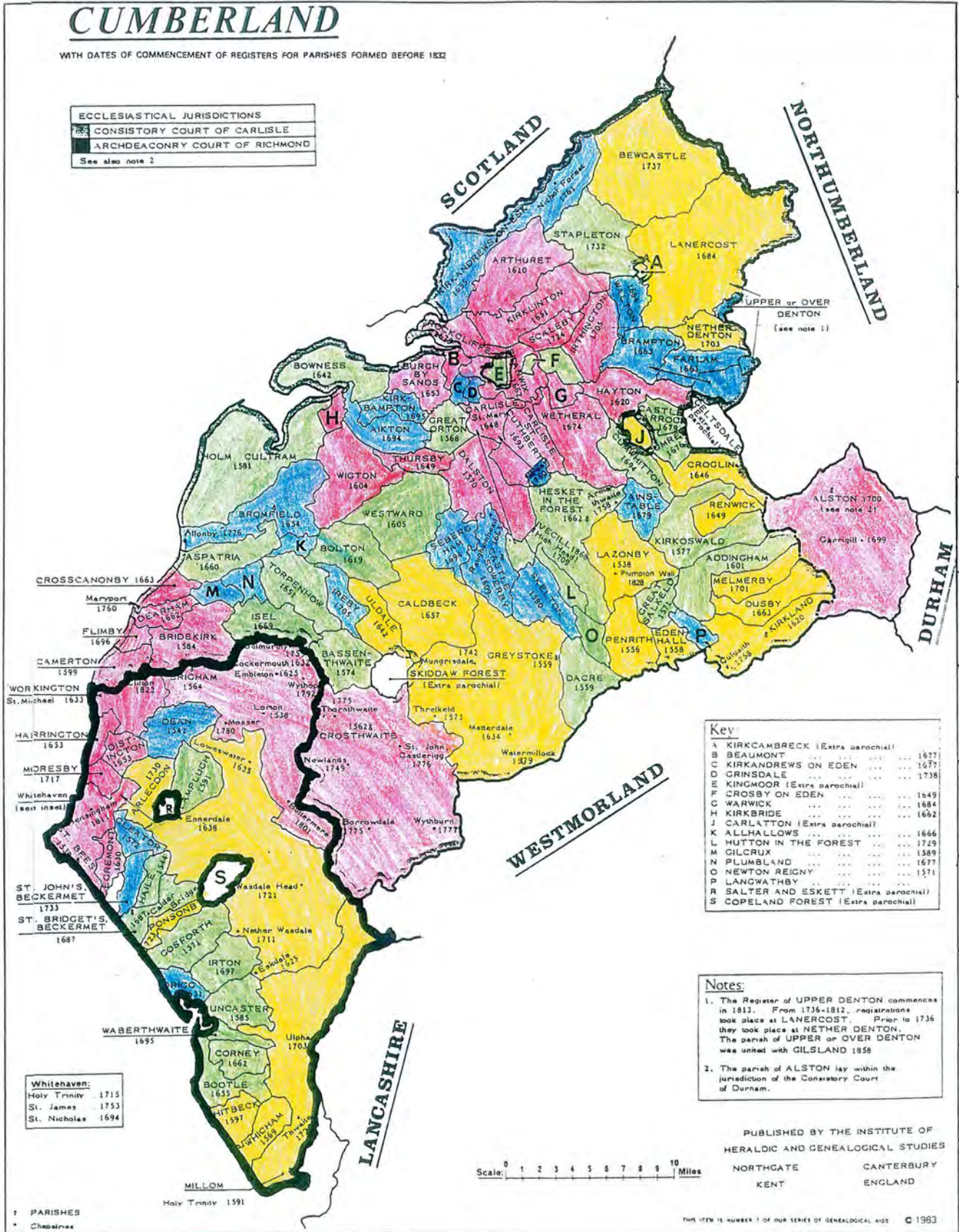
Patterns of Change, 1676-1851

Turning to the temporal progression of population in the study region, there appears to be a very strong link between the distribution patterns at all three periods. For 1851 and 1801 the overall pattern is very similar, with two main areas

CUMBERLAND

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

ECCLESIASTICAL JURISDICTIONS	
	CONSISTORY COURT OF CARLISLE
	ARCHDEACONRY COURT OF RICHMOND
See also note 2	



Key

A	KIRKCAMBRECK (Extra parochial)	
B	BEAUMONT	1677
C	KIRKANDREWS ON EDEN	1673
D	GRINDALE	1738
E	KINGMOOR (Extra parochial)	
F	CROSBY ON EDEN	1649
G	WARWICK	1684
H	KIRKBRIDE	1662
J	CARLATTON (Extra parochial)	
K	ALLHALLOWS	1666
L	HUTTON IN THE FOREST	1729
M	GILCRUX	1589
N	PLUMBLAND	1677
O	NEWTON REIGNY	1571
P	LANGWATHBY	
R	SALTER AND ESKETT (Extra parochial)	
S	COPELAND FOREST (Extra parochial)	

Notes:

1. The Register of UPPER DENTON commences in 1812. From 1736-1812, registrations took place at LANERCOST. Prior to 1736 they took place at NETHER DENTON. The parish of UPPER or OVER DENTON was united with GILSLAND 1858.
2. The parish of ALSTON lay within the jurisdiction of the Consistory Court of Durham.

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A B C D E F G H I J K L M

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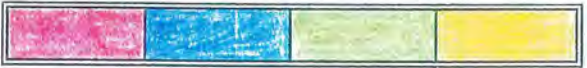


Figure 5.3a Population density, 1801.

WESTMORLAND

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

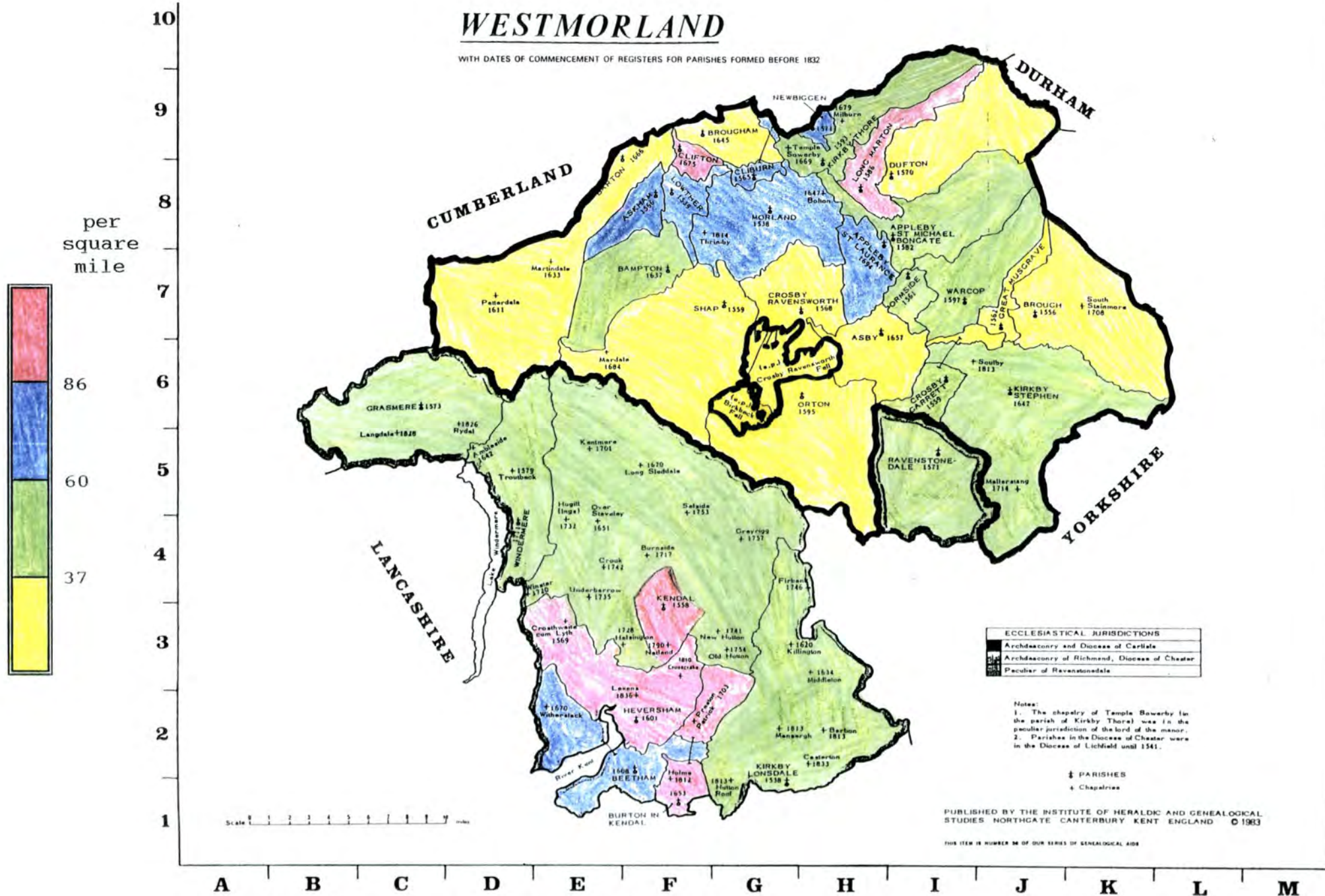
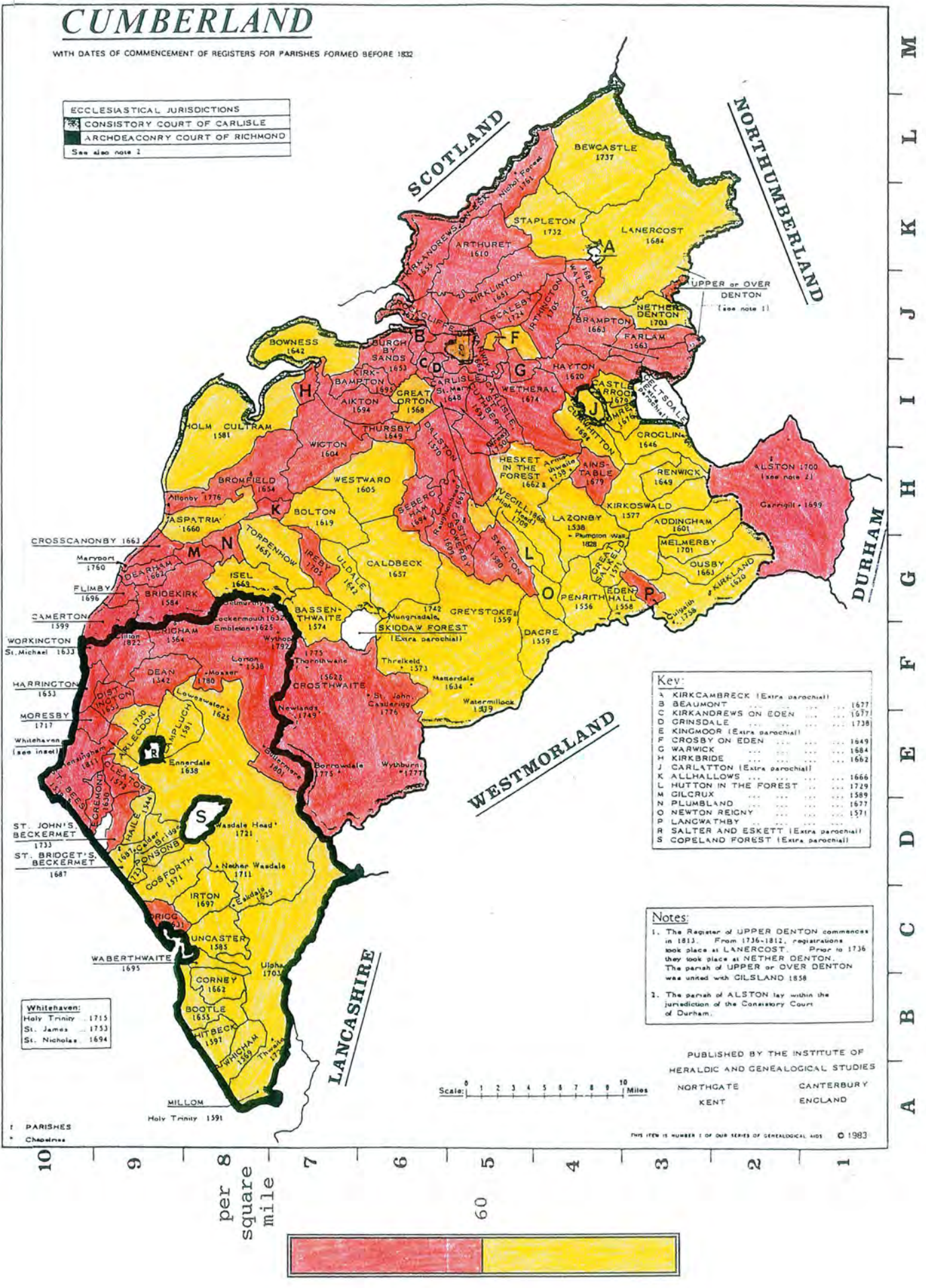


Figure 5.3b Population density, 1801.

CUMBERLAND

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

ECCLESIASTICAL JURISDICTIONS	
	CONSISTORY COURT OF CARLISLE
	ARCHDEACONRY COURT OF RICHMOND
See also note 2	



Key:

A	KIRKCAMBRECK (Extra parochial)	...	...
B	BEAUMONT	...	1677
C	KIRKANDREWS ON EDEN	...	1677
D	CRINSDALE	...	1738
E	KINGMOOR (Extra parochial)	...	...
F	CROSBY ON EDEN	...	1649
G	WARWICK	...	1684
H	KIRKBRIDE	...	1682
J	CARLTON (Extra parochial)	...	...
K	ALLHALLOWS	...	1666
L	HUTTON IN THE FOREST	...	1729
M	GILCRUX	...	1589
N	PLUMBLAND	...	1677
O	NEWTON REIGNY	...	1571
P	LANCWATHBY	...	...
R	SALTER AND ESKETT (Extra parochial)	...	...
S	COPELAND FOREST (Extra parochial)	...	...

Notes:

1. The Register of UPPER DENTON commences in 1813. From 1736-1812, registrations took place at LANERCOST. Prior to 1736 they took place at NETHER DENTON. The parish of UPPER or OVER DENTON was united with GILSLAND 1858.
2. The parish of ALSTON lay within the jurisdiction of the Consistory Court of Durham.

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Figure 5.4a Population density, 1801.

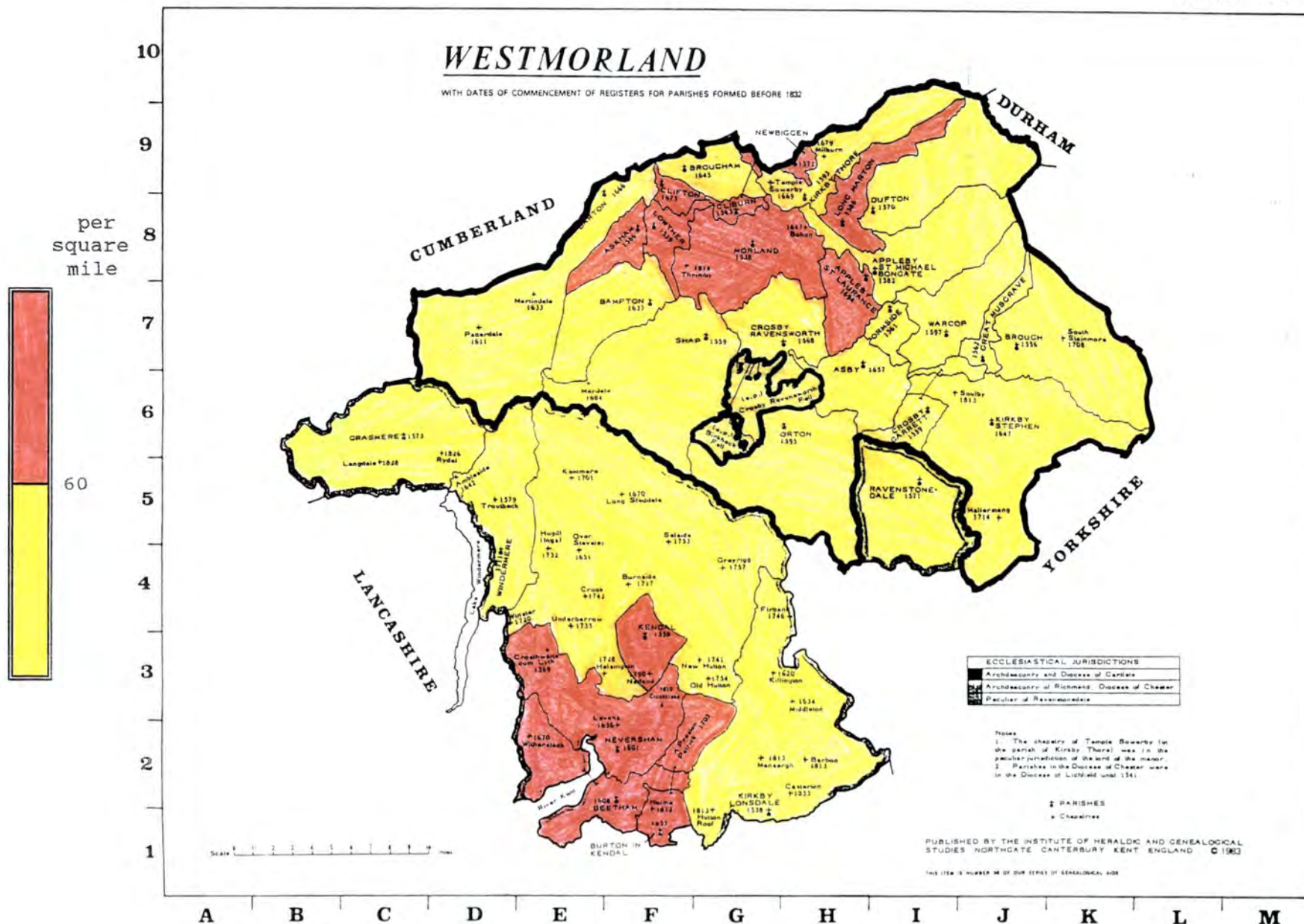
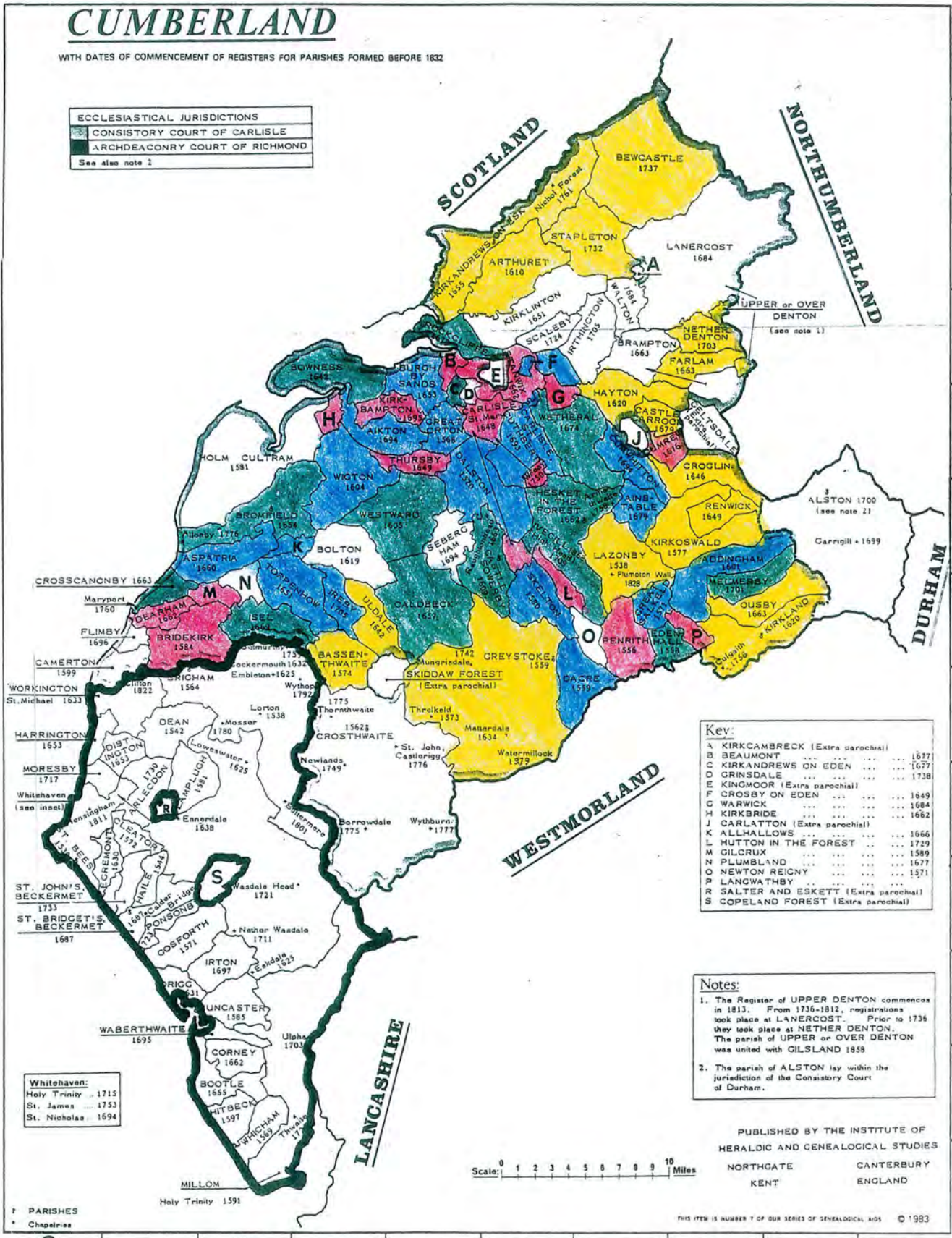


Figure 5.4b Population density, 1801.

CUMBERLAND

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

ECCLESIASTICAL JURISDICTIONS	
	CONSISTORY COURT OF CARLISLE
	ARCHDEACONRY COURT OF RICHMOND
See also note 2	



Key:

A	KIRKCAMBRECK (Extra parochial)	
B	BEAUMONT	1677
C	KIRKANDREWS ON EDEN	1677
D	GRINSDALE	1738
E	KINGMOOR (Extra parochial)	1649
F	CROSBY ON EDEN	1684
G	WARWICK	1684
H	KIRKBRIDE	1684
J	CARLATTON (Extra parochial)	1666
K	ALLHALLOWS	1729
L	HUTTON IN THE FOREST	1589
M	GILCRUX	1677
N	PLUMBLAND	1571
O	NEWTON REIGNY	1571
P	LANGWATHBY	1556
R	SALTER AND ESKETT (Extra parochial)	
S	COPELAND FOREST (Extra parochial)	

Notes:

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Scale: 0 1 2 3 4 5 6 7 8 9 10 Miles

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Figure 5.5a Population density, 1676.



WESTMORLAND

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

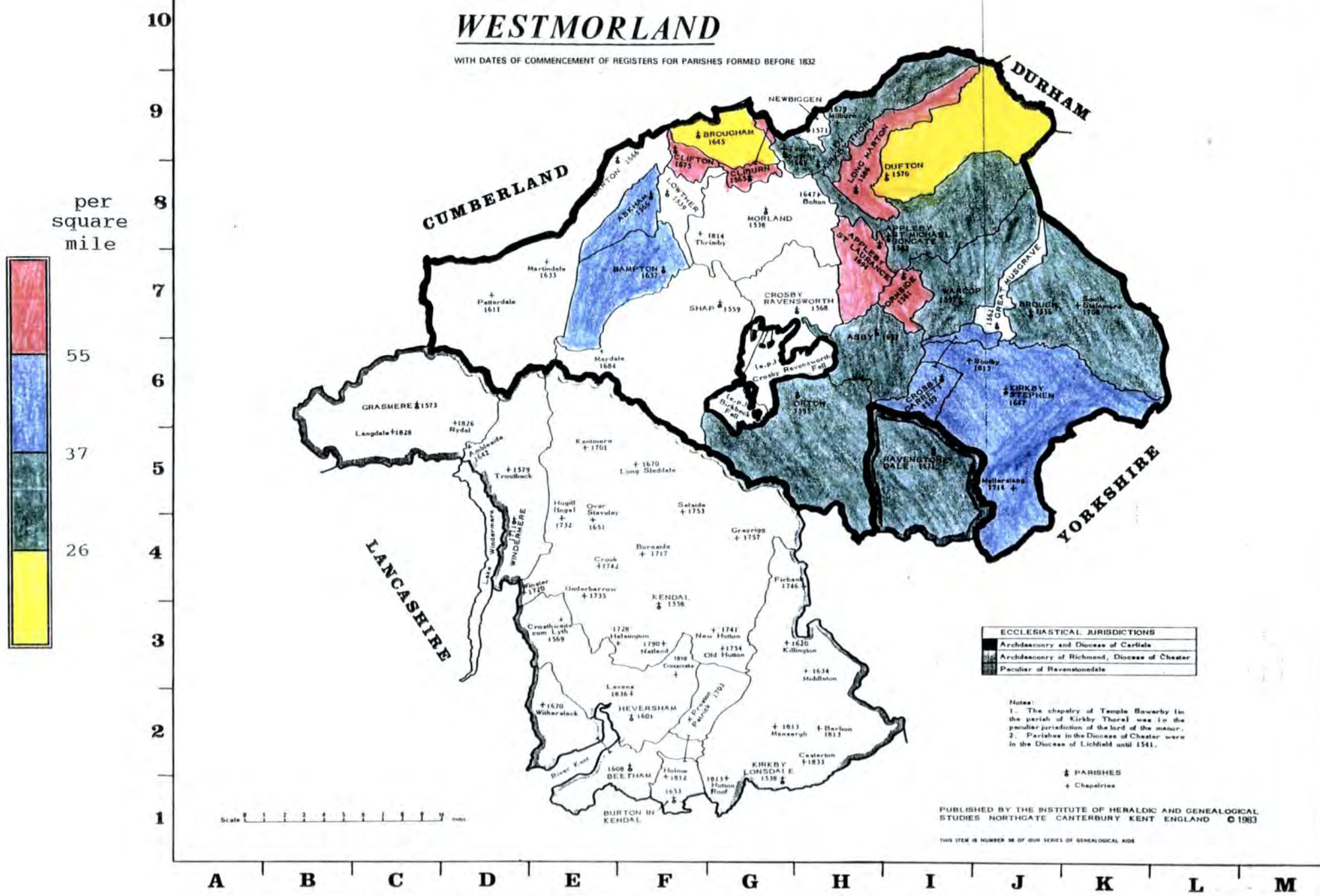
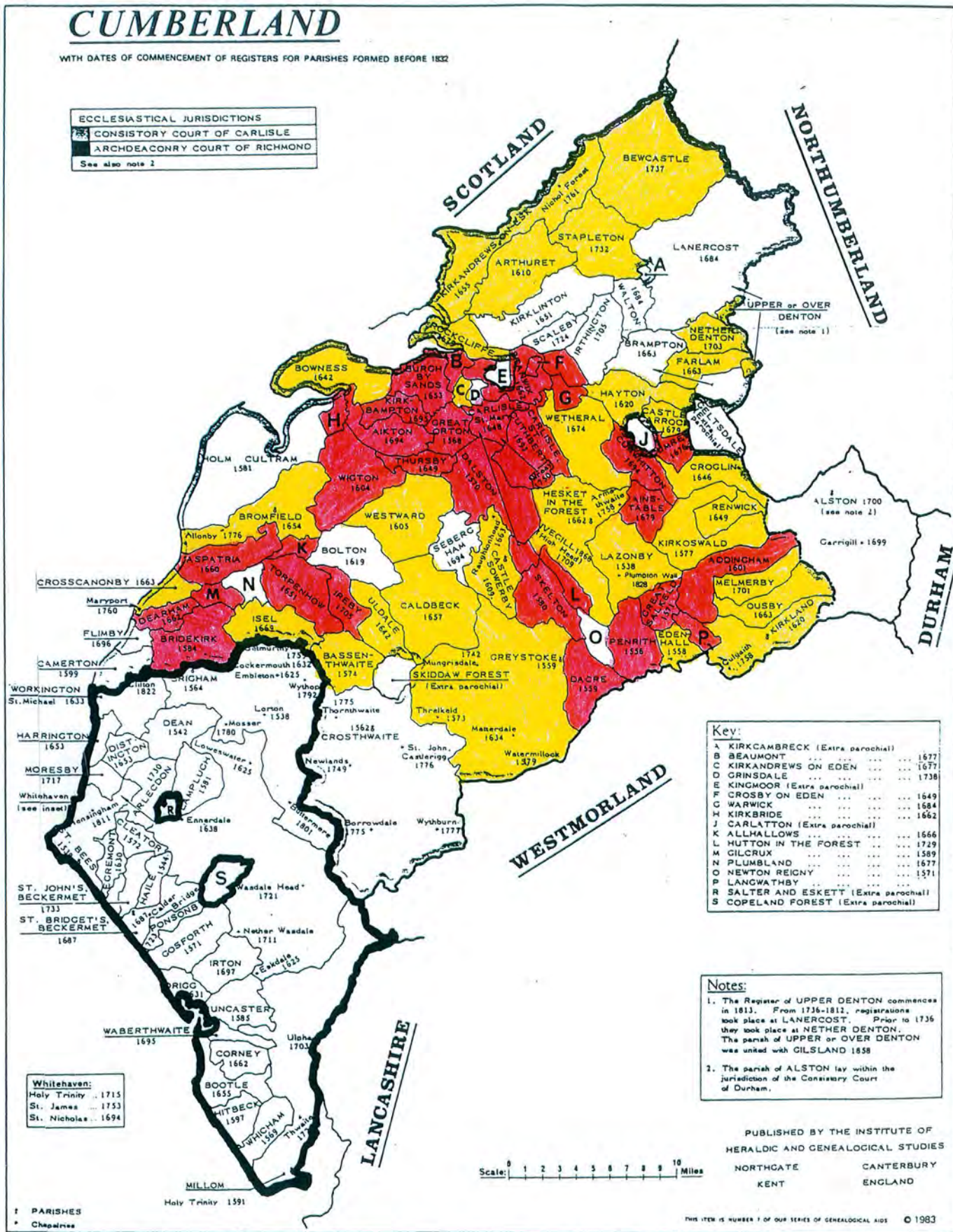


Figure 5.5b Population density, 1676.

CUMBERLAND

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

ECCLESIASTICAL JURISDICTIONS	
	CONSISTORY COURT OF CARLISLE
	ARCHDEACONRY COURT OF RICHMOND
See also note 2	



Key:

A	KIRKCAMBRECK (Extra parochial)	...	1677
B	BEAUMONT	...	1677
C	KIRKANDREWS ON EDEN	...	1677
D	GRINSDALE	...	1738
E	KINGMOOR (Extra parochial)	...	1649
F	CROSBY ON EDEN	...	1649
G	WARWICK	...	1684
H	KIRKBRIDE	...	1662
J	CARLATTON (Extra parochial)	...	1666
K	ALLHALLOWS	...	1729
L	HUTTON IN THE FOREST	...	1589
M	GILCRUX	...	1677
N	PLUMBLAND	...	1571
O	NEWTON REIGNY	...	1571
P	LANGWATHBY	...	1571
R	SALTER AND ESKETT (Extra parochial)	...	1571
S	COPELAND FOREST (Extra parochial)	...	1571

Notes:

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- The parish of ALSTON lay within the jurisdiction of the Consistory Court of Durham.

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Figure 5.6a Population density, 1676.

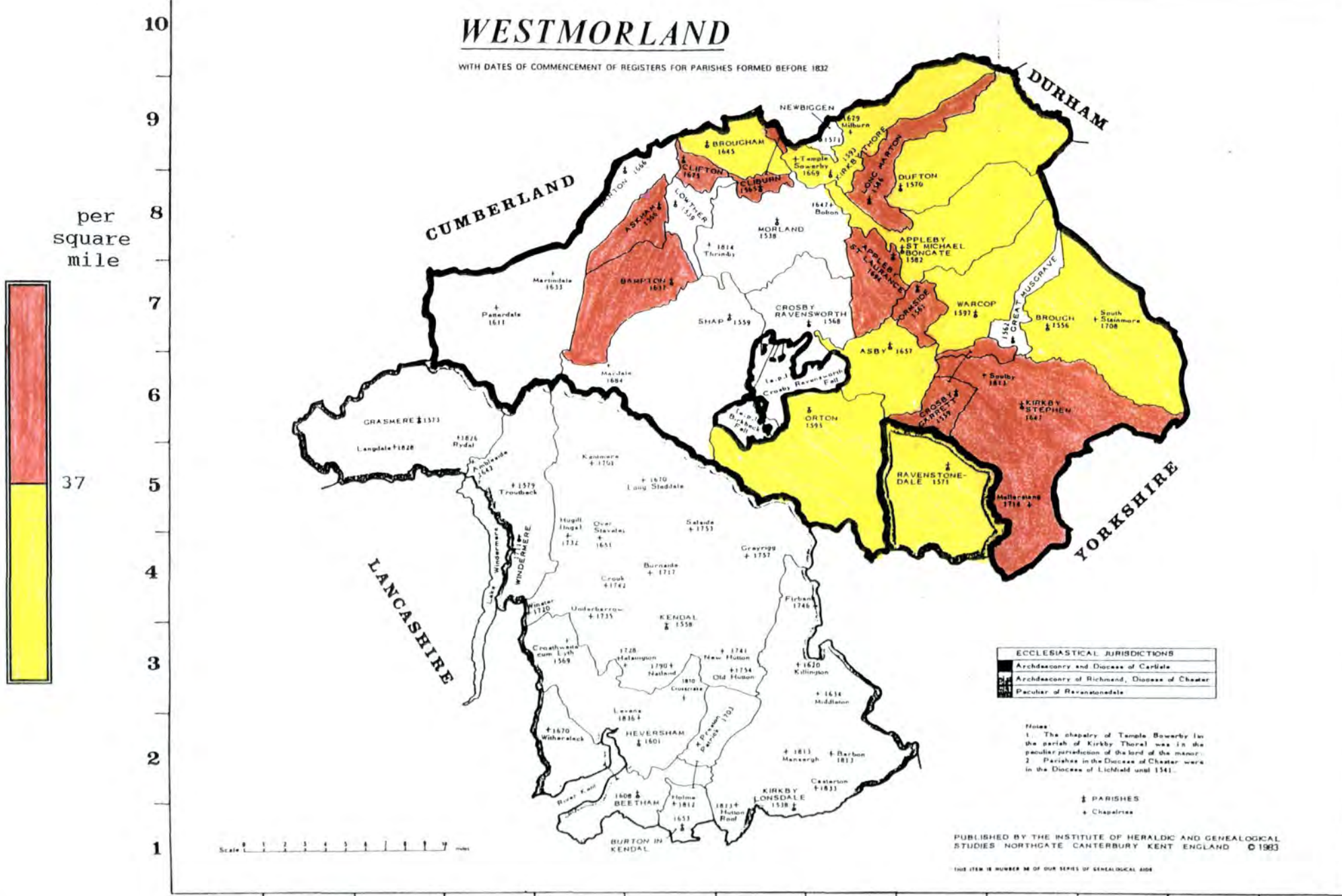
per square mile

37



WESTMORLAND

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832



per square mile

37

ECCLESIASTICAL JURISDICTIONS	
[Red Box]	Archdeaconry and Diocese of Carlisle
[Yellow Box]	Archdeaconry of Richmond, Diocese of Chester
[White Box]	Peculiar of Ravenstonedale

Notes
 1. The chapelry of Temple Bowerby in the parish of Kirkby Thoral was in the peculiar jurisdiction of the lord of the manor.
 2. Parishes in the Diocese of Chester were in the Diocese of Lichfield until 1341.

† PARISHES
 + Chapels

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A B C D E F G H I J K L M

Figure 5.6b Population density, 1676.

of high population around Carlisle and along the Cumberland Coast, centred on Workington. In 1801 these two areas are quite distinct, but by 1851 both have expanded enough to merge into one large swathe of populous land. This practically runs the length of the Cumberland coastline and extends inland in a great arc into the Eden Valley. Two smaller areas of high population in the south of the study region remain constant between the two periods. Areas of low population are also incredibly similar, especially in the county of Westmorland. Only two parishes within the whole of the study region exhibit any real change between the censuses. Both in Cumberland, Penrith has seen a great increase and Crosthwaite a decline. The median divided maps highlight this strong similarity of distribution, and also the development of the two populous areas in the north to become one.

From the information available for 1676, the population distribution is once again remarkably like those for 1851 and 1801. The area of high density around Carlisle is already obvious and from the densities of such parishes as Bridekirk and Dearham, there is a suggestion that the West Cumbrian Coast was already heavily populated. The parishes of Westmorland are relatively more populous in this period, but this could be due to the lack of data altering the balance within the study region. The median map for 1676, as far as it can, emphasises the similarity with the nineteenth century in the general pattern of distribution.

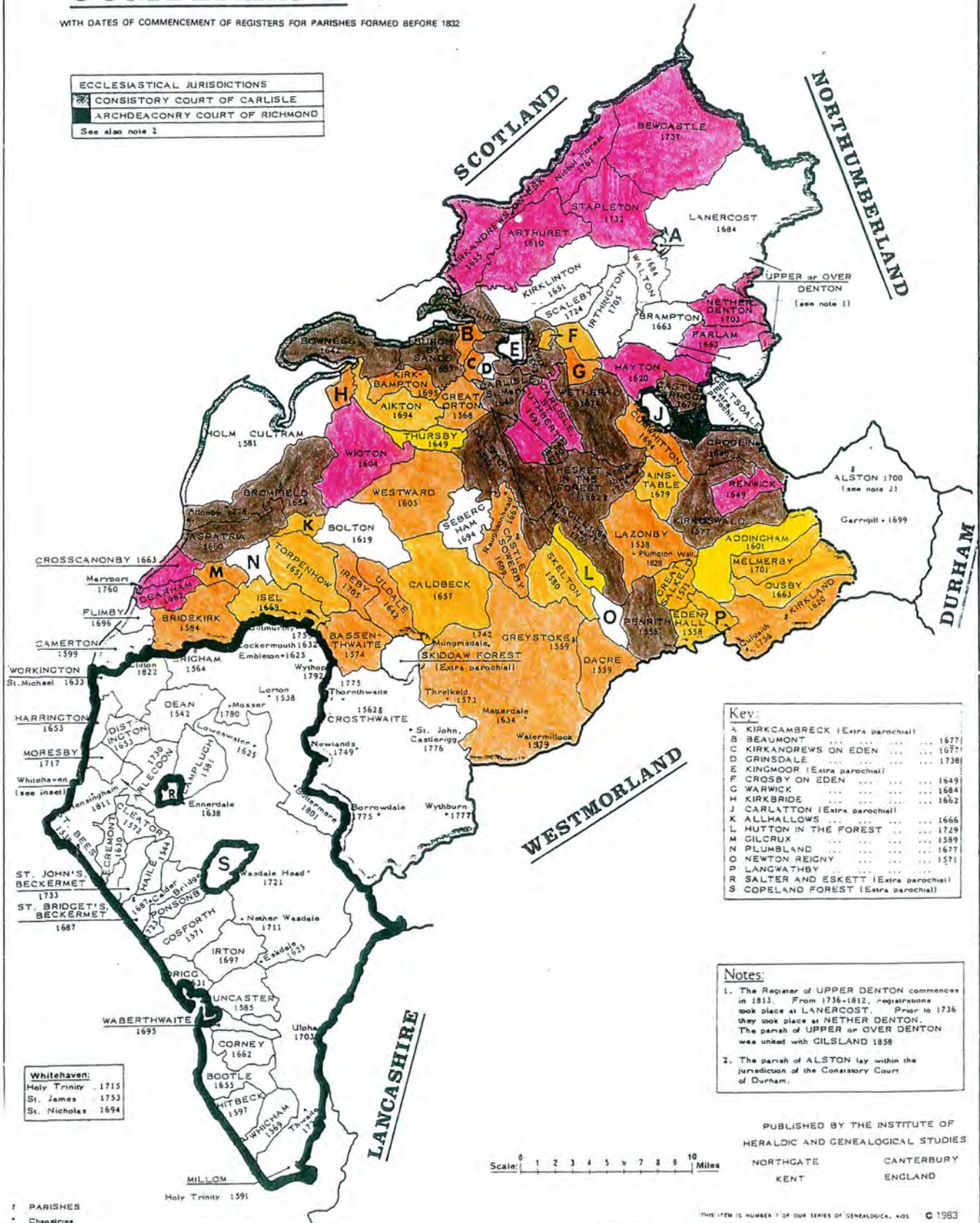
The maps of 1676, as a percentage of 1851 population (Figures 5.7 and 5.8), echo the quartile distribution maps for the nineteenth century and, to a lesser extent, the 1676 quartile map. The average growth of parishes in the region is almost 50% over the 175 year period (therefore centred in the orange band on Figures 5.8). Areas of high growth are found around Carlisle and progressing south-west from here down the West Cumberland Coast. To the south of this and moving into Westmorland, most parishes have experienced average growth, corresponding with parishes of low population on the quartile maps. Over half of the low growth parishes of Westmorland experienced population decline between 1676 and 1851 (represented on Figure 5.7 as 100+%).

Only one area differs greatly from the distribution patterns of the quartile maps. The very north of the study region, although obviously quite sparsely populated at all three census dates, shows a great rate of growth over the 175 year period. This rate is highlighted further on the more detailed map, where much of the Carlisle area experienced a lower population growth than the parishes of Bewcastle, Arthuret, Stapleton, Kirkandrews On Esk and Nether Denton. Table 5.1 details the population figures for these parishes in 1676 and 1851. They show that although a great rise in population was experienced by the parishes, the figures of 1676 were so low to start with that in real terms the parishes were still sparsely populated in 1851 and indeed still are. Arthuret was the only parish with a high enough population in 1676 to make any real increase by 1851. Only three other parishes, besides those listed above, had populations of under ten persons per

CUMBERLAND

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

ECCLESIASTICAL JURISDICTIONS	
	CONSISTORY COURT OF CARLISLE
	ARCHDEACONRY COURT OF RICHMOND
See also note 1	



Key:

A	KIRKCAMBRECK (Extra parochial)	
B	BEAUMONT	1677
C	KIRKANDREWS ON EDEN	1677
D	GRINDALE	1738
E	KINGMOOR (Extra parochial)	
F	CROSBY ON EDEN	1649
G	WARWICK	1684
H	KIRKBRIDE	1662
J	CARLITON (Extra parochial)	1666
K	ALLHALLOWS	1652
L	HUTTON IN THE FOREST	1729
M	GILCRUX	1589
N	PLUMBAND	1677
O	NEWTON REIGNY	1571
P	LANGWATHBY	
R	SALTER AND ESKETT (Extra parochial)	
S	COPELAND FOREST (Extra parochial)	

Notes:

1. The Register of UPPER DENTON commences in 1813. From 1736-1812, registrations took place at LANERCOST. Prior to 1736 they took place at NETHER DENTON. The parish of UPPER or OVER DENTON was united with GILSLAND 1859.
2. The parish of ALSTON lay within the jurisdiction of the Consistory Court of Durham.

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Scale: 0 1 2 3 4 5 6 7 8 9 10 Miles



A B C D E F G H I J K L M



Figure 5.7a Population change: 1676 population as a percentage of 1851 population.

PARISHES
Chapels

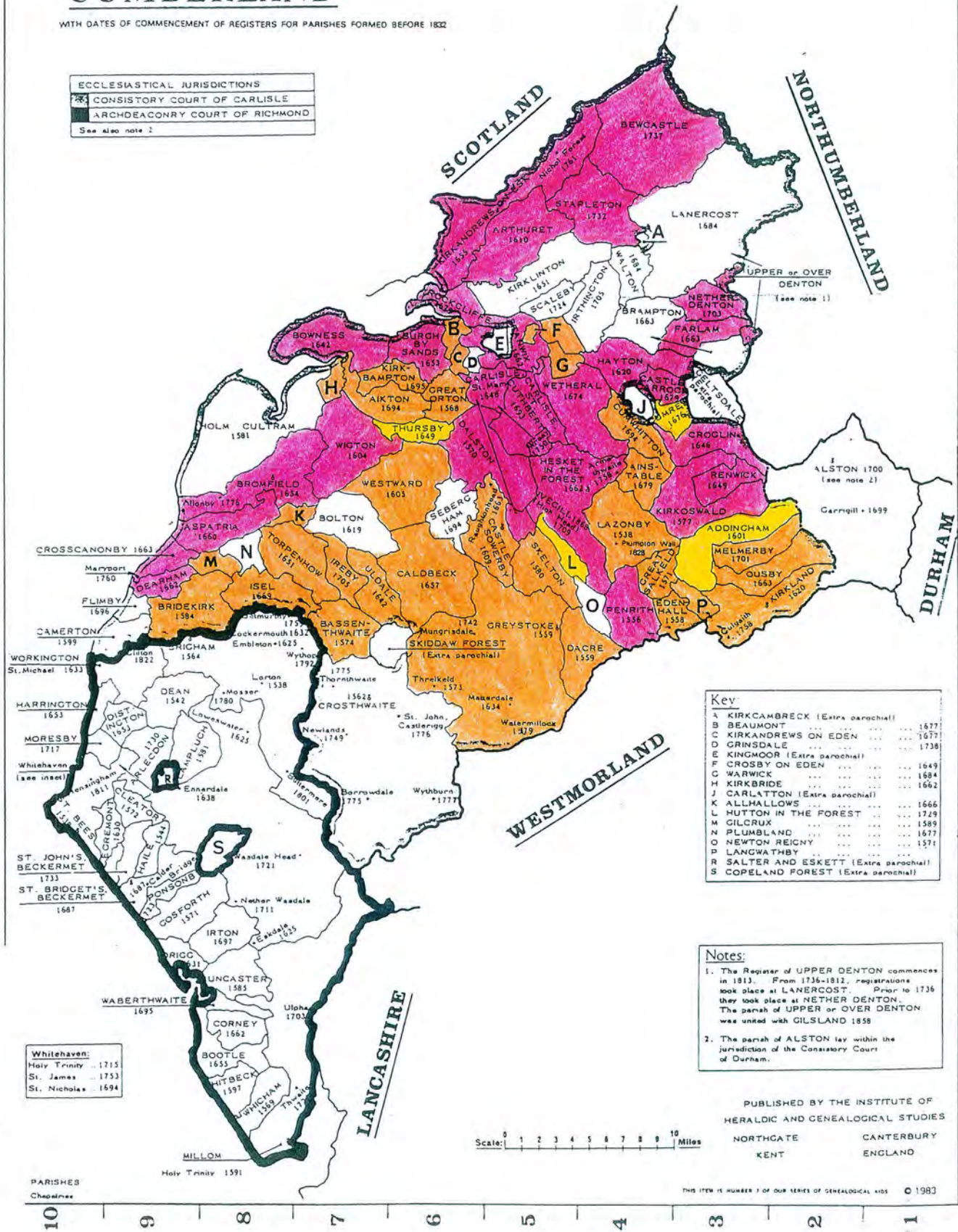
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CUMBERLAND

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

ECCLESIASTICAL JURISDICTIONS	
	CONSISTORY COURT OF CARLISLE
	ARCHDEACONRY COURT OF RICHMOND

See also note 1



Key	
A	KIRKCAMBRECK (Extra parochial)
B	BEAUMONT
C	KIRKANDREWS ON EDEN
D	GRINDSDALE
E	KINGMOOR (Extra parochial)
F	CROSBY ON EDEN
G	WARWICK
H	KIRKBRIDE
J	CARLTON (Extra parochial)
K	ALLHALLOWS
L	HUTTON IN THE FOREST
M	GILCRUX
N	PLUMBLAND
O	NEWTON REICNY
P	LANGWATHBY
R	SALTER AND ESKETT (Extra parochial)
S	COPELAND FOREST (Extra parochial)

Notes:

1. The Register of UPPER DENTON commences in 1813. From 1736-1812, registrations took place at LANERCOST. Prior to 1736 they took place at NETHER DENTON. The parish of UPPER or OVER DENTON was united with GILSLAND 1858.
2. The parish of ALSTON lay within the jurisdiction of the Consistory Court of Durham.

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A B C D E F G H I J K L M

Figure 5.8a Population change: 1676 population as a percentage of 1851 population.



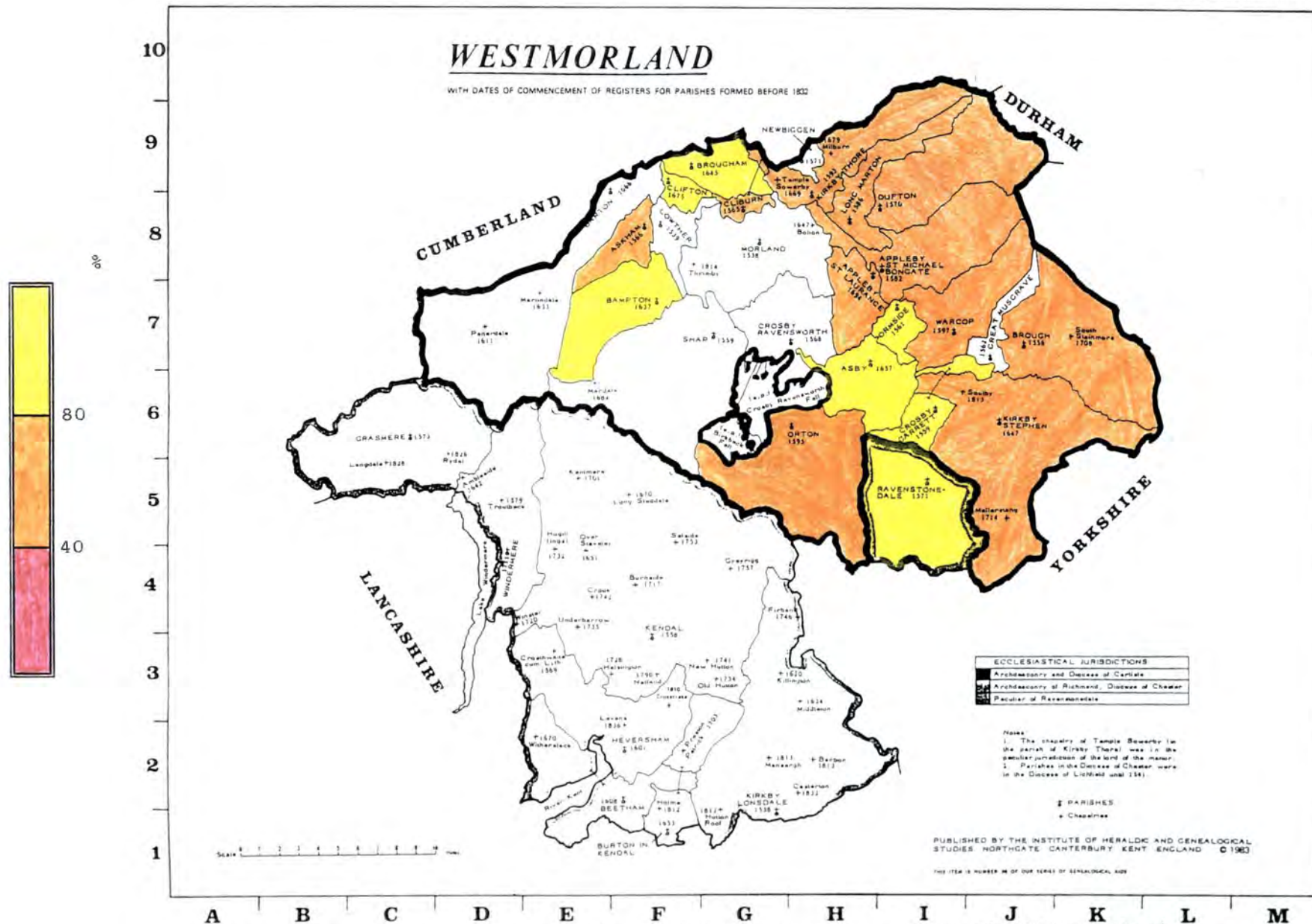


Figure 5.8b Population change: 1676 population as a percentage of 1851 population.

square mile throughout the whole of the study region (where data are available).

	1676 (per square mile)	1851 (per square mile)
BEWCASTLE	2.6	26
KIRKANDREWS ON ESK	6.8	68
ARTHURET	17.4	114
STAPLETON	4.4	63
NETHER DENTON	6.6	47

Table 5.1 Population densities for northern Cumberland, by parish.

Reasons behind the general distribution patterns for all three periods are examined in the next section, looking especially at the areas of high population around Carlisle and the West Cumberland Coast and the obvious decline of parts of Westmorland. As in the West Midlands, the actual patterns of distribution display little change throughout the whole of the 175 year study period. This is also considered in the discussion below.

Although this study region does not cross a settlement province boundary, there is a very obvious arc-shaped sub-province of nucleated settlement to the north. It stretches in an arc from Gosforth on the south-west Cumbrian coast, to Arthuret in the north and then south again as far as Appleby, St. Laurance. This mainly coincides with areas of above median population, with the exception of the Kendal area. The following discussion provides some broad explanations.

Threads of Explanation

Here the distributions noted in the first half of this regional study are subjected to further analysis, chiefly through exploration into causal factors of importance, e.g. the physical landscape and its use in farming. For further investigation into industry, landownership and migration the study region is split by population density into two, the populous arc of parishes in the north and the sparsely populated south (Figures 5.2, 5.4 & 5.6).

From a glance at Figure 2.6 there is obviously a strong correlation between the distribution of population and the physical landscape. The highland of the Cumbrian Mountains covers the bulk of the sparsely populated parishes, including the whole of Westmorland. The small pockets of higher population in this area are around the main market towns, e.g. Kendal, in the valleys.¹ High population density is strongly

¹The numbers of market towns in the two separate counties represent the huge contrast of population density between them. Extracts from James Barclay's *Complete and Universal*

associated with the coastal lowlands to the north and west of the study region and the Vale of Eden in the north-east. The Vale of Eden is a very wide valley with much glacial deposition in the form of drumlins and heavy till. Hence a second correlation of population density and farming is evident, with arable farming in these more fertile lowland vale areas. In the upland areas where some sort of farming and settlement is possible (much of the mountain area is of course totally inhospitable to either) the pastoral way of life dominates (Figure 2.8). It should be noted that the areas of arable farming broadly coincide with the sub-province of nucleated settlement and the corresponding arc-shape of densely populated parishes. However, the three-field system was not a traditional feature in this study region, unlike the West Midlands.² Hence, the villages that existed in this sub-province tended to be smaller than those within the Central Settlement Province itself.

The above observations conveniently split the study region into two:

Area One: The vast area of sparse population to the south of the region, where highlands, pastoral farming and dispersed settlement (where it occurred at all) dominate. It is made up of Westmorland and the more southern and eastern parts of Cumberland.

Area Two: The arc of densely populated parishes in the north, equated with lowland vales of arable farming with some pasture and nucleated settlement. Wholly within the county of Cumberland.

Both areas have a 'blocky' appearance, i.e. large numbers of neighbouring parishes with similar population densities. From work in Chapter Four this would be expected. The whole of the study region is within the Northern and Western Settlement Province where the open village dominated. This is as opposed to the Central Province, where a greater mix of open and closed settlements led to the distinctive 'patchwork' distribution seen in Area Three in the West Midlands study region.³

Area One :- Quite the opposite of Area Two, the majority of the land here lay sparsely populated throughout the whole of the study period. It is the physical aspects of the land that dominate the population distribution here. Much of the area

English Dictionary (1842), reproduced in: Thomas Moule, *The County Maps of Old England* (London: Studio Editions Ltd., 1992), record 17 market towns in Cumberland and only 8 in Westmorland.

²Mills, p. 137.

³see Chapter Four for a fuller discussion of open and closed settlements.

was and is of course totally void of habitation, due to the overall dominance of the Cumbrian Mountains and settlement was rarely found over 800 feet. This bleak landscape was noted by many contemporary writers, e.g. Arthur Young in the 1750's referred to the huge tracts of barren wastelands found within Cumberland and Westmorland.⁴ Further, farming was purely pastoral, supporting very few people per square mile. Many farmers no doubt practised a dual economy, using work in the lead mines as a secondary income. However, lead mining was not really a large industry waiting to expand further and could never have had the effect that coal mining did on population totals and the settlement pattern. It therefore remained an industry of the dual economy for most, even though the actual mining was controlled by large companies. At its height, pressure on land availability forced some miners into villages,⁵ producing small pockets of dense population within vast agricultural parishes. But this tended to be the exception to the rule.

Hence, the nature of the land, plus the lack of any highly profitable industries, gave rise to the low levels of population seen throughout the study period (Figures 5.1, 5.3 & 5.5). Small pockets of high population density did exist, mainly around the small number of market towns in the area. Some even had their own small woollen industries e.g. Appleby, Kendal and Kirkby Stephen. However, they were no competition for the centre of the handloom weaving industry based in Carlisle and could only have attracted workers from the immediate vicinity.

Thus, settlement in Area One was highly dispersed, the majority of which was situated below circa 700 feet. This allowed farming to be carried out on the more fertile drift covered valley floors and in amongst the drumlins where glacial deposition had occurred. In addition to the pastoral way of life, the early enclosure of much of Cumberland and Westmorland led to an even higher degree of dispersion. By the time the enclosure acts went through Parliament, only 1-2 % of Cumberland and Westmorland was required to be enclosed by the laws. It was this early enclosure that produced far more of a gradation between nucleated and dispersed than had previously been seen, with many settling on separate but compact small holdings.⁶

By 1850, just as in Shropshire and Herefordshire in the West Midlands study region, rural depopulation had become widespread. This is supported by the maps of population change

⁴H.C. Darby, 'The Age of the Improver: 1600-1800', in H.C. Darby (ed.), *A New Historical Geography of England After 1600* (Cambridge: Cambridge University Press, 1976), pp. 1-88.

⁵Mills, p. 213.

⁶A.E. Smailes, *North England* (Edinburgh: Thomas Nelson and Sons Ltd., 1960), p. 150.

within the study region between 1676 and 1851, even though the information is incomplete (Figure 5.7). The maps also show that if the parishes were not experiencing a decline in this period they were not seeing an exceptional increase either, with no parishes showing more than the average increase over the 175 year period. As the industries to the north and west in Area Two expanded, their demands for labour ultimately reached beyond the surrounding local area. Further, agriculture in Area Two was slow to improve, mainly due to the resistance of change by the peasant farmers. Therefore, even though the agricultural areas were not experiencing large increases in population, the natural increase alone was quite likely producing too many people for the land to sustain. Such people would move first, but news of wages and demands for labour in the mines or factories would soon filter back, encouraging more to leave the pastoral areas of the study region. Therefore, Area One can be described as a sparsely populated, agricultural area which, with the expansion of industry to the north and west, began to experience a definite population decline which increased in magnitude with time.

Area Two :- This area is heavily populated in comparison to Area One, at all three census dates. The early rise of industry is the dominant factor behind this. The employment opportunities of industry attracted migrants from other areas, directly increasing the population and also indirectly adding to the totals through natural increase. Coal mining, especially for export, began to increase from 1640 along the Cumbrian Coast and the production of textiles in Carlisle and the surrounding area sustained a large population from an early date.⁷

This early rise in industry was possible due to the abundance of easily accessible coal in western Cumberland and the dominance of the open settlement, where industries could flourish freely and the settlements involved could increase in size to accommodate the expanding workforce. Also important was the prevalence of the dual economy in the area. This allowed the initial development of a trade as a secondary income before it became a fully developed industry, totally divorced from the soil.

The minor extraction of coal had been going on in Cumberland for some time prior to the seventeenth century and other small scale industries were already present. These included such industries as salt production along much of the coast, using salt pans, e.g. at Crosscanonby, quarrying for stone and slate, tanning at such places as Maryport and Whitehaven and the extraction of a variety of metals in the Alston district, e.g. iron ore, copper, silver and plumbago.⁸ However, from the seventeenth century onwards coal mining moved into a new

⁷Ibid., pp. 137-44.

⁸J. Wilson (ed.), *A History of Cumberland (V.C.H.) Vol. 2* (London: Archibald Constable, 1905), pp. 331-85.

league in terms of production. By 1640 coal was already being exported to Dublin where the rapidly growing population was outstripping the local timber supplies. Three ports along the Cumberland coast were instrumental in this: Workington, Parton and Whitehaven. It was to be the last of these that rose to prominence through this trade and also through trade with America in such commodities as tobacco. By 1740 - the peak of coal production and export in Whitehaven - the pits in the immediate area were producing nearly one thousand tons of coal, the bulk of which was shipped to Dublin.⁹ Although the population data for these areas are missing for 1676, the 1801 and 1851 distributions (Figures 5.1 & 5.3) show the effects of the industry and the resulting export trade on population levels. Certainly by the beginning of the nineteenth century the coalfield had expanded to its full extent as far as technology allowed,¹⁰ and from 1819 to 1849 the shipment of coal from the West Cumberland field more than doubled in volume.¹¹ With the advent of rail transport and the construction of a link between the North East England in the 1840's, it was now possible for an iron smelting industry to be established in the area, using coke produced on the other side of the Pennines. This had hitherto been impossible, as the locally produced coal was not suitable for coking¹², even though iron ore extraction was one of the earliest industries in Cumberland, dating from the twelfth century in Egremont.¹³ The establishment of the railway also encouraged the opening of new mining districts, previously too inaccessible. Hence, a further advancement in industry at the end of the study period provided a stimulus for a further rise in population.

Although 'peasant miners' practising the dual economy existed in some numbers in the area, it was always a few great families that ruled the industry in Cumberland, quite a rare occurrence in British industry of the time. The Lowther family epitomise the dominance of great local families in the industry. Often, as in the case of the Lowthers, these were merchant families that had acquired landed estates, rather than traditional gentry. The Lowthers were the first family to profit from involvement in coalmining and rose to prominence around 1750, due to the success of Whitehaven.¹⁴ Other families began to take a great interest in the industry and the profits it yielded, e.g. the Curwens. Another great family to become

⁹Smailes, pp. 137-44.

¹⁰extraction in the north-east of the field was still beyond technological reach.

¹¹A. Harris, 'Changes in the Early Railway Age', in H.C. Darby, pp. 165-226.

¹²Smailes, pp. 137-44.

¹³Wilson (ed.), pp. 331-85.

¹⁴Holderness, p. 152.

involved was the Senhouses from Maryport, on the mouth of the River Ellen. It was the extraction of coal from Senhouse land, in the north of the field, that led to the success of Maryport as a port. Again, this is reflected by the high population density of this area in 1801 and 1851.

Carlisle and the surrounding area constitutes the northern half of Area Two. Figure 5.5 shows that this area was one of the most densely populated from 1676 through to the nineteenth century (Figures 5.1 & 5.3). The manufacture of textiles (especially coarse linen) was its chief industry, with handloom weaving based in the villages surrounding Carlisle, the main market centre for the product. However, this trade was of little importance until after the 1745 rebellion when the threat from Scotland was finally quashed.¹⁵ Prior to this, the density of population in this area was purely due to the agricultural richness of the land. A strongly arable area, it was able to support a large number of people and therefore required a large market for the sale of produce and the supply of services. However, with the change in the political situation, textile production began to flourish, encouraging a very rapid growth in population. In 1761 the printing of calicoes began with great success, attracting much interest and subsequent investment in the industry. Also attracted by this new branch of the industry were large numbers of migrants from Ireland and Scotland¹⁶ and it is estimated that by 1794 handloom weaving employed around one thousand people in Carlisle and the immediate district.¹⁷ Wigton and Brampton themselves had become secondary centres of production for Carlisle. By the early nineteenth century factories had sprung up in Carlisle itself and in the surrounding area, resulting in industrial expansion into the countryside. This is shown, in terms of population, by Figure 5.3, which highlights the high density of population in Carlisle and its neighbouring parishes. Over the next fifty years the area experienced mixed fortunes with the decline and extinction of handloom weaving while the production of cotton continued. This is perhaps reflected in the 1851 population distribution pattern (Figure 5.1), where the area is obviously still heavily populated, but the extent of this is not as pronounced as in 1801 (Figure 5.3). Carlisle, was however, by this time becoming a railway centre, although the effect of this on the population of the area would not really have been felt before the end of the study period.

Hence, Area Two was densely populated from an early date. In the north of the area this was initially due to richness in agriculture and then to Carlisle's prosperity in textile manufacturing. The south of the area, along the Cumberland coast, right from the beginning of the study period owed its

¹⁵Smailes, pp. 147-8.

¹⁶Wilson (ed.), pp. 331-85.

¹⁷W. Hutchinson, *History and Antiquities of Cumberland* (1794).

populousness to the availability of coal, the proximity of its pits to the coastal ports and a ready market for its mined coal in Dublin. By 1851 West Cumberland was a booming industrial area, and represented as such in the 1851 Census employment tables. These showed that the agricultural population of the area was outstripped by the numbers involved in mining and manufacturing.

This northern sample is therefore seen to contain two highly contrasting areas. However, they both display an overall 'blocky' appearance in their distribution patterns. This is largely due to the dominance of the open settlement in the Northern and Western Settlement Province. Table 5.2 details the major differences between the two areas.

As the industries in Area Two advanced and expanded the population rose through in-migration and the resulting higher rates of natural increase. Conversely, Area One remained an almost purely agricultural area with the exception of some lead mining, mainly as part of a dual economy. Over the 175 years of the study period, the population levels in several of the parishes in Area One declined, quite probably due to out-migration into Area Two. As seen in the West Midlands, the distribution patterns for all three census dates are strongly alike. This can be attributed to the early rise of industry in the north and west of the region, which set the trends in population distribution at an early date.

	AREA ONE	AREA TWO
LOCATION	north-west	south-east
LANDSCAPE	lowland	highland
FARMING	arable	pastoral
SETTLEMENT	nucleated	dispersed
MAIN OCCUPATION	industry	agriculture
POPULATION	high density	low density

Table 5.2 Characteristics of the two contrasting areas within Cumberland and Westmorland.

CHAPTER SIX

CHAPTER SIX

YORKSHIRE

This final study region, the largest county in England, is examined at two census dates only, 1851 and 1676. The county was chosen to provide a balance between the two previous study regions. Yorkshire is of a similar size to the West Midland and displays a similar range in population densities. However, it shows much more diversity in terrain with large areas of highland, similar to Cumberland and Westmorland. The chapter takes on exactly the same format as those for the West Midlands and Cumberland and Westmorland. A retrogressive approach is taken to the population distribution maps produced and the stationary and dynamic pictures of population in the region are examined. The second half of the chapter then aims to explore some broad causal factors behind these pictures.

1851

(Figure 6.1) Nearly all parishes of high population (over 207 persons per square mile) are situated in the south-west of the West Riding. They form one vast area on the western edge of the study region which actually extends much further, into the counties of Lancashire, Cheshire and Derbyshire (Figure 2.10). Within the study region, it stretches for around 43 miles, from Otley and Kildwick in the north to Sheffield in the south. At its broadest the area reaches from Halifax in the west to Methley in the east, some 40 miles. If parishes within the low upper quartile are taken into account, the area stretches much further. No other populous areas of any magnitude exist, although the area around Knaresborough in the north-east of the West Riding should be noted. There are few parishes within the two upper quartiles in the North and East Ridings, the only area of any size being centred on Hull in the south of the East Riding.

Areas of low population are far more numerous and three main areas are obvious. The first in the east of the North Riding, around 27 miles north to south and 30 miles east to west. This area is centred on the large strip-like parishes of the North York Moors. A second area stretches from Gisburn in the west of the West Riding, north to Romaldkirk in the north-west of the North Riding. The area is some 54 miles north to south and 40 miles east to west, covering the bulk of the Yorkshire Dales. A third, smaller area is situated in the north of the East Riding, from West Heslerton in the north to Goodmanham in the south. As well as this main area, many of the parishes in the East Riding are within the two lower quartiles, but their distribution is far more mixed than the 'block' appearance elsewhere in the study region.

YORK

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

Notes

- The following townships were detached parts of this province:
 - Upper Poppleton - ST MARY BISHOPHILL, BISHOP OF Eborac - HOLY TRINITY, WICKLEGATE
 - Dringhouses - HOLY TRINITY, WICKLEGATE
 - Middlethorpe - ST MARY BISHOPHILL, BISHOP OF Eborac
- KIRK HAMMERTON lay within the Archdeaconry of Richmond
- A peculiar jurisdiction lay over the parishes of ALL SAINTS, NORTH STREET, ST HILES, STONE GATE and ST GILES GILFERRIE transferred to ST CLAVE prior to 1341

• NETHER POPPLETON	1840
• Upper Poppleton	1840
• WALTON	1819
• THORP ARCH	1555
• ASKHAM RICHARD	1518
• BISHOPHILL	1693
• Middlethorpe	1840
• HOLY TRINITY	1840

Ecclesiastical jurisdictions

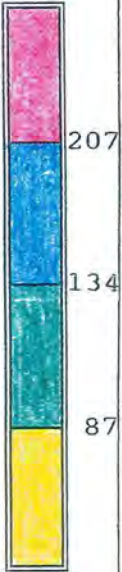
ARCHDEACONRY OF THE EAST RIDING
ARCHDEACONRY OF CLEVELAND
ARCHDEACONRY OF YORK
PECULIARS

See also Plates nos 1 & 2

Notes

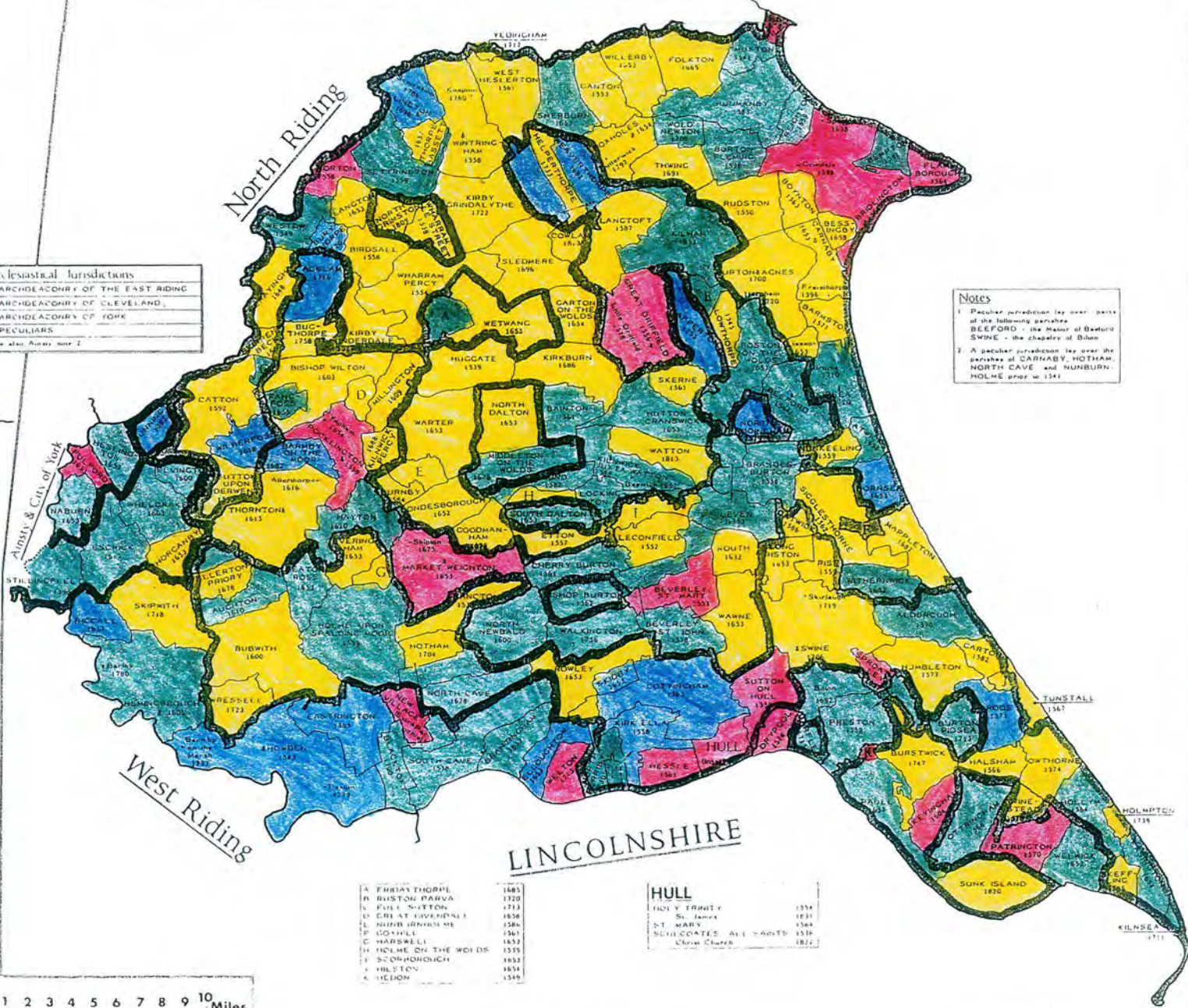
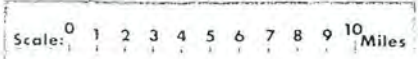
- Peculiar jurisdiction lay over parts of the following parishes: BELFORD - the Manor of Bawford SWINE - the chapelry of Bilton
- A peculiar jurisdiction lay over the parishes of CARNABY, HOTHAM, NORTH CAVE and HUNBURN - HOLME prior to 1341

per square mile



KIRK PARISHES

ALL SAINTS NORTH STREET	1577
ALL SAINTS FARMER'S	1594
HOLY TRINITY (GOSWORTHY)	1518
HOLY TRINITY (KING'S FIGHT)	1570
HOLY TRINITY (MILK GATE)	1640
ST GILES	1706
ST GILES (BISHOP'S COURT)	1527
ST GILES (CROSS)	1527
ST GILES (CROSS) (with ALL SAINTS, PRESENCE)	1561
ST GILES (CROSS) (with THE WALKS and merged with ST MARY AVERTHORPE)	1568
ST HILES	1568
ST HILES (MILK GATE) (with DUSEBRIDGE FARM)	1570
ST LAWRENCE (merged with ST MICHAEL'S)	1528
ST MARGARET	1528
ST MARTIN (KING'S STREET)	1528
ST MARTIN (LIM GREGORY) (with ALLEGATE)	1528
ST MARY BISHOPHILL (SEARD)	1632
ST MARY BISHOPHILL (JURBOR)	1634
ST MARY (EAST GATE)	1647
ST MICHAEL	1647
ST MICHAEL (ST BELBY)	1647
ST MICHAEL (SPRINGFIELD)	1648
ST GILES (with ST GILES, GILFERRIE and ST GILES)	1648
ST SAMUELSON	1648
ST SAMUELSON (merged with ST JOHN, HUNGATE and ST ANDREW - then both Peculiars)	1540



A. FRIARS THORPE	1685
B. RUSTON PARVA	1713
C. CREATON	1838
D. HUNBURN	1586
E. GOSWORTHY	1561
F. HARSWELL	1832
G. HOLME ON THE WOLDS	1575
H. SCOTCHBOROUGH	1832
I. HILSTON	1834
J. HEDON	1549

HULL

HOLY TRINITY	1554
St James	1831
ST MARY	1584
ST JOHN'S	1558
St. Andrew's	1827

Figure 6.1b Population density, 1851.

YORKSHIRE (WEST RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

PART OF THE WEST RIDING CONTAINING THE FOLLOWING WAPENTAKES:

CLARO, SKYRACK, STAINCLIFFE AND EWCROSS, AND RIPON LIBERTY

Ecclesiastical Jurisdictions	
	ARCHDEACONRY OF YORK
	ARCHDEACONRY OF RICHMOND
	PECULIARS
	OTHERS

A detailed list of the peculiars is available

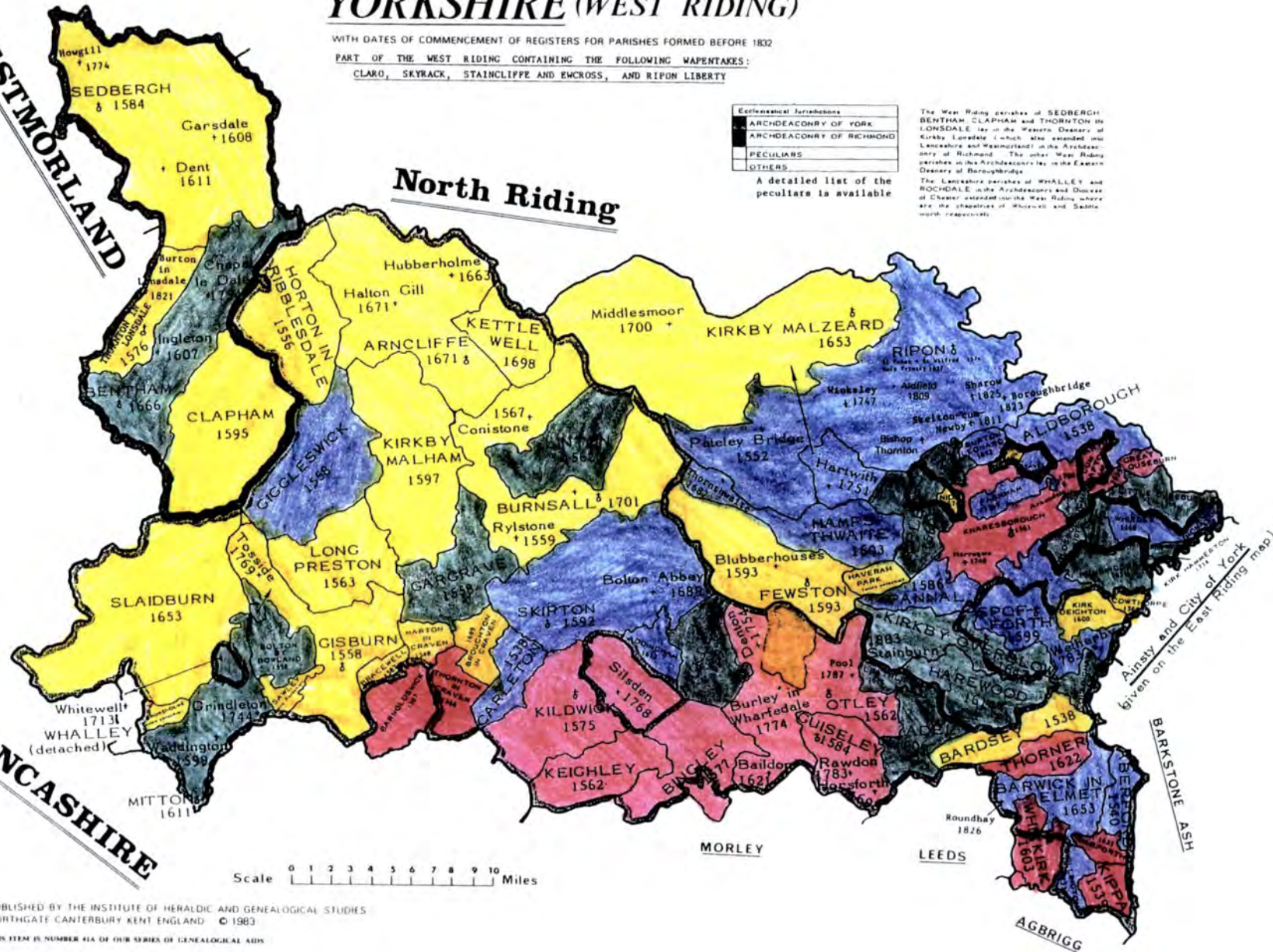
The West Riding parishes of SEDBERGH, BENTHAM, CLAPHAM and THORNTON in the LONSDALE lay in the Western Deanery of Kirby Lonsdale (which also extended into Lancashire and Westmorland) in the Archdeaconry of Richmond. The other West Riding parishes in the Archdeaconry lay in the Eastern Deanery of Boroughbridge. The Lancashire parishes of WHALLEY and ROCHDALE in the Archdeaconry and Diocese of Chester extended into the West Riding where are the chapels of Wharfedale and Sable worth respectively.

North Riding

WESTMORLAND

LANCASHIRE

per square mile



Scale 0 1 2 3 4 5 6 7 8 9 10 Miles

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Figure 6.1c Population density, 1851.

YORKSHIRE (WEST RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

PART OF THE WEST RIDING CONTAINING THE FOLLOWING WAPENTAKES:

AGBRICG, AINSTY, BARKSTONE ASH, MORLEY, OSGOLDCROSS, STAINCROSS,
STAFFORTH AND TICKHILL, DONCASTER SOKE AND LEEDS BOROUGH

APPROXIMATE POPULATION
100,000
50,000
25,000
OTHERS

A detailed list of the
peculiars is available

The boundaries of the West Riding of Yorkshire are shown in this map. The boundaries of the West Riding are shown in this map. The boundaries of the West Riding are shown in this map.

The boundaries of the West Riding of Yorkshire are shown in this map. The boundaries of the West Riding are shown in this map. The boundaries of the West Riding are shown in this map.

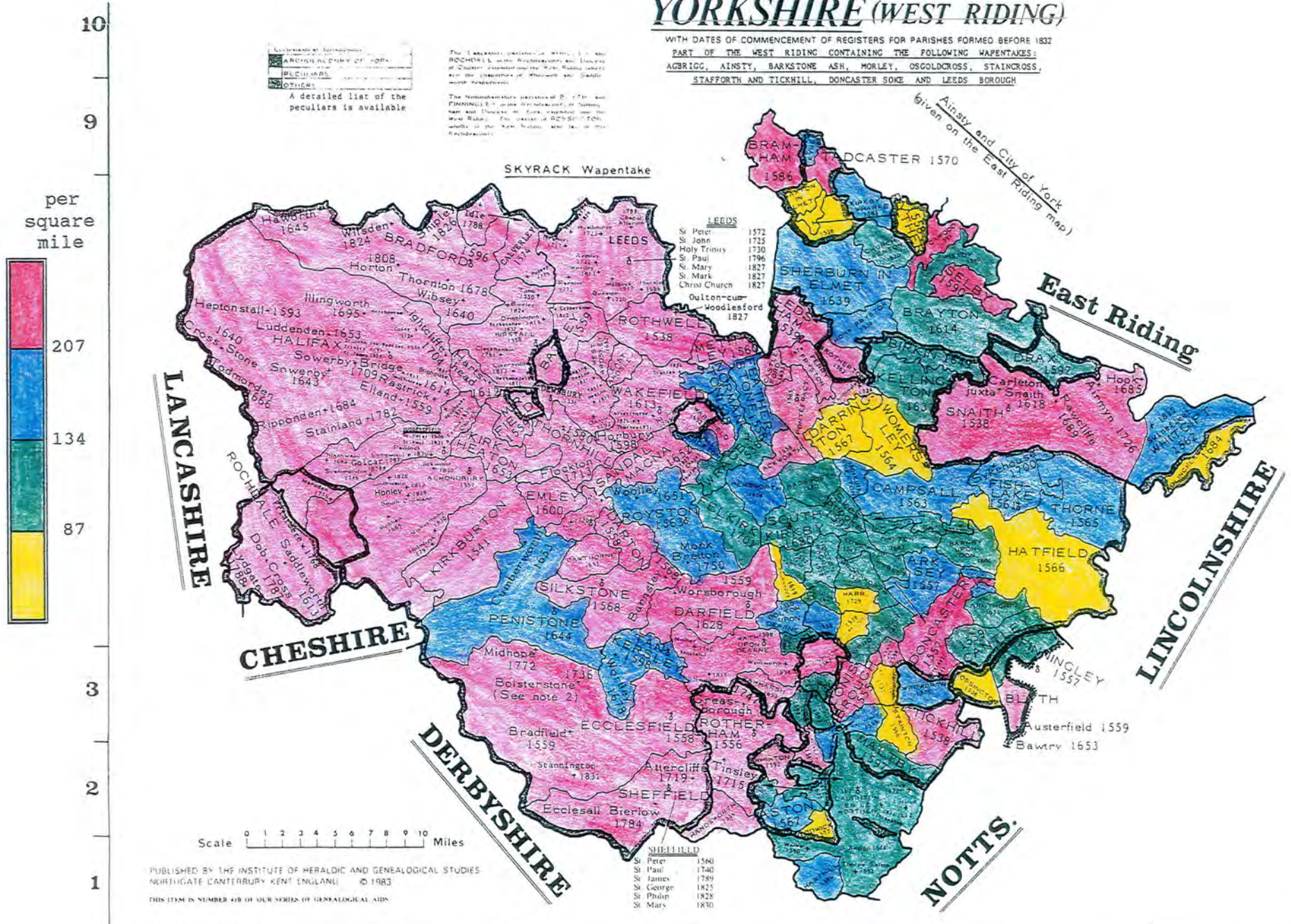


Figure 6.1d Population density, 1851.

YORKSHIRE (WEST RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

PART OF THE WEST RIDING CONTAINING THE FOLLOWING WAPENTAKES:

CLARO, SKYRACK, STAINCLIFFE AND EWROSS, AND RIPON LIBERTY

Ecclesiastical Jurisdiction	
[Yellow]	ARCHDEACONRY OF YORK
[Red]	ARCHDEACONRY OF RICHMOND
[White]	PFCUILLARS
[Black]	OTHERS

A detailed list of the peculiars is available

The West Riding parishes of SEDBERGH, BENTHAM, CLAPHAM and THORNTON in CONSDALE (as in the Western Diocese, as Kirby Lonsdale) which also extended into Lancashire and Westmorland in the Archdeaconry of Richmond. The other West Riding parishes within the Archdeaconry (as in the Eastern Diocese of Beveridge) are: The Lancashire parishes of WHALLEY and RICHFIELD (as in the Archdeaconry and Diocese of Chester) situated on the West Riding where are the chapels of Wharfedale and Sable worth respectively.

North Riding

WESTMORLAND

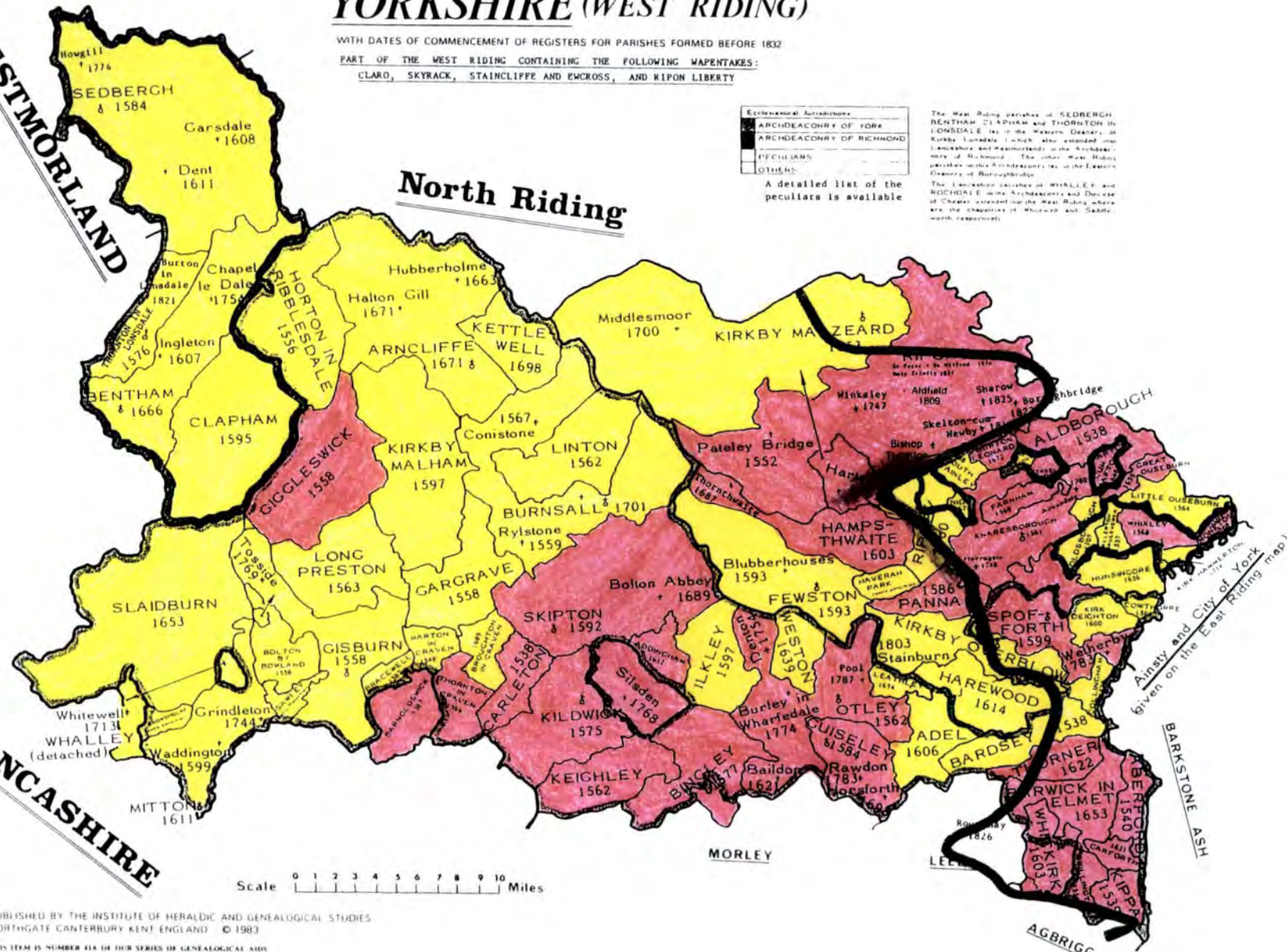
LANCASHIRE

per square mile



134

10
9
8
7
6
5
4
3
2
1



Scale 0 1 2 3 4 5 6 7 8 9 10 Miles

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Figure 6.2 c Population density and boundary of settlement provinces, 1851.

YORKSHIRE (WEST RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

PART OF THE WEST RIDING CONTAINING THE FOLLOWING WAPENTAKES:

AGBRIGG, AINSTY, BARKSTONE ASH, MORLEY, OSGOLDCROSS, STAINCROSS,

STAFFORTH AND TICKHILL, DONCASTER SOKE AND LEEDS BOROUGH

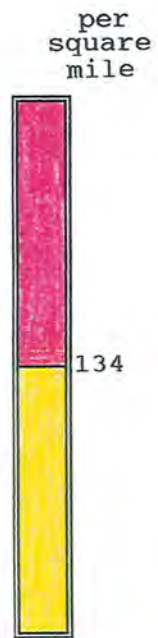
Archaeological Jurisdictions
ARCHDEACONRY OF YORK
PECULIARS
OTHERS

A detailed list of the peculiars is available

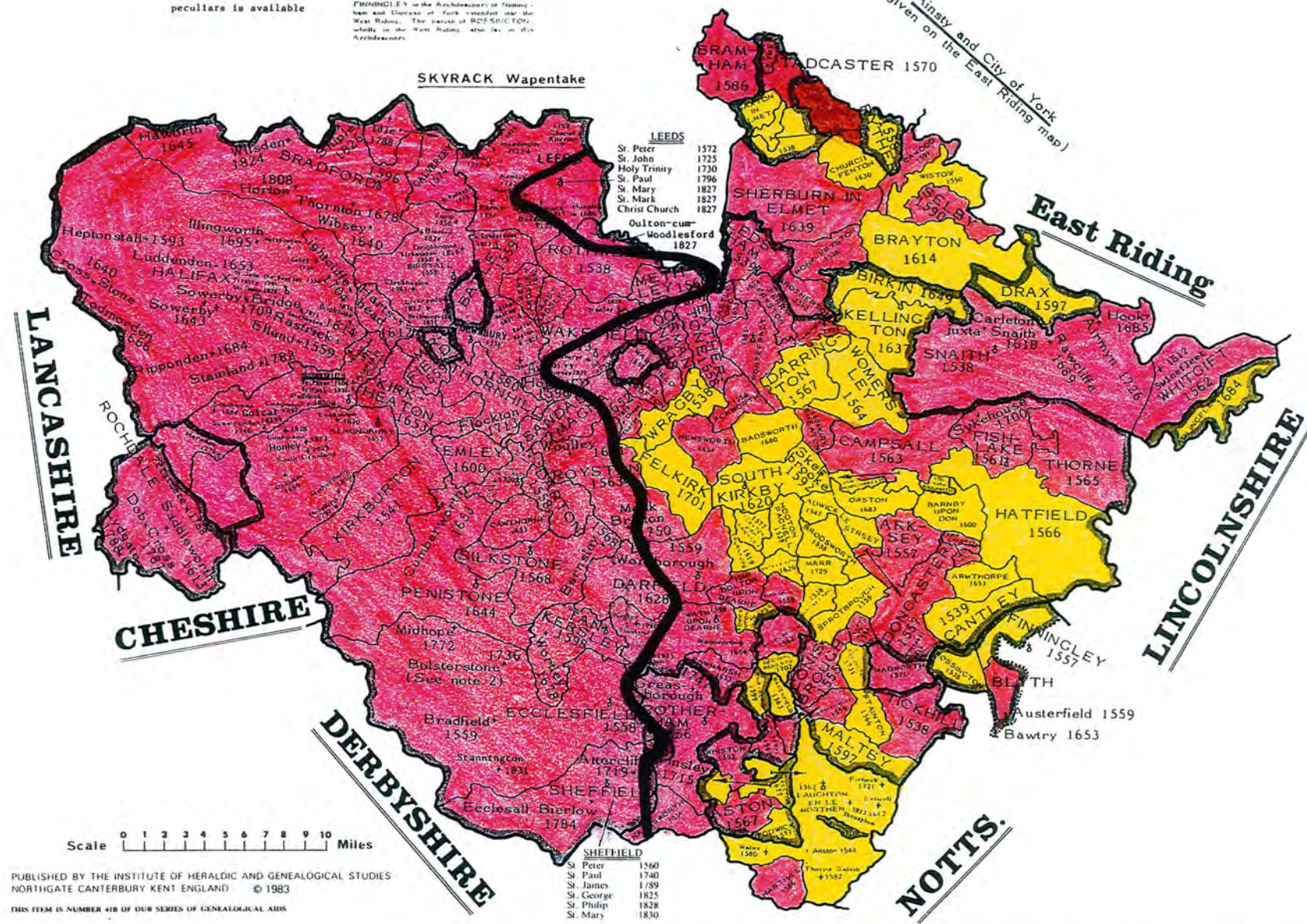
The Lancashire parishes of WILKIE and ROCHDALE in the Archdeaconry of York and the parishes of Ainsty and City of York extended into the West Riding, where are the chapels of Wistow and Southworth respectively.

The Nottingham parishes of BLYTH and FISHINGLEY in the Archdeaconry of Flouresham and Doncaster of York extended into the West Riding. The parish of ROSEBURY, wholly in the West Riding, also lay in this Archdeaconry.

Ainsty and City of York
Given on the East Riding map)



10
9
8
7
6
5
4
3
2
1



Scale 0 1 2 3 4 5 6 7 8 9 10 Miles

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LEEDS

St. Peter	1572
St. John	1725
Holy Trinity	1730
St. Paul	1796
St. Mary	1827
St. Mark	1827
Christ Church	1827

SHEFFIELD

St. Peter	1560
St. Paul	1740
St. James	1789
St. George	1825
St. Philip	1828
St. Mary	1830

Figure 6.2 d Population density and boundary of settlement provinces, 1851.

As in the West Midlands, this contrasting 'patchwork'/'block' distribution is broadly separated by the boundary of the Central and Northern and Western Settlement Provinces. This runs through the North and West Ridings and is shown on the maps dividing the parishes at the median (Figure 6.2). Also shown is the eastern edge of the Central Settlement Province, which runs along the periphery of the North York Moors. A change in distribution pattern also occurs at this boundary. These maps emphasise the vast areas of sparse population in the North and West Ridings and the densely populated south-west of the study region. All of these areas show a very 'block' distribution pattern. The 'patchwork' pattern of the East Riding, the east of the West Riding and the central portion of the North Riding is obvious on these maps, but far more definite on the quartile maps.

1676

(Figure 6.3) With much information missing, patterns of distribution are far harder to define for this period. However, one larger area of high population is evident in the south-west of the West Riding. Including parishes in the low upper quartile, the area stretches from Spofforth and Long Preston in the north to Sheffield in the south, in the region of 40 miles. The centre of the area is some 34 miles across, from Halifax in the west to Pontefract in the east. Other smaller areas of high density are found in the East Riding, from Hull north to Beverley, in the North Riding from Stokesley to the Durham border and in the south of the North Riding around Whenby.

Areas of low population (under 36 people per square mile) are found in all three Ridings. One in the north of the West Riding would probably spread much further north into the North Riding, if the data were available, to cover the bulk of the Yorkshire Dales. The North York Moors are emphasised by the large number of sparsely populated parishes of the area. Much of the East Riding is of low population if both lower quartiles are included. Of note is the area around Kirkburn in the centre of the Riding and the Foxholes area to the north. Small areas of low population are also found in the south-east of the West Riding.

As for 1851, the dichotomy of the 'block' and 'patchwork' distributions is evident. The 'block' appearance of the parishes outside the Central Settlement Province is clear on the median divided maps (Figure 6.4). However the mixed 'patchwork' distribution is more obvious on the quartile maps. The median divided maps, in particular, highlight the heavily populated south-west of the study region and the sparsely populated North York Moors.

Patterns of Change, 1676-1851

Despite the lack of data for 1676, which may have slightly distorted the population distribution for this date, the

YORKSHIRE (NORTH RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

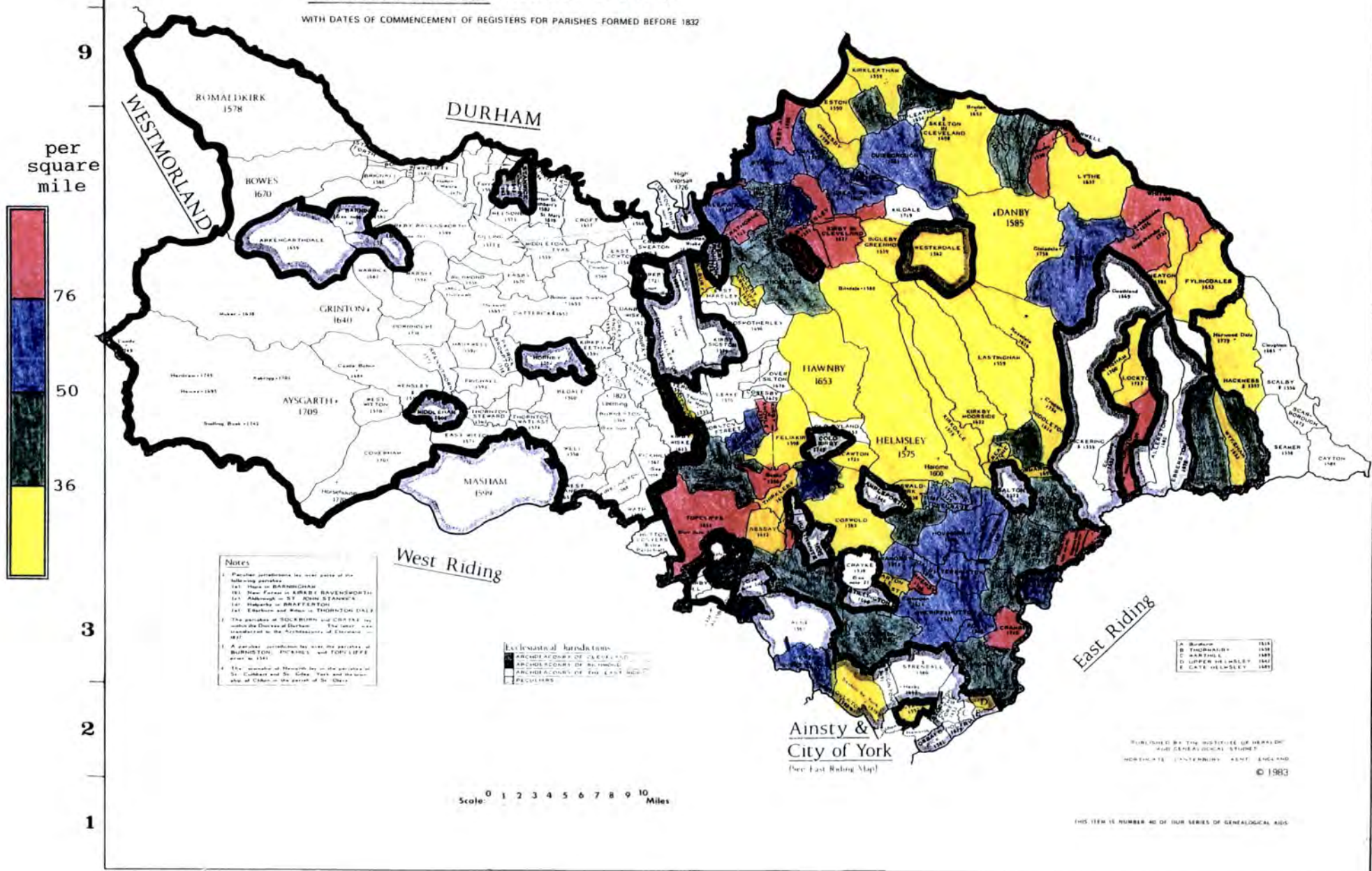


Figure 6.3 a Population density, 1676.

per square mile



9
76
50
36
3
2
1

Notes

- The following parishes were detached parts of other parishes:
 - of Upper Frodsham - ST MARY BISHOPHILL, RICHMOND
 - of Knaresborough - HOLY TRINITY, MICKLEGATE
 - of Droghda - HOLY TRINITY, MICKLEGATE
 - of Malborough - ST MARY BISHOPHILL SENIOR
 - of Epsom - ST MARY BISHOPHILL JUNIOR
- KIRK HAMERTON lies within the Archdeaconry of Richmond
- A peculiar jurisdiction lay over the parishes of ALL SAINTS NORTH STREET, ST JULIEN'S, STONE GATE and ST GILES COLLEGE (merged with ST GILBERT prior to 1541)

* HETHER POPPLETON 1541
 1. Upper Frodsham (see note 1)
 2. Knares (see note 1b)
 3. WILTON 1519
 4. THORP ARCH 1531
 5. ASKHAM RICHARD 1574
 6. BI BROUGH 1635
 7. Droghda (see note 1c)
 8. Malborough (see note 1d)
 9. BISHOPSTORPE 1632

Ecclesiastical jurisdictions

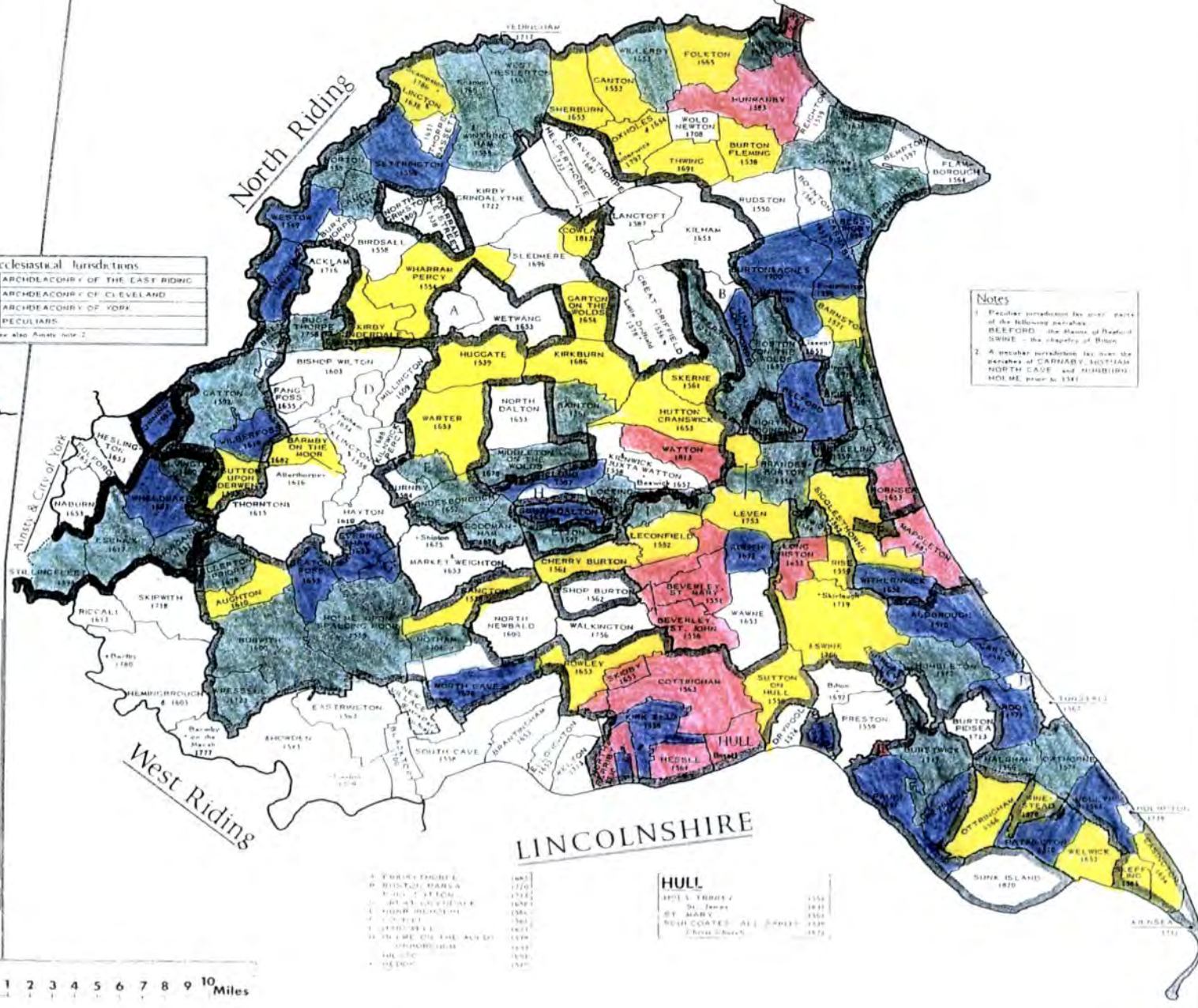
ARCHDEACONRY OF THE EAST RIDING
ARCHDEACONRY OF CLEVELAND
ARCHDEACONRY OF YORK
PECULIARS

(See also Annots note 2)



YORK PARISHES

ALL SAINTS NORTH STREET	1517
ALL SAINTS FAWCETT (merged with ST PETER THE CHURCH)	1524
HOLY TRINITY GURHAMGATE (merged with ST JOHN THE BAPTIST (see Peculiar note 1))	1519
HOLY TRINITY KING'S COURT	1520
HOLY TRINITY MICKLEGATE	1520
WILTON	1519
ST ERIC	1525
ST CUTHBERT (merged with ALL SAINTS, BEEFORD)	1521
ST GILES ON THE WALLS (merged with ST MARY LAVERGATE) (see Peculiar note 1)	1521
ST HILTY STONEWARE	1520
ST JOHN MICKLEGATE (see OSBORNE END)	1515
ST JEROME (merged with ST THOMAS)	1520
ST MARGARET	1520
ST MARTIN CORBY STREET	1520
ST MARTIN LAMBERTON (see ASKHAM)	1520
ST MARY BISHOPHILL SENIOR	1520
ST MARY BISHOPHILL JUNIOR	1520
ST MARY EASTGATE	1520
ST MICHAEL	1520
ST MICHAEL STURMILLAT	1520
ST OLAVE (merged with ST JULIEN'S, GILFLEAVE (see 1520))	1520
ST SAMBSON	1520
ST SANDRUP (merged with ST JOHN COLLEGE and ST ANDREW (see Peculiar note 1))	1520



Notes

- Peculiar jurisdiction lay over parts of the following parishes: BEEFORD (the Manor of Beaford) and STONE (the Manors of Stone)
- A peculiar jurisdiction lay over the parishes of CARNBY, 1607-1616, NORTH CAVE and HARBOROUGH HOLME prior to 1541

HULL

ST JOHN'S	1552
ST JAMES	1622
ST MARY	1552
SOUTH COATES (see 1552)	1552
ST JOHN'S	1572

Figure 6.3 b Population density, 1676.

YORKSHIRE (WEST RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

PART OF THE WEST RIDING CONTAINING THE FOLLOWING WAPENTAKES:

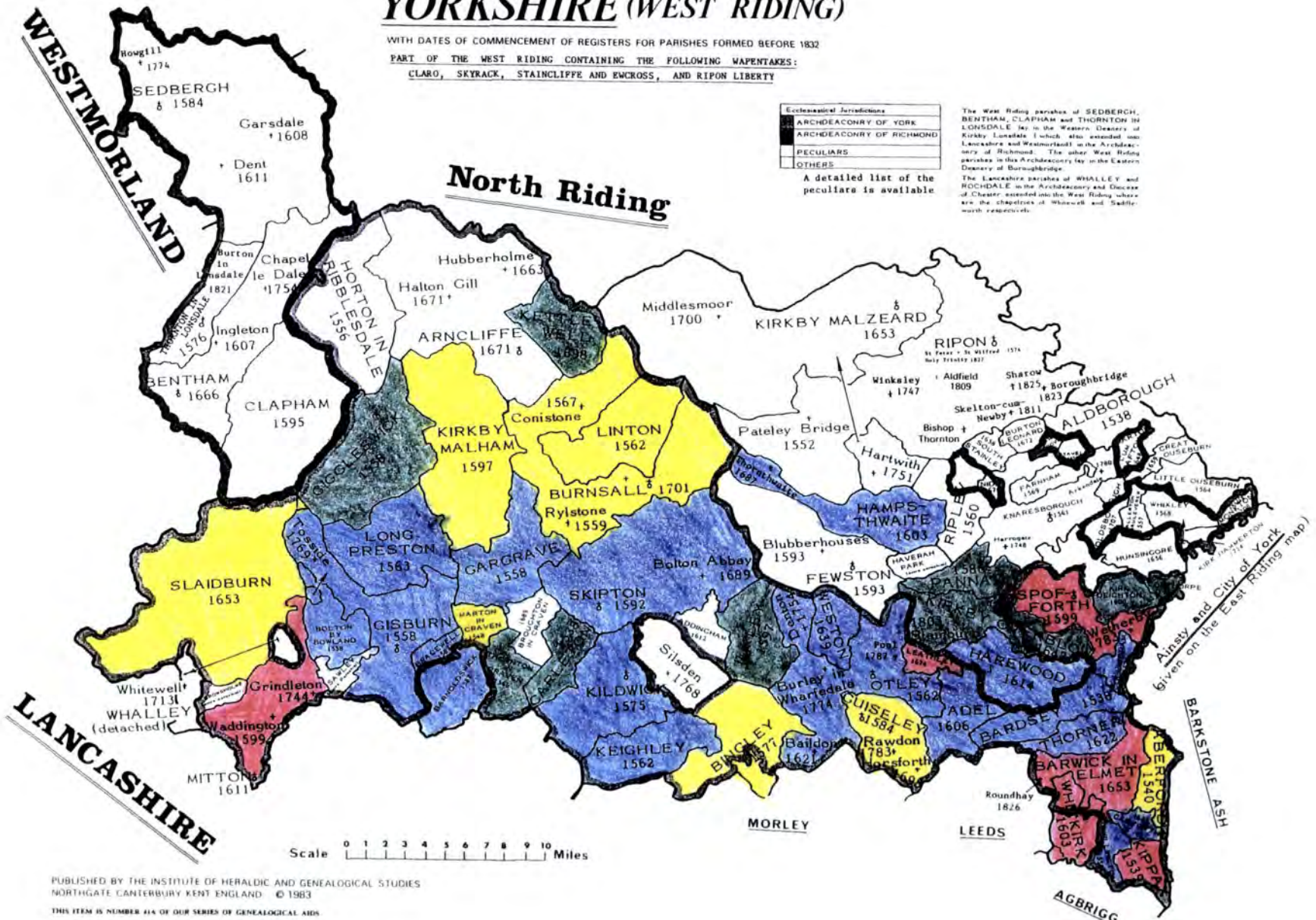
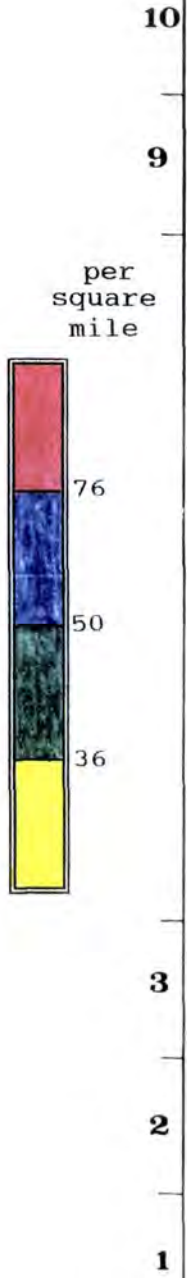
CLARO, SKYRACK, STAINCLIFFE AND EWCROSS, AND RIPON LIBERTY

Ecclesiastical Jurisdictions	
	ARCHDEACONRY OF YORK
	ARCHDEACONRY OF RICHMOND
	PECULIARS
	OTHERS

A detailed list of the peculiars is available

The West Riding parishes of SEDBERGH, BENTHAM, CLAPHAM and THORNTON IN LONSDALE lay in the Western Deanery of Kirby Lonsdale (which also extended into Lancashire and Westmorland) in the Archdeaconry of Richmond. The other West Riding parishes in the Archdeaconry lay in the Eastern Deanery of Boroughbridge.

The Lancashire parishes of WHALLEY and ROCHDALE in the Archdeaconry and Diocese of Chester, extended into the West Riding where are the chapels of Whitwell and Saddleworth respectively.



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Figure 6.3 c Population density, 1676.

YORKSHIRE (WEST RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832
 PART OF THE WEST RIDING CONTAINING THE FOLLOWING WAPENTAKES:
 ACRIBG, AINSTY, BARKSTONE ASH, MORLEY, OSGOLDCROSS, STAINCROSS,
 STAFFORTH AND TICKHILL, DONCASTER SOKE AND LEEDS BOROUGH

Ecclesiastical Jurisdictions	
ARCHDEACONRY OF YORK	
PECULIARS	
OTHERS	

A detailed list of the peculiars is available

The Lancashire parishes of WHALLEY and ROCHDALE in the Archdeaconry and Diocese of Chester extended into the West Riding, where are the churches of Wharfedale and Saddleworth respectively.

The Nottinghamshire parishes of BLYTH and FINNINGLEY in the Archdeaconry of Nottingham and Diocese of York extended into the West Riding. The parish of ROSSINGTON, wholly in the West Riding, also lay in this Archdeaconry.

per square mile

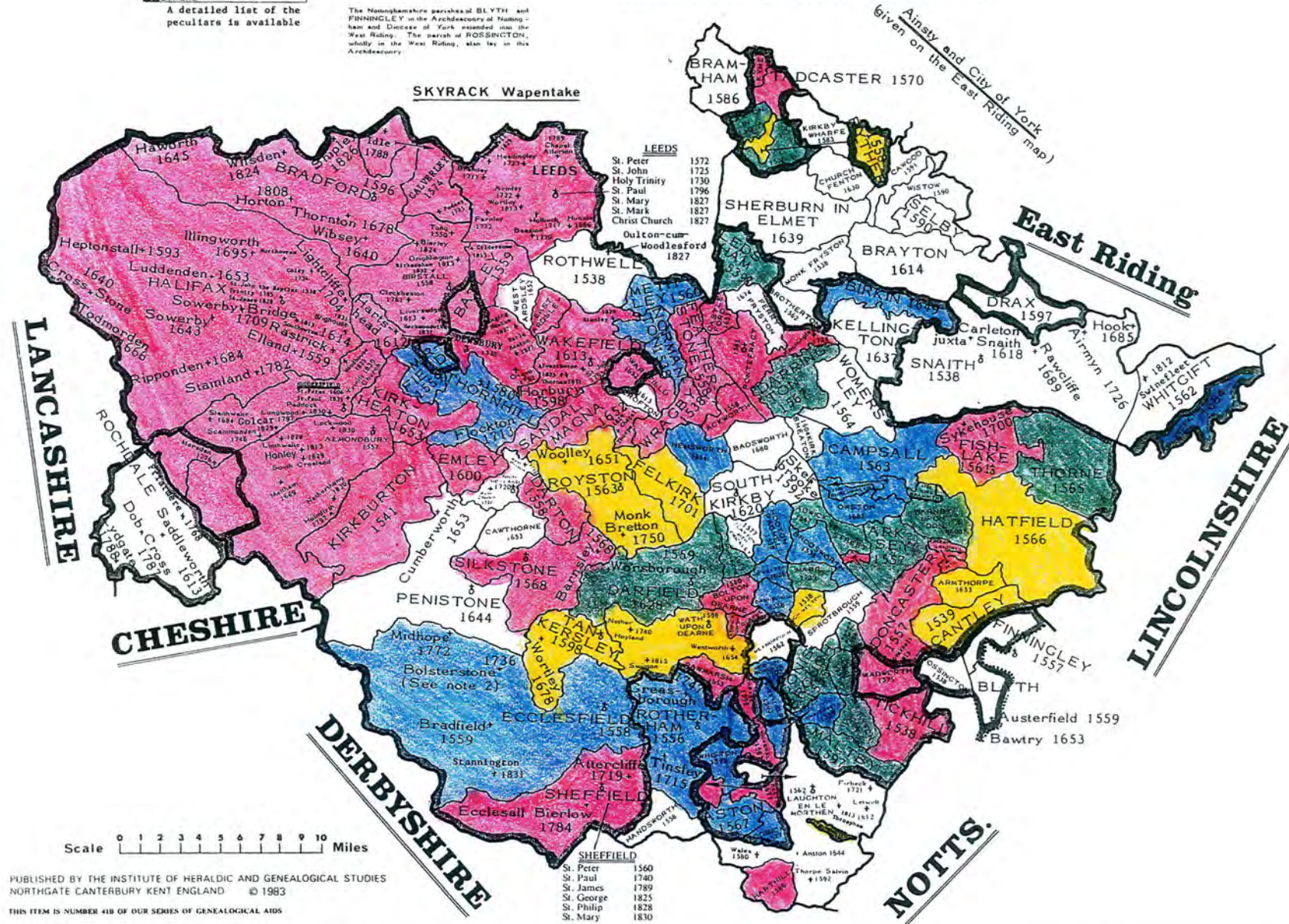
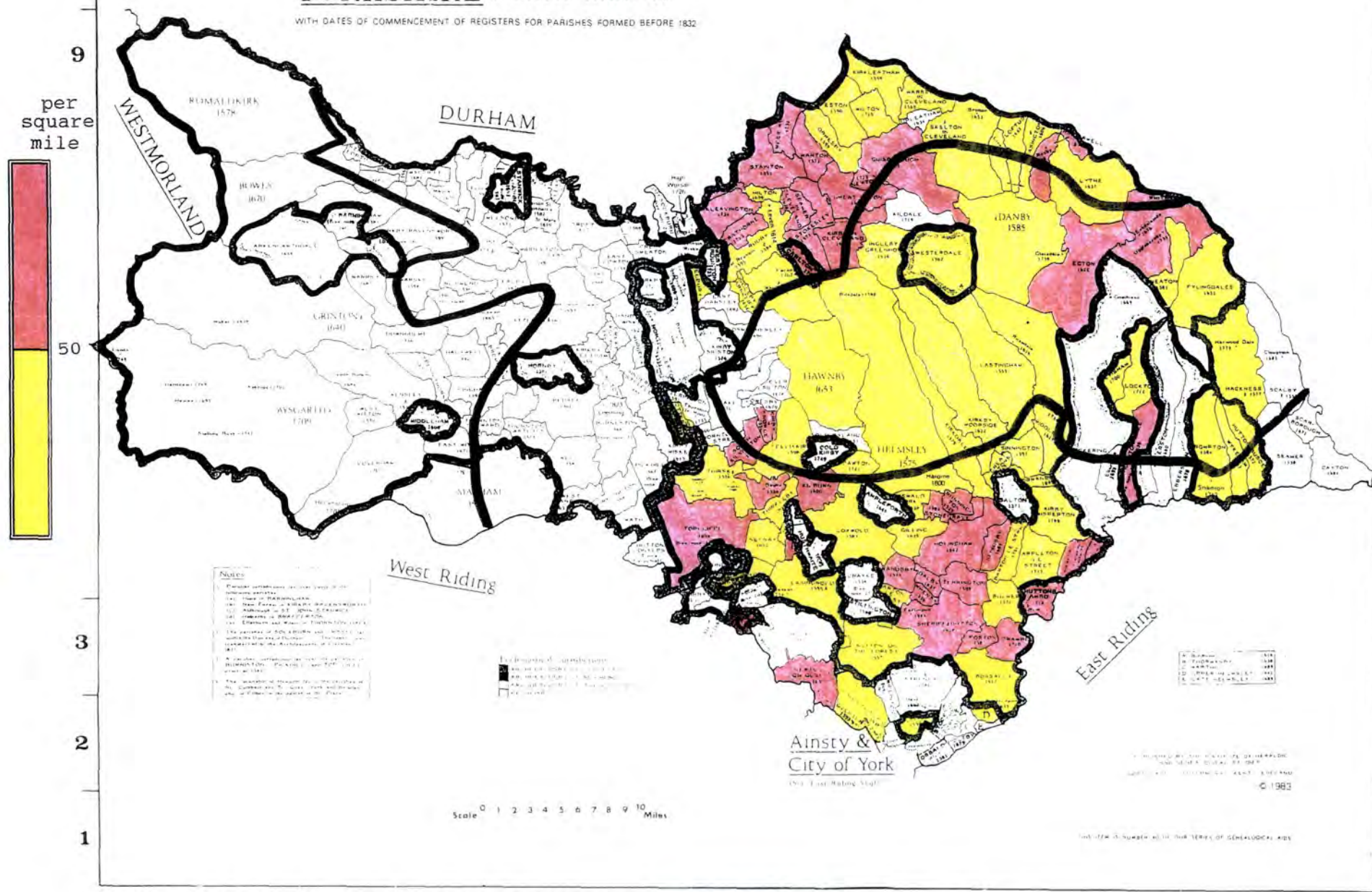


Figure 6.3d Population density, 1676.

YORKSHIRE (NORTH RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832



YORKSHIRE (WEST RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

PART OF THE WEST RIDING CONTAINING THE FOLLOWING WAPENTAKES:

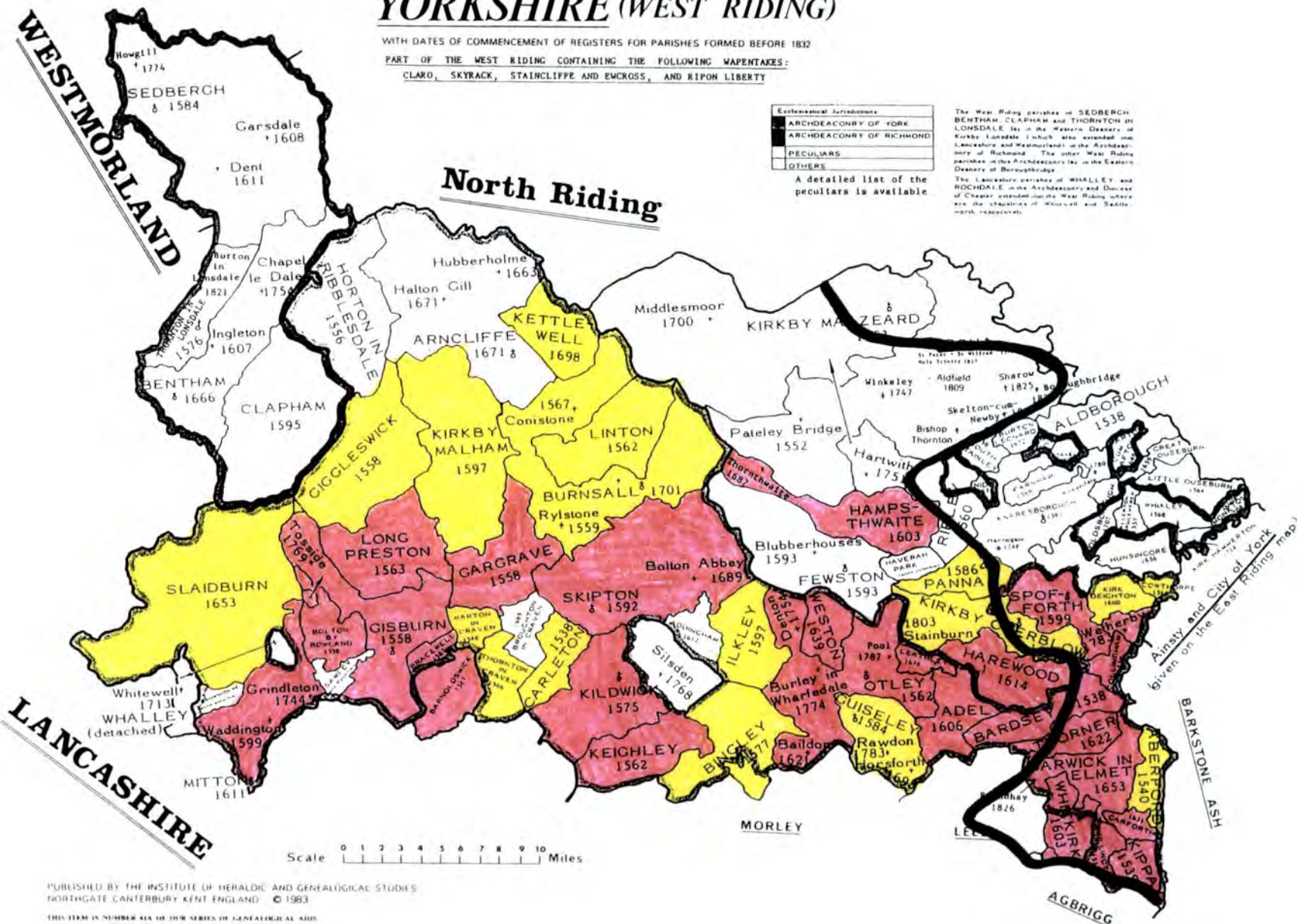
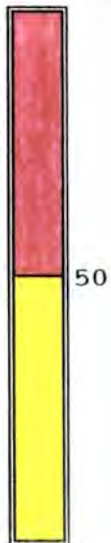
CLARO, SKYRACK, STAINCLIPPE AND EMCROSS, AND RIPON LIBERTY

Ecclesiastical Jurisdiction	
	ARCHDEACONRY OF YORK
	ARCHDEACONRY OF RICHMOND
	PECULIARS
	OTHERS

A detailed list of the peculiars is available

The West Riding parishes of SEDBERGH, BENTHAM, CLAPHAM and THORNTON of LONSDALE lie in the Western Deanery of Kirby Lonsdale (which also extended into Lancashire and Westmorland) in the Archdeaconry of Richmond. The other West Riding parishes in the Archdeaconry lie in the Eastern Deanery of Broughbridge. The Lancashire parishes of WHALLEY and ROCHDALE in the Archdeaconry and Diocese of Chester extended into the West Riding where the parishes of Wharfedale and Tadcaster were respectively.

per square mile



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Figure 6.4 c Population density and boundary of settlement provinces, 1676.

continuity of patterns between the two periods is strong. The populous south-west of the study region, contained within the West Riding, is constant between both census dates, although a sizeable expansion of the area by 1851 is evident (Figures 6.1 and 6.3). This is also true for much smaller areas of high population, e.g. Hull and its immediate area in the East Riding. Sparsely populated areas show the same degree of stability. This is seen in the north-west of the study region and even more prominently in the north-east, on the North York Moors. This shows the dominance of the 'blocky' pattern from 1676 to 1851. Further, the 'patchwork' distribution pattern of parishes within the Central Settlement Province is dominant throughout the 175 year period.

The maps dividing the parishes at the median show just how similar the distribution patterns of the two dates are (Figures 6.2 and 6.4). Three types of area are distinguishable for both periods, very similar to the situation in the West Midlands:

Area One: A 'block' pattern, where a large area of parishes immediate to one another have very similar population densities. Here, these densities fall short of the median. This is represented by two separate areas, one in the north-east of the North Riding and the second covering much of the north-west of the study region.

Area Two: Again a 'block' pattern, but the population densities of the parishes are above the median value. This area lies to the south-west of the West Riding.

Area Three: An incredibly mixed distribution of parishes, with very varied population densities gives this area a 'patchwork' appearance. This is found in the central and south-eastern parts of the study region, covering the whole of the East Riding, the western half of the West Riding and a central portion of the North Riding.

Areas One and Two lie outside the Central Settlement Province, Area Three is within its boundaries.

Looking further into the change in population between the two censuses, the maps of percentage change provide further information (Figures 6.5 and 6.6). Two versions were plotted as for the previous two study regions. The average growth of the parishes examined over the 175 year period is exactly 50%. The more general maps show several areas of above average growth within the study region (Figure 6.6). The largest of these is situated in the south-west of the West Riding, from Sheffield in the south to Skipton in the north. Covering in the region of 50 by 37 miles, the area is basically the same as that of high population on the quartile map. Other smaller areas of high growth are found in all three Ridings. Three are of note. One lies to the east of the West Riding centred on the parish of Barnby On Don. A second is in the East Riding, stretching from Huggate in the west to Foston On The Wolds in the east. Lastly, a larger area than the previous two extends along much of the North Riding coast and inland to the parish

YORKSHIRE (NORTH RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

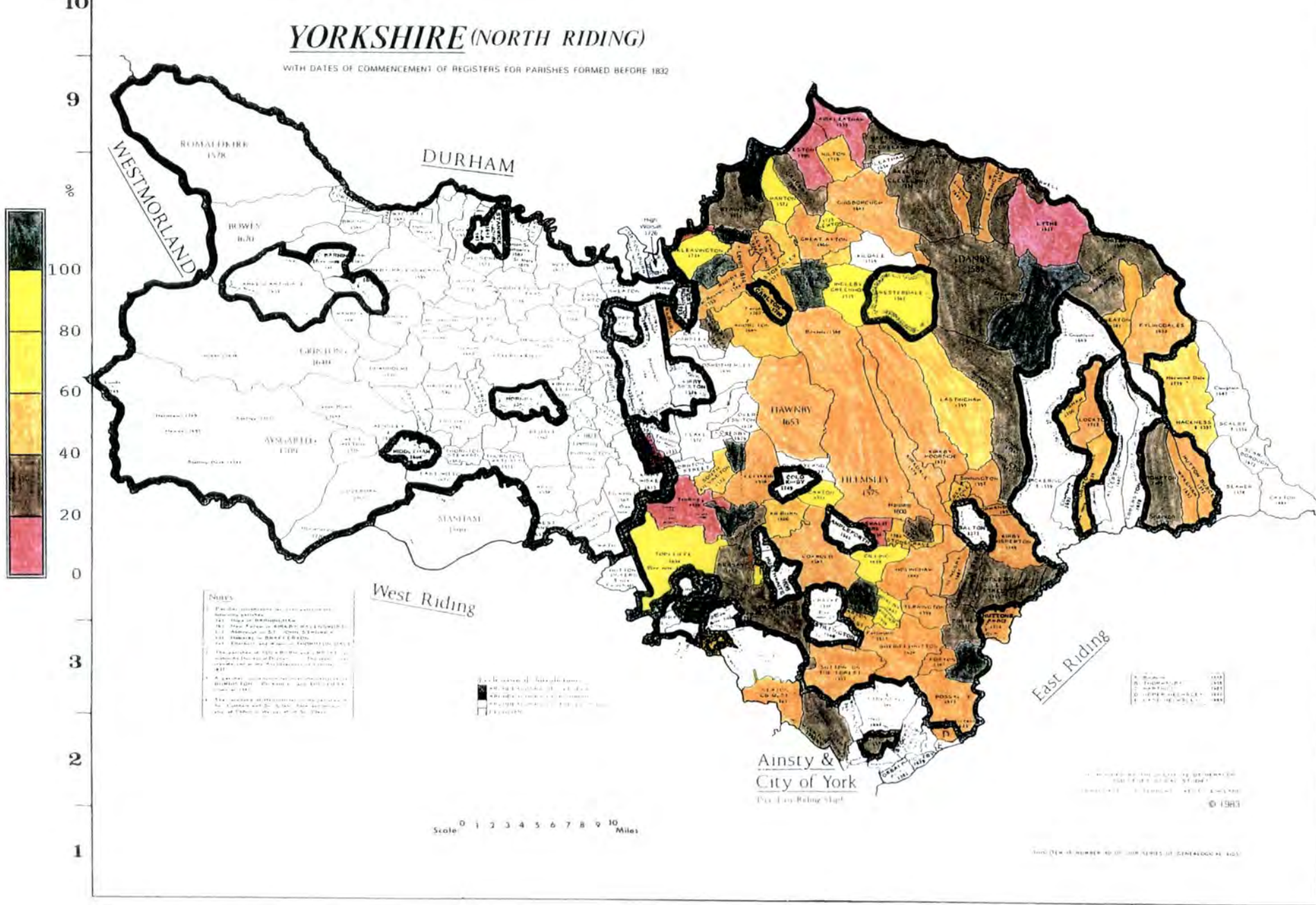


Figure 6.5 a Population change: 1676 population as a percentage of 1851 population.

YORKSHIRE (WEST RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832
 PART OF THE WEST RIDING CONTAINING THE FOLLOWING WAPENTAKES:
 AGRICG, AINSTY, BARKSTONE, ASH, MORLEY, OSGLDCROSS, STAINCROSS,
 STAFFORTH AND TICKHILL, DONCASTER SOKE AND LEEDS BOROUGH

The 1851 population of West Riding parishes is given in the accompanying table. A detailed list of the peculiars is available.

The 1676 population of West Riding parishes is given in the accompanying table. A detailed list of the peculiars is available.

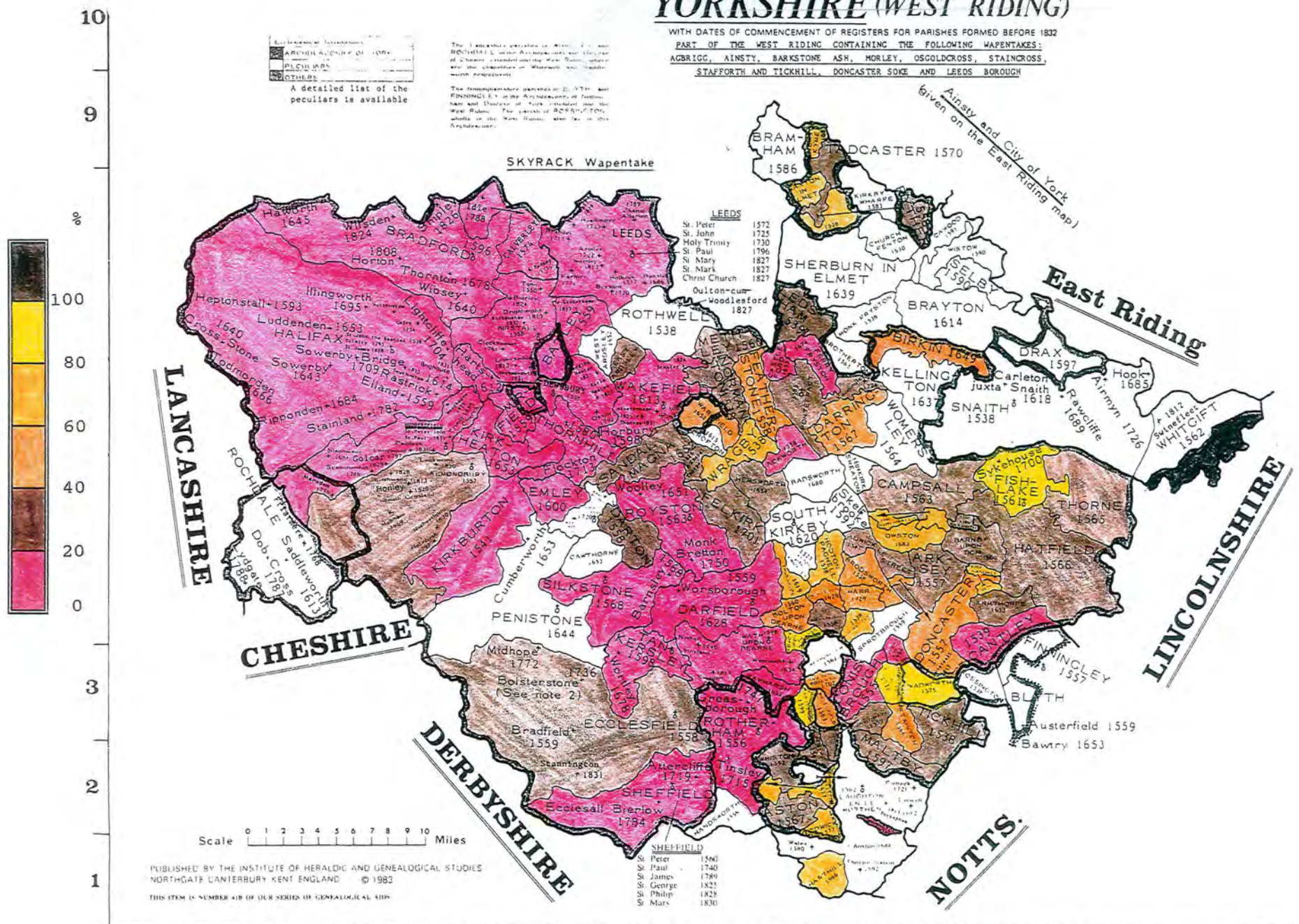


Figure 6.5 d Population change: 1676 population as a percentage of 1851 population.

YORKSHIRE (NORTH RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

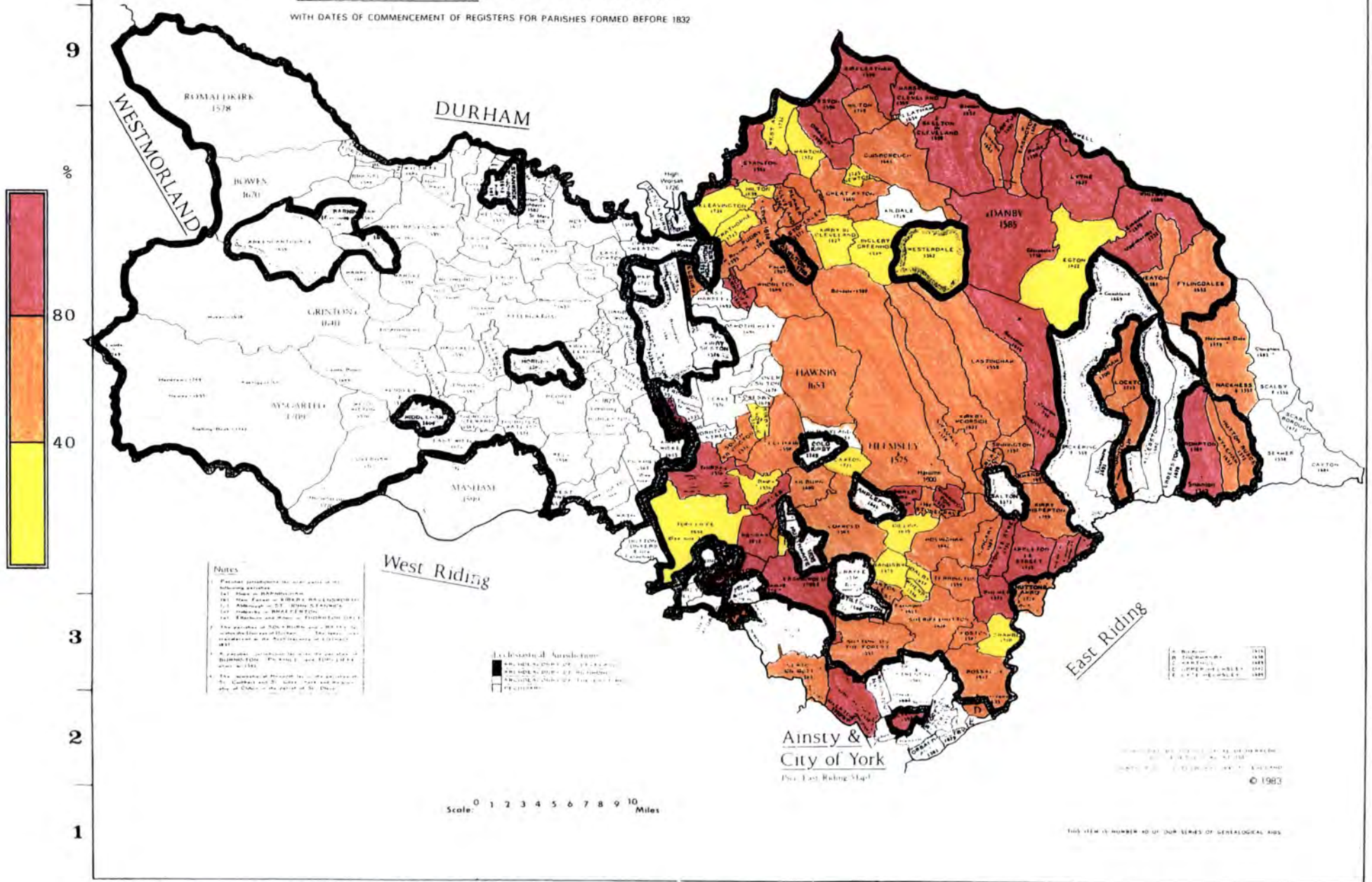


Figure 6.6 a Population change: 1676 population as a percentage of 1851 population.

YORKSHIRE (WEST RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1832

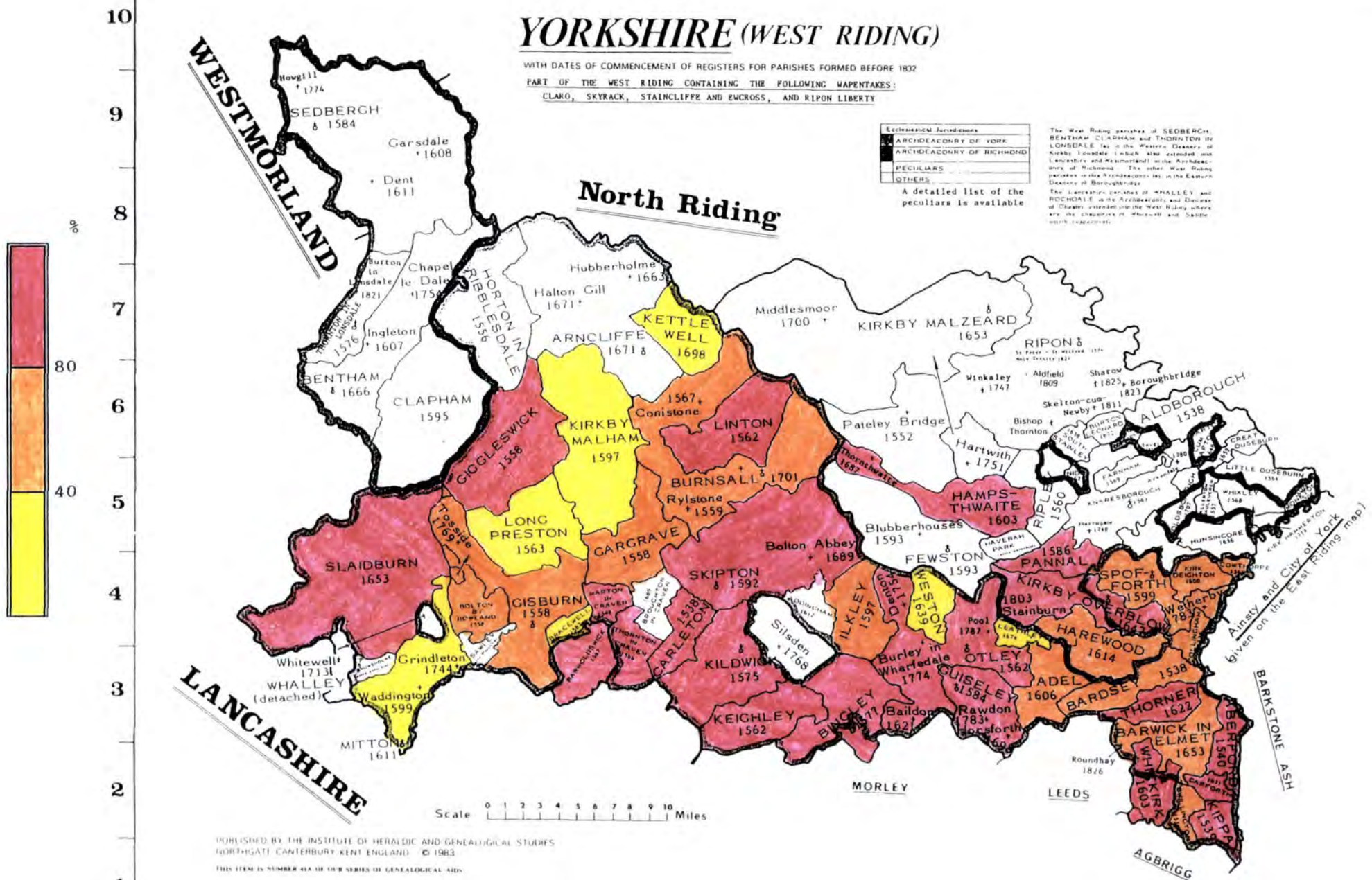
PART OF THE WEST RIDING CONTAINING THE FOLLOWING WAPENTAKES:

CLARO, SKYRACK, STAINCLIFFE AND EMCROSS, AND RIPON LIBERTY

Ecclesiastical Jurisdictions	
ARCHDEACONRY OF YORK	—
ARCHDEACONRY OF RICHMOND	—
PECULIARS	—
OTHERS	—

A detailed list of the peculiars is available

The West Riding parishes of SEDBERGH, BENTHAM, CLAPHAM and THORNTON DE LONSDALE lay in the Western Deanery of Ripon; Lonsdale which also extended into Lancashire and was included in the Archdeaconry of Richmond. The other West Riding parishes in the Archdeaconry lay in the Eastern Deanery of Biscroft-lege. The Lancashire parishes of WHALLEY and ROCHDALE in the Archdeaconry and Diocese of Chester extended into the West Riding, where are the churches of Wharfedale and Sartin north of ARBORACRE.



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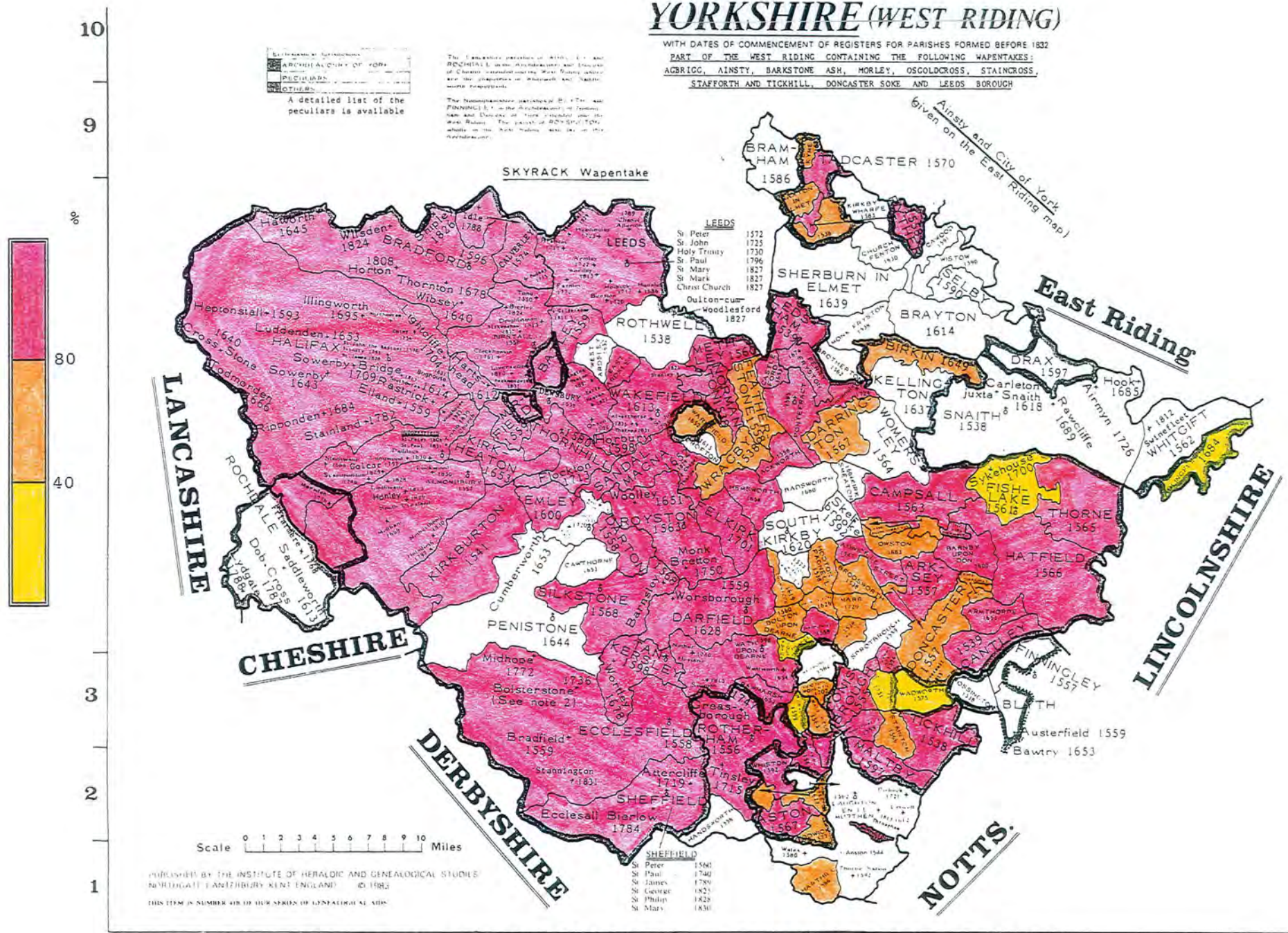
Figure 6.6c Population change: 1676 population as a percentage of 1851 population.

YORKSHIRE (WEST RIDING)

WITH DATES OF COMMENCEMENT OF REGISTERS FOR PARISHES FORMED BEFORE 1822
 PART OF THE WEST RIDING CONTAINING THE FOLLOWING WAPENTAKES:
 AGRIC, AINSTY, BARKSTONE ASH, MORLEY, OSGLDCROSS, STAINCROSS,
 STAFFORTH AND TICKHILL, DONCASTER SOKE AND LEEDS BOROUGH

ARMS OF THE COUNTY OF YORK
 A detailed list of the
 peculiars is available

The Ecclesiastical parishes of 1810, 1811 and
 1812 are shown in the original map and those of
 1813 are shown in the present map. The parishes of
 1813 are shown in the present map. The parishes of
 1813 are shown in the present map.



Scale 0 1 2 3 4 5 6 7 8 9 10 Miles

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St Peter	1560
St Paul	1740
St James	1780
St George	1825
St Philip	1828
St Mary	1830

Figure 6.6 d Population change: 1676 population as a percentage of 1851 population.

of Middleton on the North York Moors. Unlike the large expanse of high growth parishes in the West Riding, these three smaller areas equate with areas of mainly low or even sparse population on the quartile maps of 1851 and 1676. This shows that although these parishes experienced a great increase in population between the two periods, the starting population of 1676 was so low that even by 1851 the population was still sparse in comparison to much of the rest of the region.

Areas of average growth are several, including much of the North York Moors. However, parishes of below average growth are few and tend to be singular rather than in areas. The North and East Ridings contain many more of such parishes than the West Riding. Turning to the more detailed maps (Figure 6.5), these highlight parishes that declined over the 175 year period. Well over half the parishes of below average growth actually show up on these maps as having declined from 1676, many of which are in the East Riding. The only area of such parishes is in the north-east of this Riding, including the parishes of Bessingby, Carnaby, Burton Agnes and Lowthorpe.

Hence the picture portrayed by these percentage maps is one of a high growth study region, with small areas of low growth and decline, mainly in the North and East Ridings.

The overall distribution, then, for this area in both 1851 and 1676, is one of very high population and high growth in the south-west of the study region. Areas of sparse population are to the north, with a generally low population distribution to the east (within the East Riding), where the growth rate in several parishes is low or negative. Reasons behind this distribution are discussed in the following discussion.

Even though many areas experienced a great rise in population between the two periods, the actual distribution patterns are incredibly constant, with very little change between the pictures produced on the quartile maps of 1676 and 1851. This is highlighted by the maps dividing the parishes at the median. Why is this pattern so static, with 175 years of great change to the country elapsing between the censuses?

Finally, the division of the distribution patterns into 'block' and 'patchwork' by Settlement Province must be addressed. Having already been noted in the West Midlands study region, this division is obviously a very real issue to be pursued further.

Threads of Explanation

As in the previous two study regions, the population distribution patterns first are related to the physical landscape and farming types. The region is then split into the three areas noted above, for further investigation into industry, landownership and migration, i.e.

Area One 'Block' distribution; below median density.

Area Two 'Block' distribution; above median density.

Area Three 'Patchwork' distribution.

The two main areas of sparse population in the north of the study region (Figures 6.1 & 6.3) are strongly related to the physical qualities of the land there (Figure 2.6). The area in the north-east of the region covers the bulk of the highland of the North York Moors. In the north and west, the Yorkshire Dales stretching to the southern end of the Pennines encompass the large area of sparse population in the North and West Ridings. It is the foothills of the Pennines in the West Riding where the vast area of densely populated parishes is found, on the eastern edge of the Northern and Western Settlement Province. The mixed 'patchwork' distribution in the North and West Ridings occurs mainly in the lowland vales, e.g. the Vale of York which comprises of glacial deposits such as till and sands and gravels. In the East Riding, this 'patchwork' pattern is associated with the chalklands of Yorkshire Wolds and areas of marshland in the south-east and south-west of the riding (Figure 2.7). Hence, the only particularly obvious connection between the physical attributes of the landscape and population density is found in the two areas of sparse population in the north of the study region, covering the Yorkshire Dales and the North York Moors.

However, the picture becomes simpler, and parallels are easier to make, when comparisons are drawn between population density and farming types (Figure 2.8). A broad distinction can be made between arable areas within the bounds of Central Settlement Province, where the 'patchwork' distribution pattern dominates, and areas of pastoral farming which are associated with the below and above median 'blocky' distributions occurring outside the Central Settlement Province. Two small areas of woodland pasture also exist, both within the bounds of the North Riding, but these seem to have no effect on the population distribution patterns, probably due to the insignificance of their size. Therefore, we see here a pattern emerging similar to that found in the West Midlands, of three main areas which are closely linked to farming types (and hence a particular way of life) and the boundaries of the Central and Northern and Western Settlement Provinces. These three areas are now examined in more detail.

Area One :- This actually comprises of two separate areas, the North York Moors in the north-east of the region and the Yorkshire Dales in the north-west. However, both have the same characteristics of sparse population distribution and pastoral farming and both are situated outside the bounds of the Central Settlement Province.

As already mentioned, these two areas display close ties to the land. Both the Moors and the Dales are areas of highland, dominated by pastoral farming. As seen in the area today, settlement was mainly dispersed, although in both districts the land is so desolate, that over the majority of the area settlement was actually absent altogether. This inhospitable

nature of the land led to the low densities of population seen in 1676 and in 1851 (Figures 6.1 & 6.3).

The 'blocky' appearance of the distribution patterns (Figures 6.2 & 6.4) is a result of the prevalence of the open settlement type outside the Central Settlement Province. This is in comparison to the 'patchwork' distribution seen in the East Riding and the Vale of York (within the Central Province), where there is a far more equal mix of open and closed villages.

This dominance of the open settlement could have assisted a great rise of industry in the Dales and Moors, as seen in Area Two, if raw materials had been available in abundance and possibly if access to and transport within the areas had been easier. Further, the nature of the pastoral way of life (low capital and labour input) allowed many to pursue a dual economy, highly instrumental in the beginnings of industrial development. However, as in Area Two in Cumberland and Westmorland, agriculture was mainly combined with lead mining (certainly in the Yorkshire Dales) and this was not an industry which led to large scale development or employment. Hence, lead mining had little real effect on the settlement pattern of the dales. Some miners moved into villages at the peak of the industry, but this was not common and expansion of the villages concerned was probably minimal. Other crafts and services would have been united with pastoral farming to a lesser extent and there is evidence that a sizeable proportion of farmers in the North Riding were also producing yarn for textiles. Some was sent to the West Riding for weaving, but much remained in the North Riding for various uses, e.g. knitting in Swaledale and Wensleydale¹, again as part of a dual economy. These small scale, local producers never rivalled the textile industry of the West Riding, but no doubt adequately catered for the demand in the immediate vicinity. This was really the extent of the 'industrial' development here. Hence, Area One remained a mainly agricultural and sparsely settled region throughout the study period.

Decline in Area One between the two census dates is however minimal, certainly over the North York Moors (data for the dales is not available) where most parishes experienced an average growth (around a 50% increase) of population. This is in contrast to the parishes of the sparsely populated Area Two in Cumberland and Westmorland, which experienced either a decline in population or at best, a small increase. In the Yorkshire dales the main thrust of depopulation came around 1850, when the lead mines began to close in large numbers as they became worked out. Large numbers of farmer/miners moved to the coalfields of Northumberland and Durham and Yorkshire in a bid to find new work. This is the acknowledged date from which most rural areas in the country began to experience large scale out-migration.² Hence, it is highly likely that

¹H. Heaton, *The Yorkshire Woollen and Worsted Industries* (London: Oxford University Press, 1965), p. 285.

²Smailes, pp. 137-44.

any decline in population numbers in Area One would only begin to become apparent in census returns later than those of 1851.

Area One can therefore be summarised as a sparsely populated area between 1676 and 1851, experiencing average population growth over the 175 year period. High increases in population were restricted by the nature of the land, where only pastoral farming could be practised and dispersed settlement dominated. Further, due to the physical severity of large tracts of the countryside, much of the area was void of settlement altogether. The prevalence of the open settlement gave rise to the 'blocky' appearance of the population distribution patterns. It could also have aided industrial growth quite substantially, if the industries practised within the dual economy had had the potential for large scale development and access to trade routes had been easier. However, the area remained predominantly agricultural with wide utilisation of the dual economy, especially in textiles and lead mining. By 1851 the area had not suffered obviously from out-migration, but this probably began with increasing intensity from the end of the study period onwards.

Area Two :- This large area of dense population covers the south-west of the West Riding and includes the well known industrial towns of Bradford, Halifax, Sheffield, Rotherham and Leeds. It is this prominence of industry (especially coalmining, iron smelting and the resulting manufacturing industries and cloth production), established at an early date, that is the key to the high population density of the area from 1676 to 1851.

The early rise of industry was made possible by several factors, acting to produce an ideal situation for industrial establishment and progress. The availability of raw materials and an abundance of running water to drive mills and machinery, allowed 'crafts' to begin at an early date. In the north of the area, coal was highly accessible and the steep hillsides of the Pennine foothills gave excellent provisions of running water, allowing 'craftsmen' to practise their trades in great numbers. In the south, a wealth of exposed coal and ironstone, along with a good supply of timber for charcoal and running water meant a large amount of coal extraction, iron production and iron working, from an early date. Mining was in fact active from medieval times, producing supplies for the local market.³

The pastoral economy enabled a secondary 'trade' to be taken due to its low labour requirement and low capital input. In the very west of the area, where the Pennines and dispersed settlement dominate, the pastoral farming already noted was combined with cloth-making in the north and the manufacture of

³B.E. Coates, 'The Geography of the Industrialization and Urbanization of South Yorkshire, 18th Century to 20th Century', in S. Pollard and C. Holmes, *Essays in the Economic and Social History of South Yorkshire* (Sheffield: South Yorkshire County Council, 1976), pp. 14-27.

metal goods, most notably cutlery, in the south. This dual economy was also practised further east on the coal measures, where open pasture was still the main form of farming, although the soils were somewhat more fertile than in the Pennine foothills. Out of this way of life grew fully established industries totally divorced from the soil and many entrepreneurs emerged from those families which had initially practised a trade within the dual economy.⁴

The development of these secondary trades into industries, was made possible due to the dominance of the open settlement, in the predominantly pastoral Northern and Western Settlement Province. Here, industrial involvement was not curbed and settlements were free to increase in size, in order to accommodate the growth in the workforces required. The prevalence of the open settlement has been noted in terms of religious dissent in this area.⁵ Dissent was almost unheard of in closed settlements, as the resident gentry exercised such tight control over social and religious matters in their villages. Hence, dissent was largely confined to open settlements, e.g. in 1676, 10% of Sheffield's population was made up of nonconformists and by 1851 dissent (especially Methodism) was stronger in this area than conformity.⁶

The result of this strong tradition of industry was a thickness of settlement even in these strongly dispersed areas and high population density, which is seen for both 1676 (Figure 6.3) and 1851 (Figure 6.1). In the early eighteenth century Daniel Defoe, on his tour of Great Britain, described in detail this heavy settlement of the already well-developed industrial landscape of the West Riding of Yorkshire:

"The nearer we came to Hallifax, we found the houses thicker, and the villages greater in every bottom; and not only so, but the sides of the hills, which were very steep every way, were spread with houses, and that very thick..."⁷

and he described Sheffield as "very populous and large"⁸.

Hence, the three main industries to contribute to the early rise of Area Two were coal, iron and textiles. Prior to 1750, coal and textiles were the most rapidly growing industries in the country and their rise in Yorkshire (as in the West Midlands) in this period is regarded as phenomenal.⁹ As

⁴Holderness, p. 154.

⁵D.G. Hey, 'The Changing Pattern of Nonconformity, 1660-1851', in Pollard and Holmes, pp. 204-17.

⁶Ibid., pp. 204-17.

⁷Hoskins, p. 212.

⁸Ibid., p. 222.

⁹Holderness, p. 94.

already mentioned, the extraction of coal had been taking place for the local market from medieval times. In the eighteenth century, as in Cumberland and Westmorland, the bulk of coal mined came from the great estates of the gentry, e.g. Wortley, Wentworth and Rotherham.¹⁰ The iron industry had in fact been established in the south-west of Area Two in the second half of the sixteenth century, centred on Sheffield. Here, many blast furnaces were erected to serve the town's growing production of edge-tools and, subsequently, cutlery. By 1680 the industry was one of the three principal iron producers in the country.¹¹ A series of technological changes in the later eighteenth century, including the production of coking coal and the use of steam power, meant that the majority of the home market was covered by British production. Ten per cent of this was from the West Riding.¹²

The rise of both industries up to 1750 was obviously substantial, but the situation of the coalfield and iron reserves was still a great disadvantage in terms of market proximity. However, from about 1750 onwards the industries began to expand further, especially with improvements made to the River Don's navigation in the late eighteenth century, which meant that the great port of Hull was so much easier to reach, in terms of distance and cost. With the advent of rail transport in the 1830's, the rise of the coal and iron industries was further strengthened.

In the north of Area Two, the extraction of coal was an important industry, but the production of textiles perhaps had the strongest influence in creating the high levels of population seen throughout the study period. The industry was expanding as early as the sixteenth century, producing cloths of varying quality, but in the main cheaper fabrics.¹³ It was these lower quality fabrics which were to lead to the supremacy of the West Riding (at the expense of Gloucestershire, Somerset and Wiltshire) in the British textile industry in the eighteenth century. The workers in the south-west produced superior quality cloth, but as the rise of industry in the country as a whole prompted population growth, it was the cheaper cloth that came into increasing demand to supply the expanding 'working class'. The great population increase in the neighbouring county of Lancashire provided an important early market, along with the West Riding itself. Although in the eighteenth century the manufacture of textiles was in evidence throughout the whole of the county of Yorkshire, the west of the West Riding stretching over the Pennines into Lancashire was without doubt the heart of the industry. Leeds, Halifax and Wakefield had by now emerged as

¹⁰Coates, pp. 14-27.

¹¹Holderness, p. 98.

¹²P. Riden, 'Iron and Steel', in Langton and Morris (eds.), pp. 127-31.

¹³Holderness, p. 87.

highly important centres for the industry and specialisation in the type of cloth produced was already apparent here. In effect the area could be split into two, with the west of Area Two, including Halifax, Huddersfield and Keighley, producing the majority of the worsted cloth. The east of the area, including Wakefield, Bradford and Leeds, concentrated on woollens, with Leeds being the great market centre for this type of cloth.

By the end of the eighteenth century these cheaper textiles were also the most desired cloths abroad, fuelling the expansion of the Yorkshire industry to provide over half of Britain's exported cloth.¹⁴ As in the coal and iron industries of the area, this export was made possible through the great port of Hull, which became more and more accessible to inland areas from the late eighteenth century onwards. Advances in the industry itself were, however, quite slow to infiltrate the area and by 1800 there were still only around 20 factories in Yorkshire. It really took until the mid-nineteenth century, before such inventions as the power-loom were being widely used. Even at this date, contemporary writers were still referring to the extensive continuity of the cottage workforce.¹⁵ In spite of this slow rate of technological change, the industry still rose by tremendous proportions and by 1838 the area was by far the largest employer of textile workers in Britain, producing woollens, worsteds, flaxes and cottons.¹⁶

These advances in the textile industry, plus the effects of the expanding coalfield and iron works, acted to produce great changes in the settlement pattern and population levels of the area as a whole. The effect on the population of Area Two was to produce a high density throughout the area, even as early as 1676 (Figure 6.3). Over the next 175 years, the population increased by a phenomenal amount through in-migration from less industrially prosperous areas such as Area One and through the huge natural increase that this triggered. The 1676 population figures, which were high for that period, only total between 0 to 40% of the 1851 figures (Figure 6.5 & 6.6) and by 1851, the parishes making up the area are solidly within the high upper quartile, i.e. with over 207 persons per square mile (Figure 6.1). This great rise has in fact been noted by many writers, e.g. B.A. Holderness, who dates the initial leap in population to 1500-1750.¹⁷

In terms of settlement, the effects of industry were just as far reaching. The West Riding as a whole was mainly occupied

¹⁴K.G. Ponting, *A History of the West of England Cloth Industry* (London: Macdonald and Co. Ltd., 1957), pp. 144-50.

¹⁵Heaton, pp. 282-321.

¹⁶P. Laxton, 'Textiles', in Langton and Morris, pp. 106-13.

¹⁷Holderness, p. 17.

by small freeholders¹⁸, suggesting the prevalence of the dual economy and few cottages were without a segment of land. In the coal measure areas, the once dispersed settlement pattern of hamlets with some isolated farmsteads had a second pattern of large industrial villages superimposed upon it. Further, the interspersed market towns became great urban centres, constantly increasing in magnitude. The areas of textile production began as highly dispersed swathes of land especially in the west, with some villages in the eastern valley bottoms. At this time, a vast proportion of manufacturing was carried out on the hillsides and such places as Leeds were merely industrialised villages in the lower Pennine Valleys. In the seventeenth and eighteenth centuries, it was these villages that saw the greatest expansion as textile centres, as opposed to the larger towns of the area and the cottage system of the western hills continued to flourish. As time progressed the towns did not really attract any more workers and many were actually driven out of the towns into the surrounding villages, due to competition for land and the resulting high rents. This soon led to the established situation of the towns acting only as finishing and marketing centres, with the actual cloth manufacturing taking place outside them.¹⁹ Hence, the extremely high population, caused primarily by the rise of the industry, was evenly spread throughout the area instead of being highly urbanised. As the factory system was adopted, the manufacturers moved from the hillsides to become concentrated in the valley bottoms and streets were erected to house the factory workers.²⁰ However, the numbers were not of the magnitude of those established for the coal mining industry.²¹ Remaining little more than large hamlets clustered around their mills, it was not until the steam age (which did not reach the West Riding until the very end of the study period) that these textile villages became the large and dirty settlements we associate with the industrial West Riding.²²

Area Three :- The whole of the East Riding, the Vale of York (running through the centre of the North Riding and along the eastern edge of the West Riding) and the Lower Tees Valley down to the Yorkshire Coast (in the North Riding) constitutes this final area of the study region. The area is characterised by its 'patchwork' population distribution pattern at both census dates (Figures 6.1 & 6.3), although by 1851 the north-west of the East Riding, in the heart of the Yorkshire Wolds, is made up of parishes of predominantly low population density (i.e. within the low lower quartile). The overall population density of this area is in fact much lower (especially in the

¹⁸Heaton, pp. 282-321.

¹⁹Ibid., pp. 282-321.

²⁰Hoskins, p. 219.

²¹Mills, pp. 217-8.

²²Hoskins, p. 219.

East Riding) than that seen in Area Three of the West Midlands, where many more of the parishes in the 'patchwork' pattern are within the high upper quartile. Indeed, it is within this area that the majority of parishes, which experienced a decline between 1676 and 1851, are situated.

Area Three lies within the Central Settlement Province where nucleated villages are the typical settlement type in association with the arable farming practised throughout the area. In spite of the uniformity of the farming and settlement in the area, the physical landscape varies enormously, from the glacial depositions of till, sands and gravels in the Vale of York, to the chalk of the Yorkshire Wolds (Figure 2.6), to the marshlands at the head of the Humber Estuary (Figure 2.7). These differences in terrain of course produce subtle differences in farming types, but the broad heading of arable covers the full range seen here in Area Three.

The 'patchwork' pattern of population distribution in the area is brought about by the more balanced mix of open and closed settlements, in comparison to Areas One and Two, where open settlements are by far in the majority. It is acknowledged by several writers²³ that the East Riding was strongly affected by the dichotomy of open and closed settlements and was possibly the most influenced area in England.²⁴ As seen in the West Midlands, the existence of both types of settlement in an area led to differential population growth and most often differences in industrial growth, village morphology and religious dissent. Evidence of both types of settlement is abundant for Area Three as a whole. Closed villages included:

- High Melton, W.R.
- Sprotborough, W.R.
- Ravenfield, W.R.
- Harewood, W.R.
- Sledmere, E.R.

and examples of open villages are:

- Fishlake, W.R.
- Thorne, W.R.
- Hull, E.R. and its immediate area.
- Ampleforth, N.R.

Estate owners of the closed villages were reluctant to build new houses, either due to the demands of the Poor Law or for aesthetic purposes, hence driving their surplus inhabitants to open settlements, usually across the parochial border. Thus, differences in population were established and the resulting natural increase widened the gap even further. With so few people residing in the closed villages, agricultural workers often had to be brought in from the open settlements daily, especially at busy times of the year, e.g. at harvest. This

²³e.g. Clemenson, p. 83.

²⁴Mills, p. 119.

resulted in the development of "Gang Systems", evidence of which exists for the East Riding.²⁵

Although the open settlement provided the opportunity for industrial development (no restrictions from gentry unwilling to become involved in industry and a surplus of labour due to the higher density of population), it would seem that this was not capitalised on fully although some areas were involved in the production of yarn for textiles or indeed finished cloth. The East Riding mainly produced linen yarn, whilst centres such as Masham and Middleham in the North Riding produced woollen goods and Ripon in the north-east of the West Riding manufactured carpets.²⁶ However, even these larger centres of production could not rival those such as Leeds and Halifax in Area Two and there was a lack of a prominent industry within Area Three. This would account for the generally lower levels of population found in the area (Figures 6.1 & 6.3), in comparison to Area Three of the West Midlands (Figures 4.1 & 4.5), where the open villages had a high level of involvement in industry, e.g. hosiery production in Leicestershire. The only significant area of high population is found in Hull and the surrounding parishes, a result of the success of Hull as a thriving seaport. In the early seventeenth century the port was in decline, but by 1700 it had been resurrected, trading Yorkshire broadcloth with Northern Europe and the Baltic.

Dissent and conformity in open and closed villages respectively has been observed in the east of the West Riding and also in Hull in the East Riding.²⁷ Non-conformity tended to flourish in open settlements where social constraints were minimal or non-existent. Closed villages, however, were always under the tight control of the estate owner in most social aspects of life, as they depended heavily on the estate for housing and employment. Therefore, dissent was easily controlled and eradicated in closed settlements.

Therefore, we see that Area Three was a region of predominantly arable farming and nucleated settlement. An almost equal mix of open and closed settlements caused the differential population growth which produced the 'patchwork' pattern seen on the distribution maps of 1676 and 1851 (Figures 6.1. & 6.3). The lack of a large scale industry in the area failed to differentiate further this already established gap in population density between open and closed. This has resulted in a pattern still 'patchwork' in appearance, but the parishes involved tend to be within the lower three quartiles, producing an overall lower level of population density in comparison to that found in Area Three of the West Midlands study region.

²⁵J.A. Sheppard, 'East Yorkshire's Agricultural Labour Force in the Mid-Nineteenth Century', *Agric. Hist. Rev.*, volume 9, 1961, pp. 53-4.

²⁶Heaton, pp. 285-6.

²⁷Hey, pp. 204-17.

From the analysis of these three distinct areas, a pattern already established through the two previous study regions again emerges. The region splits into two at the boundary of the Central and the Northern and Western Settlement Provinces. Within the Central Province settlement is generally nucleated, the dominant farming type is arable (champion) and a balanced mix of open and closed settlements has given rise to highly differential population growth from parish to parish. This has developed into the distinctive 'patchwork' pattern seen throughout the 175 year period. Outside the Central Province dispersed settlement and pastoral farming prevailed. Here, the dominance of the open settlement has produced a more uniform growth in the population density of the parishes, resulting in the 'blocky' pattern seen on the population distribution maps.

The second area identified can again be divided, with one area of high and one of low population density, both appearing in the 'block' form. In the former, the high population density was mainly caused by an early development in industry, mainly coal, iron and textiles. This had already begun in 1676 and by 1851 all the industries were positively booming. This attracted migrants from many areas, immediately increasing population figures and causing further rises through natural increase. In the latter area pastoral agriculture dominated, supporting very few people per square mile. Further, large tracts of land within the area were too inhospitable to support any population at all, resulting in the sparse population seen over the whole area at both census dates.

Therefore, it would seem that the actual patterns of 'patchwork' and 'block' are mainly due to the types of landownership common within them. A roughly equal mix of open and closed produces the 'patchwork' pattern, whilst a dominance of one over the other produces the 'block' pattern. The broad differences between high and low density areas are quite usually due to the presence or absence of a dominant industry or industries, totally divorced from the soil. This is especially true of Areas One and Two, the former area of sparse population was almost totally dependent on agriculture with the only industrial involvement tending to be within the dual economy. The latter was quite the opposite, with a heavy industrial involvement from an early date producing a highly densely populated area. Within Area Three the initial variations in population were again caused by differences in landownership. To an extent the gaps would have been widened through industrial involvement in the open villages, whilst the closed stayed purely agricultural. However, in comparison to Area Three in the West Midlands, industrial involvement in the open settlements was far more limited. The industry that did exist in the area (mainly yarn production and textile manufacturing) was no doubt concentrated in the open villages, but the overall population density of the area remained quite low throughout the 175 year study period.

CHAPTER SEVEN

CHAPTER SEVEN

CONCLUSION

By adopting a 'dual scale' approach, certain broad spatial correlations between settlement and population have been explored. A variety of causal factors underlying the distributions at both scales have been postulated and examined, and within the limiting context of an M.A. thesis, certain key controls have been highlighted. 'Explanation' is rarely easy or even possible when dealing with artifacts as complex as settlement patterns and their distributions, but this broad brush approach has undoubtedly raised questions which are worth examining.

At the national level, the existence of three main settlement provinces is acknowledged, with the Central Settlement Province dominated by nucleated settlement and the two 'outer' provinces by dispersion, or, in certain upland areas, by an almost total absence of settlement. Further sub-provinces are identifiable, including, for instance, a very definite grouping of villages in northern Cumbria, a case examined in detail at the regional level in Chapter Five. Relationships have been explored between the pattern of settlement in England and Wales and several other national distribution patterns, i.e. the physical landscape, farming types and deserted villages. The extent to which correlations appear varies greatly. The terrain of the country, a very complex distribution, shows only limited control over the settlement pattern. However, the division between the Northern and Western Province and the remaining two clearly reflects the highland/lowland contrast, itself a generalisation about many ecological and environmental qualities. However, we can expect that a distribution pattern that has developed over centuries, even millennia, will be controlled by more than one factor alone. A far stronger relationship between settlement and farming types was apparent. In the seventeenth century, the arable or champion landscape supported the vast majority of nucleations, whilst settlement dispersion was largely confined to pastoral areas. A further farming type, wood pasture, supported a mixture of the two settlement types, in varying combinations and mixtures. Lastly, the national distribution of deserted villages, as far as it is known, broadly echoes the 'Great Village Belt' of the Central Settlement Province and its outliers in the Northern and Western and South-Eastern Provinces. The sub-province of northern Cumbria is conspicuous in its lack of deserted villages, but this is quite possibly due to the absence of research in this area. It should be noted that if this is the case in Cumbria, it is highly likely that the distributions noted for many other counties are not true representations of the total number of deserted villages within their boundaries. In this context, the East Anglian distribution of deserted villages - confined to Norfolk - must

be mentioned. These conclusions are hardly exceptional and have been defined by J. Thirsk and others.

The population of 1851 at a national level shows some very interesting but highly complex distribution patterns. Correlations between these patterns and the distribution of settlement are, however, limited. The only links between the two are confined to the obviously low levels of population that cover areas of highland where little settlement of any kind occurs. Chapter Two introduced the complex question of population dynamics, i.e. the idea that the structure of a dominant pattern, for instance, the broad scale presence of highs and lows, may be sustained over several or indeed many centuries, even though the actual levels of population increase. The implications of this idea become important when evaluating what two or more sources, from different periods and perhaps of differing reliability, can reveal about the geography of population. It was not feasible to explore the concept at a national scale, for Dewdney's fine maps stand alone. However, at the regional or local level such questions become of paramount importance. Therefore, three study regions, all of which covered at least two whole counties or ridings, were chosen to allow a more detailed investigation.

For all three of the regional analyses, an initial examination of maps detailing the distribution of population by parish in 1851, 1801 and 1676 produced some highly interesting patterns and raised some interesting questions. Moreover, these patterns were, again and again, found to be sustained throughout the whole study period. It proved necessary to try to identify the types of pattern present, e.g. 'block' or 'patchwork', high density or low density. During analysis, the following questions emerged as fundamental to an understanding of the distribution of population and its relationship to the pattern of settlement:

1) What are the reasons underlying the population distributions seen on the regional quartile maps and the areas of high, low and negative growth between 1676 and 1851?

2) Why are these patterns of distribution apparently so constant from one period to the next?

3) Why is there often a change in the population distribution pattern with a change in settlement pattern? This is seen particularly where the patterns of population distribution change at the boundaries of the major settlement provinces. What is the relationship of these two distributions, settlement and population, at the scale of the study region?

Investigations inspired by these questions went further to reiterate the correlations of the presence of nucleated and dispersed settlement and the three settlement provinces with the terrain and the types of farming practised there. More importantly, strong links were established between these distributions and the distribution of population. The most significant discovery is that with a change in the settlement

pattern at the boundary of the Central and Northern and Western Settlement Provinces, there is also a change in the distribution pattern of population density.

It was found from the three regional studies that three main areas of population distribution could be identified. Within the Central Settlement Province, the 'patchwork' pattern of distribution was found to dominate, where there was a great mix of high and low density parishes. Outside the province, the 'block' pattern was found to be dominant. It is argued that these differences in the distribution pattern are due to shifts in the balance between open and closed settlements that occur across the Central Settlement Province borders. A relatively equal balance of open and closed within the Central Province produced the 'patchwork' pattern, whereas the dominance of the open settlement elsewhere gave rise to the more 'blocky' distribution. This latter category could be split further into two. In one area the 'block' was predominantly high density, mainly due to the prevalence of industry and a second, predominantly agricultural 'block' area provided a balance to this, consisting of sparsely populated parishes. Hence, the range of parish population densities in these 'block' areas was quite limited, whilst in the 'patchwork' areas the range could be extremely large. For example, to create a model, three spatial patterns can be identified:

Area One = 'block' = small range of predominantly low density values.

Area Two = 'block' = small range of predominantly high density values.

Area Three = 'patchwork' = large range between high and low density values.

This explanation of contrasts within the population distribution patterns basically answers the final question that arose through the three regional analyses.

These differences between the population density ranges are highlighted by graphs plotted for all three study regions in 1676 and 1851. Twelve parishes were selected from each different density area (i.e. Areas One, Two and Three), three for the West Midlands and Yorkshire and two for Cumberland and Westmorland. Scatter graphs were produced from their population density values at the two census dates. An attempt was made in all cases to select a group of parishes from the core of the area in question. These cores were identified by eye, using the quartile maps produced for both 1676 and 1851, i.e. Figures 4.1 and 4.5 (West Midlands), Figures 5.1 and 5.5 (Cumberland and Westmorland) and Figures 6.1 and 6.3 (Yorkshire). For example, the core of Area One in the West Midlands was taken to be the large area of contiguous low density parishes in the county of Shropshire (Figures 4.1 & 4.5). Continuity between periods was also kept in mind when choosing the twelve parishes from each quartile map. However, in certain cases, e.g. Cumberland and Westmorland in 1676, the partial coverage of data or a shift in the focus of an area's

core meant that parishes were chosen from various locations within these areas.

Area One:- This is a 'block' area of low density, where the range of low density values is expected to be small. This is proven to be true through a glance at the y-axis values alone on Figures 7.1, 7.2 and 7.3. For 1851 this scale reaches only 100 persons per square mile and for 1676 values reach no higher than 60 persons per square mile in all three study regions. The density levels in Cumberland and Westmorland are seen to be particularly low for both periods.

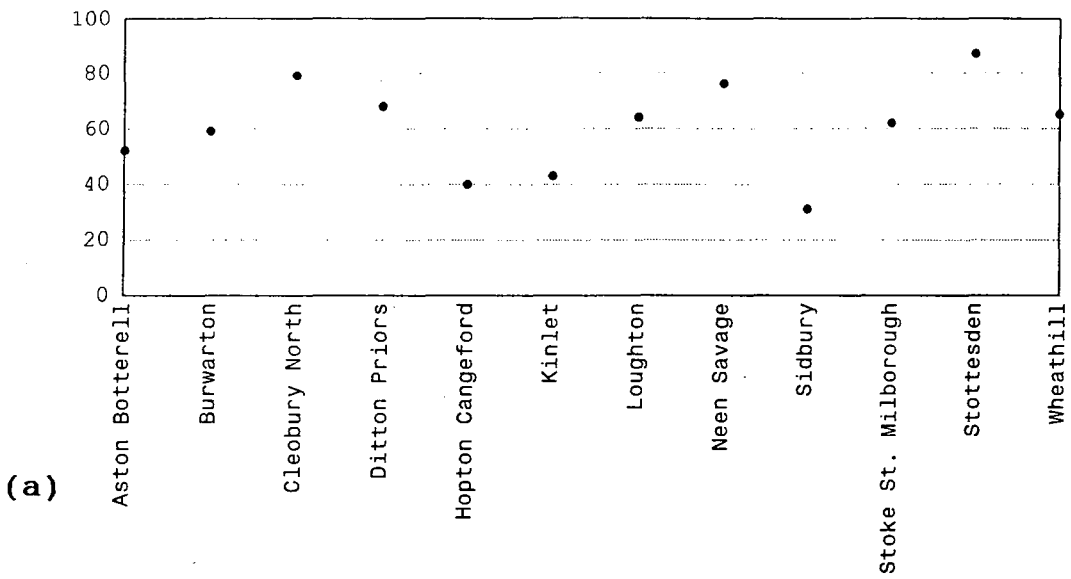
Area Two:- In this second 'block' area, the density range should again be small, but the actual values should be far higher than those seen in Area One. Graphs plotted for all three study regions again show this to be the case (Figures 7.4, 7.5 & 7.6). The patterns produced by the scatter graphs show very low ranges in density at both census dates, although most areas do contain one 'rogue' value, usually for a particularly large city which is much greater than any of the other values, e.g. Birmingham in the West Midlands, Carlisle in Cumberland and Westmorland and Leeds in Yorkshire. For 1851 the numbers of people per square mile reaches into the thousands for all three study regions, whilst in 1676 the values are in the hundreds. At first it would seem that the density values for Cumberland and Westmorland (and even to an extent the West Midlands) in 1676 are rather low for an area of supposed 'high' population. However, when these values are compared to those of each Area One plot in 1676, the values for Area Two are, relatively speaking, extremely high.

Area Three:- An Area Three only exists for the West Midlands and Yorkshire. From an analysis of the population distribution maps, the 'patchwork' pattern seems to have arisen out of a very mixed distribution of high and low density parishes. Again, this is proved by the scatter graphs plotted for the West Midlands and Yorkshire (Figures 7.7 & 7.8). For both study regions, parishes of extremely high or extremely low density are almost non-existent (within these samples) and the general density values seem to lie somewhere between those of Area One and Area Two. However, the actual range of these values is quite large, shown by the erratic patterns produced on the scatter graphs. For 1851, the sample parishes support between 15 and 220 persons per square mile and for 1676 the range is very similar. This is in comparison to the relatively linear distributions seen on Figures 7.1-7.6.

Hence, the graphs of sample data plotted for all three 'types' of population distribution area serve to reinforce and further clarify the findings of this investigation. The dominance of these 'types' of population distribution patterns from one period to the next (question two), is probably the result of differences in landownership and management policies that established these differential patterns from an early date, coupled with a strong growth in industry in Area Two of the three study regions, due to local opportunities. In all three of these areas, industrial growth was taking place on a large scale well before the acknowledged date of the

West Midlands 1851

Area One



West Midlands 1676

Area One

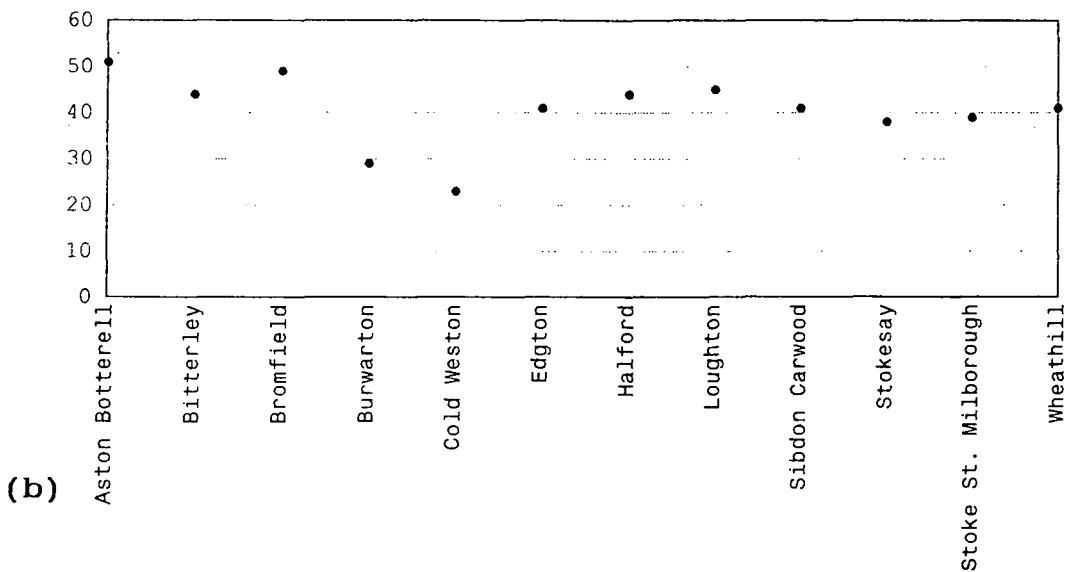
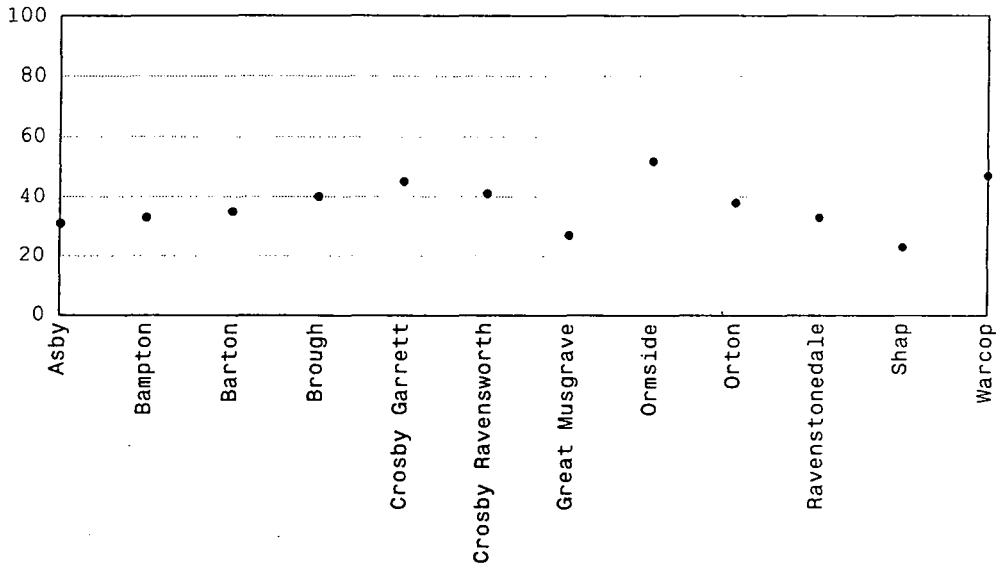


Figure 7.1 West Midlands, Area One: Scatter graphs of the population density of 12 selected parishes in (a) 1851 and (b) 1676. y-axes denote persons per square mile.

Cumberland and Westmorland 1851

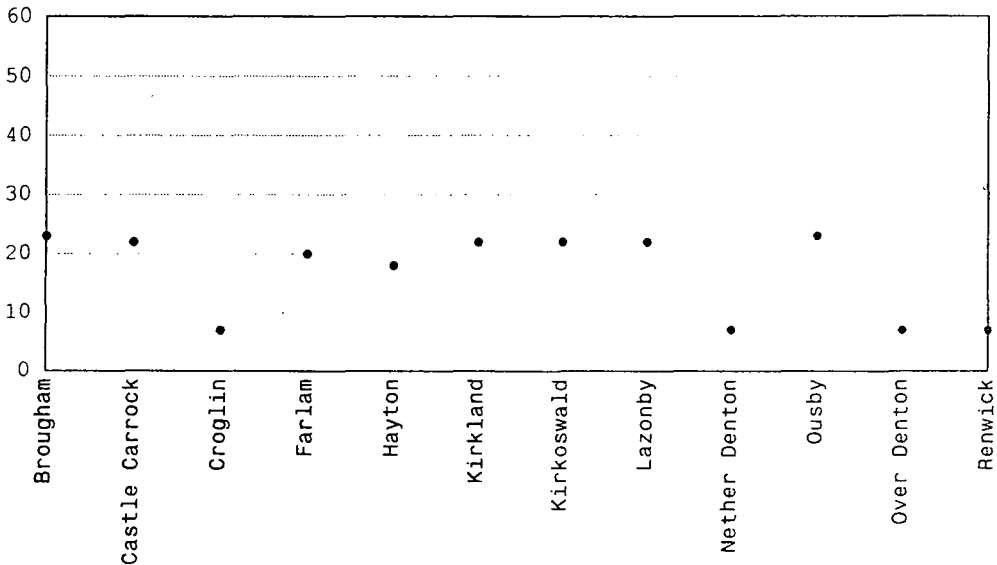
Area One



(a)

Cumberland and Westmorland 1676

Area One

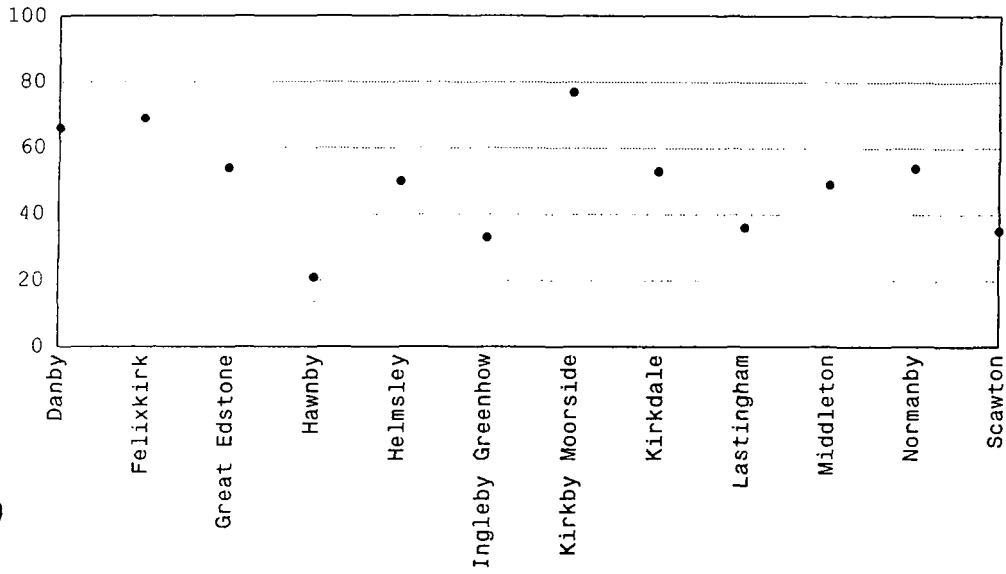


(b)

Figure 7.2 Cumberland and Westmorland, Area One: Scatter graphs of the population density of 12 selected parishes in (a) 1851 and (b) 1676. y-axes denote persons per square mile.

Yorkshire 1851

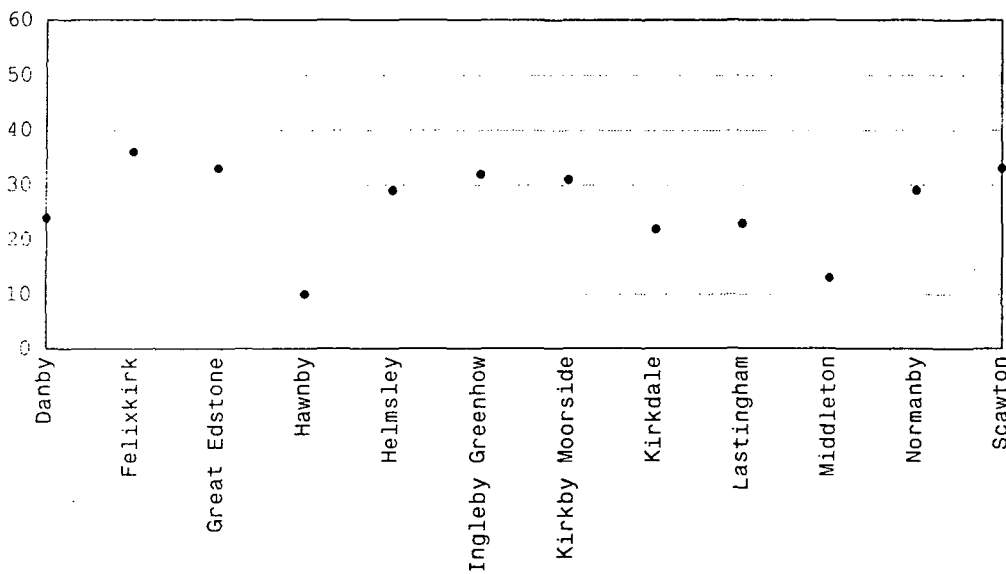
Area One



(a)

Yorkshire 1676

Area One

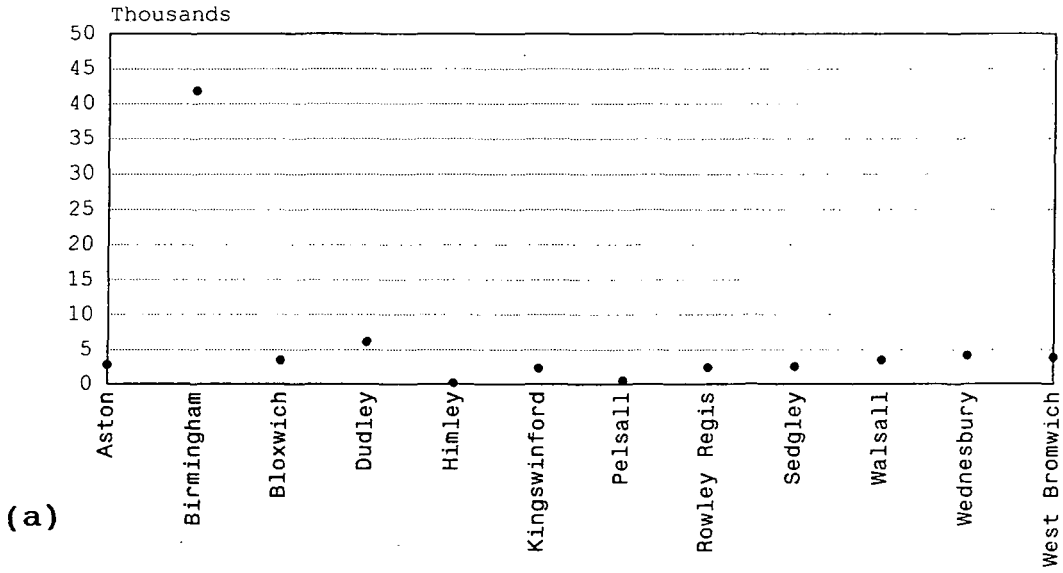


(b)

Figure 7.3 Yorkshire, Area One: Scatter graphs of the population density of 12 selected parishes in (a) 1851 and (b) 1676. y-axes denote persons per square mile.

West Midlands 1851

Area Two



West Midlands 1676

Area Two

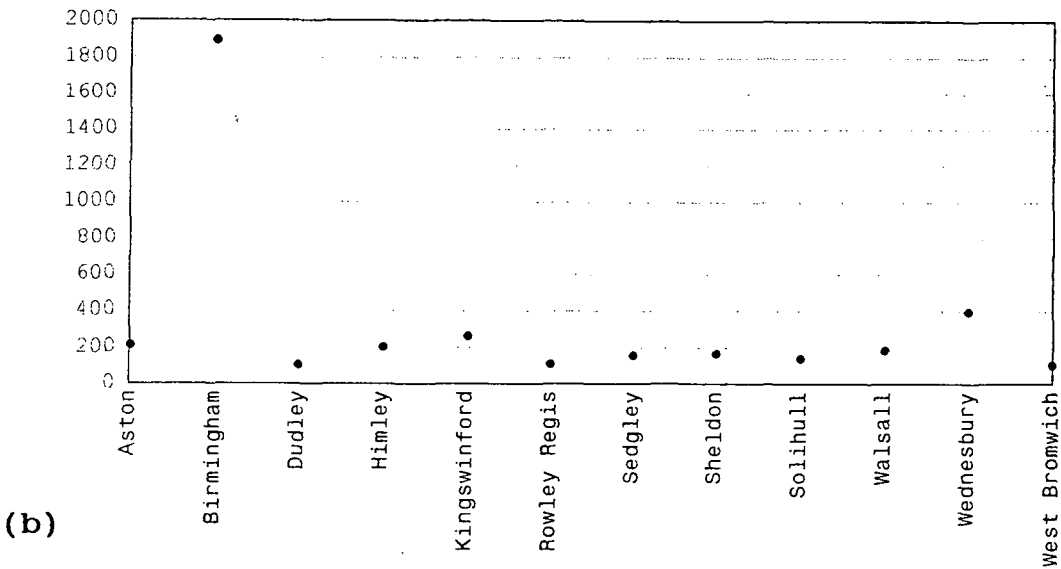
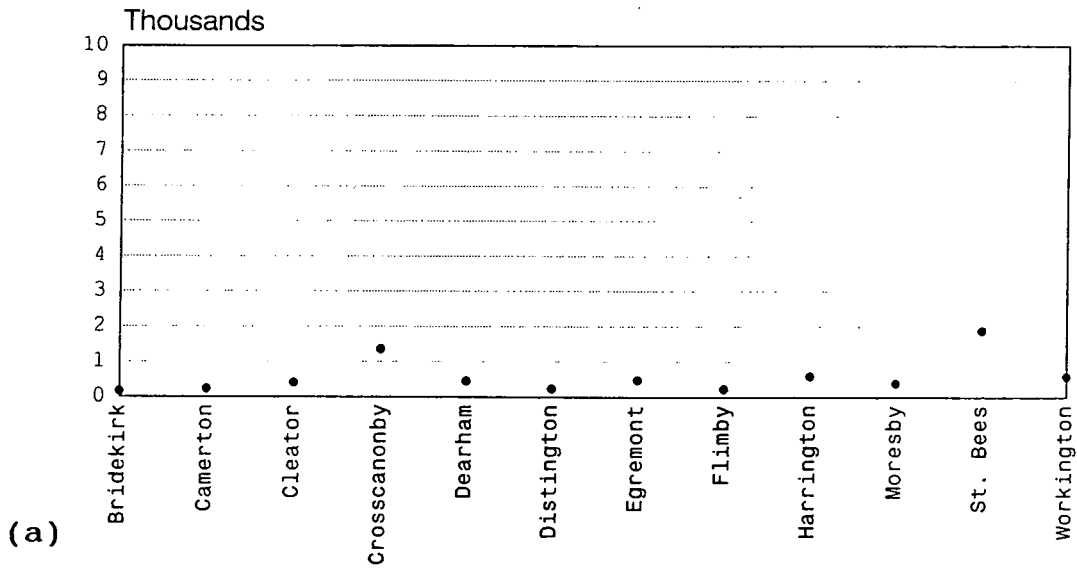


Figure 7.4 West Midlands, Area Two: Scatter graphs of the population density of 12 selected parishes in (a) 1851 and (b) 1676. y-axes denote persons per square mile.

Cumberland and Westmorland 1851

Area Two



Cumberland and Westmorland 1676

Area Two

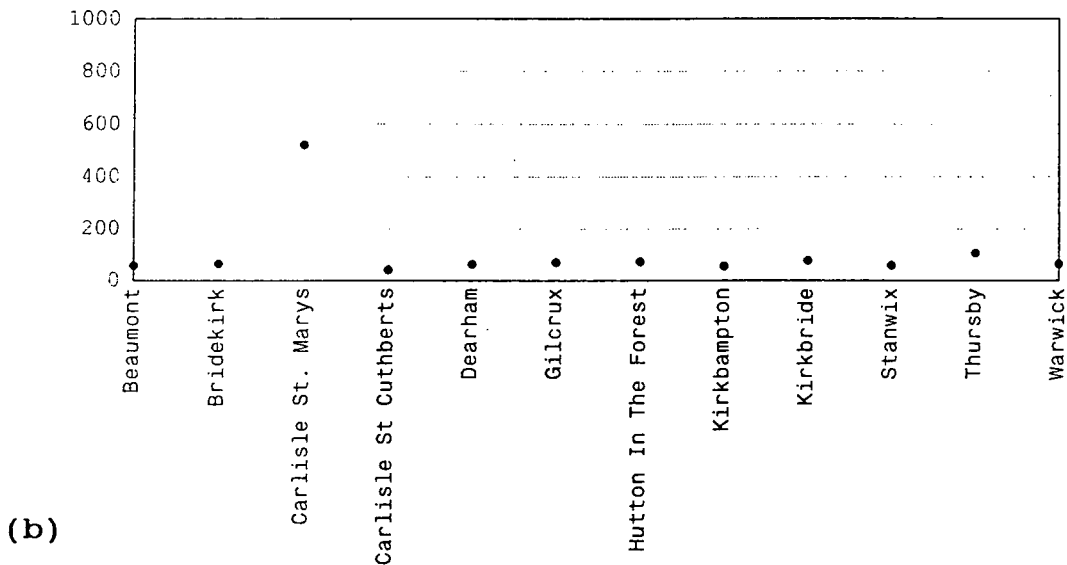
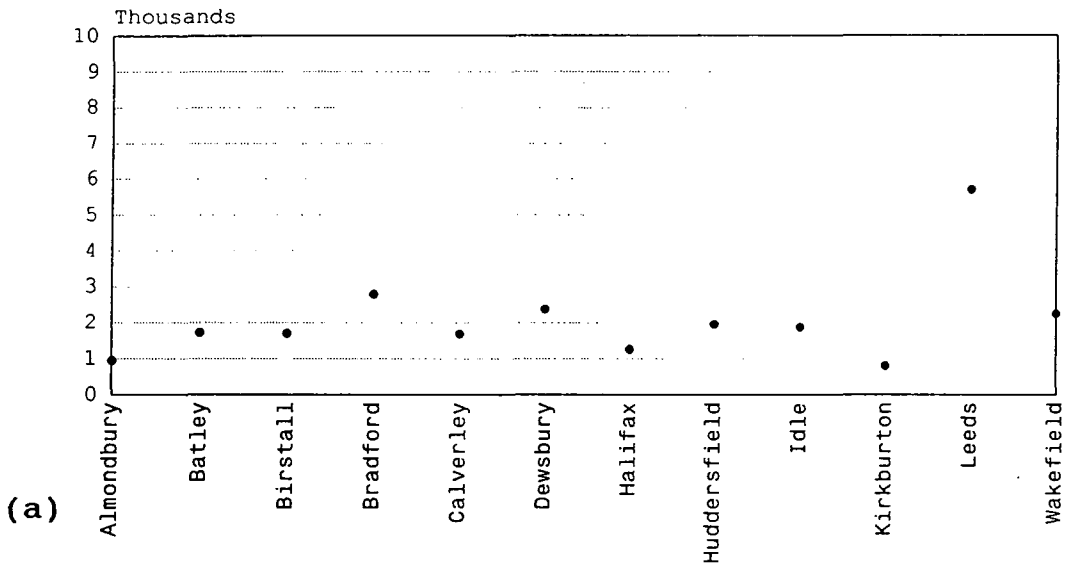


Figure 7.5 Cumberland and Westmorland, Area Two: Scatter graphs of the population density of 12 selected parishes in (a) 1851 and (b) 1676. y-axes denote persons per square mile.

Yorkshire 1851

Area Two



Yorkshire 1676

Area Two

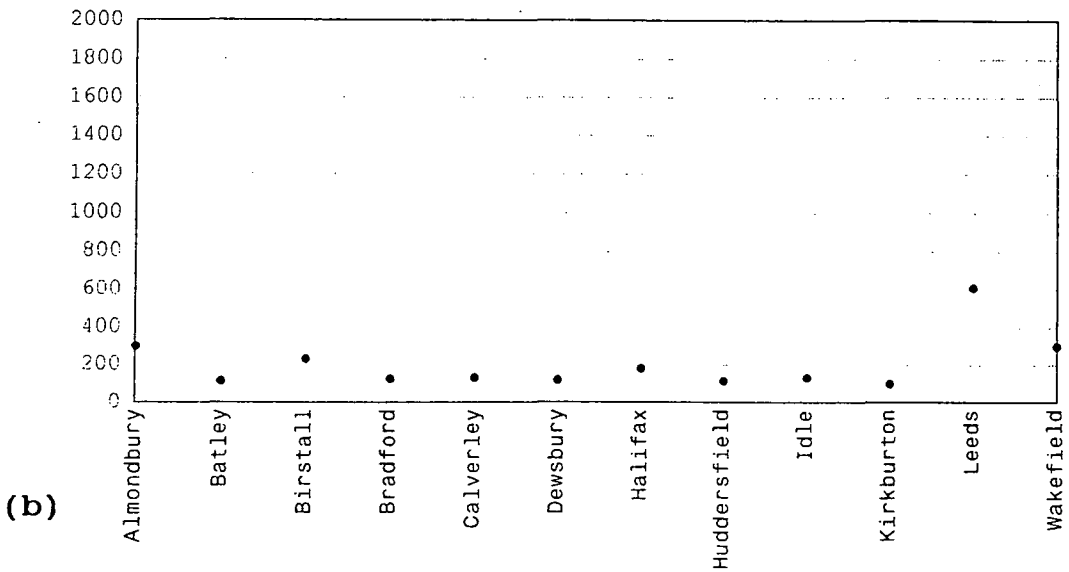
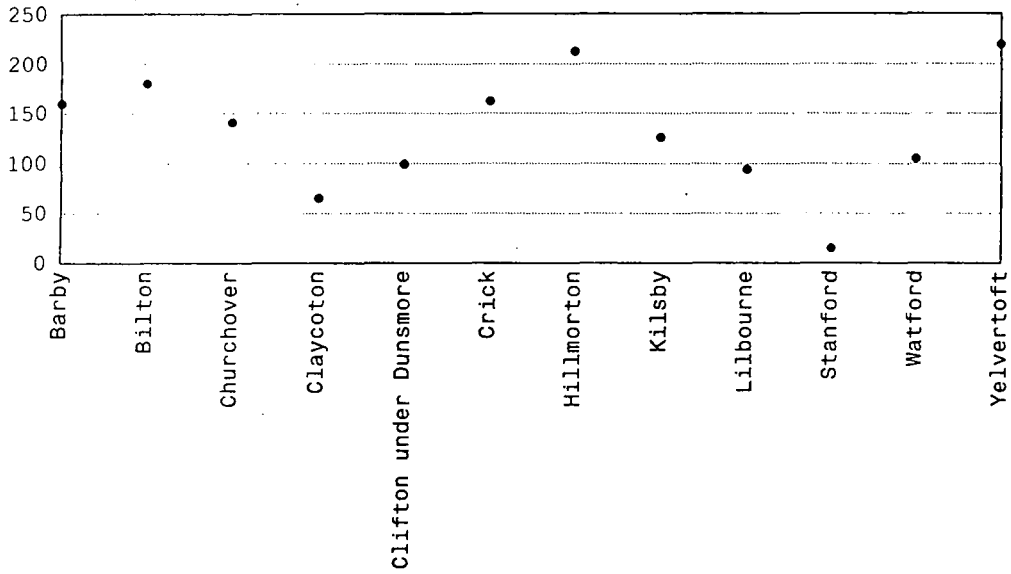


Figure 7.6 Yorkshire, Area Two: Scatter graphs of the population density of 12 selected parishes in (a) 1851 and (b) 1676. y-axes denote persons per square mile.

West Midlands 1851

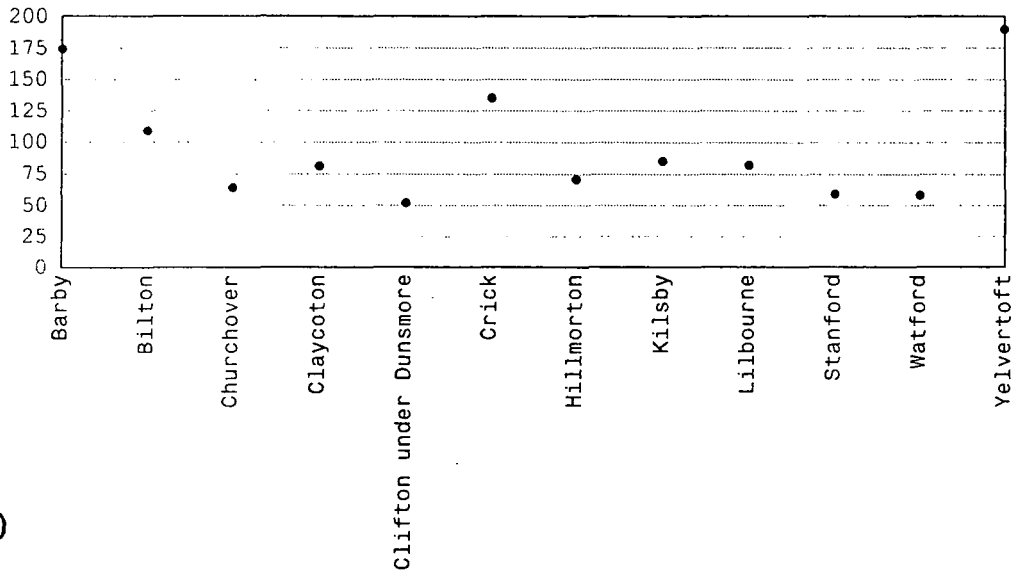
Area Three



(a)

West Midlands 1676

Area Three

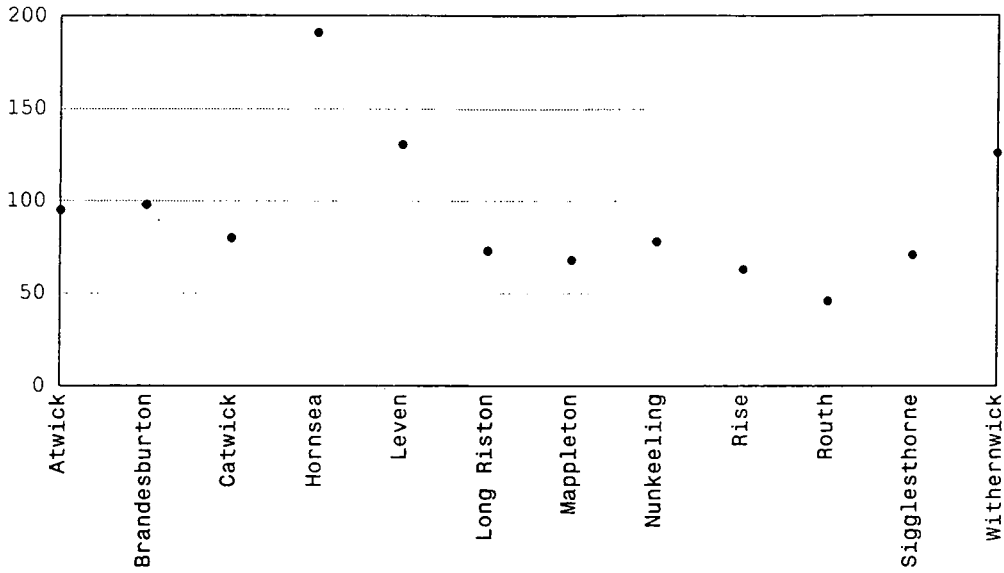


(b)

Figure 7.7 West Midlands, Area Three: Scatter graphs of the population density of 12 selected parishes in (a) 1851 and (b) 1676. y-axes denote persons per square mile.

Yorkshire 1851

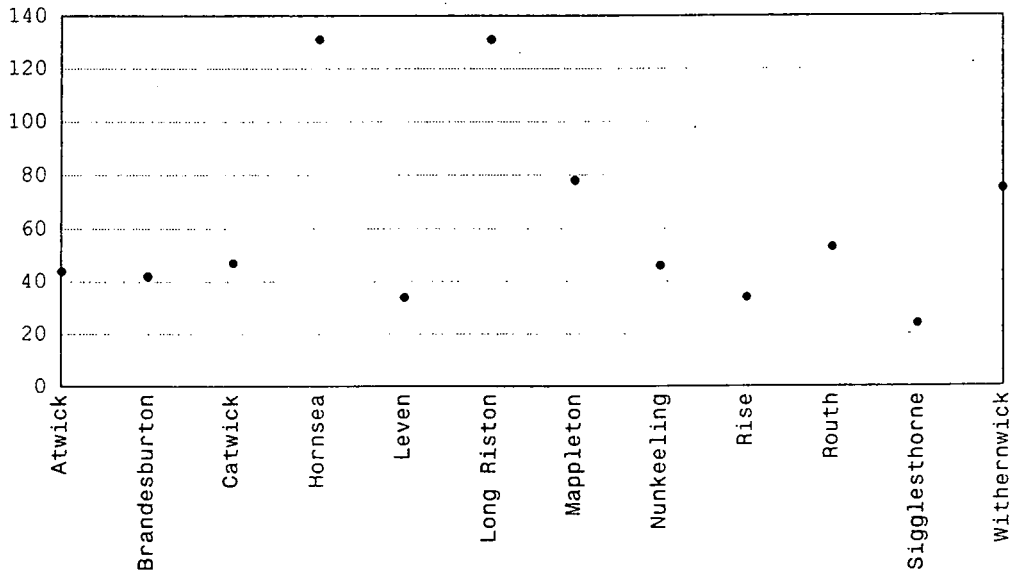
Area Three



(a)

Yorkshire 1676

Area Three



(b)

Figure 7.8 Yorkshire, Area Three: Scatter graphs of the population density of 12 selected parishes in (a) 1851 and (b) 1676. y-axes denote persons per square mile.

'Industrial Revolution'. This really does suggest that the 'revolution' was purely in technological terms and that the far reaching effects of industry on the population, its growth and movement, were already intrinsic, or at least latent by this date. The 'Industrial Revolution' merely took the levels one step further.

Lastly, highly influential causal factors behind the distribution of the population, at all three census dates, were found to be landownership, industrial growth and patterns of migration. Further, correlations between all of these causal factors were established and other 'by-products', such as village morphology and religious conformity and dissent, were noted. These three highly important causal factors go a long way to answering the first question raised through the regional level studies.

The broad correlations discussed in this final chapter are summarised in Table 7.1, which is split into the three main population density areas observed in all three study regions.¹ This table goes some way to providing a model of the relationships between settlement, population and the causal factors underlying the broad inter-relationships between settlement and population. It provides a strong basis for future studies of British population and settlement.

	BLOCK: LOW DENSITY	BLOCK: HIGH DENSITY	PATCHWORK
POPULATION DENSITY	GENERALLY LOW	GENERALLY HIGH	HIGHLY MIXED
POPULATION DENSITY RANGE	SMALL: LOW VALUES	SMALL: HIGH VALUES	LARGE
SETTLEMENT TYPE	DISPERSED	DISPERSED WITH SOME NUCLEATIONS	NUCLEATED
RELATIONSHIP TO CENTRAL SETTLEMENT PROVINCE	OUTSIDE BOUNDS OF PROVINCE	OUTSIDE BOUNDS OF PROVINCE	WITHIN BOUNDS OF PROVINCE
LANDOWNERSHIP OF SETTLEMENTS	PREDOMINANTLY OPEN	PREDOMINANTLY OPEN	EQUAL MIX OF OPEN AND CLOSED
DOMINANT EMPLOYER	AGRICULTURE	INDUSTRY	INDUSTRY/ AGRICULTURE
FARMING TYPE	OPEN PASTURE	OPEN/WOODLAND PASTURE	ARABLE
DOMINANT MIGRATION FLOW	OUT	IN	CLOSED TO OPEN

Table 7.1 Characteristics of the three major population areas identified at the regional level.

¹The study region of Cumberland and Westmorland contained only two areas, as no part of the region was within the Central Settlement Province, where an 'Area Three' could be expected to be found.

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