

A Secularising Geography?

Patterns and Processes of Religious Change in England and Wales, 1676 - 1851

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by

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Abstract

The aim of this thesis is to address the most important questions raised by the 1851 Census of Religious Worship, which was the only comprehensive census of religion in the history of the modern United Kingdom. The relationship between religion and society is clearly of general interest in all contexts, but perhaps attains a special importance in England and Wales between 1676 and 1851, a cradle of 'modernity'.

Secularisation theory proposes that the social significance of religion necessarily declines under conditions of modernity, yet sociologists have seldom investigated such claims with empirical rigour. Furthermore, historians have only paid limited attention to secularisation theory, and geographers have been altogether silent on the issue. This thesis aims to address these deficiencies in two stages. First, certain core propositions of secularisation theory are investigated using detailed empirical data. Secondly, secularisation theory is used as a basis for comprehending religious change in England and Wales. In this way context is used to evaluate theory, and then theory is used to illuminate context.

To realise these aims, extensive use is made of a very large historical dataset and geographical information system (compiled at both registration-district and parish level). The Religious Census data of 1851 - when combined with earlier religious sources, decennial census data, and other sources - provide a uniquely comprehensive and geographically sensitive basis with which to examine the connections between religion, society, culture and economy.

The result of considerable analysis is to argue that certain of the core propositions of secularisation theory were indeed manifest in England and Wales. The analysis highlights the fundamental importance of *religious pluralism*: over and above the more usually considered *religious practice*. It is shown that to pay conceptual and methodological attention to religious pluralism is to help explain the geography of religious practice, and what is usually described as a paradox of Victorian religion - revival and decline.

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Chapter One

Introduction and Context

About this thesis.

This is an interdisciplinary piece of research utilising the approaches and knowledge base of history, geography, sociology and, to a much lesser extent, anthropology. Sociology and history form the main sources of intellectual capital. To simplify greatly, the work of historians is drawn upon to describe the context of the research problem, and the work of sociologists is drawn upon to help interpret and explain the issues thereby raised. I am by training a geographer, which no doubt influences my thinking throughout. While the 'geography of religion' remains a fragmented and understudied branch of the discipline, yielding little to draw upon for this research, I aim to show how the insights of human geography can benefit greatly the study of religion and society.

1.1 Religion in the Nineteenth Century: Themes and Paradoxes

The relationship between religion and society forms a huge subject, and by necessity one can only offer a partial introduction to the context of religion in nineteenth-century England and Wales. For a more detailed introduction, the interested reader is recommended to read the work of: A.D. Gilbert, H. McLeod, K.S. Inglis, R. Gill, K.D.M. Snell and P.S. Ell, J. Cox, and E.R. Norman.¹ Such works fill many of the gaps in this account, which leaves untouched (or confined to footnotes) many important issues, such as the relationship between religion and politics and religion and science, the life-cycles of religious organisations, and the

¹ The major works are: A.D. Gilbert, Religion and Society in Industrial England: Church, Chapel and Social Change 1740-1914 (London, 1976); A.D. Gilbert, The Making of Post-Christian Britain: A History of the Secularization of Society (London, 1980); H. McLeod, Class and Religion in the late Victorian City (London, 1974); H. McLeod, Religion and Society in England, 1850-1914 (Basingstoke, 1996); K.S. Inglis, Churches and the Working Classes in Victorian England (London, 1963); R. Gill, The Myth of the Empty Church (London, 1993); K.D.M. Snell and P.S. Ell, forthcoming, Victorian Religion and the Cultural Regions of England and Wales, (Cambridge, 1998/9); J. Cox, The English Churches in a Secular Society: Lambeth, 1870-1930 (Oxford, 1982); E.R. Norman, Church and Society in England 1770-1970 (Oxford, 1976).

individual denominational histories. Another avenue of study not pursued in this thesis is the morphology of religious movements. As a note, the term 'denomination' is used as a loose term covering all religious faiths, unless otherwise specified. This is to prevent an endless series of qualifications (i.e. sects, cults churches etc.) to describe each and every religious organisation mentioned.²

The unifying theme of this introduction is that religion in nineteenth-century England and Wales was, above all else, distinctive in terms of the rapid growth, spread, and schism of competing religious groups. The scale and intensity of religious diversity (later termed 'religious pluralism') gave religion a distinctive character in the nineteenth century; a character distinctive from that which had gone before, and distinctive in comparison with contemporaneous religious developments in much of continental Europe.

When discussing religion in this period, the most important point to introduce is the *importance* of organised religion to both individuals and society. In sociological terms, religious institutions possessed considerable power in many of the core processes of socialisation and societal maintenance; the most clear examples being the direct involvement of the Church of England and dissent in education, social work and philanthropy, and the involvement of the established church in poor relief, the legal system, and parliament.³ Religion played a key part in the ideology and party divisions of contemporary politics. Indeed, many historians argue that religious affiliation was a more important determinant of political affiliation than 'social class' for much of the nineteenth century.⁴ In addition

² While a wealth of literature exists on the differences between, *inter alia*: the 'universal church', 'churches', 'denominations', 'sects' and 'cults', such terms are not generally used in this thesis. The sociology of religion has yet to agree on a system of classification of religious movements, and to use such terms would require lengthy justification and qualification. For this reason the term 'denomination' is used very loosely to describe all the Christian movements listed in the returns of the 1851 Religious Census - including the Church of England and the Roman Catholic Church, which is not to imply that they all fitted a sociological definition of a denomination.

³ An excellent account of the Victorian religious influence on society is given in Cox, *The English Churches*, pp. 48-89.

⁴ See especially Gilbert, *Religion and Society*. Gilbert dates the decline of the influence of religion on politics to the late nineteenth century. Wald places the decline after the First World War, see K. Wald, *Crosses on the Ballot* (Princeton, 1983).

to these highly visible influences of religious institutions, there were many latent influences upon individual and social life.

Although the nineteenth century was a period of unparalleled religious vitality, it was also a period of intense religious change. It marked a great transition in the range of the religious activities and influences of the established church. Act after Act reduced the scope of the Church of England, whether this was the removal of religious oaths for public officers (1866), abolition of compulsory church rates (1868), or the abolition of religious tests for universities (1871). One should not, however, suggest a simple, linear decline in the influence of 'the church'. The second half of the nineteenth century was a time of apparent paradox. On the one hand lay the actual and perceived reduction in levels of worship at the Church of England. It was commonplace for Victorian commentators to mourn the rise of what they termed 'irreligion', 'secularism' or religious 'apathy'.⁵ Religion as a political force - whether in terms of defining party divisions, as a motivator of policy, or a vehicle for rhetoric - declined also.⁶ On the other hand, the mid-nineteenth century was a time of remarkable religious innovation, revival and fervour. This was most clearly typified by the continuing rapid rise of Wesleyan Methodism and its offshoots, and also the resurgence of the older nonconformist denominations - most notably the Independents and Baptists. In addition, Irish immigration was greatly expanding the Catholic population. In the mid and late nineteenth century, church and chapel building achieved record levels amongst all the major denominations.⁷

Thus, one source of this apparent paradox - revival and expansion followed by, if not concurrent with, decline - was the growth of nonconformity and the rise of a religiously 'plural' society. In a superficial way, the growth of religious diversity can immediately resolve a part of the paradox; the majority of the parliamentary Acts which curtailed the powers and monopoly status of the Church of England

⁵ The most influential commentator in this regard was Horace Mann who was in charge of the Religious Census of 1851. The results of the census were published in their most succinct form in Mann, Sketches. A later survey of London has also been highly influential, see R. Mudie-Smith (ed.), The Religious Life of London (London, 1904).

⁶ See Wald, Crosses.

⁷ The rapid building and upgrading of churches and chapels is a major theme in Gill, Empty Church.

stemmed not from some secularist parliament, but rather reflected the growing political influence of nonconformity and its struggle for religious equality. Understood in this manner, it becomes clear that it was the rising influence and popularity of nonconformity which led the Church of England to surrender many of its monopoly privileges, and not the pressure of mass 'irreligion' or a strongly secularist State.

More profound aspects of the paradox remain, however. The essential puzzle is why should one of the most intensive periods of religious revival and innovation in the history of England and Wales have been followed by a period of decline? In addressing this paradox, the timing of the only comprehensive Census of Religious Worship in England and Wales proves extremely fortuitous. The mid-nineteenth century was a time when both growth and decline were evident in England and Wales. At this time nonconformity was reaching its peak of popularity, and support for the Church of England was at its lowest point in comparison. This was reflected by the fact that about half the attendances on Sunday 30th March (Census Sunday) were non-Anglican. Few historians would disagree with J. Cox's summary that:

'Sometime after 1850 this great religious crusade faltered. ... Whether this institutional decline began as early as 1850 or as late as World War I is a matter of dispute. Some Nonconformist denominations ceased to grow in real terms around 1850, others in the 1880s. Nonconformity continued to grow in absolute terms until 1906 and 1907 when, with stunning unanimity, each denomination began to shrink. Church attendance may have been holding its own in real terms between 1850 and 1880, but was almost certainly in decline by the 1880s.'⁸

Whatever the precise timing (which was in any case regionally specific), it can be safely assumed that any widespread decline in the rates of attendance was some decades away in 1851.⁹ The Religious Census revealed that at least one

⁸ Cox, The English Churches, p. 7.

⁹ There is disagreement over the precise timing of the downturn in the rate of religious practice. The most detailed work is that of R. Currie, A.D. Gilbert and L. Horsley, Churches and Churchgoers: Patterns of Church Growth in the British Isles Since 1700 (Oxford, 1977). Using Oxfordshire Diocesan data, they argued that Church of England attendances fell from the 1740s until the late nineteenth century; mainly as a result of the increase in nonconformity - most especially Methodism. Using membership data, they showed that support for the major nonconformist denominations fell

half of the population attended religious worship on Census Sunday.¹⁰ Yet, despite this apparent religious vitality, many commentators were already talking about religious decline, especially in association with the larger cities (this point is addressed in section 1.4 of this thesis). Thus, the timing of the Religious Census makes the data an unparalleled opportunity to examine the heart of the paradox of religion in nineteenth-century England and Wales. Although individuals can suddenly gain or lose faith, or convert to another faith, widespread cultural changes in church-going behaviour tend to be gradual and inter-generational. Understood in this way, it is clear that one needs to look back to what was happening in 1851, and earlier, to explain the onset of decline in the 1880s and 1890s. It was the infants of 1851 who grew into adults who were less likely to attend religious worship than their parents had been. J.N. Morris rightly noted that 'the roots of these changes [decline of commitment and attendance] clearly lie further back in the century.'¹¹

Resolving the paradox.

As becomes clear in the remainder of this chapter, the concentration of 'quantitative' research has been upon the chronological variation of religious attendance and membership statistics. 'Qualitative' research has tended to focus upon 'popular religion' and 'diffusive Christianity'. Both approaches have explained much, but I would argue that both have failed to answer some of the most pressing questions concerning the nature of religious change and religions as an indicator of regional culture.

I would argue that the 'quantitative' approaches have failed to provide an adequate explanation of the decline of attendance and membership, while the 'qualitative' analyses have failed to address a fundamental paradox in Victorian religion - revival and growth on the one hand and decline and apathy on the other.

from the late nineteenth century onwards. Some of this support returned to the Church of England, but here too support fell markedly from the 1920s onwards.

¹⁰ H. Mann estimated that 58% of the population (able to attend) attended worship (or Sunday school) on Census Sunday. See Mann, Sketches, pp.87-88. I reach a similar estimate of religious practice in section 3.1 (though my assumptions are very different from Mann's).

¹¹ J.N. Morris, Religion and Urban Change: Croydon 1840-1914 (Woodbridge, 1992), p.178.

In more detail, Those concentrating on the chronological variation of attendance and membership statistics have tended to argue that 'urban industrialisation' (above all else) can explain religious decline. Irrespective of the truth of such claims (which is examined subsequently), such accounts largely fail to address *why* the early and mid-nineteenth century was a period of unparalleled religious innovation and vitality in England and Wales. If one's chronology starts in 1851, it is relatively easy to portray the history of modern Britain as one of religious decline. If one's chronology commences in 1751, rather than appearing as the point when decline started, the mid-nineteenth century becomes a period of remarkable growth in religious fervour, innovation and adherence.

Those who have concentrated on popular religion and diffusive Christianity, have worked with a broader view of 'religion' than that encompassed by attendance or membership statistics. Using such a broad definition of religion, any paradox of decline and revival becomes less pertinent - religious growth or decline become rather uncertain and unquantifiable. In this way, such accounts typically shun any talk of 'general' or 'inevitable' decline. However, looking back from the close of the twentieth century, it seems hard to argue that the religious decline of the past one hundred years has been either temporary or local. The trend of religious decline certainly appears inevitable even if the causes were not.

In this thesis, I hope to show that the geography of religious affiliation, understood in terms of a sociological conceptualisation of religious pluralism, need not leave unanswered this paradox of Victorian religion. In short, it is proposed that an understanding of the geography of religious pluralism can help explain both the vitality and decline of nineteenth-century religion. This is the central aim of this thesis.

The rise of 'religious pluralism': an historical outline.

Before invoking the term 'religious pluralism' in its sociological sense, it is first important to understand the historical context in which such 'pluralism' had arisen. It has already been proposed that the most marked feature of religion in the

nineteenth century was the growth and spread of nonconformity, and thereby the rise of great religious diversity. B.I. Coleman has summarised the situation thus:

'English Society has always displayed a considerable degree of regional and local differentiation, but that feature became more pronounced between the Tudor and the Victorian periods and notably so with respect to religious life. Perhaps no other society with an official church establishment has shown such a degree of religious pluralism as Victorian England.'¹²

The level of religious pluralism in Victorian England and Wales was indeed unparalleled in any other European country. Even the Scandinavian countries, with which Britain has most frequently been compared, displayed nothing like the variety or vitality of the British religious situation.¹³ In the nineteenth century, Britain was not just a world power economically, but also a major exporter of religious movements. While the origins of Catholicism and Protestantism had lain in continental Europe, much of the religious innovation of the seventeenth, eighteenth and nineteenth centuries arose within the United Kingdom. The British Empire was to ensure that such innovations would be given a global influence.

To describe the origins of nonconformity, or 'dissent' as it was originally labelled (reflecting its illegal origins), requires a longer view of history. The Protestant Reformation is widely recognised as being a key event in terms of the subsequent growth of nonconformity in England and Wales. Prior to the English Reformation of 1534, only limited criticism of the Roman church had existed (more especially after the Great Papal schism of 1378, and most notably in the writings of John Wycliffe). The power of the Church and the Crown ensured that such criticism was never allowed to directly challenge the Church in terms of demands

¹² B.I. Coleman, The Church of England in the Mid-Nineteenth Century: a Social Geography (London, 1980), p.3.

¹³ Britain and Scandinavia were compared in D.A. Martin, A General Theory of Secularization (Oxford, 1978), see especially pp.27-36. It would be mistaken to stretch too far Martin's contention that denominational dissent was a 'minor motif' of nineteenth-century England and Wales. The contrast between the strength and diversity of dissent in the United Kingdom and the lesser religious pluralism and vitality of Norway is evident in F. Hale, Norwegian Religious Pluralism (New York, 1992). In a more recent context, comparisons and distinctions have been drawn between the United Kingdom and Norway in P.K. Botvar, 'Belonging without believing? The Norwegian religious profile compared with the British one', in P. Repstad (ed.), Religion and Modernity: Modes of Co-Existence (Oslo, 1996), pp. 119-134.

for legal toleration of any other religious organisations. This situation, of an overarching, relatively unchallenged religious monopoly, was to be weakened fundamentally by the Reformation.

The Reformation marked the end of the almost unchallenged hegemony of a single church (the Roman Church) in England and Wales. After the Reformation, an alternative 'official' religion had to be put in its place. This was to be no simple task, and the century following the Reformation was unprecedented in the level of theological argument concerning the future nature of the new Anglican Church (the Church of England). The exact content of these many debates are not detailed here, suffice to say that a principal axis of dispute was the degree of Protestantism or Catholicism that the new church should represent. These debates involved the evolving 'high' and 'low' church elements of the Church of England and the more extreme Protestantism of the various types of Puritanism which lay outside the established church.¹⁴ Such hotly contested issues were not substantially settled until the mid-seventeenth century. As a result of these decades of uncertainty, pre-existing religious groups, especially the Lollards, gained in influence. Other groups, chiefly the Presbyterians, Unitarians, Congregationalists and Baptists gained a foothold from continental Europe. Such groups usually refused to attend Anglican mass and were thereby labelled 'dissenters' (though some, especially the Unitarians, were also likely to be partial conformists). In addition, some wealthy families retained their Catholicism, and were thereby branded as 'Popish recusants'.

'Dissent', as a term for subversive religious viewpoints, emerged as the liturgy and beliefs of the Church of England ceased to be contestable and were fixed by law. Those who refused to show loyalty to the Church of England were prosecuted and persecuted. The Act of Uniformity (1662) demanded that every

¹⁴ For an introduction to these debates, see J.A. Sharpe, Early Modern England: a Social History 1550-1760 (London, 1987). Greater detail is provided in C. Haigh, English Reformations: Religion, Politics, and Society under the Tudors (1993, Oxford). The earliest comprehensive history of the English dissenting tradition is H.W. Clark, History of English Nonconformity, 2 vols (London, 1911-3), is. The most complete and comprehensive history of the dissenting tradition is M.R. Watts, The Dissenters (i): From the Reformation to the French Revolution (Oxford, 1978), and M.R. Watts, The Dissenters (ii): the Expansion of Evangelical Nonconformity (Oxford, 1995).

minister should declare his unfeigned assent and consent to all and everything contained and prescribed in the newly issued Book of Common Prayer. The effect of this oath was to force out the remaining clergy who were sympathetic to the Congregationalists, Baptists and, most especially, the Presbyterians. This body of what had previously been 'internal' dissent was thereby added to those who had always dissented outside the church - the Quakers and many Baptists, Congregationalists and Independents.

For much of the late seventeenth century, other than a brief lull following Charles II's Declaration of Indulgence (1672), dissent and Catholicism were clamped down on most severely. The major Acts of prosecution were the Five Miles Act (1664) and Conventicles Acts (1664 and 1670). Persecution was moderated slightly with the Act of Toleration (1689). Ironically, the early forms of dissent, known as 'old' dissent, which had grown in the face of the most intense persecution, were to decline as legal toleration grew in the early eighteenth century.

The legacy of old dissent was to facilitate the spread of new religious movements outside of the Church of England. Most notable was the rise of Methodism in the late eighteenth and nineteenth centuries. By the early nineteenth century legal toleration of 'dissent' was more complete, with the repealing of the Five Miles and Conventicles Acts (1812), and the passing of the Catholic Emancipation Act (1829). The rise of Methodism, initially a movement within the Church of England, was to herald an era of unparalleled religious diversity, both from the offshoots of Methodism and from the revival of old dissent. By the time of the Religious Census of 1851, England and Wales were highly religiously diverse societies. The Census recorded 26 major denominations of British origin or emphasis, four 'foreign' churches (serving immigrant communities), six 'other Christian Churches' (most importantly the Roman Catholic Church). Even greater diversity is apparent when one considers that the 'isolated congregations' group reported in the census contained no less than 64 religious movements, many of

which were minor, but in aggregate attracted over 100,000 attendances on Census Sunday.¹⁵

Not only was the religious diversity immense in terms of sheer numbers, but it is also important to realise that this diversity was largely composed of 'home-grown' religious movements, which had originated in the various regions of the United Kingdom and had little to do with the ethnicity of immigrants (the Irish Catholics being the major exception here). In this sense, the religious diversity of Victorian Britain can be seen as a unique. It was not a diversity that resulted from the mixing of nations, but was largely fuelled by 'native' innovation and schism. Viewed in this way, Victorian England and Wales not only stood out from continental Europe, but also from North America.

Religious 'pluralism': from historical context to sociological concept.

The net result of the long history of Protestant dissent (and residual Catholicism) was that by 1851 England and Wales were religiously very diverse nations with a multitude of nationally, regionally and locally important denominations. Some of the dissenting denominations attracted more support than the Church of England in their various heartlands. It is important to realise the diversity inherent in the scale and organisation of these denominations. On the one extreme lay the Wesleyan Methodists in England and the Calvinistic Methodists in Wales; movements which became a major challenge to the established church and were managed by highly efficient administrations. These major denominations attempted to redefine the Christian message, and they lay firmly within the 'mainstream' Christian heritage (however one attempts to define this). At the other extreme lay the 'isolated congregations', the likes of the Millenarians, Swedenborgians, Muggletonians and the followers of Joanna Southcott. These smaller religious groups displayed many characteristics in common with twentieth-century cults, in many cases owing their origins to a charismatic leader claiming prophetic ability. For instance, Joanna Southcott, at the age of 52 years, prophesied that she was to be the mother of a second Christ (but her aspect of

¹⁵ See Mann, Sketches, pp. 106-111.

pregnancy was rather sadly due to a terminal illness).¹⁶ L. Muggleton and his cousin J. Reeve claimed to receive personal communication from Jesus Christ,¹⁷ E. Swedenborg claimed a unique ability to unlock the truth from scripture,¹⁸ and George Fox 'claimed that his message was a direct revelation from God'.¹⁹

From a late twentieth-century landscape of inter-denominational services, joint promotional literature and explicit ecumenicalism, one can easily overlook the extent to which the churches, denominations and other religious movements differed from each other, often in an explicitly oppositional manner. A first hand account of the diversity of religious beliefs in Victorian London was presented in the writings of the Rev. C.M. Davies.²⁰ Reading through his descriptions of the many different acts of worship he attended, one cannot fail to be struck by the range of theology, organisational structure and type of adherent which characterised the various religious movements.

The denominations of the nineteenth century were not just variations on a theme, though some such as the Bible Christians and Wesleyan Methodists displayed few differences. They were major agents of awareness and sense of identity in their adherents. If the differences between dissenting denominations at

¹⁶ It is interesting to note that confidence in her prophetic nature did not decline after her unexpected death; her supporters believed that 'for the accomplishment of her predictions, she would shortly re-appear, restored to life', Mann, Sketches, p.54. Davies noted, over twenty years after Mann, that 'it would appear that, when her followers' hopes were disappointed by her speedy death and irrefragable medical testimony ... the sect must have at once and for ever collapsed. But fanaticism has within it a more than feline tenacity of life. The sect lived on, and explained away the failure of its hopes ... by saying that a spiritual, not a material, birth was contemplated', Rev. C.M. Davies, Unorthodox London (London, 1876), p.159. Interestingly, an explosion in Regent's Park, which shattered her gravestone some sixty years after her death, was seen as a signal of her return, as reported in the entry for 'Southcott' in The Compact Edition of the Dictionary of National Biography, (Oxford, 1975), p.1,963. The situation has strong parallels with the American cult which formed the basis of cognitive dissonance theory, see L. Festinger, H.W. Riecken and S. Schachter, When Prophecy Fails: a Social and Psychological Study of a Modern Group That Predicted the Destruction of the World (New York, 1964). But see also R. Gill, Competing Convictions (London, 1989), especially chapter 3, in which he questions the influence of the sociologist 'infiltrators' of the cult. A detailed case-study of an *historical* cult would certainly be a most interesting application of the theory - and one free from sociological infiltrators!

¹⁷ See the entry under 'Muggleton' in The Compact Edition of the Dictionary of National Biography, (Oxford, 1975), p.1,440. Again, the cult proved extremely tenacious, the last known 'Muggletonian' died as recently as 1979.

¹⁸ See Clark, English Nonconformity, pp. 335-336.

¹⁹ Watts, Dissenters (i), p.188.

²⁰ Rev. C.M. Davies, Orthodox London (London, 1874); Unorthodox London; Heterodox London 2 vols (London, 1874); Mystic London (London, 1875).

times led to little mutual admiration, dissenting views of the established church sometimes bordered onto hatred, and views of Catholicism were often stronger still. The following quote is a satirical report of the Primitive Methodist viewpoint:

'The Rev. Mr Whittaker, of Doncaster, gave me some curious statistics on the subject of the growth of Popery in England. Five hundred of the Church of England clergy had "gone over" since 1845. The curate of a London parish had been recognised as having officiated in full Popish vestments in a Catholic Church at Rome; and there were 960 clergymen in Church of England pulpits who had received their orders from Rome! This is startling. The Pope and Cardinals, it appeared, had met, and confessed that the great hindrance to Popery in England was - Primitive Methodism.'²¹

By the mid-nineteenth century the dissenting denominations had achieved a very great social significance, not only in terms of the strength of their religious influence, but also as agents of socialisation (through education, recreation and worship). Furthermore, their influence was widespread - dissenting attendances were as numerous as Anglican attendances.

By any estimation, there was a great diversity of religious affiliation in England and Wales in 1851. The idea with which I want to conclude this introductory section is how this religious diversity fits into the sociological conceptualisation of *religious pluralism*. While it is this presence of more than one religious choice which allows one to speak of religious 'pluralism' in everyday language, to invoke the term in a sociological manner, certain other conditions have to be met. One of the most useful sociological definitions of pluralism has been provided by M. Yinger, who proposed that pluralism was:

'a situation in which a society is divided into subsocieties with distinct cultural traditions. Pluralism is thus one form of social differentiation. It can be distinguished from the universal variety based on differentiation of role by the fact that pluralistic differences are related to separate social structures and cultural systems; whereas role differences represent a

²¹ Davies, Unorthodox London, p.45.

division of function within a shared system and based on a common culture.²²

It becomes evident that Protestant and Catholic dissent can thereby be sociologically conceptualised as religious pluralism.²³ The organisational structures of these religious groups were founded on separate social structures (the various 'denominations'). Each religious movement tended to display a distinctive liturgical and theological identity and thereby expected or required distinctive thoughts and actions on the parts of its adherents. In this manner one can begin to speak of a plurality of religious cultures. The implications of such plurality extended far beyond the religious sphere. Each denomination tended to attract support from certain social groups, whether this grouping was based on occupation, class, or regional location. From the outset, religious pluralism was part and parcel of the other major axes of social and cultural pluralism.

Religious pluralism did not just reflect other axes of social differentiation, it could also perpetuate and intensify such divisions. One result of religious persecution was that religious convictions affected many aspects of an individual's social identity apart from worship and religious belief. Although legal and social toleration had increased by the mid-nineteenth century, religious affiliation still exerted a major influence upon many aspects of an individual's life. Denominational allegiance affected the formative socialisation of childhood and the life of the adult alike; through the choice of education, friends, and careers (certain professions, and universities, were barred to both Catholics and dissenters).²⁴ As Obelkevich concluded in his study of Lincolnshire, 'To be a Methodist was to have Methodist friends, employers, customers, relations, masters, and servants; it was to have a distinct place, to take a certain stance in the World. *At times rural society*

²² J.M. Yinger, 'Pluralism, religion and secularism', Journal for the Scientific Study of Religion, 6:1 (1967), 17-30, pp.17-18.

²³ This introductory treatment of religious pluralism is necessarily brief. The issues concerning the conceptualisation and quantification of religious pluralism form the subject of sections 3.2 and 3.3 of this thesis.

²⁴ For instance, Oxford opened its doors to nonconformist students to study for the Bachelors of Arts in 1854, and Cambridge (for the Master of Arts) in 1856. Not until 1871 were Oxford, Cambridge and Durham opened more fully to nonconformists, and even then nonconformists were not eligible for the positions of Fellowships or Headships until 1882. For a history of the gradual increase in religious toleration see Watts, The Dissenters (i).

was divided more sharply by religion than by social class'. [My italics].²⁵ Historians have long realised the influence of religious identity upon the cultural identity of the individual, locality, region and nation, but geographers have seldom considered such issues. Religious pluralism fits well the concerns of the 'new' cultural geography in which 'Culture, here, is regarded as an active force in social reproduction, capable of being deployed by minority groups in a strategy of resistance against dominant ideologies, thus "subcultures".²⁶ As becomes apparent, religious pluralism in the nineteenth century should be of as much interest to the geographer as the sociologist and historian.

Another issue relating to the sociological treatment of religious pluralism is the difference between *inter* and *intra*-religious pluralism. Sociologists have sometimes labelled diversity within Christianity itself as *intra*-religious pluralism, and that between religions *inter*-religious pluralism.²⁷ On this basis it becomes clear that one is primarily describing *intra*-religious pluralism in nineteenth-century England and Wales. It could also be argued that *inter*-religious pluralism existed. To argue this point, one would not necessarily have to invoke the presence of Judaism (chiefly in the large cities and along the south coast of England), or the appearance of 'exotic' eastern religions (chiefly in London).²⁸ If one takes a very narrow definition of Christianity (as did many Victorian commentators), then certain other religious movements present in 1851 lay outside of Christianity. For instance, the Latter Day Saints attracted over 34,000 attendances on Census Sunday, and the 'isolated congregations' over 100,000. At any point in history the line one draws between 'Christian' and 'non-Christian', or between any other faiths, is inevitably arbitrary. For instance, Islam is arguably as closely associated with the 'Judaeo-Christian tradition' than the Latter Day Saints, or certain of the more outspoken 'cults' of the nineteenth-century, such as the Southcottians or Swedenborgians.

²⁵ J. Obelkevich, Religion and Rural Society: South Lindsey 1825-1875 (Oxford, 1976), pp.218-219.

²⁶ D. Cosgrove, 'Culture', in R.J. Johnston, D. Gregory and D.M. Smith (eds), The Dictionary of Human Geography (Oxford, 1981, 1986 edn), p. 91.

²⁷ See G. Davie, Religion in Britain Since 1945 (Oxford, 1994), p. 63.

²⁸ There were around 6,000 Jewish attendances recorded in the 1851 Religious Census.

To pursue the issue of religious pluralism further requires a more detailed reference to the sociological literature (which is made in the following chapters). This introduction has been given to propose that of all the characteristics of Victorian religion, religious pluralism was the most important. Many would agree that the rise of religious pluralism was associated with the rise of religious vitality in the early nineteenth century. In this thesis it will be argued that religious pluralism also played a major part in the subsequent decline of religious attendances and beliefs.

1.2 Religion and Society: an Evolving Concern

The marked religious and social changes of nineteenth-century Europe did not pass unnoticed at the time. The great degree of attention focused on religion is evident both in the history of ideas of the Victorian period, especially the relationship between religion and science, and in the focus of nineteenth-century sociology itself.²⁹ It is not the aim of this thesis to address the 'history of ideas' in detail. The position taken accords with H. McLeod who, referring to the work of other leading social historians, A.D. Gilbert, J. Cox and C.G. Brown, noted a general (and rare!) agreement that while the 'history of ideas' may explain changes in belief, crises of faith, or even reinforcements of faith of the *intellectual elite*, it does little to further one's understanding of changes within the wider society.³⁰

This section focuses on the 'history of ideas' in the narrow sense of the evolving *theorisation* of religion and society from the nineteenth-century onwards. In the nineteenth century, interest in the relationship between religion and society became a pre-occupation of the newly emerging social sciences, playing on the minds of the most famous 'founding fathers' of the social sciences, most notably August Comte, Emile Durkheim, Karl Marx, Frederick Engels and Max Weber.

²⁹ On the relationship between science and religion see T. Cosslet, Science and Religion in the Nineteenth Century (Cambridge, 1984). For the Christian response to changing ideas, see O. Chadwick, The Victorian Church 2 vols (London, 1966-70).

³⁰ See McLeod, Religion and Society, p. 4.

A major tenet of nineteenth-century social theory was that religion in Europe was declining and would decline further - towards complete extinction. This terminal decline was seen as a result of, *inter alia*, industrialisation, urbanisation, and most importantly, the 'triumph of rationality'. The inevitability and centrality proposed for such links in nineteenth-century social theory led Brian Turner to state that, 'Nineteenth-century theories of industrialisation were also theories of secularisation'.³¹ Marx and Engels perceived religion as an unhelpful psychological 'crutch' which served to conceal the true laws of material existence. Comte and Durkheim were also strongly secularist. Weber perceived religion as, at best, a conservative social force which scientific rationality and knowledge would supersede. Thus there was a strong element of overt 'secularism' among the social theorists of the late nineteenth century. Typically, they both believed and desired that the functions served by religion should actively be replaced by 'science' and the 'state'; science providing an alternative and superior knowledge and belief system (which would promote people's understanding of their destiny rather than obscure it), and the state removing religious authority from the spheres of education, social work and the law.³²

Modernity and post-modernity.

For much of the twentieth century, the sociological prognosis of the fate of religion remained as negative, and indeed in much of Europe certain aspects of religion were declining faster than in the previous century. In sociological jargon, the 'modernity project' remained dominant (i.e. theories of modernity remained the core of sociological theory, and the decline of religion was viewed as a central process of 'modernisation'). However, a change in the *evaluation* of religion's decline did emerge. Whereas, as already outlined, the social theorists of the nineteenth century were often *secularists* (actively promoting the decline of religion), many of their mid twentieth-century counterparts espoused a value free

³¹ B.S. Turner, Religion and Social Theory (London, 1991), p.134.

³² Indeed, such secularist ideologies could themselves be presented as 'religions'. There was at least one Sunday school of the 'religion of humanity' active in London in the 1870s. This group translated the philosophy of August Comte into a religious belief system. See Davies, Unorthodox London, pp. 423-440.

position in their theorisation of its continued decline. Although outwardly neutral in stance, an almost complete reversal in the *evaluation* of religion's decline can be detected. There was a strong undercurrent of sadness at the perceived 'loss' of some of the features of a religious society, particularly in the writings of B.R. Wilson and P.L. Berger. In Wilson's writings (following the Weberian tradition of the 'iron cage' of capitalism), there is a reflection that along with religion, the conditions of cohesion, stability, community, and other 'pre-modern' societal characteristics, had all been profoundly shaken by modernity. In Berger's writings there is a more personal undercurrent of the tension between maintaining a (Lutheran) religious faith and conducting a sociology of religion.

A new word, 'secularisation', was emerging to describe work which theorised upon the decline of religion but did not thereby seek to promote this decline. The term gained common usage to contrast the position from the earlier 'secularism' that characterised earlier sociological writing. In England the term secularism was associated with Holyoake's nineteenth-century programme of an aggressive campaigning to free, *inter alia*, education, from the domain of religious authority. However, as K. Dobbelaere noted, the term secularisation itself dates back to at least 1648, and itself has a distinctly anti-religious tradition in its meaning, stemming from the French term *séculariser*.³³ The term secularisation and secularism are still confused by academic authors.³⁴ Much of the theoretical work relating to religion and modernity in the western world produced in the 1960s and 70s is now habitually grouped under the heading of the 'secularisation thesis'. The most notable theorists being B.R. Wilson, P.L. Berger, D.A. Martin, and T. Luckmann.³⁵ The term 'thesis' is rather unhelpful since the volume of work is far from a unitary thesis, and is at times highly divergent.

³³ K. Dobbelaere, 'Secularization: a multi-dimensional concept', Current Sociology, 29:2 (1981), 3-216, p. 9.

³⁴ An oft invoked example being D.A. Martin, 'Towards eliminating the concept of secularization', in J. Gould (ed.), Penguin Survey of the Social Sciences, (Harmondsworth, 1965), pp. 169-182.

³⁵ The most influential original works being B.R. Wilson, Religion in Sociological Perspective (1982); Martin, Theory of Secularization; P.L. Berger, The Social Reality of Religion (Harmondsworth, 1973); T. Luckmann, The Invisible Religion (New York, 1967).

Since the 1970s there has been something of a retreat away from the 'secularisation' viewpoint, at least in terms of grand theories and accounts of universal or inevitable religious decline. In America, the evident vitality of contemporary religion, had tended to foster a different interpretation for some time, and in the 1980s a major challenge to secularisation was offered by a body of work centred upon rational choice theory.³⁶ In Europe, the challenge to secularisation was more muted and less unified. In the United Kingdom, D. Bell's call for the 'return to the sacred' marked the beginning of a move away from a secularisation 'orthodoxy'.³⁷ The main themes of criticism centred on an examination of 'counter-secularisation' trends and the study of 'functional equivalents' of practised religion, both within the sphere of the psychological (alternative belief systems), and the social (alternative 'rituals' and 'congregations'). In such a way it was proposed that the spiritual, and even the divine, could retain an important part of the personality and belief systems of the 'modern' person, without this necessarily being packaged in the form of a single over-arching conventional religious world-view or entailing organised acts of religious worship.³⁸ Also investigated were 'equivalents' to the sense of bonding and awe inherent in many religious acts of worship. The football match became one such haunt of such investigations in the United Kingdom, and a 'civic religion' was proposed for the United States.³⁹ New religious movements, most notably the rise of world-rejecting cults became a major focus of study.⁴⁰ The sociology of more mainstream religious movements went out of fashion. As historian Robin Gill noted recently, 'If sociologists have given considerable attention to sects and to new religious movements over the last twenty years, they have seldom studied Churches or denominations with the same level of scholarship.'⁴¹

³⁶ The leading rational choice theorists of religion are R. Finke, R. Stark, W.S. Bainbridge and L.R. Iannaccone. Their work is presented in considerable detail in chapter 5 of this thesis.

³⁷ D. Bell, 'The return of the sacred?', British Journal of Sociology, 28:4 (1977), 419-449.

³⁸ G. Davie considered such issues in her account of the 'ordinary gods of British society', Davie, Religion in Britain, pp. 74-92.

³⁹ The notion of an American civic religion was first proposed by R.N. Bellah, 'Civic religion', Daedalus, 96:1 (1967), 1-21.

⁴⁰ For a thorough review of the 30 years of work (up to c.1989) in the sociology of religion in the British context, see R. Wallis and S. Bruce, 'Religion: the British contribution', British Journal of Sociology, 40 (1989), 493-520.

⁴¹ Gill, Competing Convictions, p.55.

While the secularisation 'thesis' continued to receive attention in the 1980s and 1990s much of this was critical. However, few alternative theories of religious change were proposed, the exception being the rational choice approach to the sociology of religion in the United States, in particular Stark and Bainbridge's theory of religion.⁴² A further recent development, on both sides of the Atlantic, has been the proposal of a systems approach known as 'new' or 'neo' differentiation theory to better conceptualise secularisation (which is sometimes thus referred to as 'neo-secularisation theory').⁴³ Such theory posits that secularisation is the product of the religious *system* no longer presenting itself as society itself, but as a *subsystem*, one of many, in a modern society. In short, secularisation is seen as an outcome of the *functional* differentiation of society (in terms of Luhmann's definition of differentiation, and in contrast to Parsons' formulation). As Dobbelaere stated, 'Luhmann's approach does not contradict the major conclusions of the Weberian approach to laicization [i.e. secularisation]. But his way of thinking about self-governing and self-substituting subsystems seems to eliminate people.'⁴⁴ Even this elimination of people can be seen as analogous to Weber's 'iron cage' of capitalism whereby 'All spheres of daily life tend to become chronically dependent on hierarchy.' In this way Luhmann's work can be seen as one of the few theoretical developments allied to secularisation theory in the last twenty years.

In the 1990s, the theorisation of religion remains polarised in two camps; the rational choice theorisation, dominant in the United States, and various workings and reworkings of secularisation theory. The two approaches are similar in that they are both theorisations of religion under conditions of *modernity*. A *post-modern* theorisation of religion has yet to fully emerge. As J.A. Beckford and others have recently noted, perhaps in religion more than other phenomena, post-modern insights remain rather thin.⁴⁵ A major problem in the area is the lack of

⁴² See R. Stark and W.S. Bainbridge, A Theory of Religion (New York, 1987).

⁴³ The 'new' distinguishes the theory from T. Parsons' work. The leading figure in new differentiation theory is N. Luhmann, see N. Luhmann, Religious Dogmatics and the Evolution of Societies, trans. and intro. by P. Beyer, (New York, 1984).

⁴⁴ Dobbelaere, 'Multi-dimensional concept', p. 92.

⁴⁵ I refer to J.A. Beckford, 'Postmodernity, high modernity and new modernity: three concepts in search of religion', in K. Flanagan and P.C. Jupp (eds), Postmodernity, Sociology and Religion (Basingstoke, 1996), pp. 30-47. A recent collection of works has done much to forward the links between post-modernity and religion, though it is notable how much of the work remains critical of the consistency of a post-modern conceptualisation of religion. See K. Flanagan and P.C. Jupp

consensus over the basic terminology to describe contemporary social change, thus post-modernity, late modernity, high modernity, new modernity, and globalisation all vie for superiority.⁴⁶

Social scientists remain divided as to the usefulness of post-modern theory (I use the term here loosely, to include post-structuralism). Wallis and Bruce provided a strong critique of such approaches, warning that:

'The sociology of religion has had its advocates of recent Franco-German theoretical "innovation" ... However, the empirical results and analytical or theoretical insights have been disappointingly few. It remains for proponents of contemporary sociological "theory" to display - in the sociology of religion as elsewhere - that obscure and abstract conceptual elaboration, and vague social philosophising, can articulate in a fruitful and revealing way with the material of the real world'.⁴⁷

E. Gellner dismissed post-modern theory as:

'the abandonment of any serious attempt to give a reasonably precise, documented and testable account of anything ... everything is a "text" ... the basic material of texts, societies and almost anything is meaning, that meanings are there to be decoded or "deconstructed", that the notion of objective reality is suspect - all this seems to be part of an atmosphere, or mist, in which postmodernism flourishes.'⁴⁸

Flanagan observed rather wryly that post-modernity was all text and no context and, more scathingly, that: 'Like forms of dry rot, postmodernity, once invasive, becomes the ubiquitous condition of sociology. It means everything and nothing; it encapsulates a mood, but also denotes its elusiveness; it is the

(eds), Postmodernity, Sociology and Religion (Basingstoke, 1996). See also G. Davie's consideration of the limits of post-modern theory in Davie, Religion in Britain, pp. 1898-202. The work of R. Robertson, and his theory of globalisation is, perhaps, the most advanced body of theory which actively considers religion. See R. Robertson and W.R. Garrett (eds), Religion and Global Order (New York, 1991); R. Robertson, 'Globalization, politics and religion', in J. Beckford and T. Luckmann (eds), Social Change and Modernity (California, 1991).

⁴⁶ A further complexity is that much of what is often included under the banner of 'post-modern social theory' is not necessarily concerned with theorising the condition of post-modernity, but rather with a 'post-structural' approach to social science which is pertinent to all time periods.

⁴⁷ Wallis and Bruce, 'Religion: the British contribution', p..

⁴⁸ E.A. Gellner, Postmodernism, Reason and Religion (London, 1992), p. 29 and p. 23.

proverbial polo mint of the discipline - enough to go round but with no centre.⁴⁹ To switch metaphors, it is certainly not hard to detect a sense of the emperor's new clothes in some of what has been written upon the subject. D.A. Martin found no difficulty in tracing post-modernity back over three centuries when studying Brazilian religion, since:

'a mixture of African, European, and Amerindian themes combined and redefined in prodigious profusion. Certainly one may say the "signifiers" floated loose, so that little consistency could be discerned between African gods and correlative Christian saints. Oral culture in many ways approximated such post-modern features as fragmentation and juxtaposition, openness to new items, and absence of clear boundaries.'⁵⁰

By the same criteria religion must have been post-modern in much of Europe (and indeed everywhere?) for millennia. One could trace the juxtaposition and fragmentation inherent in the Celtic or Roman adoption of 'correlative saints' which stood alongside their older gods (for instance Michael and Mercury). One could trace 'post-modernity' back through the exchange of signifiers which arose from the ongoing cultural religious exchange, whether from Asia and Egypt to Greece, from Greece to 'pagan' Rome, or from pagan Rome to Christian Rome; in short, from Ishtar to Mary.

G. Davie, drawing upon David Harvey's seminal work on post-modernity described the post-modern counterpart of the modernist secularisation project as 'a space for the sacred but often in forms different from those which have gone before.'⁵¹ Although vague enough to be reconciled with virtually any period of history or any body of social theory, such a future for religion is particularly similar to one the work of the most influential 'modernists' - Thomas Luckmann. Luckmann's concept of the 'invisible religion' seems to have anticipated post-modernity rather well.⁵² The shortcoming of post-modern theorisation was not lost

⁴⁹ K. Flanagan, 'Introduction', in Flanagan and Jupp, Postmodernity and Religion, pp.1-13, p.3.

⁵⁰ D.A. Martin, 'Religion, secularization and post-modernity: lessons from the Latin American case', in Repstad, Religion and Modernity, pp. 35-43, p.38.

⁵¹ Davie, Religion in Britain, p. 192. The work referred to is D. Harvey, The Condition of Postmodernity (Oxford, 1989).

⁵² For instance, Luckmann stated: 'The privatization of individual existence is linked to the privatization of religion in general. As for religious themes one is tempted to say with some

Davie, who, contrasting modern and post-modern concepts of religion, stated that religion in the United Kingdom had become:

'not so much a choice, but the backdrop against which other decisions are made. Hence the notion, already hinted at, that it represents the residue of the past (what is left of pre-modern religion after the toll taken by both industrial and post-industrial developments), rather than the emergence of a post-modern future.'⁵³

The secularisation 'thesis': retrospect and prospect.

The preceding summary of the evolving concern of religions and society was inevitably subjective and impressionistic, excluding many avenues of research within the sociology of religion. The summary was offered to stress the points that little theoretical innovation relating to secularisation has been produced since the late 1960s and that the secularisation 'thesis' has received much critical attention in recent decades. From the rational choice viewpoint, secularisation is quite simply wrong and from a post-modern (and other) viewpoints, secularisation is seen as something of an old chestnut, and the discipline is keen to move onto pastures new. To concentrate on secularisation theory is to put to one side many recent developments within the sociology of religion, whether these be the 'neo-secularisation', post-modern, or rational choice approaches (though the rational choice approach is considered in chapter 5 of this thesis). This requires elaboration and justification.

I would argue that secularisation theory would not be an area of legitimate and necessary academic interest if either the considerable body of rational choice based research had persuasively disproved secularisation, or conversely, if secularisation theory had left religious decline and modernity as well understood

exaggeration: anything goes. In the global interpretation of cultures, a vast - and by no means silent, although perhaps imaginary - museum of values, notions, enchantments, and practices has become available. It has become available "directly" but primarily through the filter of the mass media rather than social relations'. T. Luckmann, 'The structural conditions of religious consciousness in modern societies', Japanese Journal of Religious Studies, 6:1-2 (1979), 121-137, p.136.

⁵³ Davie, Religion in Britain, p. 199.

partners, and, by implication, what remained for innovative academic debate was the nature of religion under conditions of post-modernity.

I suggest that neither condition has been realised. Secularisation, for all the attention it has received, remains woefully under-researched. The secularisation 'thesis' became an established orthodoxy with very little empirical research - presumably because 'modernity' was generally accepted as an incoming tide that would sweep away all before it, and the specificities of context were not an important consideration. As emerges in the detailed consideration of secularisation literature offered in chapter 2 of this thesis, the outlook for religion was seen to be equally gloomy in all societal futures, and differences were a matter of timing.

Likewise, theories of secularisation were subsequently criticised and dismissed with an equally casual attitude towards context and empirical data. Any form of religious survival, no matter how geographically isolated, transient, or insubstantial, could be (and was) used to dismiss secularisation. The exception is the substantial body of applied research based upon rational choice theory, which has been used to confront secularisation theory in a far more organised manner. However, as will be argued in chapter 5 of this thesis, such research has not effectively 'disproved' secularisation in the manner which is commonly claimed.

I argue that the hypothesised 'fate' of religion had changed intellectual hands with little recourse to history or geography. As a result, 'secularisation' has become a rather unhelpful term that can mean all things to all people. I argue that theories of secularisation are in need of applied research to forward the settlement of some long-running debates within sociology. Two main points justify the attention devoted to secularisation theory in this thesis. First, the context of this research is historical, and so much of the theorisation of religion from the 1970s onwards, whether in terms of new religious movements, 'exotic' (non-Christian) faiths, 'new' differentiation theory, or post-modern theories of religion, are (explicitly) of limited relevance. When studying religion in the very time and place that many would agree was a 'cauldron' of modernity, it is the theories which attempt to describe and explain these conditions which form a natural starting point

of investigation - both of the theories themselves and of their ability to interpret the context.

Secondly, and as already argued, for the considerable volume of criticism secularisation theory has attracted, very little applied investigation of the theories (whether from a 'pro' or 'ante' viewpoint) has been forthcoming. Secularisation theory has not been used (in anything other than a casual manner) as a basis for explaining religious change in any detailed context. This lack of substantial applied research using secularisation theory is not because it is so 'abstract' as to deter such application. As becomes clear in chapter two of this thesis, many of the propositions and causal links posited by the various theories are eminently amenable to empirical investigation (notwithstanding the problems of attempting to quantify religious data from any theoretical basis). Also, from the four major theories of secularisation available, an investigation of religious change need not be restricted to a narrow positivist (or indeed historically materialist) perspective by a reliance on 'empirical' data. Secularisation theory has been advanced within 'functionalist', 'structural-functionalist', and 'phenomenological' approaches.⁵⁴

The following two quotes, which propose a strong potential for studying religious change using empirical data, are from Peter Berger, a leading proponent of the phenomenological study of religion.

'One may say, with only some exaggeration, that economic data or industrial productivity or capital expansion can predict the religious crisis of credibility in a particular society more easily than data derived from the "history of ideas" of that society.'⁵⁵

'In looking at the collapse of plausibility suffered by religion in the contemporary situation, *hic et nunc*, it is logical to begin with social structure and to go on to consciousness and ideation, rather than the reverse. Quite apart from its theoretical justification, this procedure will avoid the pitfall (to which religiously inclined observers are particularly prone) of ascribing secularization to some mysterious spiritual and intellectual fall from grace.

⁵⁴ This point is clarified in chapter 2 of this thesis.

⁵⁵ Berger, *Social Reality*, p.155.

Rather it will show the rootage of this fall from grace ... in empirically available social-structural processes.' [His italics].⁵⁶

Such assertions have long invited detailed research grounded in history and geography, yet this has seldom been achieved. A major study using 'secularisation' as a basis of investigation is long overdue. R. Robertson summarised the situation rather aptly, when he stated that 'given the current fluidity of modern sociology and the almost consensually acknowledged view that modern societies are in some sort of cultural crisis, the fact that *the dilemmas are old* is no reason for not exploring them.' [My italics].⁵⁷ Such words have gained in relevance over the twenty six years since they were spoken.

1.3 Secularisation and History

The perceived decline of the social significance of religion has not simply been the concern of sociologists. As a major (if disputed) process of the nineteenth and twentieth centuries, it lies in the realm of history. As in sociology, the study of religion and society has engendered much debate between historians. If one can simplify a major line of division between sociologists as lying between those who argue for and against secularisation, in social history one can trace a line of division between what C. Brown has labelled the 'optimist' and 'pessimist' schools.⁵⁸ There are many parallels between the divisions in social history and sociology. Indeed, although the origins of the 'pessimist' school predate secularisation theory, the latter-day workings of this tradition have paid considerable attention to secularisation theory.⁵⁹ Conversely, the 'optimist' school has produced extensive criticism of secularisation as a valid interpretation of historical change.⁶⁰

⁵⁶ Berger, Social Reality, pp. 132-133.

⁵⁷ R. Robertson, 'Sociologists and secularization', Sociology, 5 (1971), 297-312, p.300.

⁵⁸ Following and extending Brown's divisions, the contemporary proponents of the 'pessimist' school are A.D. Gilbert and R. Currie. The advocates of the optimist school are C.G. Brown, G. Cox and, latterly, H. McLeod. This is to exaggerate a difference, since the two 'schools' would agree on many aspects of religious change.

⁵⁹ Gilbert, Religion and Society and Post-Christian Britain; Currie *et al*, Churches and Churchgoers.

⁶⁰ C.G. Brown, 'Did urbanization secularize Britain?', Urban History Yearbook, 1988, 1-14; Cox, The English Churches; Gill, Empty Church.

'Traditional' concerns of history

The Religious Census of 1851 was in itself a major agent of catalysis in the growth of interest in matters religious in the mid-nineteenth century. Indeed, for a century or so after the publication of the results, the Religious Census retained a centrality in the accounts of religious change.⁶¹ A preoccupation of such accounts was the linkage of low rates of religious observance with urban areas, especially industrial urban areas. While much of this work predated the sociological usage of the term 'secularisation', the issue of the decline of the social significance of religion lay at its heart. Definitive of such views was H. Mann's report of the Religious Census findings. Perhaps most famously of all, he proclaimed:

'a sadly formidable portion of the English people are habitual neglectors of the public ordinances of religion. Nor is it difficult to indicate to what particular class of the community this portion in the main belongs. ... while the *labouring* myriads of our country have been multiplying with our multiplied material prosperity, it cannot, it is feared, be stated that a corresponding increase has occurred in the attendance of this class in our religious edifices. More especially in cities and large towns it is observable how absolutely insignificant a portion of the congregations is composed of artizans.' [His italics].⁶²

Contemporary concerns of social history.

Since the 1960s there has been an increased focus upon the *social* history of religion in the nineteenth century, although it must be stressed that historians specialising in religion in nineteenth-century Britain remain a rarity, with Callum Brown, Robert Currie, Alan Gilbert, Robin Gill, Hugh McLeod and Keith Snell, perhaps the leading contemporary authors in the field. The issues addressed by such work are many and diverse, but a central theme has been the need to move away from a simple deterministic account of religious decline, such as that offered

⁶¹ The most notable works relating to the Religious Census being H. Mann, Sketches; A. Hume Remarks on the Census of Religious Worship for England and Wales, with Suggestions for an Improved Census in 1861 (London, 1860); K.S. Inglis, 'Patterns of religious worship in 1851', Journal of Ecclesiastical History, 2 (1960), 74-86; W.S.F. Pickering, 'The 1851 Religious Census - a useless experiment?', British Journal of Sociology, 18 (1967), 382-407.

⁶² Mann, Sketches, p.93.

by Mann. In the case of Gilbert and Currie the aim has been to refine these 'traditional' concerns, rather than reject them. Their work has presented a more tightly argued and historically sensitive linking of religious decline with, *inter alia*, industrialisation.⁶³ The most significant empirical work since Mann's census report is the study of Currie *et al*, which presents a detailed compendium of membership statistics for various denominations since 1700.⁶⁴ Interpreting Oxfordshire diocesan data, they demonstrated that Church of England attendances fell from the 1740s until well into the nineteenth century. They showed that this decline was more related to the rise of nonconformity than an overall decline in religious observance. Using national membership figures, they showed that most types of nonconformity were declining by the late nineteenth century, but that Church of England membership rose until about 1930. In other words, piecing together the local Oxfordshire attendance figures for the Church of England and the national membership statistics for the dissenting denominations, one can generalise that nonconformity grew until the late nineteenth century, and this growth resulted in part from a decline in support for the Church of England. After the 1880s, there was something of a reversal of fortunes, with Church of England membership increasing and nonconformist membership decreasing. After about 1930 all major Protestant denominations went into a hitherto unchecked decline.

Currie *et al* proposed several 'exogenous' factors as causes of the overall decline in attendance and membership of churches and denominations. They invoked the concept of 'secularisation', and most notably urbanisation and industrialisation. For instance, they argued that:

'Secularisation affects all other exogenous determinants of church growth because the long-term result of cultural changes tending to reduce the appeal of church membership is to minimize the effect of all factors promoting growth and to maximise the effect of all factors inhibiting growth.'⁶⁵

⁶³ Gilbert, Religion and Society and Post-Christian Britain; Currie *et al*, Churches and Churchgoers.

⁶⁴ Currie *et al*, Churches and Churchgoers.

⁶⁵ Currie *et al*, Churches and Churchgoers, p 101.

To plot this 'secularisation' they evidenced membership statistics for churches and denominations, supplemented by data on civil marriages and membership of secularist organisations. In this way the work became a little circular: secularisation was invoked as a cause of declining membership figures, but was itself evidenced principally by these same figures. In other words, if membership figures declined, then *ipso facto* secularisation must have occurred, and so religious change can then be 'explained' (or rather explained away) as secularisation. As becomes clear in chapter 2 of this thesis, the fluidity with which secularisation can become both *explanans* and *explanandum* has underlain much of the criticism the approach has received.

The arguments concerning religious change and religious decline were advanced in greater detail, and without such simplistic circularity, in Gilbert's work.⁶⁶ In a wide-ranging account of religious history in England, Gilbert focused on the process of industrialisation as, above all else, the key to explain religious change. For instance, Gilbert stated:

'What made particular generations critical of ideas and values which had long been taken for granted? What kind of changes enabled radical notions about nature and supernature to win widespread acceptance in societies ... In search for answers the analysis now turns to the central phenomenon in the modernization process - the industrial revolution - and to the British context in which industrialization began.'⁶⁷

Gilbert posited certain links between industrialisation and secularisation. He used Weber's concept of *anomie*, and later, G.B. Shaw's dualism of salvationism and meliorism, to argue that powerlessness, poverty and contingency (associated with the pre-industrial world) favoured *salvationism*, while many of the (longer term) effects of industrialisation - higher standards of living, better health, institutional security and the related processes of secularism, scientism and rationality - all favoured *meliorism*.

⁶⁶ Gilbert, Religion and Society and Post-Christian Britain.

⁶⁷ Gilbert, Post-Christian Britain, p.39.

The work of Gilbert and Currie *et al* has thus been closely aligned with secularisation theory, particularly the work of Bryan Wilson. As H. McLeod has noted, 'For some historians, such as Alan Gilbert, Robert Currie or John Kent, the whole religious history of the Victorian era is dominated by the theme of secularisation.'⁶⁸ Elsewhere, and more recently, there has been a much more sceptical attitude towards secularisation. The most telling commentary has been produced by C.G. Brown.⁶⁹ Brown noted the lack of empirical research supporting secularisation, he stated:

'There are few issues in British history about which so much unsubstantiated assertion has been written as the adverse impact of industrial urbanization upon popular religiosity.'⁷⁰

Brown proposed that this lack of substantial research had allowed a 'pessimist' school (which interpreted religion's decline as a consequence of urban industrialisation) to be uncritically accepted for far too long. He stated:

'Urban history undergraduates are plied each year with the well-worn secularizing interpretation of urban growth which emanated with the Victorians (mostly churchmen) and which has since been reassembled by modern investigators in forms suitable for digestion in ecclesiastical history, social history ... historical sociology and historical geography.'⁷¹

Brown argued that contemporary historians have had two sets of often accepted, but rarely substantiated, 'myths' to deal with. The first 'myth' was originally generated by an uncritical acceptance of Victorian commentaries on religious decline and the rise of irreligion. The second accepted truth, or 'myth', which is often used to reinforce the first, is the uncritical importation of theoretical ideas from sociology - the 'secularisation thesis' - to explain why religion declined in the face of urbanisation and industrialisation.

⁶⁸ McLeod, Religion and Society, p. 3.

⁶⁹ Brown, 'Urbanization'.

⁷⁰ Brown, 'Urbanization', p.1.

⁷¹ Brown, 'Urbanization', p.1.

Brown labelled accounts which relied on these two myths as the 'pessimist' school of thought. As was pointed out with regard to the unconvincing invocation of secularisation by Currie *et al*, there is much force in Brown's criticisms, the most important of which is that secularisation could be used interchangeably both to *describe* and *explain* religious change, producing a tendency to tautology.

While Brown is correct to criticise the 'pessimist' school of history, I would argue that what could be called the 'optimist' school - which has sought to stress the continuance of religious influence in the face of industrial urbanisation - is now also guilty of considerable mythologising. Robin Gill has produced perhaps the most ambitious alternative historical interpretation of religious change to the secularisation viewpoint, and in Brown's terminology can be labelled an 'optimist'.⁷² Gill argued that the concept of secularisation has proved unable to explain the decline in church-going, especially in the nineteenth century. He replaced what he called the 'cultural' variable of secularisation with the 'physical' variables of 'provision of seating', 'emptiness of churches', and 'levels of attendance'. He argued that inter-denominational rivalry led to a widespread over-provision of seating in nineteenth-century Britain. Using detailed case studies he proposed that this effect was marked in both rural areas, where chapel building continued in the face of depopulation, *and* urban areas, where denominational rivalry was at its most intense. The proposed result was that in many areas there was an 'excess' provision of seating beyond that which could have been filled by the most religiously active of communities.

Gill argued that this excess of seating produced the 'empty church', a potent physical symbol of religious decline, a symbol made apparent *before* any decline in attendance had itself occurred. For Gill, the empty church was not initially a *product* of religious decline, but through the associated problems of debts, over-stretched ministries and, most importantly, the negative psychological effect on worshippers, the empty church became a *cause* of real subsequent religious decline. As Gill noted: 'However, once established, empty churches seem to have had a number of predictable effects; and it is the latter that would appear to have

⁷² The chief work referred to here is Gill, Empty Church.

been important in initiating church-going decline.⁷³ In short, empty churches were not a *product* of secularisation, but were in fact a *cause* of it. Thereby Gill turned the arguments of Mann and others - that it was a *lack* of religious accommodation which accelerated, if not caused, religious decline - on their heads.

While Gill was quite right to be critical of an unthinking acceptance of existing (pessimistic) consensus regarding church decline, the nature of his dismissal of 'secularisation' was done rather hastily. For instance, in relation to the work of Currie *et al* he stated:⁷⁴

'The authors were well aware of a cluster of factors affecting church-going - economic, political, technological ... yet they maintained that it was secularization that was the primary factor ... By 1977 Currie, Gilbert and Horsley were aware that there were already some powerful sociological critics of the notion of secularization'.⁷⁵

This quote is of interest for two reasons. First, there is an implied difference between 'economic, political and technological factors' and 'secularisation'. It is very hard to see how the process of secularisation can be considered as aloof from these processes; in all the major sociological works secularisation is posited as being a product of precisely these factors.⁷⁶ A more minor, but nevertheless telling, point of interest is that the 'powerful sociological critics' of secularisation to whom Gill refers were referenced to a single 'classic' article written by D.A. Martin some thirty years previously, when the author had apparently confused the term with 'secularism'.⁷⁷ D.A. Martin has since written one of the definitive accounts of secularisation.⁷⁸

⁷³ Gill, Empty Church, p.272.

⁷⁴ Currie *et al*, Churches and Churchgoers.

⁷⁵ Gill, Empty Church, p.5.

⁷⁶ This becomes apparent in chapter 2 of this thesis.

⁷⁷ The article being Martin, 'Eliminating the concept'. B.R. Wilson claims that Martin's change of mind, from demanding that the term 'secularisation' should be expunged from the sociological dictionary, to his later work, Martin, Theory of Secularization, resulted from Martin's earlier confusion of the term with term 'secularism'; see B.R. Wilson 'Reflections on a many sided controversy', in S. Bruce (ed.), Religion and Modernization: Sociologists and Historians Debate the Secularization Thesis (Oxford, 1992), pp. 195-210, p.209.

⁷⁸ Martin, Theory of Secularization.

I would argue that the consideration of 'secularisation' by social historians, whether 'pessimists' or 'optimists', has often been unsatisfactory. On the one hand there is a group of accounts based on the 1851 Religious Census and other sources which tend to be methodologically rather simplistic, this being a reflection of their date of publication rather than a comment on the authors themselves.⁷⁹ Nonetheless, for certain of these accounts the very findings themselves, let alone their subsequent interpretation, can be challenged.⁸⁰ This set of accounts has been too closely associated with the secularisation 'thesis'. As a result, a considerable volume of more recent work - the 'optimist' school - has been set up in opposition to a straw man rather than the secularisation thesis itself. Even the work of J. Cox, which contains one of the most sociologically informed criticisms of secularisation theory by an historian, can itself be criticised on these grounds. While Cox introduces his work with an informed criticism of secularisation theory, the rest of the work charts, *inter alia*, the decline in church-going, the replacement of the previously religious functions of education, social services and philanthropy by secular authorities.⁸¹ Cox's own conclusion is phrased in rather stronger language than many of the secularisation theories themselves. He stated:

'The churches had in fact become irrelevant. The philanthropic apparatus which I described in Chapter 3 had disappeared or was in the process of being dismantled by the early 1920s. ... The churches were left with little to do and even less to say, since "church work" had been a central justification for their existence. In sociological jargon it was a process of functional differentiation'.⁸²

Cox then qualifies this apparent description of secularisation theory (it fits the arguments of Bryan Wilson *par excellence*) by noting:

⁷⁹ The most notable being Mann, Sketches; Hume, Remarks on the Census; Inglis, 'Patterns of Religious Worship'; Pickering, 'A useless experiment'; and Mudie-Smith, Life of London.

⁸⁰ In the Daily News Census of London (Mudie-Smith, Life of London), the proportion of 'twicers' was reported ambiguously. This ambiguity led many of the regional essays contained in the work to use an incorrect calculation which served to underestimate the rate of religious practice, especially among nonconformists. Section 3.1 of this thesis details this deficiency and shows the corrected data.

⁸¹ For his introduction to secularisation theory see Cox, The English Churches, pp. 7-16.

⁸² Cox, The English Churches, p. 273.

'but it is important to remember that this change was not a global transformation which reduced the importance of all religions everywhere in the world. It was a particularly British transformation which reduced the importance of Lambeth's churches ... In a different context, "functional differentiation" might even strengthen the churches.'⁸³

This is, of course, an entirely valid point, but forms an odd way to conclude a work based entirely upon Lambeth. If the only area one studies appears to fit well secularisation theory, it is an awkward platform from which to reject it - especially on the grounds that it does not fit some other (unspecified) context.

In a parallel study of Croydon, J.N. Morris concluded that

'It is easy to attack notions of urbanisation, secularisation and decline if they are described in over-simplistic, monolithic terms, and certainly some of the proponents of the "pessimist" school are guilty of doing that.'⁸⁴

It is interesting to note the parallels between the rejection of secularisation theory by sociologists working with a functional definition of religion, and a noticeable trend in the 'optimist' school of social history literature to move away from reliance upon attendance and membership data to the more wide-ranging components of religion inherent in 'diffusive Christianity', 'popular religion' and 'believing without belonging'. In another recent study of urban religion S.J.D. Green noted that:

'historians have of late have been much less willing to equate the decline of mass membership in mainstream ecclesiastical organisations with a diminution in the social significance of religion in later Victorian and Edwardian Britain; and altogether more inclined to search for evidence of the survival of religious norms and sacred life beyond the boundaries of traditional organised religion.'⁸⁵

⁸³ Cox, The English Churches, pp. 273-274.

⁸⁴ Morris, Urban Change, p. 177.

⁸⁵ S.J.D. Green, Religion in the Age of Decline: Organisation and Experience in Industrial Yorkshire, 1870-1920 (Cambridge, 1996), p.17. R. Gill is the main exception to this trend; although he argues against secularisation, he explicitly argues that religious attendance data is fundamental to any consideration of religious change.

The point to stress is that how one defines religion has a strong impact upon the interpretation of religious change offered by both historians and sociologists. Two accounts can be based on similar evidence, but disagree upon the division between that which is 'genuinely religious' and that which is secular with 'religious overtones', and thereby reach very different conclusions concerning the nature of religious change. For instance, one could agree with much of the analysis of Alan Gilbert and at the same time hold an 'anti-secularisation' viewpoint, or conversely, agree with much of the analysis of Jeffrey Cox and hold a 'pro-secularisation' viewpoint.⁸⁶

A clear definition of religion and secularisation needs to precede any analysis of the state of religion in society. There is no absolute right or wrong in such definition, but a clarification of one's standpoint serves to indicate precisely why one's conclusions are reached. Such clarity is lacking in much of the literature. In this thesis there is an unashamed concentration upon those elements of religion which have become decidedly 'unpopular' since 1851 - what S. Bruce has labelled 'explicit' Christianity.⁸⁷ Religious attendance is the most conspicuous element of 'explicit' religion.⁸⁸

Summary: secularisation and history - a poor track record.

The central point to emerge from this brief dip into the historical literature is the confusion and controversy surrounding both the term 'secularisation' and the theories of secularisation. The long-accepted accounts detailing religious decline in the nineteenth century had been written before what are now considered the major theories of secularisation had been formally established in the late 1960s.⁸⁹ As already described, these early 'pessimist' accounts tended to portray religious decline as a fairly simple and linear product of industrialisation and urbanisation.

⁸⁶ The works referred to are Gilbert, Religion and Society and Cox, The English Churches. The sociological division between functional and substantive and inclusive and exclusive definitions of religion are the focus of section 2.2 of this thesis.

⁸⁷ See S. Bruce, A House Divided: Protestantism, Schism and Secularization (London, 1990), pp. 7-30.

⁸⁸ The working definitions of 'religion' and 'secularisation' are outlined in chapter 2 of this thesis.

⁸⁹ Though clearly the ideas of E. Durkheim, M. Weber, and T. Parsons were influential before this date.

Such accounts were latterly viewed by historians not only as accounts of secularisation, but also as the very substance of the secularisation 'thesis' itself. Few historians followed the advice of Karel Dobbelaere and attempted to 'to state explicitly the different dimensions of the concept, as I see them, and not to use the term secularization as a "vague stereotype", for such use does not stimulate our thinking.'⁹⁰

Certainly, there is a noticeable trend in recent social historical studies for books to open with ten or twenty pages of theoretical discussion critical of secularisation, proceed with the main study of religion in a particular town or borough over a few decades, and conclude (even more rapidly than in the introduction), that religious decline had occurred, but that it was not 'secularisation', because there were 'unique', 'local', or 'specific' factors at work.⁹¹ The desire to avoid any link with secularisation becomes every bit as unpersuasive as Currie *et al*'s desire to explain all religious change as secularisation.

By the mid-1970s the ideas of the secularisation theory were filtering across the disciplinary boundaries between sociology and history. My argument is that the timing was perhaps unfortunate. Detailed scrutiny of the secularisation 'thesis' was disseminating into social history at the time when a major focus of historical study had already shifted towards a revision of the accepted wisdoms of the 'pessimist' school. A critique of 'secularisation' was often implicitly linked with a dismissal of the 'pessimist' school.⁹² This considerable body of recent work has been valuable in exploring many hitherto understudied facets of religious life - facets which could not be illuminated by membership or attendance figures - but I would argue that this is not to dismiss secularisation theory as is often claimed. There are too few historians (whether 'optimists' or 'pessimists') who have heeded the words of Alan Gilbert when he stated:

⁹⁰ Dobbelaere, 'Multi-dimensional concept', p.10.

⁹¹ I refer here to the works of Cox, The English Churches; Green, Age of Decline; and Morris, Urban Change.

⁹² The major critiques of secularisation theory by historians are: Brown, 'Urbanization'; Cox, The English Churches; H. McLeod, 'Secular cities? Berlin, London, and New York in the later nineteenth and early twentieth centuries', in Bruce, Religion and Modernization, pp. 59-89; Gill, Empty Church.

'Secularisation is a theme in which the historian cannot ignore relevant social theory, or proceed without reference to the debates of specialists in other disciplines'.⁹³

1.4 The Geography of Religious Practice in 1851: an Unsolved Mystery?

Before introducing secularisation theory itself (which forms the scope of chapter 2), it is instructive to conclude this introductory chapter by addressing the major 'myth' associated with the secularisation literature in the British context: that religious attendance should be proportionately lower the more urban, industrial and proletarian an area. This is the myth which C.G. Brown highlighted, and forms the bedrock of historians' criticism of 'secularisation'; although secularisation theory is largely free of such sweeping assertions.⁹⁴

This section serves to show that there was no simple or geographically stable relationship between urbanisation and religious practice in England and Wales in 1851. I take this unusual step of presenting an 'introductory analysis', because, other than in unpublished work, no maps or descriptive accounts of the 1851 Religious Census are entirely satisfactory or comprehensive.⁹⁵ Where maps have been used at all, these are presented at very large scales (the county or larger). Also, the method of presentation is often somewhat esoteric, and in some cases the boundaries shown are not coterminous with the data being mapped.⁹⁶ Likewise, the data have not been systematically analysed. Typically, 'analysis' comprises a few tables containing descriptive statistics, often referring to self-selected lists of registration districts or towns.

⁹³ Gilbert, Post-Christian Britain, p xiv.

⁹⁴ The major (and somewhat retrogressive) exception being Martin, Theory of Secularization, p.3.

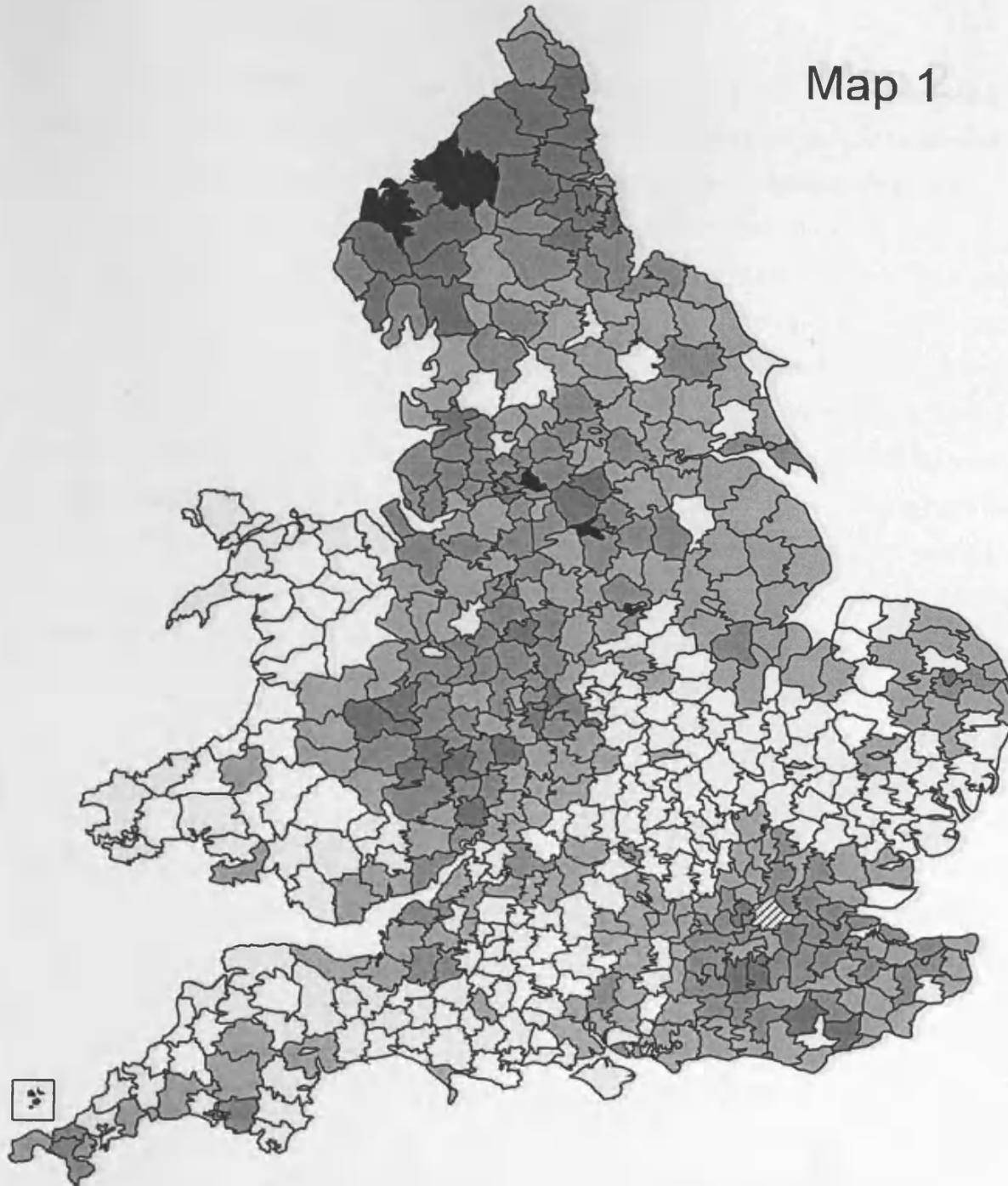
⁹⁵ The maps presented in Snell and Eil in Victorian Religion are the best available maps of religious affiliation in the nineteenth century.

⁹⁶ See, for example, the maps in Hume, Remarks on the Census; Pickering, 'A useless experiment'; and more recently, Coleman, The Church of England, and McLeod, Religion and Society. M. Tranter noted that Coleman's maps used the pre-1974 county boundaries rather than the registration county boundaries for which the data were compiled. See M. Tranter (ed.), The Derbyshire Returns to the 1851 Religious Census (Chesterfield, 1994), p.xxxi.

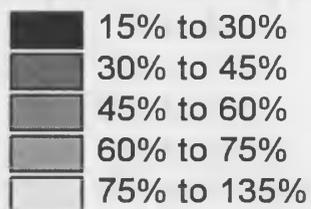
The following analysis serves to demonstrate that the traditional 'pessimist' accounts of religious change prove incapable of explaining even the broadest of phenomena - the national variations in religious practice in England and Wales in 1851. The question remains as to whether to 'surrender to complexity' and suggest that such matters are simply too complex to be understood, or whether a re-examination of secularisation theory - one which returns to the 'original' theories - can help to explain this geography. The latter option forms the basis of this thesis.

The best method of describing the broad geography of religious practice in 1851 is to use the registration-district data, which have been computerised for the *whole* of England and Wales. Map 1 shows the index of total attendances (a measure of religious practice defined in Appendix 1 and section 2.1) mapped at registration-district level. Map 2 shows the population density.

Map 1

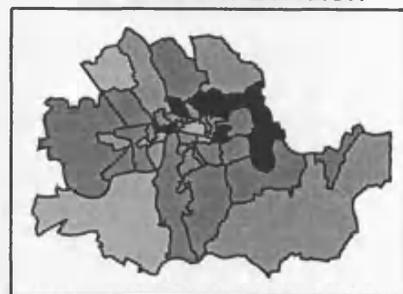


Index of total attendances:



 London Division (see inset)

The London Division



Index of total attendances in England
and Wales, 1851

Map 2



Population density in England and
Wales, 1851

While a glance at maps 1 and 2 shows that there was some level of correspondence between urban districts and lower levels of religious practice, a more level gaze reveals that there were no simple or universal links. Map 1 is deliberately shaded 'back-to-front', so that to the extent that religious practice was lower the higher the population density, the darkest would be the major urban-industrial centres and the lightest would be the least urban districts. While places like Birmingham, Norwich, Sheffield, Barnsley, Liverpool, Manchester, Preston, and most clearly of all, London, do stand out as areas of low attendance, by far the most extensive regions of low religious practice were the highly rural far-north of England and the Welsh Marches. Districts in these areas typically contained fewer than 10,000 inhabitants and little manufacturing industry. Conversely, among the areas with an index of attendances in excess of 75% were Luton, Bedford, Merthyr Tydfil, Abergavenny and Haslingden; all decidedly urban districts with populations in the region of 25,000 to 100,000 inhabitants.

Overall, the maps correspond quite closely in Lancashire, the West Riding, the Black Country and London, but diverge markedly in the far north of England and the Welsh Marches. Indeed, in the far north of England, it was some of the most urban districts - South Shields, Sunderland, Houghton-le-Spring and Berwick - which contained the highest levels of religious practice.

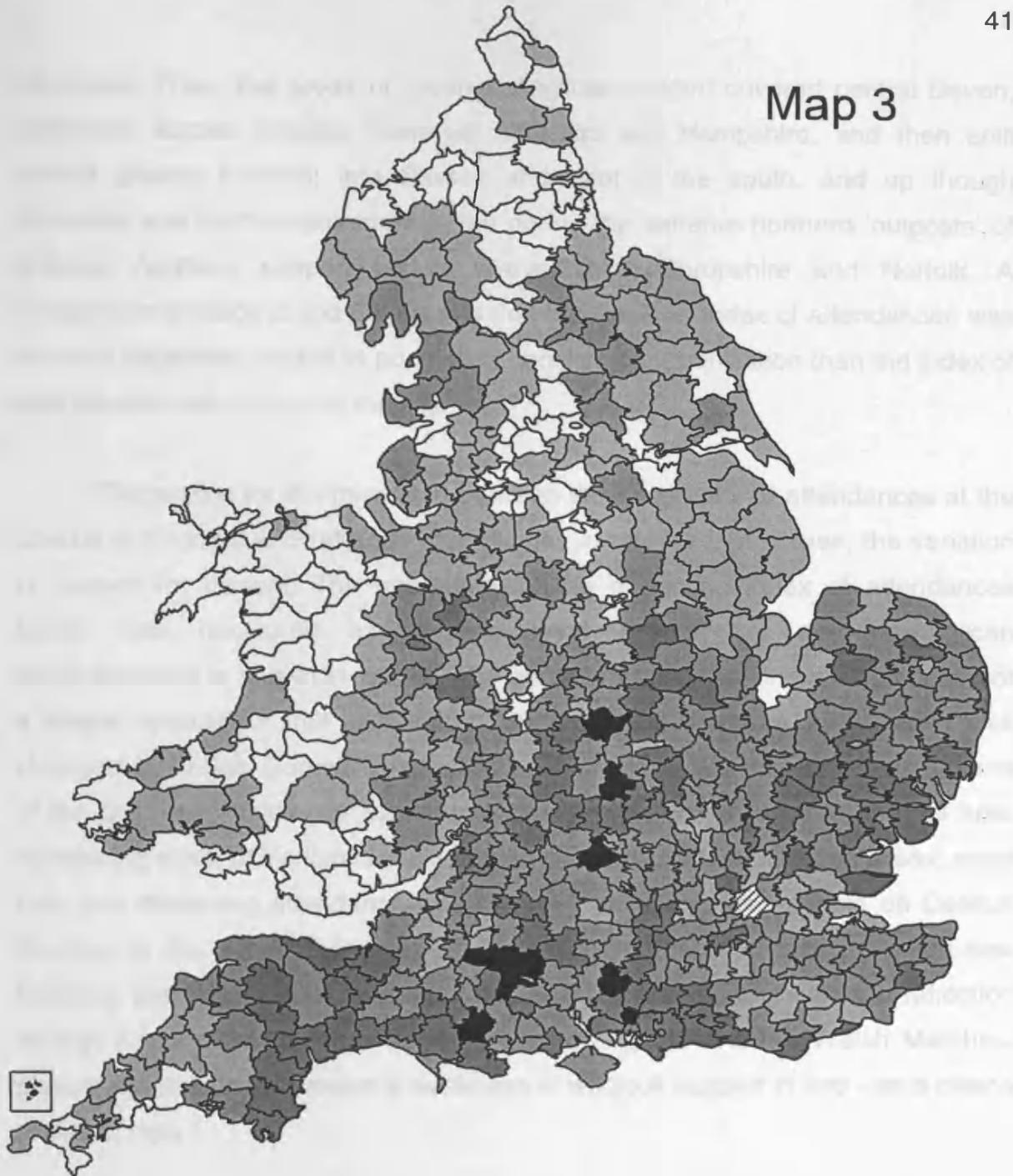
A potential explanation: religious pluralism.

A disaggregation of the index of total attendances into Anglican and dissenting components can help provide the immediate explanation why there was no strong repulsion between high religious practice and urbanisation in certain parts of England and Wales, while in other regions, such as the far north, there even appeared to be an attraction.

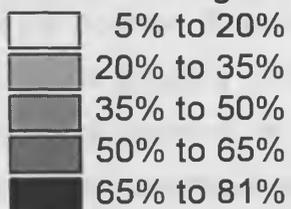
Map 3 shows the Church of England index of attendances.⁹⁷ It can be seen that the Severn-Wash line broadly divided the areas of Anglican strength and

⁹⁷ That is Church of England attendances (all services) as a percentage of total attendances for all denominations, as defined in Appendix 1.

Map 3



Church of England index of attendances:



 London Division (see inset)

The London Division



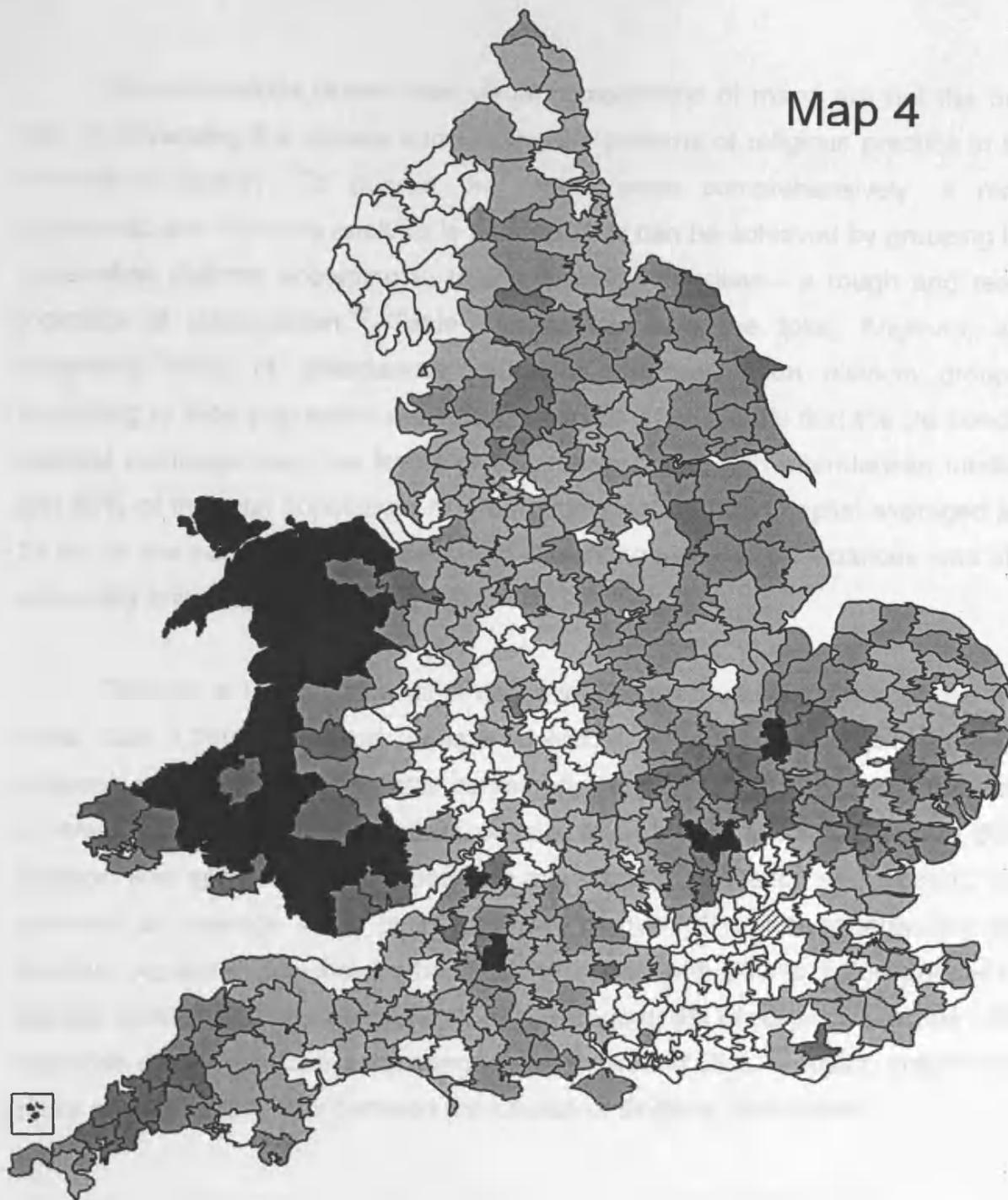
Church of England index of attendances
in England and Wales, 1851

weakness. Thus, the areas of greatest Anglican support covered central Devon, eastwards across through Somerset, Wiltshire and Hampshire, and then split around greater London; into Sussex and Kent in the south, and up through Berkshire and Northamptonshire in the north. The extreme northern 'outposts' of greatest Anglican support lay in Warwickshire, Shropshire and Norfolk. A comparison of maps 2 and 3 suggests that the Anglican index of attendances was no more negatively related to population density and urbanisation than the index of total attendances (shown in map 1).

The reason for the mismatch between the geography of attendances at the Church of England and religious attendances *in toto* was, of course, the variation in support for dissent. The geography of the dissenting index of attendances (which was measured as the combined strength of *all* non-Anglican denominations) is shown in map 4. The geography of dissenting strength was not a simple reversal of that of Anglican Support. Map 4 shows that dissent was strongest in: Wales, Cornwall, the borders of Somerset, Wiltshire and Dorset, parts of the south-east midlands across into East-Anglia, and in a more general area comprising much of Yorkshire, east Lancashire and Durham. In these areas, more than one dissenting attendance was recorded for every three people on Census Sunday. In the south, the areas of dissenting weakness - much of south-east England, and the western midlands (outside the black country) - were a reflection of high Anglican strength. In the far north of England and the Welsh Marches, dissenting weakness revealed a weakness of religious support *in toto* - as is clearly visible in map 1.

A comparison of maps 1, 3 and 4 reveals that in Wales, Cornwall and parts of the northern Pennines, the Church of England was extremely weak, but levels of religious practice *in toto* were not at all low. Herein dissent filled the shortfall in Anglican support. In the case of Wales, support for dissent was so strong that levels of practised religion were higher than in any of the Anglican heartlands. Conversely, in the far north of England and the Welsh Marches, dissent did not compensate for the weakness of the Church of England, and religious practice was very low.

Map 4



Total dissenting index of attendances:

-  0% to 20%
-  20% to 35%
-  35% to 50%
-  50% to 65%
-  65% to 104%

 London Division (see inset)

The London Division



Dissenting index of attendances
in England and Wales, 1851

Generalisations drawn from visual comparisons of maps are not the best way of advancing the debate surrounding the patterns of religious practice in the nineteenth century. To pursue the matter more comprehensively, a more systematic and inclusive analysis is needed. This can be achieved by grouping the registration districts according to their population densities - a rough and ready indicator of urbanisation.⁹⁸ Table 1 examines how the total, Anglican, and dissenting index of attendances varied in the registration districts grouped according to their population densities. It can be seen clearly that the 36 London districts contained very low levels of religious practice, with attendances totalling just 40% of the total population. Anglican attendances in the capital averaged just 24.3% of the population, and the mean dissenting index of attendances was also extremely low at only 15.7%.

Outside of London, the most densely populated urban districts (those with more than 1,000 people per square kilometre) showed much higher levels of religious practice. These districts contained many of the major provincial urban centres.⁹⁹ In such districts, indices of total attendances averaged around 55%. Support was split fairly evenly between the established church and dissent; both received an average index of attendances of over 27%. Interestingly, the less densely populated provincial urban centres, those with 350 to 1,000 people per square kilometre, displayed slightly lower average levels of religious practice - they recorded a mean index of total attendances of around 53%.¹⁰⁰ Again, support was more or less equally split between the Church of England and dissent.

⁹⁸ It should be noted that since the major part of this analysis relates to parish-level data, the socio-economic data computerised at registration-district level is limited to the 1851 population density. A more systematic investigation of the links between urbanisation, industrialisation and the index of attendances is presented in chapter 4 using the parish-level data.

⁹⁹ These districts are: Salisbury, Exeter, Cambridge, Reading, Bristol, Oxford, Leicester, Dudley, Bury St. Edmunds, Canterbury, Nottingham, Derby, Worcester, Southampton, Yarmouth, Brighton, Stoke Damerel, East Stonehouse, Leeds, Portsea Island, Bradford, Gravesend, Hull, Sunderland, Newcastle-upon-Tyne, Norwich, Coventry, Liverpool, Plymouth, Stoke-upon-Trent, Salford, Manchester, Chorlton, Sheffield, Birmingham, and Oldham.

¹⁰⁰ These districts are: Colchester, Haslingden, Bath, Cheltenham, Hastings, Ipswich, Northampton, Dewsbury, King's Lynn, Huddersfield, Clifton, Stourbridge, West Ham, Rochdale, Blackburn, West Bromwich, Halifax, Alverstoke, West Derby, Richmond, Medway, Wolstanton, South Shields, Wolverhampton, Bury, Stockport, Wigan, Walsall, Hunslet, Bolton, Ashton-under-Lyme, Tynemouth, Preston, Gateshead, Brentford, Aston, Ecclesall Bierlow, and Radford.

Table 1

How the index of total, Anglican, and dissenting attendances varied according to the population density

Registration district classification:	Mean index of attendances	Mean Anglican index of attendances	Mean dissenting index of attendances	n
London (population density 500 - 71,719 per square kilometre)	40.1	24.3	15.7	36
Other 'highly urban' (population density > 1000 per square kilometre)	55.4	27.6	27.7	36
'Urban' (population density 350 - 1000 per square kilometre)	52.7	25.5	27.2	38
'Mixed' (population density 50 - 350 per square kilometre)	71.7	39.0	32.8	404
'Rural' (population density 30-50 per square kilometre)	70.0	34.2	35.8	78
Remote 'rural' (population density < 30 per square kilometre)	62.1	20.8	41.3	32
All districts	67.1	35.1	32.0	624

It was the 'mixed' districts, those with around 'average' population densities of 50 to 350 people per square kilometre, which showed the highest average levels of religious practice - a mean index of total attendances of around 72%. These mixed districts were not typically extremely rural and contained small towns. Indeed, over 85% of these districts contained 10,000 - 40,000 people, and were typically centred on an urban centre of 10,000 - 25,000 people. In these districts, Anglican support was slightly stronger than dissenting support.

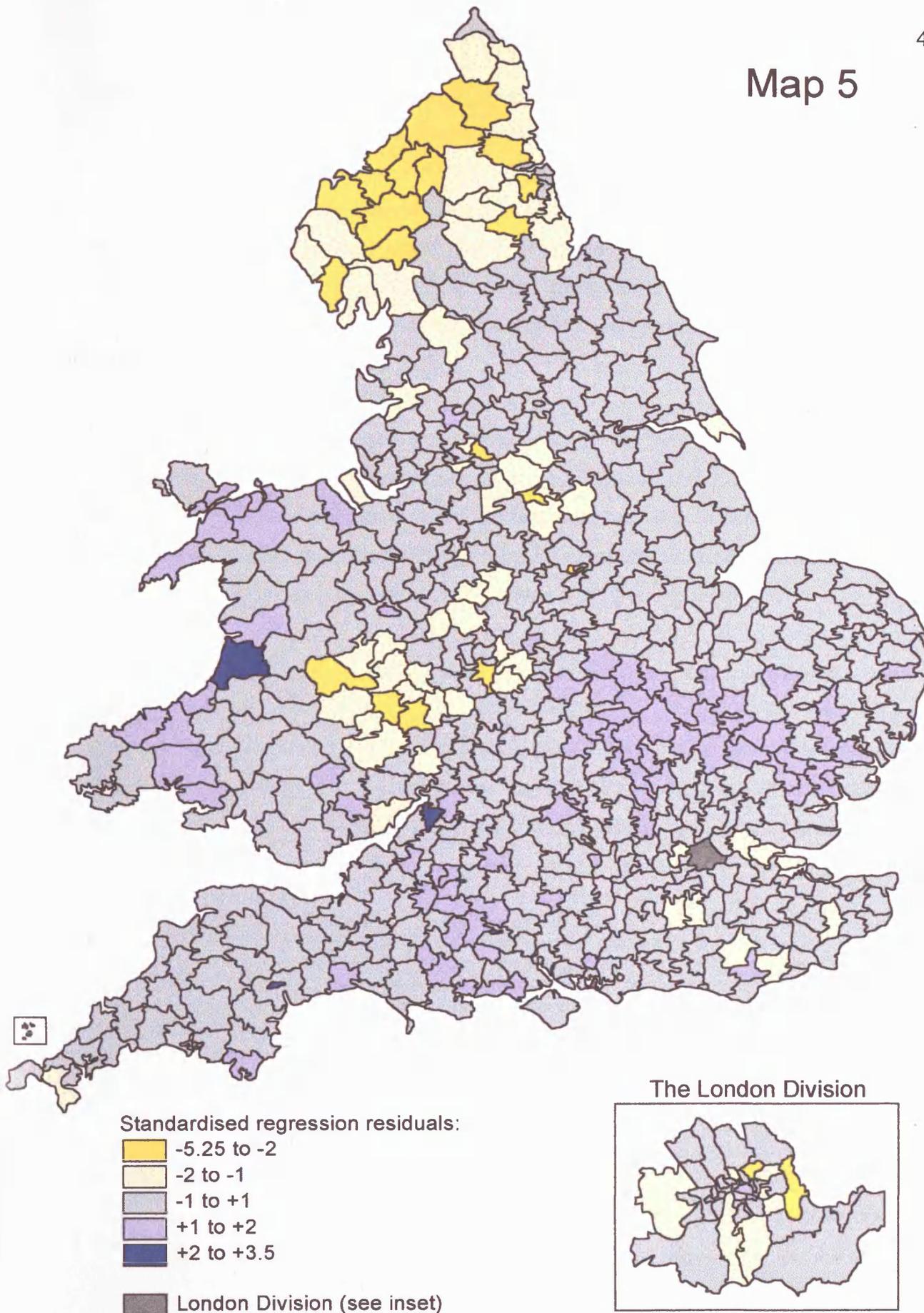
The more clearly 'rural' districts, those containing 30 - 50 people per square kilometre, also showed above average levels of religious practice, though not quite as high as the 'mixed group'. The mean index of total attendances was 70%. In these rural districts, dissenting support was slightly greater than Anglican support.

Finally, the districts in the 'remote' rural group, those with less than 30 people per square kilometre, were characterised by substantially lower levels of religious practice - a mean index of attendances of 62.1%. These remote districts were also characterised by a notably low mean Anglican index of around 21%, and a notably high mean dissenting index of over 40%.

One can further the analysis by returning to the geography underlying this complex relationship between religious practice and population density. Map 5 shows the deviations from the relationship between the index of total attendances and the population density.¹⁰¹ The general regression equation was natural log (index of total attendances) = 4.583 - 0.085 × natural log (population per square kilometre). Thus, solving the equation for the groups defined in table 1, the regression predicted the following indices of attendances: 41 for a typical London district (with a population density of 25,000), 49 for a typical 'highly urban' district (with a population density of 3,500), 57 for a typical 'urban' district (with a population density of 550), 67 for a typical 'mixed' district (with a population density of 80), 71 for a typical 'rural' district (with a population density of 40), and 76 for a

¹⁰¹ The standardised regression coefficients shown in map 5 were produced by a regression of the natural logarithm of the index of attendances with the natural logarithm of population density. Both variables were logarithmically transformed because they approximated closely a log-normal distribution (Appendix 4 details this characteristic of the index of attendances).

Map 5



Deviations from the overall relationship between the index of total attendances and population density (see main text for details)

typical 'remote rural' district (with a population density of 20). Overall this model showed reasonable explanatory power across the range of population densities.¹⁰²

Map 5 shows the standardised residuals. As would be expected, since the residuals approximated a normal distribution, the majority of districts (71.6%) lay within +/-1 standard deviation.¹⁰³ In these districts (shaded grey in map 5) the overall model can be considered to have been a reasonably good predictor of the index of attendances.¹⁰⁴

Of greater interest are the districts which did not conform to the general model: the 'yellow' and 'blue' areas. The pale yellow and pale blue districts are those in which the predicted index of attendances lay between +/-1 and +/-2 standard deviations from the actual index. The districts shaded dark blue and dark yellow lay more than +/-2 standard deviations from the actual index.

The yellow areas (both pale and dark) show, *par excellence*, that no generalisations can be made whether regions of unexpectedly low religious practice were either 'industrial' or 'agricultural'. One can see that Northumberland, Cumberland, Westmorland and County Durham all stand out as the major areas of lower than predicted indices of attendance. Likewise the Welsh Marches also

¹⁰² The coefficients of the regression analysis were $F = 160.9$ ($p = 0.000$), adjusted $R^2 = 0.20$. The predictive power of the model was fairly even across the range of population density, though the residuals did not obey constant variance or a normal distribution about a mean of zero at population densities of below about 30 people per square kilometre (i.e. the 'remote rural' districts). In all the other groups presented in table 1, the mean of the residuals lay very close to zero (within +/- 0.10). In the 32 districts comprising the 'remote rural' group, the mean standardised residual was -0.28 - one standard deviation away from the overall mean of zero. A glance at map 5 reveals that it was the highly rural districts of Northumberland and Cumberland which did not conform to the regression model.

¹⁰³ Given a perfect normal distribution, 68.4% of residuals would lie within +/-1 standard deviation, and these two extremes would be symmetrical - i.e. 15.8% of residuals would be $>+1$ standard deviation from the mean (which should be zero) and 15.8% of residuals would be <-1 standard deviation from the mean. In the analysis presented in map 5, the residuals closely approximated a normal distribution, such that 90 (14.4%) standardised residuals were greater than +1, and 87 (13.9%) standardised residuals were less than -1. The mean of the unstandardised residuals was zero to three decimal places.

¹⁰⁴ Although, it should be noted that since the model is log-log, these limits are not uniform or symmetrical above and below the actual index of attendances. For example, with an actual index of attendances of 40, if the standardised residual was less than +/-1, then the predicted index of attendances lay between 30 and 53, i.e. a relatively tight band. However, with an actual index of attendances of 80 and a standardised residual less than +/-1, the predicted index could have lain in a band twice as wide - anywhere between 60 and 106.

stand out as an area of lower than predicted religious practice. The majority of districts in both these regions were highly rural. However, also visible as yellow districts in map 5 are parts of the major urban-industrial regions, namely: the West Riding (Barnsley, Ecclesall Bierlow, Saddleworth, and Sheffield), the West Midlands (King's Norton, Aston, and Stoke-upon-Trent), Lancashire (Chorlton, Oldham, and Preston), and London (Shoreditch, Poplar, St. George-in-the-East, Bethnal Green, Kensington, Rotherhithe, Clerkenwell, Lambeth, and Camberwell).

The areas in which the index of attendances was substantially higher than predicted (the pale and dark blue areas) lay in west Wales, and parts of southern England, notably: the borders of Somerset, Wiltshire and Dorset, and parts of the south-east midlands across into East-Anglia. As with the areas in which the predicted index of attendances over-estimated religious practice, these 'under-estimated' areas presented a wide range of rural and urban characteristics; ranging from the rural districts of central Wales to urban centres as far north as Leicester, Nottingham, and Shrewsbury. The common thread running through all these 'blue' areas was the strength of dissent, as shown in map 4. Either dissent was at its strongest - as in west Wales, or both dissent and the Church of England were relatively strong - as across the parts of England shaded blue in map 5.

What map 5 shows more effectively than a lengthy description, is that there was no systematic class of districts (according to population density) in which the predicted index of attendances was clearly and under-estimate; there were numerous highly rural and urban districts in this group. Similarly, there was no systematic class of districts in which the predicted index of attendances was an over-estimate. Again, there were both highly urban/industrial and rural/agricultural districts in this group.

The extent which both the blue and yellow districts formed distinct geographical regions which covered urban and rural districts alike, is a measure of how 'geography' prevented an 'iron law' linking religious practice and population density. While the relatively low explanatory power of the regression equation (adjusted $R^2 = 0.20$) revealed that such an iron-law was extremely malleable, the

regional patterns displayed in map 5 help reveal why this was so. Some regions were regions of low religious practice irrespective of population density (most notably, the far north of England), while other regions, such as the south-east midlands, were areas of high religious practice irrespective of population density.

The regression model only took account of the population density, but these regions were not defined by population density. One can examine a point at which the two regions meet - the border between the west and east midlands - to make this point more clearly. For example, one can pick out the two adjoining districts to the east of Birmingham, Meriden (shaded pale blue in map 5) and Atherstone (shaded pale yellow in map 5). The two districts contained almost identical total populations of around 11,300, though Meriden contained a slightly lower population density of 57.3 people per square kilometre (compared with the figure of 101.5 in Atherstone). However, the index of total attendances stood at only 46.4 in Meriden, but was 88.2 in Atherstone. The higher index of attendances was largely due to the much greater dissenting presence in Atherstone, which recorded a total dissenting index of attendances of 34.8, compared with a total dissenting index of just 7.3 in Meriden. In this way one begins to see how the geography of religious practice goes beyond a consideration of urbanisation.

The pessimist school revisited.

Even this brief introductory analysis has hinted at considerable complexity in the geography of religious practice. Thus, any model of churchgoing based solely on patterns of urban development will be, at best, a partial one. A further observation pertinent at this point is that the 'pessimist' accounts of social history had rarely postulated a simple, universal link between urbanisation and/or industrialisation and decline in religious practice, as the secondary literature might lead one to believe. For instance, Pickering, whose account perhaps comes closest to proposing such a link, stated:

'One might be tempted to imagine that these findings pointed to an "iron law" in which church-going is seen to be inversely proportional to the

population of an urban area. A re-examination of Table 5 and Map 5 [Pickering's data] will demonstrate that this is not the case.¹⁰⁵

Thus, while it is correct to criticise the conventional 'pessimism' proposing universally low levels of religious attendance by the urban working class in the nineteenth century, it must be remembered that many of these 'pessimist' accounts (especially that of K.S. Inglis) were actually not so sweeping as much of the secondary literature would suggest.¹⁰⁶

This analysis has shown that a 'pessimist' account, in superficial terms at least, was supported by the geographical patterns of the index of attendances and population density in some parts of England and Wales. In others, most visibly the far north of England and the Welsh Marches, population density and the index of attendances tended to be low in the same localities. Not only did the districts of the far north of England (i.e. Northumberland, and Cumberland) and the English and Welsh border districts,¹⁰⁷ not conform to a pessimist model (as shown in map 5), they actively contradicted it. There was actually a statistically significant *positive* association between population density and the index of total attendances in these districts ($r_s = + 0.44$, $p = 0.002$, $n = 46$).¹⁰⁸ In contrast, taking all other districts together, there was a strong *negative* association between population density and the index of total attendances ($r_s = - 0.41$, $p = 0.000$, $n = 578$).¹⁰⁹ Such a strong negative association shows that outside these border areas there was clear evidence that levels of religious practice did tend to be lower where population density was higher, as map 5 also suggested.¹¹⁰

¹⁰⁵ Pickering, 'A useless experiment', pp. 402-403.

¹⁰⁶ I refer to Inglis, 'Patterns of religious worship'.

¹⁰⁷ These comprised all the districts of Northumberland and Cumberland, all the English districts bordering Wales, and all the Welsh districts bordering England (except Newtown, which barely touched the English border).

¹⁰⁸ For an outline of the reporting the results in this thesis, see Appendix 5.

¹⁰⁹ Even excluding the 36 London districts, the correlation remained strong ($r_s = - 0.31$, $p = 0.000$, $n = 542$).

¹¹⁰ It is argued in chapter 7 of this thesis that the distinctiveness of the Scottish and Welsh border areas is far from accidental.

The uniqueness of London.

A further geographical subtlety is the influence of the 36 London districts. It has already been shown that the London districts were unique in terms of the combination of very high population densities and low rates of religious practice (as map 5 has shown, these rates were typically low even in relation to the very high population densities). A latent bias of the 'pessimist' accounts - if they are to be taken as general explanations of religious decline - was the attention they paid to London. Pickering included all the separate London boroughs in the table he used as a basis for arguing that lower attendances were a feature of large urban centres. In this way the majority of such urban centres in his table were, in fact, London boroughs.¹¹¹ Inglis' more qualitative work on religion and the working classes also focused upon London.¹¹² This is not to criticise the work itself, since London would have been home to a high proportion of the Victorian working class (however defined), and, therefore, deserving of considerable attention in its own right. However, it is possible that this attention to London contributed to their 'pessimism'. The capital was unique amongst urban environments for the failure of a strong dissenting culture to appear in the face of Anglican weakness.¹¹³

Problems occur with a reliance upon London if the tacit assumption is made that wherever London led, the provincial urban centres would follow. This, as Brown observed, rests on the tacit assumption that where London led, other districts would follow.¹¹⁴ Such an assumption stems from a general model of modernisation which has received extensive criticism.¹¹⁵ As Brown summarised:

'Moreover, much of the research has concentrated on London which, because of its unique early modern experience as a metropolis, seems to

¹¹¹ Pickering, 'A useless experiment', p. 402.

¹¹² See Inglis, Working Classes, pp. 63-69.

¹¹³ The lack of dissenting strength was not because the dissenting denominations did not attempt to gain support in London. The Mudie-Smith report highlighted the immense missionary effort (both dissenting and Anglican) put into London throughout the late nineteenth and early twentieth centuries (Mudie-Smith, Life of London). See also Cox, The English Churches, for an account of the Victorian religious 'mission' in Lambeth.

¹¹⁴ Brown, 'Urbanization', p.5.

¹¹⁵ For a critique of 'modernisation' theory with respect to religion (in which secularisation plays a large part) see M. Douglas, 'The effects of modernization on religious change', Daedalus 3:1 (1982), 1-19.

have established a wholly different community framework for religion from that which developed in other places.¹¹⁶

London does appear to have been a case apart - in terms of its very high population densities and very low levels of religious practice. This makes the interpretation of the London data problematic; not just in relation to the debates concerning modernisation theory, but also, as noted by S. Bruce, in terms of statistical analysis.¹¹⁷ Indeed, when using parametric statistics, the decision to include or exclude London alters profoundly the interpretation of results.¹¹⁸ As an illustration, table 2 shows the parametric (Pearson) correlation between population density and the total, Anglican, and dissenting index of attendances.

For all 624 registration districts, all the correlations achieved strong statistical significance. In particular the correlation between population density and the index of total attendances ($r_p = - 0.33$) was of the order of magnitude which could be used to argue for a fairly close relationship between increasing population density and a declining religious practice. However, the same correlation excluding the 36 London districts was much weaker ($r_p = - 0.17$), and, thereby, a far less impressive degree of association upon which to centre an argument.¹¹⁹ A further example is that once the London districts were excluded, no strong association existed between population density and the dissenting index of attendances.

It is not just the 'pessimist' accounts which have concentrated on London. Partly because they were attempting to revise the accepted wisdom, and also because there is a much greater range of data available for London, the 'optimist' school have also tended to concentrate on the capital. The work of Cox and Morris, is based on south London.¹²⁰ Outside London, attention has tended to rest

¹¹⁶ Brown, 'Urbanization', p.5.

¹¹⁷ S. Bruce, 'Pluralism and religious vitality', in Bruce, Religion and Modernization, pp. 170-194: see especially p.184.

¹¹⁸ Historians almost always use parametric statistics, most often out of a misplaced notion that they are always more rigorous. A consideration of parametric vs. non-parametric statistics is presented in Appendix 5. The potential for misuse of parametric statistics emerges as a major theme in chapter 5 of this thesis.

¹¹⁹ If the statistics were presented as the result of linear regression, then the drop in 'predictive' power would be from an R^2 of 0.11, when all 624 districts are included, to an R^2 of 0.03 when the 36 London districts are excluded.

¹²⁰ Cox, The English Churches; Morris, Urban Change.

Table 2**The influence of London**Pearson correlations (r_p)

Correlation between population density and:	All districts n = 624	All districts <i>except</i> London districts n = 588
index of total attendances	$r_p = - 0.33^{**}$ (p = 0.000)	$r_p = - 0.17^{**}$ (p = 0.000)
Anglican index of attendances	$r_p = - 0.22^{**}$ (p = 0.000)	$r_p = - 0.14^{**}$ (p = 0.001)
dissenting index of attendances	$r_p = - 0.18^{**}$ (p = 0.000)	$r_p = - 0.06^*$ (p = 0.0146)

** indicates that the correlation coefficient exceeded the 99% confidence level.

* indicates that the correlation coefficient exceeded the 95% confidence level.

upon the remaining large cities.¹²¹ The work of R. Gill and J. Obelkevich remain something of an exception in the social history of religion in considering rural areas.¹²²

In this thesis I intend to concentrate on the 'provinces' rather than the capital. The Religious Census of 1851 is a unique source, allowing the patterns of religious worship and affiliation to be reconstructed, right down to the parish level, for the *whole* of England and Wales. The thesis is unashamedly a largely non-metropolitan study, in that the detailed arguments and evidence comes from fifteen registration counties in England and Wales (shown in map 1 of Appendix 1), all of which lay well outside the metropolitan area.

1.5 This thesis: Aims and Outline

To summarise the main thread of the preceding sections, it is proposed that the most notable religious phenomenon of nineteenth-century England and Wales was the greatly increased intensity of religious pluralism. It was the scale of growth, spread and fissure of these 'new religious movements' which distinguished the nineteenth-century as being unique to England and Wales, and also made this experience distinct from much of continental Europe. This period of intense innovation and revival - in short the rise of a religiously plural society - was followed by a hitherto unchecked decline of churchgoing.

The secularisation 'thesis' is a well-known, but seldom understood (and even more rarely 'used'), volume of social theory which aims to explain why religious decline has occurred. Historians have tended to ignore the subtleties of the secularisation theories, and geographers, who, but for a few exceptions, have ignored Victorian religion altogether.¹²³ The result is that there is no substantial

¹²¹ Glasgow is the focus of Brown, 'Urbanization'. Halifax is the focus of Green, Age of Decline.

¹²² The works referred to here are Gill, Empty Church and Obelkevich, Religion.

¹²³ While the work of J.D. Gay, The Geography of Religion in England (London, 1971) has shown that geographers are well placed to consider such issues, the call for geography to study religion in England and Wales has seldom been heard. Indeed, the dearth of research in any aspects of the 'geography of religion' has often been noted. One of the few books written upon religious geography

volume of applied research which has used secularisation theory as a means of furthering the understanding of religious change in a specific context. Conversely, the secularisation 'thesis' remains largely untested by rigorous historical or geographical investigation. It is argued that all disciplines studying religion thereby remain impoverished.

The traditional pessimist accounts of Victorian commentators and subsequent historians were not without foundation (nor were these accounts so crude as is sometimes inferred). However, the theme of declining religious observance has become rather sterile and leaves unaddressed rather more pertinent questions. Charting the patterns of religious observance has little to do with 'proving' or 'disproving' secularisation, unless one is content to advocate or dismiss the term in its blandest sense and ignore the propositions of secularisation theory.

The introductory analysis of religious practice has hinted at a considerable geographical complexity in the geography of religious practice in 1851. Any simple equation of low religious practice with highly urban and/or industrial environments is shown to be of limited explanatory potential. If one cannot explain the patterns of religious practice at one moment in time (and the only moment with comprehensive data), there seems little hope of providing an authoritative explanation of the subsequent decline in religious practice.

The study of religion in nineteenth-century England and Wales remains rather too close to the situation described by K. Christiano in relation to American research:

'Seldom, for instance, have the data been examined by historians for systematic trends or related in their works to emerging conditions or coincident events. More common is an almost casual resort to Census tables for a number or several to insert into an otherwise impressionistic

in recent decades is C.C. Park, Sacred Worlds: an Introduction to Geography and Religion (London, 1994). As a synthesis of research by geographers of many countries, the book shows just how much of an unstudied backwater the geography of religion is. Indeed most of the examples of 'research' are no more than very broad references to 'cultural regions' and 'diffusion' located in standard American student texts of the 1970s.

narrative on a certain religious group or a general social history of a particular region or period.¹²⁴

The aim of this current study is to fill this deficiency by examining the evidence of the 1851 Religious Census and other sources in a systematic manner. This examination will use the secularisation 'thesis' as a framework to help describe and explain the patterns of religious behaviour in the nineteenth century. Conversely, a systematic analysis of the religious sources allows a much needed empirical examination of some of the key propositions of secularisation theory. Thus, the aims of the thesis are twofold; to examine whether theories of secularisation can offer insights into religious change, and to examine whether the geography of religion in England and Wales in the nineteenth century (and earlier) appears to support or challenge the theories of secularisation.

In short, this thesis aims to redress the deficiency noted by the historian C.J. Sommerville that:

'secularization has not been much studied. The reason for that is not a lack of interest in such a fundamental change. Mostly, it is that "secularization" has seemed such a broad, diffuse, tautological, or even contradictory concept that sociologists and historians have become impatient with it. They cannot do without the term, but they use it very gingerly. Scholars complain, quite rightly, that the notion of a unitary, linear, and inevitable decline of religion is only an assumption, and one which falsifies the evidence. They [sometimes] acknowledge that there has been some kind of religious decline over the past several centuries, but their discussions have foundered because of a lack of agreement or consistency in definitions of secularization and of religion.'¹²⁵

While the literature considered in this introduction and the following chapter led me to believe that secularisation theory was likely to be the most fruitful avenue for exploration of the research problem, this was not allowed to become an act of faith. Secularisation theory is not accepted as an automatic truth and much of the

¹²⁴ See K.J. Christiano, Religious Diversity and Social Change: American Cities 1890-1906 (Cambridge, 1987), p.43.

¹²⁵ C.J. Sommerville, The Secularization of Early Modern England: From Religious Culture to Religious Faith (Oxford, 1992), pp. 3-4.

analysis considers alternative and competing explanations of the findings presented.

The use of secularisation theory does not make this thesis what Goldthorpe would call a positivistic 'grand historical sociological' narrative.¹²⁶ He posited the distinction that whereas historians tend to rely on 'relics' for their explanations, the narratives of 'grand historical sociology', as a product of their ambition, could not conduct 'primary research', and instead selected the historical accounts most supportive of their grand schema. As is already evident, the interpretations of religious history are many and varied. A grand narrative of religious change in Victorian England and Wales based on 'secondary' accounts could follow many seemingly plausible directions, all of which could appear to capture the weight of historical opinion.

This thesis attempts a rather more productive combination of history and sociology. The scope of the investigation is, at most, national. There is no implied generalisation to other counties and other time periods. The only generalisation is from the parishes of 15 registration counties to the whole of England and Wales, and evidence for such a generalisation, when and where it is made, is in any case founded upon 'primary research' using the registration-district data (which covered the whole of England and Wales). Throughout the thesis, considerable attention is given to the sources used and the limitations of the data derived from these sources. In this way, neither 'solidity' nor 'meaning' is attached to 'historical facts' without reason and elaboration, nor is religion assumed too profound or complex for any of its qualities to be quantified. As will be argued, religion provides a much-neglected indicator of aspects of society and culture which have left few other lasting 'relics'. As J. Obelkevich noted:

'In the nineteenth century, at any rate, when secular modes of expression were scarce (or left few records), the concerns and aspirations both of individuals and of groups could express themselves - indirectly or symbolically if necessary - in religion as nowhere else. Religion thus offers

¹²⁶ J.H. Goldthorpe, 'The uses of history in sociology: reflections on some recent tendencies', British Journal of Sociology, 42:2 (1991), 211-230.

privileged access to values and assumptions that might otherwise have remained unarticulated or invisible. To attempt a social history of religion is not therefore to ascend to a realm beyond experience - but to return to men's "common thoughts on common things".¹²⁷

Structure of the thesis.

The main body of this thesis commences with a review of the 'secularisation' literature, which as already suggested in this introductory chapter, is far from clearly understood and has not generally been well summarised elsewhere in the historical or geographical literature. Chapter 2 introduces the work of four of the principal secularisation theorists, Peter Berger, Thomas Luckmann, David Martin and Bryan Wilson (section 2.1). This work is considered with respect to the method of defining 'religion' itself (section 2.2), which raises the question of when is religious change to be considered as secularisation? (section 2.3). A systematisation of secularisation theory is presented in section 2.4. In conclusion to chapter 2 (section 2.5), the theory of P.L. Berger is selected to investigate the impact of *religious pluralism* in England and Wales.

Chapter 3 prepares the way for the subsequent analysis by considering the conceptual issues involved in quantifying aspects of religion. How to measure religious practice forms the focus of section 3.1. A conceptual and methodological consideration of religious pluralism is given in section 3.2. Finally, the strengths and weaknesses of the methodology are considered in section 3.3.

The main body of analysis falls into two major sections. The first centres upon a quantitative examination of the core propositions of Berger's theory of secularisation (chapter 4). The most important proposition to be analysed is that religious pluralism, in the long-term, exerted a profound secularising impulse. A considerable volume of American research has reached the opposing conclusion - that religious diversity fosters religious vitality. This research is addressed both conceptually and empirically in chapter 5 of this thesis.

¹²⁷ Obelkevich, *Religion*, pp ix -x.

The second part of the analysis (chapters 6 and 7), examines the further implications of the secularisation framework advanced in chapter 4. In chapter 6 the most developed alternative historical explanation of religious change, Robin Gill's 'empty church' thesis, is examined using the 1851 Religious Census data. Having concluded that the evidence for Gill's theory is rather patchy, attention is returned to the concept of 'religious pluralism'. In chapter 7 an attempt is made to describe the regional geography of religious pluralism and to discover the local socio-economic contexts which fostered it.

The final and concluding eighth chapter attempts to examine the further implications of this research regarding the limits of our understanding of religious change in the nineteenth century. The importance of the findings to future research in both history and sociology is outlined.

Chapter Two

The Sociology of Secularisation

Reduced to its most basic level, the secularisation 'thesis' is a body of work which attempts to describe and account for the process of the decline of the social significance of religion in the modern (western) world. The core theme is the effect of modernity upon religion. However, as becomes clear, beyond such broad common ground, the sociology of secularisation is not a unified field, and the 'theories' subsumed beneath the unhelpful banner of the secularisation 'thesis' stem from very different epistemologies. It is important to make such differences clear at the outset. This serves to avoid the 'generic' description of a secularisation 'thesis', which has become something of a 'straw person'. I aim to rediscover the shady ground upon which this 'straw person' has been built, knocked over, and rebuilt, all with a less than constructive fluidity and rapidity.

The structure of this chapter is to return to the theories which have collectively become almost synonymous with the secularisation 'thesis'. These theories arise from the work of P.L. Berger, T. Luckmann, D.A. Martin and B.R. Wilson.¹ A few notes are needed to explain the structure of this chapter, in particular, the lack of a specific section devoted to the secondary literature (though this literature is referred to throughout the chapter). This is not to offer an uncritical introduction to secularisation theory, as becomes clear as the chapter progresses. It is a recognition that the secularisation 'thesis' has become so broad and heterogeneous that it is too easy to argue either side of the case without confronting what should be the core issues - how should one conceptualise religion and theorise religious change. Indeed, the secularisation arena has become so diverse that it is only exaggerating slightly to say that the *same* set of arguments could be presented to argue for or against the 'thesis' at the whim of

¹ There are other bodies of work associated with secularisation. One can trace the influence of Emile Durkheim, Max Weber and Talcott Parsons. In terms of more contemporary work, the major authors *not* considered here are R.K. Fenn and N. Luhmann; see R.K. Fenn, Liturgies and Trials: the Secularization of Religious Language. (Oxford, 1982) and The Dream of the Perfect Act: an Inquiry Into the Fate of Religion in a Secular World. (London, 1987); N. Luhmann, Religious Dogmatics and the Evolution of Societies, trans. and intro. by P. Beyer, (New York, 1984).

the author, as was demonstrated in chapter 1 with respect to the historians J. Cox and A.D. Gilbert.

Secularisation has typically been offered as a *general* model of religious change, and this has led to much of the criticism of the associated theories. From a pro-secularisation viewpoint one could argue that generalisation is a facet of most theories within the social sciences (indeed, the object of many), and that the model is not deterministic, since local conditions of geography and history will alter the resultant patterns of the general model. This is (latterly) the position of David Martin *par excellence*.² From an ante-secularisation viewpoint one could argue that such generalisation has produced a framework so broad as to be tautological - all religious decline must be a product of secularisation (and thereby any religious decline is evidence of secularisation), and any contra-indicative information can be dismissed as the results of singularities of geography and history that do not challenge the general theory.

The point I wish to stress (and, I would argue, is a necessary basis for any meaningful progress in the secularisation debate), is that there is *no* definitive secularisation 'thesis'. The increased use of the term 'thesis', has served to mislead - it imparts a high degree of unity to what is often a markedly heterogeneous body of work. As a result, the secularisation 'thesis', in so far as it can be said to exist, is inevitably something of a straw person which can be torn apart without great intellectual effort. Indeed, much of the empirical work on both sides of the secularisation debate constitutes a rather superficial attempt to affirm or disprove the various aspects of religious 'decline' versus 'survival' or 'revival'. The issue of real interest - the proposed relationship between religion and society - often lies subsumed beneath such exchanges.

It is for these reasons that this chapter begins by a return to the individual theories of secularisation (section 2.1) and proceeds with a further return to the definition of basic terms (sections 2.2 and 2.3). A consideration of these

² See D.A. Martin, *A General Theory of Secularization* (Oxford, 1978) and D.A. Martin, 'The secularization issue: prospect and retrospect', *British Journal of Sociology*, 42:3 (1991), 465-74.

fundamental issues cuts more incisively to the heart of the secularisation debate than a comprehensive review of the secondary literature, and allows a more informed critical platform from which to re-address the secularisation theories in sections 2.4 and 2.5.

2.1 The Secularisation 'Thesis' Disaggregated

In examining the work of the secularisation theorists, it is probably most instructive to begin with Bryan Wilson. This is because his theory is perhaps the most synonymous with the secularisation 'thesis', and is closest to its Weberian origins. Also, in the British context, Wilson's work has been the most influential of all contemporary sociologists. The most important point to make about Wilson's work is that it was (explicitly) not written as a 'thesis' or 'theory', but rather as the proposal of a series of *concomitant trends* which tend to occur in the religious sphere as a result of modernity.

The three key trends or processes in Wilson's account are *rationalisation*, *societalisation* and *secularisation* itself.³ Wilson's starting point was the definition of the functions of religion in terms of both 'explicit' and 'latent' functions. For Wilson, explicit functions are headed by *salvation* - a function of universal importance in the Judaeo-Christian tradition. More minor explicit functions, such as miracles and faith healing, could be of local importance. In Wilson's schema, the latent functions of religion are *social cohesion*, *social control*, and *reinforcement of group identity*.

Wilson argued that there has been an almost automatic ascription of such latent functions to religion as a result of the anthropological tradition of early

³ The following discussion of Wilson's work is centred upon B.R. Wilson, Religion in Sociological Perspective (Oxford, 1982). In this work Wilson summarises and elaborates upon his earlier formulations of secularisation. A major focus of Wilson's work, tangential to secularisation, is his study of sects; see B.R. Wilson, The Social Dimensions of Sectarianism (Oxford, 1990). More recently, Wilson has considered the concepts of toleration, privatisation and pluralism as overlapping, but evolving, conditions; see B.R. Wilson, 'Religious toleration, pluralism, and privatization', in P. Repstad (ed.), Religion and Modernity: Modes of Co-existence (Oslo, 1996), pp. 11-34. These ideas emerge in section 2.4 of this thesis.

sociology, which tended to examine 'primitive' societies.⁴ He argued that in 'advanced' societies certain of these erstwhile religious functions had been taken over by other agencies, and others had lost relevance outright - as latent functions were made manifest by the process of *rationalisation*. Wilson disagreed with functional definitions of religion for their implication that there could be a net translation of functions into the 'secular' sphere, rather than the outright loss of religious functions that he proposed.

The process of rationalisation, which Wilson identified as the rise of science and technology, is fundamental to Wilson's arguments. He argued that rationality, in contrast to most other social developments, was almost uniquely anathematic to religion, largely because the ultimate claim of salvation lay beyond rationality. For Wilson, rationalisation is the process which transforms social organisation from community (*gemeinschaft*) to society (*gesellschaft*), and this is the dominant mechanism of secularisation. He termed this product of rationalisation 'societalisation', and offered the following summary:

'Whereas, in the community, the individual's duties were underwritten by conceptions of a morality which was ultimately derived from supernatural sources, or which had reference to supernatural goals, in the society, duties and role performances are ultimately justified by the demands of a rational structure, in which skills are trained and competences certificated; roles are assigned and co-ordinated; rewards are computed; and times are measured and allocated. Societal organisation is itself the result of processes of *rationalization*'.⁵[My italics].

In Wilson's account, secularisation is long-term and ultimately irreversible, despite local religious revivals linked to specific social circumstances. Wilson therefore sees secularisation as concomitant with the modernisation of society. He proposed that the chief causal process involved was *rationalisation* and that the chief secularising mechanism of rationalisation has been *societalisation*. The net

⁴ Most notably in the work of Durkheim, principally, E. Durkheim, The Elementary Forms of the Religious Life, trans. E. Swain, (London, 1915).

⁵ Wilson, Sociological Perspective, pp.155-156.

result of secularisation is that religion loses its social significance, but remains in the individual, private sphere.⁶

Peter Berger's theory of secularisation is part of a wider project known as the 'sociology of knowledge'.⁷ Both Berger and Luckmann operate within the sociology of knowledge, an approach which popularised the German phenomenological tradition of sociology. Berger and Luckmann's work is more ambitious in scope than either Martin or Wilson, since it forms a theory of culture *in toto*.⁸

Berger and Luckmann's understanding of society and culture is built upon a three-way dialectical relationship between 'externalisation', 'objectivation', and 'internalisation' (socialisation). In their account these three processes describe the mechanisms whereby personal development (socialisation) occurs, and also they provide a bridge to societal and cultural maintenance and change.

From this viewpoint 'externalisation' is the very essence of human being - an ongoing biological necessity to 'pour out' into the world. This outpouring occurs because there is no biologically grounded structure of instincts which can channel thought and behaviour. People have to construct 'human' structures which are thereby 'external' to those who produce them. The inherent 'externalisation' of human 'world-building' is part and parcel of 'objectification' (objectivation) - the human structures confront their creators/maintainers as an external fact, an

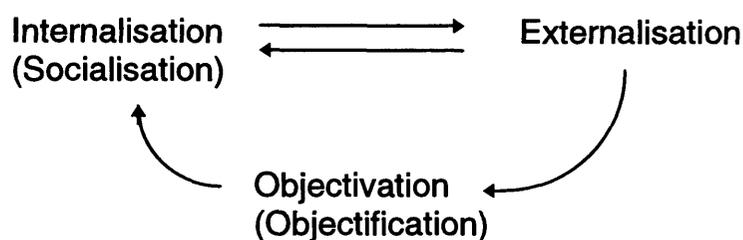
⁶ Wilson doesn't elucidate further on this point, but presumably in his terms religion survives in the private sphere because at the level of individual consciousness the explicit function of salvation retains a relevance.

⁷ The foundations of the sociology of knowledge were laid out in P.L. Berger and T. Luckmann, The Social Construction of Reality: a Treatise in the Sociology of Knowledge (New York, 1966). The phenomenological tradition has been classified in A. Giddens, Studies in Social and Political Theory, (London, 1977). According to Giddens, Berger's approach lies within the existential tradition of phenomenology (as opposed to the hermeneutic tradition). This is because Berger's explanations focus on the 'individual' level of society - society as it has been 'internalised' by the individual. A similar classification is offered by N. Thrift who positions Berger and Luckmann's sociology of knowledge as the 'voluntarist' wing of the 'structuralist school', see N. Thrift 'On the determination of social action in space and time', Environment and Planning D: Society and Space 1 (1983), 23-57.

⁸ For a full review of Berger's work see R. Wuthnow, J.D. Davison Hunter, A. Bergesen and E. Kurzweil, Cultural Analysis: the Work of Peter L Berger, Mary Douglas, Michel Foucault and Jurgen Habermas (London, 1984): see especially pp. 21-71.

objective reality. The human world directs or even controls human behaviour through sanctions, coercion, discipline and so forth. The objectivated world is continually reabsorbed into individual consciousness and shapes the individual consciousness through the constant process of socialisation, i.e. 'internalisation'.

In this way one can trace the three way dialectic as a circular process of reality maintenance:



Once created, these externalised, objectivated 'worlds' do *not* form a taken-for-granted, unchanging reality. Though the individual understands the objective social world, and, indeed, identifies with it and has knowledge shaped by it, there is an ongoing need for social *legitimation*. This is a cognitive legitimation centred upon the distribution of knowledge, or what Berger terms 'plausibility structures'. In Berger's view, socio-cultural maintenance is dependent upon a social structure which provides a uniformity between the social world as it is objectively understood by each individual in common with others and the social world as it is subjectively understood by the individual consciousness. In other words, social 'maintenance' requires that there are no significant differences between individuals' plausibility structures. It is conversation with significant others (the chief mechanism of reality maintenance, since it is the point where internalisation and objectivation meet), which maintains reality as subjectively plausible.

The extent to which individual plausibility structures are similar is thereby dependent on the inner cohesion and organisational strength of the wider plausibility structures. For Berger, one of the main mechanisms of socio-cultural change is where a plurality of reality definitions co-exist and compete with each other. Under such circumstances, 'reality' ceases to be an inter-subjective, self-evident truth and plausibility structures become heterogeneous.

This brief introduction to Berger's dialectical basis of a theory of culture begins to make clear why he has been particularly fascinated by the fate of religion under conditions of modernity. For Berger, the role of religion has been historically at the heart of social legitimation in most cultures. He proposed that religion acted to interpret the social ordering of things in terms of a sacred order of the universe - a 'sacred canopy'.⁹ Religion was thereby a key part of the plausibility structures of most 'pre-modern' societies, forming an inter-subjectively uniform sacred canopy. For Berger 'modernity' (and like Wilson, Berger has drawn upon the ideas of Max Weber in his understanding of modernity) is, above all else, characterised by technology, bureaucracy and *pluralism*. While, following Berger's dialectics, all three of these phenomena have correlates at the level of individual consciousness, it is *pluralism* which has had the greatest influence on plausibility structures in general, and religion in particular.

In Berger's terms, secularisation is the inherent problem of the maintenance of a 'sacred canopy' (a religious world view) in a 'modern', 'pluralised' society. Secularisation becomes a major personal and social problem; at the individual level the loss of religion poses the constant threat of *anomie*; at the societal level a key form of social legitimation is fragmented and weakened.

Building from this theoretical basis, Berger goes on to provide an account of how secularisation has occurred in the western world.¹⁰ In his view, the Judaeo-Christian tradition has tended to de-mythologise the world and attenuated the supernatural, both through the historicity of its cosmology and the organisation inherent in the Christian church. Berger argued that despite reversals in this diminution of the supernatural under the Medieval Roman Church, these elements returned strongly with Protestantism - which removed the three 'ms' from

⁹ The main work drawn upon here is P.L. Berger, The Social Reality of Religion (Harmondsworth, 1973). Berger's later work on religion is more concerned with the personal and theological implications of secularisation, see P.L. Berger, A Rumour of Angels: Modern Society and the Rediscovery of the Supernatural (New York, 1970); P.L. Berger, The Heretical Imperative: Contemporary Possibilities of Religious Affirmation (London, 1980); and P.L. Berger, A Far Glory (New York, 1992).

¹⁰ Berger, Social Reality, pp. 111-130.

Christianity: magic, mysticism and mythology. In Berger's terms, the 'elective affinity' of Christianity with rationality, combined with modernisation has led to 'objective' (social structural) secularisation. In this historical part of his work, Berger's focus, as with much of Wilson's work, is upon rationality. For instance Berger suggested that 'A sky empty of angels becomes open to the intervention of the astronomer and, eventually, of the astronaut.'¹¹ Berger argues that in the longer term, this avowal of rationality was part of Christianity's undoing, and hence it was, at least in part, its own gravedigger.

A part of Berger's notion of objective secularisation is the weakening or formal severance of the church-state relationship, leading to the loss or weakening of a single church monopoly. In this way *religious pluralism* arises, and religious groups compete for membership. The singularity of world-view is lost, and 'disconfirming others' can no longer be kept silent. In terms of Berger's dialectics, pluralism relativises religious content and thereby de-objectivates it: religion becomes 'subjectivised' in a double sense - both in its becoming a private affair with little remaining self-evident, inter-subjective plausibility, and because it now refers to individual questions of meaning rather than to history or cosmology. Berger's theory is therefore very much centred upon religious pluralism as the dominant causal agent of secularisation.

Thomas Luckmann's starting point is very similar to that of Berger in terms of their shared dialectical basis to the sociology of knowledge.¹² Whereas Berger's recurring theme is *religious pluralism*, and its consequences of denominational competition and the problem of plausibility of religion, Luckmann concentrates on the *heterogeneity of world view*, and its impact upon individual consciousness. These are two aspects of the same theme, but lead to quite different accounts of religious change.

¹¹ Berger, *Social Reality*, p. 118.

¹² The main work referred to in this summary is T. Luckmann, *The Invisible Religion* (New York, 1967). Certain of these arguments were developed in T. Luckmann, 'The structural conditions of religious consciousness in modern societies', *Japanese Journal of Religious Studies*, 6:1-2 (1979), 121-137.

Luckmann examined how the development of society led to social differentiation (in terms of institutional specialisation) and thereby differentiation and privatisation of the *world view*. He proposed that this tended to occur because in the modern world individuals interact in various social spheres and hold many differing alliances. In Luckmann's theory, social differentiation leads to the loss of functions by religious organisations, and the differentiation of world view means that no one religion (and within Christianity, no one church) can appeal to all. Thereby competing religious world views (religious pluralism) arise.

A second strand of Luckmann's work examined how 'institutionally specialised' models of religion are limited in their ability to change, due to their 'textual' stability. Changing social conditions tend to progressively distance institutionalised religiosity from personal religiosity - leading to an 'invisible religion' - one of Luckmann's core concepts. 'Invisible' religion comes from three principal sources: remnants of former political ideologies, remnants of former religious ideologies, and individual or familial (private) themes. In summary, Luckmann concluded:

'Religion could be and was increasingly perceived as the ideology of an institutional subsystem. Its jurisdiction over matters of "ultimate" concern was restricted to matters that could be of "ultimate" concern to the "private individual" only. The most important link of the sacred universe to the world of everyday life was broken. Religious institutions maintained their massive presence in society as highly visible institutions but suffered a sharp restriction of the jurisdiction of their norms.'¹³

The last account considered here is David Martin's general theory of secularisation.¹⁴ In many ways Martin offers an overview of the other theories, and a clarification of the geography of secularisation within 'Christendom'. Martin's starting point is that certain broad tendencies, or what he subsequently labelled

¹³ Luckmann, 'Religious consciousness', p.133.

¹⁴ The work referred to here is Martin, Theory of Secularization. See also Martin, The Secularization issue; and D.A. Martin, 'Religion, secularization, and post-modernity: lessons from the Latin American case', in Repstad, Religion and Modernity, pp 35-43.

'universal processes' (of secularisation) are 'fairly well established'. Among these tendencies are:¹⁵

- i) 'that religious institutions are adversely affected to the extent that an area is dominated by heavy industry'
- ii) 'that they are more adversely affected if the area is homogeneously proletarian'
- iii) 'that religious practice declines proportionately with the size of an urban concentration'
- iv) 'that geographical and social mobility erodes stable religious communities organised on a territorial basis; that it also contributes to a relativization of perspectives through extended culture contact'
- v) 'that the church becomes institutionally differentiated in response to the differentiation of society, notably into pluriform denominations and sects.'
- vi) 'that the church becomes partially institutionally differentiated from other institutional spheres: such as justice, ideological legitimation, the state apparatus, social control, education, welfare ...'
- vii) 'this is paralleled by a compartmentalization of an individual's religious role which may encourage a range of variation in personal religion which contributes to institutional disintegration.'

Martin avoided the implied determinism and universality of these processes by defining them as things that would happen all things being equal, 'But things are not equal - ever ...'.¹⁶ This introduction sets the theme for the substance of Martin's theory, which is at times both the most sweeping of all the theories, but in part the most sensitive (especially in terms of geographical detail). The historian J. Cox aptly summarised Martin's work as a 'contrast between a sensitive examination of the variety of patterns of religious change on the one hand, and a determination to fit them into an overall explanatory framework on the other.'¹⁷

¹⁵ The list is derived from Martin, Theory of Secularization, p. 3. Roman numerals added.

¹⁶ Martin, Theory of Secularization, p. 3.

¹⁷ G. Cox, The English Churches in a Secular Society: Lambeth, 1870-1930, (Oxford, 1982).

Much of the rest of the Martin's book examined exactly how and why things were not equal. In particular Martin posited that the first component of his theory *component A*, 'the crucial event', produced *component B*, 'resultant patterns' (of religious change); these resultant patterns being unique to various cultural regions. Martin argued that the most important 'crucial event' was the success or failure of the Reformation. Certain other, more geographically limited, events effected more specific and local patterns of religious change, e.g. the outcome of the English Civil War. Two further components were also important to Martin's scheme. *Component C*, which Martin defined as the 'Calvinist and Enlightenment elements' and *component D*, defined as the relation of religion to the growth of national identity. Martin argued that to a certain extent these first three stages were all interlinked, with a strong line of causality running from the crucial events to resultant patterns and Calvinist and Enlightenment aspects. *Component D*, the relation of religion to the growth of nationalism and cultural identity, could have a strong influence on religious change; an influence largely independent of the previous three components.

It is the second component, the 'resultant patterns' (the patterns of religious change caused by the 'crucial events') which, to a large extent, forms the organisational structure for the rest of Martin's book. Martin proposed various regional patterns of religious change for the whole of Christendom. In so doing he identified three over-arching variables which determined these national or supra-national patterns. These variables were *individualism*, *pluralism*, and *Calvinist salience*. Of these, Martin argued that pluralism was the most clear differentiator of these patterns, and pluralism largely defined what Martin termed a 'frame' for the process of secularisation. For example, Martin stated:

'We have still to put the linking needle through all these relationships, and it is Protestantism in different degrees of pluralism. Unhinge the centre, make politics and religion federal, separate and dissociate religion from social authority and high culture, let religion adapt to every status group through every variety of pullulating sectarianism.'¹⁸

¹⁸ Martin, Theory of Secularization, p. 36.

In particular, he proposed a fourfold typology of countries based on four degrees of pluralism: total monopoly (Catholic), duopoly (Catholic and Protestant), limited pluralism (state sanctioned denominationalism), and total pluralism (no church-state relations, total religious competition). Martin also examined how political regimes could be associated with these various forms of religious regime, proposing that Catholic monopolies have been associated with militant 'secular' regimes, and Protestant denominationalism with democracy. In relation to religiously plural countries Martin observed that:

'All these varied characteristics, placing England half-way between Scandinavia and the U.S.A. ... are associated with degrees of pluralism. If you take participation and pluralism they run in a direct positively correlated line from the U.S.A. to Canada and Australia, to England to Scandinavia. Indeed [the attendance] figures are respectively about 40+ per cent, 25+ per cent, 10+ percent and 5 per cent (or less) per Sunday. If you take anti-clerical sentiment and clerical status they both rise together in the reverse direction *for the same reasons*. Clerks have low status and large congregations in the U.S.A. and high status and small congregations in Sweden. Likewise the incidence of Social Democracy and Communism rises along the same continuum.' [His italics].¹⁹

After describing the state of religion and society within each frame, Martin examined in more detail certain key factors, namely: the strength of the Protestant ethic, the equivalence of religion and politics, the process of social differentiation, and class and anomie. Martin's aim was to account for the geographical variations of religious experience within Christendom after the advent of modernity, a point which Martin defined (somewhat belatedly) as *after* the period of 'the extensive evangelical renaissance of Christianity which began about 1810 and extended for most of the nineteenth century'.²⁰

In this way, Martin's account is more a geographical and historical description of religious change within specified limits of space and time, rather than a theory of religious change. Though Martin's work is not completely lacking in a description of causative processes, his treatment of 'differentiation' in terms of its

¹⁹ Martin, Theory of Secularization, p.35.

²⁰ Martin, Theory of Secularization, p.13.

impact upon both religious institutions and cultural identity is more detailed than in any of the other theories.²¹

2.2 Issues of Definition: a Return to Basics

The need for definition.

It has already become clear, with reference to David Martin's work, that a degree of 'mythologising' had already arisen, even in the writings of one of the 'original' secularisation theorists. By mythologising I mean the acceptance of undemonstrated trends and causal processes as self-evident or proven truths. Martin's rather sweeping core propositions (for example that 'religious practice declines proportionately with the size of an urban concentration', and 'religious institutions are more adversely affected if the area is homogeneously proletarian') are claimed to be 'fairly well established', but he does not reveal where and by whom. It has already been shown in chapter 1 of this thesis that no historian has proposed relationships in such a manner in the last thirty years or more. If these propositions did not stem from the last three decades of historical research, neither did they arise in the other theories of secularisation already outlined.²² It is perhaps symptomatic of the nature of secularisation 'debate' that one who criticised secularisation for being a 'large number of discrete, separate elements loosely put together in an intellectual hold-all', should introduce a 'general theory of secularisation' in such a manner; presumably Martin no longer felt his earlier observation to be pertinent.²³

²¹ Martin, Theory of Secularization, pp.69-82. Martin outlined the 'secularization pattern' in England in greater detail in D.A. Martin, The Religious and the Secular: Studies in Secularization (London, 1969), pp. 114-136.

²² For example, only B.R. Wilson, and then in his early work, argued that the level of church-going was a direct indicator of the degree of secularisation, see B.R. Wilson, Religion in Secular Society (London, 1966) p.2.

²³ This criticism of secularisation was given in D.A. Martin, 'Towards eliminating the concept of secularization', in J. Gould (ed.), Penguin Survey of the Social Sciences (Harmondsworth, 1965), pp. 169-182.

The secularisation debate is replete with unsubstantiated propositions and criticisms, or what many have termed 'mythologising'. Proponents of secularisation can resort to tautology and teleology: all religious decline evidences secularisation, secularisation explains all religious decline, and any contradictory evidence must be temporary, local, or somehow demonstrate 'internal secularisation'.²⁴ It is not hard to see why P.E. Glasner, in what remains the most powerful of all the criticisms of secularisation, proposed that it was a social-scientific myth.²⁵

As Robertson recognised over twenty-five years ago, the controversy surrounding secularisation speaks as much of the tension between *sociology* (and sociologists) and *religion* (and faith) as the tension between society and religion.²⁶ In order to make any judgement upon the work of the sociology of religion it is necessary for a return to basics in order to gain a more profound perspective on the secularisation issue. This section challenges the views of M. Weber, and subsequently P.L. Berger (though altered latterly), that 'the essence of religion is not our concern',²⁷ or that definitions of religion 'are matters of taste and thus fall under the maxim *de gustibus*.' [His italics].²⁸ I attempt to show that certain of the major characteristics of the secularisation theories themselves, and also the nature of much of the criticism they have received, have been influenced strongly by the definition of the terms 'religion', and 'secularisation'. I propose that the definition of core terms is the shortest and most penetrating route into the heart of the debate surrounding the secularisation 'thesis'.²⁹ Definition is certainly a necessary

²⁴ The prime example in this context arises when those arguing from a 'pro' secularisation viewpoint dismiss the possibility that the United States of America can have undergone 'modernisation' while retaining a marked level of religiosity. Berger, Luckmann and Wilson have all argued (somewhat too superficially) that the churches and denominations have undergone an 'internal secularisation' in the U.S.A., and that American society is thereby secular. See, for example, Luckmann, Invisible Religion, pp. 36-37; Berger Social Reality, p.114.

²⁵ This is the central theme in P.E. Glasner, The Sociology of Secularisation: a Critique of the Concept (London, 1977).

²⁶ See R. Robertson, 'Sociologists and secularization', Sociology, 5 (1971), 297-312: see especially p. 300.

²⁷ M. Weber, The Sociology of Religion, trans. by E. Fischoff, (Boston, 1963), p.1.

²⁸ Berger, Social Reality, p.180; but see also Berger's shift of position in P.L. Berger, 'Some second thoughts on substantive versus functional definitions of religion', Journal for the Scientific Study of Religion, 13:2 (1974), 125-133.

²⁹ The return to basics is not a new call when considering the secularisation arena. Indeed P.E. Hammond, The Sociology of Secularisation (1977), considers the influence of the definition of religion upon the definition of secularisation. Robertson also makes a similar point in 'Sociologists and Secularization'. It is illuminating to note how perhaps the most heated (published) debate regarding secularisation, that between F.J. Lechner and T. Crippen, focused upon their contrasting

precursor to the *measurement* necessary for any quantitative research, even if a commonly agreed system of quantification remains an illusory goal.

As Forster argued (and the same remains true today), sociological definitions of religion have been lacking, and more to the point, such definitions are only of value if they are usefully employed by those offering them and not simply cast aside in the subsequent argument and analysis.³⁰ Stark and Glock did not exaggerate when they stated:

'The ambiguities in what religiousness can mean have led to serious failure in much research and writing on religious commitment. A good part of the recent dispute over whether American religion experienced post-war revival or decline seems to have been produced by different observers adopting different definitions.'³¹

The context of religion in Victorian England and Wales is no more clear-cut than that of post-war America considered by Stark and Glock. Robertson was perhaps too hasty to cast doubt as to whether a consideration of definition was a necessary basis for historical research to proceed. He stated:

'The problem [of measuring religion] is of the greatest importance and adequate research cannot proceed without some resolution of it - save in the sense that such sophisticated procedures *cannot be employed in historical work*.' [My italics].³²

It is, of course, true that historians (and historical geographers/sociologists) have set limits regarding the type of religious data available to them. This is, however, not a reason to duck any consideration of definition and measurement. It is important to know what aspects of religion are being drawn upon in an historical study - even if these aspects are data driven. Whether research is historical or contemporary, the need is constant to define what is understood by the term

definitions of religion. This debate reached its conclusion in T. Crippen, 'Further notes on religious transformation', *Social forces*, 71:1, (199), 219-223; and F.J. Lechner, 'Secularization revisited', *Social forces*, 71:1, (1992), 225-228.

³⁰ P.G. Forster, 'Secularization in the English context: some conceptual and empirical problems', *Sociological Review*, 20 (1972), 153-168.

³¹ R. Stark and C.Y. Glock, *Patterns of Religious Commitment* (Berkeley, 1968).

³² R. Robertson, *The Sociological Interpretation of Religion* (Oxford, 1970), p.54.

'religion' and thereby provide a clearly stated basis upon which to build subsequent interpretation.

Types of definition.

The term 'religion' is associated with two distinct types of meaning, this duality stemming from an everyday use and a specialised (social) scientific use. This division is reflected in the two main types of definition of religion used in academic study: substantive (what religion 'is') and functional (what religion 'does'). Substantive definitions are used for academic study.³³ Functional definitions are, however, more distinctly sociological by virtue of defining the properties of religion in terms of the functions it provides. Substantive definitions are more akin to the everyday usage of the term, being centred upon the designation of 'what a religion is' without any evaluation of its results. As J.M. Yinger stated, 'substantive definitions can be of great value, particularly for those who are concerned with religions as historical, and cultural facts'.³⁴

This division between functional and substantive definitions is a theme in the sociological literature. What the literature seldom touches upon is that many definitions are a mixture of the two types. Most notably, Durkheim's definition, often cited as the classic functional definition of religion, is partly substantive.³⁵ Durkheim's definition starts as 'A religion is a unified system of beliefs and practices relative to sacred things, that is to say, things set apart and forbidden' - which is substantive - and in a more purely functional vein finishes, 'beliefs and practices which unite into one single moral community called a church, all those who adhere to them.'³⁶

Functional definitions have the utility of indicating how religion is linked to other social phenomena which fulfil similar functions (whether these be latent or manifest). However, for this very reason, such definitions are not without their

³³ For instance see Berger, Social Reality, pp. 177-180.

³⁴ M.J. Yinger, The Scientific Study of Religion (New York, 1970), p.4.

³⁵ This point has also been made by K. Dobbelaere and J. Lauwers, 'Definition of religion - a sociological critique', Social Compass, 20:4 (1973/4), 535-551.

³⁶ Durkheim, Elementary Forms, p.47.

attendant problems. Any phenomenon providing the functions defined as religious could attain the status of a religion, almost by default. Indeed, phenomena as diverse as coronations, horoscopes and football have been cast in this mould.³⁷ In this matter the work of R. Robertson remains the most pertinent. Whilst not dismissive that communism, for example, has much in common with organised religion, he argued that it should be viewed as a 'functional equivalent' to religion and not as religion *per se*. He stated that 'The functional-equivalent thesis is important because it combines an element of substantive definition with the functional definition. That is Communism is functionally equivalent to religion, as *substantively defined*.' [His italics].³⁸

Substantive definitions are not without attendant problems either. To take Berger's definition of religion as the human enterprise by which a 'sacred cosmos' is established, it is immediately apparent that the notion of the 'sacred' becomes pivotal as to where the boundaries of religious phenomena are drawn; such boundaries can be every bit as flexible as with a functional definition.³⁹ If Berger's understanding of religion is quite narrow, the definition he offered did not make such specificity inevitable. As Yinger noted, the functional/substantive dimension is not the only one upon which definitions can be sorted, there is also an inclusive/exclusive dimension.⁴⁰ Indeed, this dimension is arguably of greater significance than the functional/substantive divide, since functional definitions do not necessitate a functional analysis, and substantive definitions do not preclude one.⁴¹ Although Berger was rather too ready to equate overly-inclusive definitions with functional definitions, for example, when he stated: 'For one thing, they [functional definitions] are very broad, and I've always been convinced that useful definitions are narrow.'⁴² I would argue that he was correct to say that useful definitions tend to be narrow. The situation is perhaps best summed up by Robertson who stated: 'I do not argue that functional definitions have to be

³⁷ A trend noted in A.D. Gilbert, The Making of Post-Christian Britain (London, 1980), p.4.

³⁸ Robertson, Interpretation of Religion, p.39.

³⁹ Berger's definition is outlined in Berger, Social Reality, Appendix (i), pp. 177-180.

⁴⁰ Yinger, Study of Religion, chapter 1.

⁴¹ This point was also made by Yinger, Study of Religion, chapter 1.

⁴² Berger, 'Definitions of religion', p.127.

inclusive, or that substantive ones are always exclusive. I am merely generalizing that this seems to be the case empirically.⁴³

For this thesis, the definition of religion proposed by Glock and Stark is seen to contain the elements necessary for a workable definition. Their definition has the advantage of showing how religion can be related to similar phenomena, but it is not overly inclusive, in that it attempts to formally separate religion from 'functional equivalents'. Their definition is in two parts. First, they define the concept of *value orientations* as 'over-arching and "sacred" systems of symbols, beliefs, values, and practices concerning ultimate meaning which men shape to interpret their world.'⁴⁴ Religion is then defined as such a value orientation with a *supernatural referent*, i.e. God in the Judaeo-Christian tradition.

Some important points arise immediately from this definition. Certain functional equivalents are explicitly separated from religion. Most importantly, Humanism, Marxism and what Yinger termed 'science as a way of life' can be defined as value orientations, but they (explicitly) have no supernatural referents.⁴⁵ In the context of this thesis this leaves magic as the hardest term to separate from religion, since magic has a supernatural referent in many instances. However, one can build upon Durkheim's view, that there can be no 'church of magic', to argue that religion and magic can be separated.⁴⁶ I would argue that magic is not an *institutionalised* system of beliefs and practices in the same way as religion. As argued by Stark and Bainbridge, magic tends to deal with *specific* problems facing individuals or societies, (e.g. good health, weather for crops), while religion tends to deal with ultimate questions of meaning.⁴⁷ To recall the working definition of value orientations as 'over-arching and "sacred" systems of symbols, beliefs, values, and practices concerning ultimate meaning which men shape to interpret the world'; it follows that magic differs from religion in that it tends to be neither over-arching nor concerning ultimate meaning. This is not to say that magic is not

⁴³ Robertson, 'Sociologists and secularization', p. 303.

⁴⁴ C.Y. Glock and R. Stark, Religion and Society in Tension (Chicago, 1965), p.9.

⁴⁵ Yinger, Study of Religion, pp. 10-12.

⁴⁶ Durkheim, Elementary Forms, pp. 42-45.

⁴⁷ R. Stark and W.S. Bainbridge, The Future of Religion: Secularization, Revival and Cult Formation (Berkeley, 1985), pp. 116-122.

frequently connected with religion. It can form a major part of the symbols, beliefs, values and rituals that make up religious value orientations. Christianity, especially Catholicism, has had strong historical links with magic.⁴⁸ Thus magic can be 'religious', and religion can be 'magical', but this does not preclude a formal separation of magic and religion.

To apply the working definition of religion to the specific context of England and Wales in 1851 is to equate religion with the various Christian 'denominations' present at this date.⁴⁹ This may seem 'common-sense' and suggestive that the preceding definitional argument was somewhat superfluous, but its purpose will become clear as I move on to the problem of quantifying religion, which brings to the fore the need for defining the terms 'religious', 'religiosity', and latterly 'secularisation' itself.

What is religious?

The often subtle differences in the various definitions of religion tend to be magnified when the consideration moves to the *religious*. There is a degree of cohesion (in practice, if not in the definition itself) between the broadest functional definition and the narrowest substantive definition of religion. This consensus has arisen if only because 'when confronted with concrete cases they [functional theorists] veer, inconsistently, towards a commonsense definition based on conventional, everyday usage.'⁵⁰ In contrast, the limits of phenomena described as 'religious' lie in very murky water.⁵¹

⁴⁸ On the relationship between Catholicism and magic see Stark and Bainbridge, Future of Religion, pp. 116-122; Glasner, Sociology of Secularisation, pp. 69-72. The leading work on magic and religion in remains K. Thomas, Religion and the Decline of Magic (London, 1971).

⁴⁹ As noted previously, the term 'denominations' is loosely used to cover all religious organisations (Churches, cults, sects etc.). The only other religion to have a measurable presence in 1851 was Judaism. Synagogues were recorded on the registration-district dataset, but were not recorded on the parish-level computerised dataset. The presence of Judaism was highly concentrated into a very few places, most especially London, the major provincial urban centres, and along the south coast of England.

⁵⁰ Robertson, Interpretation of Religion, p.41.

⁵¹ For instance, part of a recent heated debate between two sociologists of religion centred upon whether a Michael Jordan 'slam-dunk' inspires awe and is thereby sacred and is thereby religious. See T. Crippen, 'Religious transformation', and F.J. Lechner, 'Secularization revisited'.

Many texts written upon the sociology of religion devote attention to sport, travel and other activities in the context of the 'religious'.⁵² The boundaries between the *religious* and the *secular* are more blurred when viewed from the 'bottom up' (the individual as reference) than from the 'top down' (the institution or the ideology as reference). Thus individual experiences outside of 'religion' (to use the everyday usage of the term for a moment) can be described as *religious* by sociologists - in the sense that they may offer a considerable degree of 'transcendence' or address questions of 'ultimacy' (in functionalist terms, they can achieve a very close functional equivalence to the manifest functions of religion).

The most successful attempt by sociology to disaggregate religion into areas or components which can then be used to define the 'religious' has been the conceptualisation of dimensions of *religiosity*. The logic being that if 'religion' can be broken down into separate components or dimensions of the 'religious', this will facilitate the placing of limits around the beliefs, practices and experiences that collectively make up religion. Several attempts have been made to define the components of religiosity. The work of Glock and Stark remains the most widely referred to definition of 'dimensions of religiosity', and is the closest to a generally accepted consensus.⁵³ Stark and Bainbridge offer the following summary of the dimensions proposed in the earlier work.⁵⁴

1. The ***belief*** dimension of commitment consists of the expectation that the religious person will accept certain doctrines as true.

2. The ***practice*** dimension includes acts of worship and devotion directed toward the supernatural. Two important subtypes exist here. ***Ritual*** practices refer to formal ceremonies, rites, and sacred activities - such things as baptism, attending worship services, and taking communion.

⁵² See, for example, Davie's description of the Hillsborough disaster of 1989, G. Davie, Religion in Britain Since 1945 (Oxford, 1994), pp. 88-91. No doubt the public response to the death of Diana, Princess of Wales, will receive attention as a 'religious' phenomenon.

⁵³ The dimensions of religiosity were first proposed in Glock and Stark, Religion in Tension. A large volume of subsequent work refers to, and in many cases makes use of, these dimensions. See, for example, Yinger, Study of Religion, pp. 26-27; Robertson, Interpretation of Religion, pp. 53-54; A.D. Gilbert, Religion and Society in Industrial England: Church, Chapel and Social Change 1740-1914 (London, 1976), pp. 23-24.

⁵⁴ The following list is summarised from Stark and Bainbridge, Future of Religion, pp. 9-10.

Devotional practices are informal, often spontaneous, and frequently done in private. Bible reading and private prayer are common examples.

3. The **experience** dimension takes into account that individuals often believe they have achieved direct, subjective contact with the supernatural. Often these are no more than intense but diffuse feelings of special awareness of divine existence.

4. The **knowledge** dimension indicates that people are expected to know and understand central elements of their religious culture.

5. **Consequences** refer to religious actions in everyday life. All religions direct people to behave in certain ways and not to behave in certain other ways.

One immediate point raised by a glance at these dimensions is that much historical work, especially that of a quantitative nature, is limited by the available data to a consideration of attendance or membership - and thereby to part of the second dimension, i.e. 'ritual practice'.

While clearly very helpful in clarifying the different aspects of religiosity, the invocation of 'dimensions' of religiosity perhaps suggests more than it can deliver. Even if one agrees that these dimensions are a reasonably good measure of the various forms of religiosity, they are not necessarily an end in themselves. By this I mean that if one's aim is to produce some overall measure of religiosity, whether of an individual or a society, problems remain of how to scale and how to aggregate these dimensions. The problems of measuring the religiosity of a society are the greater: is it the sum of individual religiosities, or is it more related to the ideological, social and economic power of religious organisations within the society? One can label the first option a 'bottom up' measurement of religiosity, and the second a 'top-down' measurement. As Robertson noted: 'there is the thorny problem of the relationship between measures of the religiosity of *individuals* and the religiosity of the system as a whole'. [His italics].⁵⁵ More tellingly he stated:

⁵⁵ Robertson, Interpretation of Religion, p.52.

'recent attempts to establish dimensions of religiosity flow not so much from a desire to break down analytically a clearly established or proposed concept of religiosity; but rather to "add together" available and promising indicators, so arriving *atomistically* at a total , aggregated conception of religiosity.' [His italics].⁵⁶

I propose that it is upon such uncertainties that much of the controversy surrounding the term secularisation rests. Any talk of religion's decline, in whatever historical or geographical context, will remain controversial in so far as the measurement of the religiosity of society remains an illusive goal.

I propose that sociology has failed (and this failure may well be inevitable) to meet 'the need to establish a viable, "master conception" of religiosity - one which will at one and the same time transcend the *religious* definitions of particular religious groups and also not be too general as to make redundant such questions as: is society x more religious than society y.' [His italics].⁵⁷ Without such a master conception, challenges of Catholic utopianism, on the one hand, or contemporary religious vitality on the other, will inevitably be used to challenge secularisation theory.

2.3 When is Religious Change Secularisation?

Since the definition and measurement of the religiosity of a society remain something of a pipe-dream, a more achievable way of forwarding the secularisation debate is to elaborate precisely what sorts of religious change can be viewed as secularisation. Only once this has been achieved can one address the data to see it supports or contradicts secularisation theory. Without this step, any form of contemporary religious survival or revival, or historic religious weakness, can be used to argue against secularisation (even when these forms were actually predicted by secularisation theory; for example, the rise of new

⁵⁶ Robertson, Interpretation of Religion, p.52.

⁵⁷ Robertson, Interpretation of Religion, p.28.

religious movements). Conversely, any form of religious decline can be used to evidence secularisation.

As concluded in section 1.3, secularisation can become a rather circular *explanans* and *explanandum*. Thankfully, not everyone has followed the maxim of secularisation is ... whatever I say it is. Some thoughtful work has been carried out regarding what has been (and what should be) meant by the term secularisation. This section reports on this work with reference to the four theories of secularisation considered already.

K. Dobbelaere has produced the most influential attempt to understand the variety of phenomena classified as secularisation. He attempted to categorise the relevant literature into three main dimensions, all subsumed beneath the term secularisation. He posited the usual dictionary meaning of secularisation as 'the shrinking relevance of the values, institutionalized in church religion, for the integration and legitimation of everyday life in modern society.'⁵⁸ He termed this 'dictionary meaning' of secularisation as (latent) 'laicisation' to avoid subsequent confusion.⁵⁹ In sociological terms this 'laicisation' is a function of the differentiation of society where 'Religion becomes one institution alongside other institutions and loses its overarching claim.'⁶⁰

Dobbelaere then posited a second, additional meaning of the term secularisation as a process of religious change; in loose terms, the modernisation of religion. He noted that this usage of the term has become more pronounced over the years, as attention has switched from the laicisation (both manifest and latent) envisaged by Durkheim and others in the nineteenth century, to the adaptations and innovations that have occurred within religion (often argued to be as a result of laicisation). To simplify, whereas laicisation refers to the reduction in

⁵⁸ K. Dobbelaere, 'Secularization: a multi-dimensional concept', *Current Sociology*, 29:2 (1981), 3-216, p.5.

⁵⁹ Dobbelaere contrasted *latent* laicisation with *manifest* laicisation - which is perhaps closest to the English term *secularism*. He associated manifest laicisation with Durkheim, Marx and others. See Dobbelaere, 'Multi-dimensional concept', p.7. Where the term laicisation is used in this thesis it always refers to *latent* laicisation.

⁶⁰ Dobbelaere, 'Multi-dimensional concept', p. 11.

the institutional 'spheres' governed or affected by religion, religious change refers to the changes which occur within those spheres which remain religious. The core of such institutional spheres being the various churches, denominations, sects and cults. Dobbelaere's third component of secularisation is religious involvement which 'is an index of the accord between the norms of religious groups - in domains of beliefs, rituals, morals, etc. - and the attitudes and conduct of their members.'⁶¹

Thus, as Chaves noted, it can be argued that Dobbelaere is conceptualising three different (but clearly inter-related) *levels* of analysis - from the entire societal institutional sphere through to the religious institutional sphere, and finally, to the individual sphere.⁶² Simplifying Dobbelaere's three dimensions of secularisation in this manner, it becomes clear that some of the differing views regarding secularisation parallel the contrast between 'top down' or 'bottom up' approaches to the measurement of the religiosity of society (as observed previously with respect to Glock and Stark's dimensions of religiosity). The term 'secularisation' (in the sense of latent laicisation) originated with an explicitly 'top-down' emphasis on the power and scope of religious institutions. It was as the term was widened to cover the dimensions of religious change and religious involvement that an increased breadth of potential meaning (and, thereby, increased controversy) surrounded the term.

(Re)defining secularisation

One can apply the functional/substantive and inclusive/exclusive dualities, already identified in the various definitions of religion, to the term secularisation. Berger and Wilson both operated from a substantive definition of religion. It is for this reason that they proposed similar definitions of secularisation. Wilson stated: 'Secularization relates to the diminution in the social significance of religion.'⁶³ He defined secularisation as the 'process by which religious institutions, actions, and

⁶¹ Dobbelaere, 'Multi-dimensional concept', p. 12.

⁶² M. Chaves, 'Secularization as declining religious authority', Social Forces, 72:3 (1994), 749-774, p. 757.

⁶³ Wilson, Sociological Perspective, p.149.

consciousness, lose their social significance.’⁶⁴ Berger offered a similar definition of secularisation as ‘the process by which sectors of society and culture are removed from the domination of religious institutions and symbols.’⁶⁵

Although Wilson used a substantive definition of religion, this did not preclude a *functional* analysis (as Yinger noted), and that is exactly what Wilson produced.⁶⁶ The epistemological bases of Wilson’s and Berger’s approaches are very different.⁶⁷ For Wilson, religion is understood (though not defined by) what it ‘does’ for the social system - in terms of latent and manifest functions.⁶⁸ Berger’s basic premise is that religious commitment is a means of providing meaning and significance to *individual* existence. As Robertson has summarised, Berger’s approach attempts ‘to “get behind” religion as it manifests itself in institutional forms - to get at the basic “underlay” of factors which give rise to *religiosity*.’ [His italics].⁶⁹ Thus, one can observe that although Wilson and Berger operate from very different theoretical bases, a more or less shared definition of religion and secularisation has resulted in similar conclusions regarding the fate of religion under conditions of modernity.

A contrasting conclusion is reached when one compares Berger and Luckmann. They share a common theoretical basis (the sociology of knowledge), but differ in their definition of religion (and thereby secularisation). It is self-admittedly true that the most important difference between Berger and Luckmann stems from their differing definitions of religion.⁷⁰ As a result, Luckmann’s definition of secularisation is much more restricted than that of Berger or Wilson. While Berger sees secularisation as a widespread and largely progressive feature of

⁶⁴ Wilson, Sociological Perspective, p.149.

⁶⁵ Berger, Social Reality, p. 113.

⁶⁶ Yinger, Study of Religion.

⁶⁷ Such differences have rarely been commented upon in the secondary literature, though Dobbelaere places Wilson in a ‘social facts’ paradigm of secularisation theory and Berger in a ‘social definition’ paradigm. See K. Dobbelaere, ‘Secularization theories and sociological paradigms: convergences and divergences’, Social Compass, 31:2-3 (1984), 199 -219, p.205.

⁶⁸ There is an inherent danger in this viewpoint, sometimes called the ‘functionalist fallacy’, whereby the very existence of an institution is taken to evidence a social need being met. See Chaves, ‘Declining authority’, p.751.

⁶⁹ Robertson, Interpretation of Religion, p.28.

⁷⁰ This difference of opinion is stated quite openly in Berger, Social Reality, Appendix (i), pp. 177-180.

modern societies, Luckmann limits secularisation to the 'physical' decline of the church (the 'official model' of religion). Luckmann's view of secularisation is therefore limited to Dobbelaere's notion of 'laicisation'. He is ambivalent towards any other components of secularisation, since changes other than the outright diminution of the 'official models' of religion (e.g. the loss of a national church's political or economic power), cannot unproblematically be described as a net loss of religiosity, but rather may represent a translation of religiosity into the 'invisible religion'. In contrast, Berger's account posits secularisation in all three of Dobbelaere's dimensions. Laicisation, or in Berger's terminology 'objective secularisation', results in religious pluralism which in turn results in a religious market-place (*religious change*). Religious pluralism also leads to a crisis of plausibility for religious belief, which Berger terms 'subjective secularisation', and lies in the realm of Dobbelaere's dimension of religious involvement.

Secularisation: a terminally confused arena?

It has become clear that the definition of religion has been a major influence upon the definition of secularisation. Differences in definition not only help explain arguments for and against secularisation, they make clear differences within the secularisation theories themselves.

The absence of an agreed 'master conception' of religiosity combined with the breadth and ambiguity of the term 'secularisation', provides a major problem for secularisation theory. I would argue that there are three possible responses to the problem of the definition and subsequent conceptualisation of secularisation.

First, there is the response (or non-response) that characterises much of the literature - to take secularisation to mean 'whatever I say it does'. This can result in a somewhat tedious exchange of instance and counter-instance of various aspects of religiosity pertaining to various societies at various time periods (however defined, and often undefined). For example, as noted in chapter 1 of this thesis, the decrease in church-going or denominational/church membership in England and Wales from the late nineteenth century onwards can be used to

argue that substantial secularisation has occurred. Conversely, the facts that new religious movements have arisen, that the majority of people still believe in god and view themselves as religious, or that 'hatching, matching and dispatching' events still lie overwhelmingly in the religious realm, have all been used to argue against secularisation.⁷¹ Such debates are frequently disappointing; they rarely settle upon a specific aspect of religiosity, or a specific location or time-period long enough to leave a revealing imprint.⁷² What made the secularisation thesis an interesting intellectual endeavour - Wilson's processes of *rationalisation* and *societalisation*, or Berger and Luckmann's dialectical theory of culture - are seldom addressed. Secularisation has become an unprovable claim with flexible goalposts; a myth indeed.

The second option is to back away from the term secularisation altogether. This needn't entail an abandonment of the work linked to secularisation, but rather a replacement of the term by a less judgmental label such as 'religious change'. Perhaps if Wilson's, Berger's or Luckmann's work were labelled as theories of 'religious change', they might be distanced from the secularist and Marxist overtones with which they are sometimes still linked. Also, the removal of a blanket term might stimulate research investigating a single theory of religious change rather than the generic propositions of a secularisation 'thesis'. R. Stark and L.R. Iannaccone have recently joined Martin's oft-quoted call that secularisation should be removed from the sociological dictionary. They noted: 'In our judgement, many scholars mistakenly interpret desacrilization as secularization'.⁷³ They also noted - and this shows how far the term has been stretched from its original meaning - that 'this [i.e. desacrilisation] is how the dictionary defines secularization as well.'⁷⁴ I would argue that although this second option, of abandoning the term altogether,

⁷¹ See, for example, Forster, 'The English context'; R. Stark and L.R. Iannaccone, 'A supply-side reinterpretation of the "secularization" of Europe', *Journal for the Scientific Study of Religion*, 33:3 (1994), 230-252. But see also Wallis and Bruce who make the point that such data *cannot* be used effectively *contra* secularisation; R. Wallis and S. Bruce, 'Secularization: the orthodox model', in Bruce, *Religion and Modernization*, pp. 8-30, p.22.

⁷² There are, of course, many honourable exceptions. In particular, two excellent works get to the heart of the secularisation issue. These are E. Barker, J.A. Beckford and K. Dobbelaere (eds), *Secularization, Rationalism and Sectarianism* (Oxford, 1993), and Bruce, *Religion and Modernization*.

⁷³ Stark and Iannaccone, 'Supply-side reinterpretation', p. 234.

⁷⁴ Stark and Iannaccone, 'Supply-side reinterpretation', p. 234; footnote number 5.

has certain attractions, it might be to 'throw the baby out with the bathwater'.⁷⁵ Although both 'sides' have been at fault in ensuring that the contested 'pitch' of secularisation has been made so muddy as to become almost unplayable, a removal of the term might well be seen as a triumph for the opponents of secularisation, rather than a mutual surrender.

The third option is to roll back the definition of secularisation to that of Dobbelaere's 'laicisation', or as Chaves defined it, 'declining religious authority'.⁷⁶ Chaves both extended and simplified Dobbelaere's formulation of secularisation, by proposing that it is a one-dimensional process (laicisation) with *multi-dimensional consequences*. In this way, to propose such a restriction of the term 'secularisation' is not to remove the dimensions of 'religious change' and 'religious involvement' from the secularisation debate altogether, but to restrict them as 'admissible evidence' of secularisation only in so far as they can be posited as *causal outcomes* of declining religious authority.

Such a definition of secularisation as declining religious authority (i.e. latent laicisation) gives a clear 'base camp' to secularisation (the term) without prejudging the inevitability of any preceding causes or subsequent effects proposed by secularisation theory.⁷⁷ To illustrate, in the context of England and Wales (and much of Europe), the decline of religious authority is a concrete fact in the sense that it has happened. By this I mean no more than the fact that one can chart the Acts of Parliament and other non-legal changes of the last 350 years (and especially the last 175 years) which have taken away the monopoly status of the Church of England, removed education from religious authority, removed the legal authority of the Church, removed the political authority of the church, and denied the Church the income from specific taxation (tithe). In parallel with such changes one can chart the rise of separate, secular, institutional spheres now recognised to

⁷⁵ Chaves, 'Declining authority', p. 750.

⁷⁶ This is the central point of Chaves, 'Declining authority'.

⁷⁷ Yamane has recently labelled the restriction of the term to declining religious authority as the 'neosecularisation' position: D. Yamane, 'Secularization on trial: in defence of a neosecularization paradigm', *Journal for the Scientific Study of Religion*, 36:1 (1997), 109-122.

have expertise and legitimate authority in health-care, education, social welfare and other realms.

A restriction of the term secularisation could help open up a dialogue between the rational choice theory dominant in the United States and the continued elaboration of secularisation theory within Europe. As Warner recently noted: 'in Europe, disestablishment *was* a degenerate state of religion. In the United States, by contrast, religious triumph was recent, and religious competition was constitutive.' [His italics].⁷⁸ It is notable that the two major approaches to the sociology of religion and modernity - the secularisation and rational choice approaches - have both typically been packaged as universal explanations of religious change. A restriction of the term secularisation would mean that secularisation cannot have occurred in the United States - a country born into legal toleration and religious pluralism (though this is not to imply that secularisation theory cannot pertain to religious change in America).

Most importantly, the definition of the term secularisation as the decline of religious authority would help to place some distance between the *term* 'secularisation' and the *theories* of secularisation. In short, it gives a concrete and explicitly limited focus to the term, a focus which leaves secularisation *theory* free to propose the *causes* and *products* of declining religious authority. Competing explanations would then have to contest these links and suggest alternative explanations. The dialogue which arises should not be one of the deaf. The universality or inevitability currently attached to the term *secularisation* could only arise when a specific theory of secularisation proposed such features, and could

⁷⁸ R.S. Warner, 'Convergence toward the new paradigm: a case of induction', in L.A. Young (ed.), Rational Choice Theory and Religion (New York, 1997), pp. 87-101, p.95. Earlier in the article he compared the relationship between secularisation (the 'old' theory) and rational choice (the 'new' theory) to that of Copernicus and Ptolemy. Warner seems to have distanced himself from the view that the sociology of religion should always revolve around rational choice theory after his first visit to Europe, when he drove through England and noted the absence of Medieval churches in industrial cities. See Warner, 'Convergence', pp. 93-85. Hadden has criticised Warner for such caution, see J.K. Hadden, 'Religion and the quest for meaning and order: old paradigms, new realities', Sociological Focus, 28:1 (1995), 83-100, p.85.

not be used as an easy target for any general critique of secularisation theory, as happens currently.⁷⁹

Figure 1 shows how Dobbelaere's three dimensions of secularisation theory can be used to locate the definition of the term secularisation (as declining religious authority), and to indicate how the dimensions of religious change and religious involvement are proposed to be linked to declining religious authority by secularisation theory. In this way figure 1 serves to separate the restricted definition of secularisation the term from some of the outcomes of religious change and religious involvement predicted by the theories of secularisation.⁸⁰

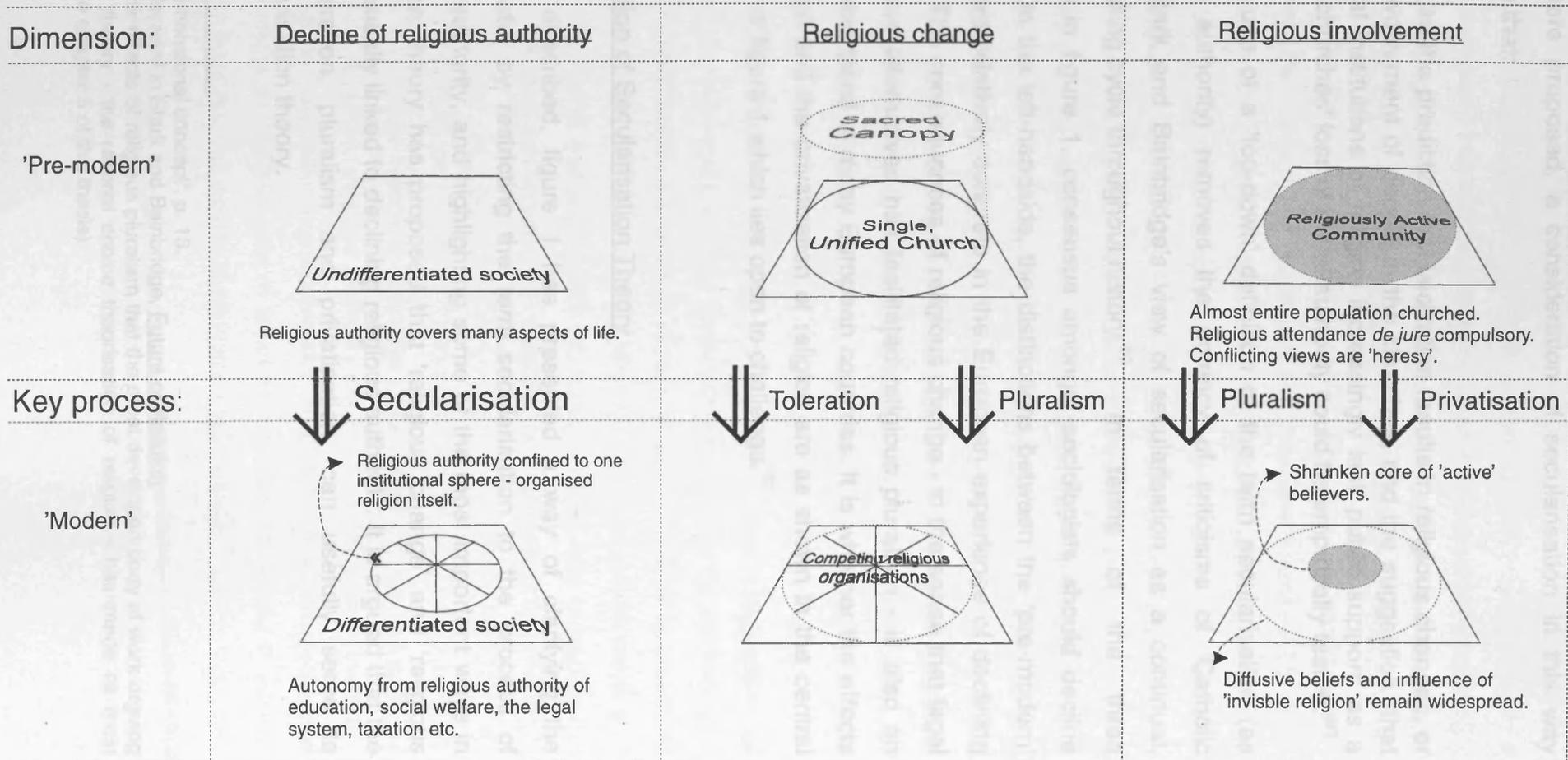
It is important to stress that if such a solution is accepted this need imply no acceptance that certain aspects of the 'religious change' and 'religious involvement' dimensions are causal products of declining religious authority (as summarised in figure 1). The point is that debate should be forced into precisely these issues - what aspects of religious change and changing religious involvement are proposed to be products of secularisation (i.e. declining religious authority), and what evidence exists to support these claims.

⁷⁹ See, for example, J.K. Hadden, 'Toward desacriling secularization theory', *Social Forces*, 65:3 (1987), 587-611. The work references Emile Durkheim and Auguste Comte, but not Max Weber, Bryan Wilson, Peter Berger, or Thomas Luckmann. In other words he picks upon nineteenth-century 'secularism' as a rather more easy target to attack. Rather strangely, Hadden deemed that 'for all that has been written about secularization, probably only Martin (1978), who decided not to abandon the concept, has written a treatise that would qualify as a theory'; Hadden, 'Desacriling secularization', p.599. In a subsequent article, Hadden cites Auguste Comte, Emile Durkheim, Karl Marx, Sigmund Freud, George Simmel, and Max Weber as 'the classics revisited' and then criticises contemporary writers (presumably Berger, Luckmann, Luhmann, Martin, Wilson *et al*) for utilising these 'classics' selectively. One may as well criticise contemporary physicists for their selective utilisation of Newtonian physics. See Hadden, 'New realities', pp. 88-89.

⁸⁰ See also the classificatory figures presented in O. Tschannen, 'The secularization paradigm: a systematization', *Journal for the Scientific Study of Religion*, 30:4 (1991), 395-415. This work offers a useful summary of the core processes of a generic 'thesis' and also the unique aspects of the individual theories.

Figure 1

Secularisation theory: the dimensions delineated



Secularisation theory

As Dobbelaere proposed, a consideration of secularisation in this way should help ensure that:

'such things as the prediction that laicization results in religious changes, or in weaker involvement of people in the churches, and the suggestion "that the traditional institutions of religion increasingly lack public support" as a result of the churches' loss of moral authority could be empirically tested.'⁸¹

The explicit use of a 'top-down' definition of the term secularisation (as declining religious authority) removes the potency of criticisms of 'Catholic utopianism' and Stark and Bainbridge's view of secularisation as a continual, regular and self-limiting cycle throughout history.⁸² In terms of the three dimensions shown in figure 1, consensus amongst sociologists should decline from left to right. On the left-hand side, the distinctions between the 'pre-modern' and the 'modern' are relatively concrete in the European experience of declining religious authority. The consequences of religious change - in the sense that legal toleration of religious alternatives has facilitated religious pluralism - is also an empirically observable trend in many European countries. It is whether the effects of religious pluralism and the privatisation of religion are as shown in the central and left-hand parts of figure 1 which lies open to challenge.⁸³

2.4 A Systematisation of Secularisation Theory

As already described, figure 1 has presented a way of clarifying the secularisation debate, by restricting the *term* secularisation to the process of declining religious authority, and highlighting some of the most important ways in which secularisation theory has proposed that 'religious change' and 'religious involvement' are causally linked to declining religious authority. It is argued that the processes of toleration, pluralism and privatisation, can usefully serve to systematise secularisation theory.

⁸¹ Dobbelaere, 'Multi-dimensional concept', p. 13.

⁸² This is the view put forward in Stark and Bainbridge, Future of Religion.

⁸³ It is certainly upon the effects of religious pluralism that the most developed body of work arguing against secularisation theory - the rational choice theorisation of religion - has made its most powerful challenge (see chapter 5 of this thesis).

Since secularisation theory is far from unitary, one can only really discern a commonality in the theories of secularisation in terms of a 'pre-modern' past and a 'modern' present. This common strand can be viewed as the secularisation 'thesis': a transition from a 'pre-modern' society in which religion governed many aspects of life to a 'modern' society in which a declining minority participate in religious worship and the majority of the population are characterised by more diffusive religious beliefs and a privatised religion. The theories diverge at the level of how and why such a transition is proposed to have occurred. Noting such diversity, it is nevertheless proposed that a consideration of the three processes of toleration, pluralism and privatisation (the vertical arrows in figure 1) serves to combine many of the principal arguments of all four theories of secularisation. In forwarding this proposition, I draw upon the recent work of both Wilson and Berger.⁸⁴ At the risk of misinterpreting their work, I sense a common perspective which can serve to usefully systematise secularisation theory, a systematisation which is far more informative than an inevitably generic 'thesis' defined in terms of 'pre-modern' and 'modern' stereotypes.

As shown in the left-hand side of figure 1, the first proposition of secularisation theory is that that religious authority has tended to decline (the process of secularisation itself). As already noted, this proposition is relatively uncontroversial in the context of England and Wales - one can chart the decline of religious authority in terms of the succession of Parliamentary Acts curtailing the monopoly status, power, and privileges of the established church and its officials.

As shown in the central part of figure 1, secularisation theory has tended to argue that increased religious toleration can be considered as an outcome of declining religious authority - as religious authority declined, so toleration tended to increase. Again, this is relatively uncontroversial in the case of England and Wales; one can chart the passing of acts of toleration and the repealing of acts of religious persecution from the late seventeenth century onwards.⁸⁵

⁸⁴ Wilson, 'Toleration, pluralism, privatization'; Berger, *A Far Glory*.

⁸⁵ Complete toleration, in terms of total legal and constitutional equality of all religious organisations, clearly has yet to occur in England.

Secularisation theory also argues that the decline of religious authority and the growth of religious toleration were a major incentive (but also, partly a response) to religious pluralism. In turn, religious pluralism becomes the key process of subsequent religious change (especially in Berger's theory). Religious pluralism brings a great diversity of religious organisations, and thereby a *choice* of religious affiliation. Where a choice exists, competition between religious organisations tends to occur. In this way secularisation theory tends to place toleration and pluralism as part and parcel of the same transition - from a single 'official' model of religion, to a state of competing religious choices. These proposed changes are shown in the central part of figure 1.

The most controversial claims of secularisation theory are located in the third dimension of secularisation theory - religious involvement (shown in the left-hand side of figure 1). Secularisation theory predicts that pluralism and privatisation effect a transition from a society largely composed of active worshippers to a society in which the proportion of active worshippers declines, and for most people religion becomes privatised. Berger theorised that religious pluralism itself had a direct impact upon the credibility of religion. Luckmann's emphasis was upon religious pluralism as a precursor of the privatisation of religion. Wilson's interpretation also concentrated upon the privatisation of religion as the end-point of secularisation.⁸⁶

Up to this point this systematisation of secularisation theory has shown how a single 'secularisation' account of religious change could be advanced. Indeed, as Wilson has recently noted, the three processes of toleration, pluralism and privatisation, can be used to produce a more historically nuanced account of religious change than is present within any single theory of secularisation.⁸⁷ To simplify grossly, such a systematisation could be used to interpret the religious history of England and Wales. One could observe that as toleration increased in the seventeenth and eighteenth centuries, so it facilitated the rise of religious

⁸⁶ Though Wilson's core process of societalisation is not shown in figure 1, stressing the partial nature of any attempted systematisation of secularisation theory.

⁸⁷ Wilson, 'Toleration, pluralism privatization'.

pluralism (most notably Methodism). Religious pluralism, since it removed the certainty of a single religious world view, tended to reduce the credibility of all religious viewpoints. I will argue that this was a dominant characteristic of the nineteenth century, and aim to demonstrate the effect of religious pluralism in this thesis. In the twentieth century, I would argue that the sociological impact of religious pluralism has itself been shown to be self-limiting, precisely due to the privatisation of religion that it has helped to facilitate. Once religion is largely a private affair, the competing convictions of religious pluralism lose much of their impact upon peoples' religious beliefs. As Wilson summarised:

'Of greater significance than pluralism's intrinsic divisiveness, however, was the fact that pluralism was by implication only an interim stage. Since individuals might choose their faith, since denominations were exclusivistic, and since proselytizing was the normal Christian commitment, it followed that tolerance for the diverse practices of different corporate groups must, if the issue were sufficiently pressed, eventually entail an increasing measure of tolerance for individual choice of belief. The way was always open for a wider recognition of individual rights, although this did not become immediately apparent in the early days of corporate toleration ... the rights that in the pluralistic situation appertained to corporate religious communities were accorded to the individual, who thus might conceivably choose to belong first to one group, then to another, or, indeed, espouse his own personal religious beliefs while belonging to no religious group at all.'⁸⁸

It is certainly interesting to note that Davie has popularised the phrase of 'believing without belonging' to describe the characteristic state of British religion in the late twentieth century.⁸⁹ Of course, any chronological ordering of toleration, pluralism and privatisation is highly subjective and far from watertight. The historian C.J. Sommerville talks of the transition from 'religious culture' to 'religious faith' between the medieval and the early-modern periods. Indeed, he locates the privatisation of religion as a dominant theme in early-modern England.⁹⁰

⁸⁸ Wilson, 'Toleration, pluralism privatization', p. 22.

⁸⁹ Davie, Religion in Britain.

⁹⁰ C.J. Sommerville, The Secularization of Early Modern England: From Religious Culture to Religious Faith (Oxford, 1992).

Figure 1 need not only be used to suggest coherence and unity in the interpretation of secularisation theory. The differences between the theories have already been made clear. What can be further elucidated are the inconsistencies and gaps between the theories. I would argue that these inconsistencies and gaps arise largely because of the *ahistoricity* of secularisation theory. Indeed, other than Martin's theory, they contain little further historical detail beyond the 'pre-modern' and 'modern' labels used in figure 1. The reader is seldom sure about when or where he or she is reading about. It is precisely because of this ahistoricity that there has been little consideration of the relationships *between* toleration and pluralism, and *between* pluralism and privatisation. A discussion of these two points serves to highlight some of the shortcomings of secularisation theory.

While toleration may well be a precursor of increased religious pluralism, no automatic link should be posited between increased religious toleration and fully-blown religious pluralism. This is because toleration does not automatically mean a free choice in religious belief. Wilson noted that religious toleration 'is not an avowal of religious liberty. It implies only the absence of prohibition and persecution. It is a concession by those who enjoy power to those who are excluded from it.'⁹¹ Such circumstances were clearly obtaining in England and Wales from 1689 until the nineteenth century.

Proposing an automatic link between toleration and religious pluralism highlights an uncertainty in the conceptualisation of religious pluralism within secularisation theory. To recall from chapter 1 of this thesis, a working definition of religious pluralism was taken from Yinger, for whom pluralism was:

'a situation in which a society is divided into subsocieties with distinct cultural traditions. Pluralism is thus one form of social differentiation. It can be distinguished from the universal variety based on differentiation of role by the fact that pluralistic differences are related to separate social structures and cultural systems; whereas role differences represent a division of function within a shared system and based on a common culture.'⁹²

⁹¹ Wilson, 'Toleration, pluralism privatization', p. 14.

⁹² J.M. Yinger, 'Pluralism, religion and secularism', Journal for the Scientific Study of Religion, 6:1 (1967), 17-30, pp.17-18.

While this is an acceptable basis for defining the presence or absence of religious pluralism, it reveals nothing about the intensity of religious pluralism: religious pluralism as a *sociological variable*. Yinger went on to note that 'The sharpness of the divisions of a society into subsocieties is a matter of degree, hence we must learn to think of pluralism as a variable.'⁹³ From this perspective of the 'sharpness of divisions', a situation of limited toleration and considerable religious authority could actually engender intense religious pluralism. For example, if the 'divisions into subsocieties' of religious movements were sharper in England and Wales in 1676 than in 1851, then in this sense religious pluralism could be defined as more intense at the former date.

Considering pluralism from Berger's standpoint (or the rational choice viewpoint)⁹⁴ suggests a different interpretation. From this perspective, intense religious pluralism occurs when there are many popular and competing religious world-views. Under conditions of limited legal toleration, knowledge of the religious world-views of the tolerated religious minorities may not permeate much across the boundaries of the mainstream religious culture(s). The religious world-view of the dominant culture may remain relatively unchallenged under such conditions. For instance, Berger contrasted the experience of being Jewish in an Eastern European Ghetto, to being Jewish in the contemporary United States. In the former he argued: 'To be Jewish was a taken-for-granted given of the individual's existence, ongoingly re-affirmed with ringing certainty by everyone in the individual's milieu (including the non-Jews in that milieu).'⁹⁵ Whilst in the latter: 'For more and more individuals it became a viable project to step outside the Jewish community. Suddenly, to be Jewish emerged as one choice among others.'⁹⁶

⁹³ Yinger, 'Pluralism', p.18.

⁹⁴ Legal toleration does not by itself necessitate a free or competitive religious market. Thereby, as Stark *et al* have noted, intense diversity may not demonstrate intense religious pluralism in the free-market sense of the concept. See R. Stark, R. Finke and L.R. Iannaccone, 'Pluralism and Piety: England and Wales, 1851', Journal for the Scientific Study of Religion, 34:4 (1995), 431-444.

⁹⁵ Berger, Heretical Imperative, p.29.

⁹⁶ Berger, Heretical Imperative, p.29.

Thus, there is something of a mismatch between a definition religious pluralism based upon 'subsocieties with distinct cultural traditions', and pluralism as conceptualised by Berger. It is clear that for Berger, religious pluralism (in terms of the causal efficacy proposed in his theory of secularisation) was stronger in the latter example (where the division of society into sub-societies was less marked) precisely because toleration was far higher. In Berger's terms, the knowledge of 'disconfirming others' was greater where social divisions were less marked, producing a greater problem for the 'plausibility structures' of all religions.⁹⁷ S. Bruce has reached a similar conclusion, observing that:

'In some settings diversity was created by migration as peoples with different cultures mingled with one another. In others the expansion of the political unit brought a range of cultures into an emerging nation-state. A third source of cultural [and religious] pluralism was the internal fragmentation of the dominant culture ... the social psychological impact [of this third type] seems greater than in the other two instances.'⁹⁸

As Bruce argued, 'it becomes less easy to protect beliefs ... when the challenge is being posed by member's of one's own people who have broken away from the true faith.'⁹⁹ It will be shown in chapter 7 of this thesis that Bruce's distinction of the different circumstances under which religious pluralism could arise was clearly visible in terms of the geography of religious pluralism in England and Wales in 1851.

If Berger's account can be used to argue why toleration and pluralism tend to be connected, it is weak upon the link between pluralism and privatisation. More precisely, Berger did not consider the consequences of a transition from religious pluralism to the privatisation of religion. I would agree with Wilson that privatisation could engender the potential loss of corporate religious and cultural life, thereby altering profoundly the nature of religious pluralism. Wilson stated that:

Privatization relieves religion of such of its erstwhile functions as it continued to maintain even in the situation of pluralism. In the pluralistic

⁹⁷ In similar fashion, in the language of rational choice, religious pluralism would also be considered stronger under these conditions, because there would be a far freer market in religious affiliations:

⁹⁸ S. Bruce, *Religion in the Modern World: from Cathedrals to Cults* (Oxford, 1996), p.45.

⁹⁹ Bruce, *Religion in the Modern World*, p.46.

situation, religion might still provide, if not total social cohesion within a given state system, then at least the reinforcement of group identity and the maintenance of a corporate moral framework within which individuals should lead their lives. As privatization occurs, it is no longer assumed that persisting group allegiance is the fundamental quality of religion. Instead, religious commitment becomes a matter of voluntary consumer choice. The apogee of the capitalist system - free choice in an open market, according to laissez-faire principals - finds its application in the field of spirituality.¹⁰⁰

From this perspective it is not at all surprising that contemporary American academics should model religious change around the principles of rational choice theory.¹⁰¹ I would argue that Berger's concentration on religious pluralism results in his account being less applicable to contemporary England and Wales, than, for example, England and Wales between 1676 and 1851. This is because to conceptualise 'religious pluralism', in the way proposed by Berger, would be problematic under conditions of advanced privatisation. As Repstad noted, once privatisation is advanced, one should not be surprised that the 'doubt-creating' power of pluralism should shrink.¹⁰² In other words, one could observe that the social significance of religious pluralism has itself declined.

In contrast to Berger, Luckmann's focus is very much upon the impact of privatisation, and I would argue is thereby more contemporary in its explanatory scope. For instance, Luckmann concluded that:

'The privatization of individual existence is linked to the privatization of religion in general. As for religious themes one is tempted to say with some exaggeration: anything goes. In the global interpretation of cultures, a vast - and by no means silent, although perhaps imaginary - museum of values, notions, enchantments, and practices has become available. It has become available "directly" but primarily through the filter of mass media rather than social relations.'¹⁰³

¹⁰⁰ Wilson, 'Toleration, pluralism privatization', p. 27.

¹⁰¹ This body of work forms the focus of chapter 5 of this thesis.

¹⁰² P. Repstad, 'Introduction: a paradigm shift in the sociology of religion?', in Repstad Religion and Modernity, pp. 1-10, p.5.

¹⁰³ Luckmann, 'Religious consciousness', p.136.

Such a picture is similar to Davie's influential account of the condition of Christianity in the contemporary United Kingdom - 'believing without belonging'.¹⁰⁴ I would argue that the disagreements between Berger and Luckmann stem not only from their differing definitions of religion, but also from the fact that they may be focusing on different stages of societal development.

2.5 Selection of Theory

As a result of the systematisation of secularisation theory, it is proposed that Berger's theory offers the greatest potential for this research. This conclusion is offered for three main reasons: it is the theory in which religious pluralism is most central, it offers specific (and empirically testable) propositions, and it matches the concerns of historical geography. These points are elaborated in turn.

Religious pluralism.

As already apparent, religious pluralism was Berger's foremost concern. In terms of Berger's dialectics, religious pluralism relativised religious content and thereby de-objectivated it. Religion became 'subjectivised' in a double sense - by having become a private affair with little remaining self-evident inter-subjective plausibility, and because it now referred to individual questions of meaning rather than to history or cosmology. In Berger's words:

'At the very least, there is a close connection between secularization and the pluralization of plausibility structures ... The typical premodern society creates conditions under which religion has, for the individual, the quality of objective certainty; modern society, by contrast, undermines this certainty, deobjectivates it by robbing it of its taken-for-granted status, *ipso facto* subjectivizes religion.' [His italics].¹⁰⁵

¹⁰⁴ Davie, Religion in Britain, pp. 93-116.

¹⁰⁵ Berger, Heretical Imperative, p.26.

Thus Berger's theory has much to say about the proposed effects of the rise of religious pluralism in England and Wales between 1676 and 1851 (which to recall from chapter 1, was the most visible of all religious changes during this time period). As I have already argued, Luckmann's theory is one of the privatisation of religion, and can thereby be considered more applicable to a later stage of 'modernity' than Berger's. Wilson's theory says remarkably little about *religious pluralism*.¹⁰⁶ This is perhaps because, from a functional perspective, it is not immediately obvious what functions religious pluralism offers society. From Wilson's functionalist viewpoint, religious pluralism appears important in so far as it tends to erode the latent function of social cohesion provided by a unified ('pre-modern') religion. One of the few comments Wilson made to religious pluralism in his major work on secularisation was that:

'Not unusually, these religious groups [different religions and religious movements] espouse divergent moral norms, and even if the ultimate values to which they are committed might, in abstract terms, be stated in similar formulations, none the less, their operative schemes of morality may differ significantly, and this may be enough to create competition and conflict among them. Given such a diversity, can it any longer be suggested that *religion functions to sustain social cohesion?*' [My italics].¹⁰⁷

Specific propositions.

In attempting to conduct quantitative research, one has to ensure that the theoretical basis is compatible with the available data. One of the major attractions of Berger's theory is that despite its highly abstract dialectical basis, it offers many propositions that are amenable to empirical investigation. In this way no daunting chasm opens up between the general pronouncements of theory and the specific context of investigation. For instance Berger stated that:

'In looking at the collapse of plausibility suffered by religion in the contemporary situation, *hic et nunc*, it is logical to begin with social structure and to go on to consciousness and ideation, rather than the reverse. Quite apart from its theoretical justification, this procedure will avoid the pitfall (to

¹⁰⁶ It is clear, from the previous discussion, that Wilson has recently written a pertinent essay upon religious pluralism; Wilson, 'Toleration, pluralism, privatization'.

¹⁰⁷ Wilson, Sociological Perspective, p. 37.

which religiously inclined observers are particularly prone) of ascribing secularization to some mysterious spiritual and intellectual fall from grace. Rather it will show the rootage of this fall from grace ... in empirically available social-structural processes.¹⁰⁸

In this respect Berger's theory has long invited research examining the evidence for any clear empirical link between social-structural processes (what he later terms 'those sectors of the economy being formed by the capitalistic and industrial processes')¹⁰⁹ and the intensity of religious pluralism. Such research has yet to emerge. In so far as applied research has focused on Berger's ideas, it has challenged the other major component of his theory, the link he proposes between religious pluralism and the collapse of belief. In particular, the considerable volume of research centred on rational choice theory has shown how this part of Berger's theory is also amenable to empirical investigation.¹¹⁰

Sociology and geography.

A third attractive feature of Berger's account is his attempt to tread between the extremes of 'idealism' and 'materialism' as standpoints for explaining religious change. He observed that:

'It is possible to show in concrete instances how religious "ideas", even very abstruse ones, led to empirically available changes in social structure. In other instances, it is possible to show how empirically available structural changes had effects on the level of religious consciousness and ideation. Only a dialectical understanding of these relationships avoids the distortions of the one-sidedly "idealist" and "materialist" interpretations.'¹¹¹

His theory allows for an independence of religious culture from the material production of society.

'It is possible to analyse secularization in such a way that it appears as a "reflection" of concrete infrastructural processes in modern society. This is all the more convincing because secularization appears to be a "negative"

¹⁰⁸ Berger, Social Reality, pp. 132-133.

¹⁰⁹ Berger, Social Reality, p. 133.

¹¹⁰ Though I argue that there are fundamental flaws in this research - see Chapter 5 of this thesis.

¹¹¹ Berger, Social Reality, p.132.

phenomenon, that is, it seems to be without causal efficacy of its own and continually dependent upon processes other than itself. Such an analysis, however, remains convincing only if the contemporary situation is viewed in isolation from its historical background.¹¹²

In this way Berger's theory presents an attractive proposition to the historical geographer. His phenomenology can be allied with approaches of the 'new' cultural geography currently receiving considerable interest in the discipline, together with the longer standing desire to balance a freedom for 'human agency' with a consideration of the constraints of 'social structure'.¹¹³ To satisfy geography's predilection for labelling the many approaches 'imported' into the discipline, one could say that the sociology of knowledge could be defined as 'symbolic interactionist', 'structuralist' or, more broadly, 'humanistic'.¹¹⁴

The challenge for this thesis is to derive a conceptual framework from Berger's theory of secularisation theory. Foremost in this challenge is the thorny issue of quantifying religious pluralism. The following chapter describes the translation of theory into methodology and evaluates the resulting strengths and weaknesses of the approach. For any applied research, one of the main deficiencies of all secularisation theory is the lack of attention to geography or history. At no point does empirical data, other than a casually inserted statistic, underpin any of these theories of religious change. Religion cannot be quantified without addressing issues of considerable conceptual and methodological

¹¹² Berger, Social Reality, p.131.

¹¹³ The most influential recent statement on the geography of religion was made in G.J. Levine, 'On the geography of religion', Transactions of the Institute of British Geographers, 11 (1986), 428-440. Levine called for the adoption of phenomenological and historical materialist perspectives as the way forward for the sub-discipline. In so far as this current study can be seen as responding to this call, it may, hopefully, demonstrate that phenomenological theory and quantitative methods are not irreconcilable.

¹¹⁴ As already noted, the work of Berger and Luckmann has not escaped the geographical community. However, as in other areas of human geography, the appetite for the introduction and classification of all things new in social theory has not been matched by an appetite for detailed research and application. N. Thrift classified Berger and Luckmann's sociology of knowledge as the 'voluntarist' wing of the 'structuralist school', see Thrift, 'Social action in space and time'. D. Gregory highlighted the symbolic interactionist tradition of Berger and Luckmann's approach, stating that 'it is undoubtedly Berger and Luckmann's *The social construction of reality* (1967) which has provided at once the most comprehensive and the most focused engagement of human geography with interactionism'; D. Gregory, 'Symbolic interactionism', in R.J. Johnston, D. Gregory and D.M. Smith (eds), The Dictionary of Human Geography (Oxford, 1981, 1994 edn), pp. 611-613.

complexity. This chapter has highlighted some of the underlying definitional and conceptual difficulties underpinning the study of religion and society. The following chapter examines the methodological problems involved in quantifying religion.

Chapter Three

Religion in England and Wales: Issues of Concept and Measurement

Introduction.

As concluded in the previous chapter, Peter Berger's theory of secularisation is seen as the most pertinent theoretical basis for investigating religious change in England and Wales between 1676 and 1851. To reduce Berger's theory to its absolute core is to state that religious pluralism leads to a decline in religious belief and practice. This proposition becomes the guiding proposition of the remainder of this thesis. This serves two purposes: first, it permits an empirical test of Berger's theory - to examine whether religious pluralism between 1676 and 1851 did appear to have a negative influence on belief and practice, and secondly, one can examine how assigning a central role to religious pluralism can further one's understanding of the relationship between religion, society, economy, and culture. This chapter lays the groundwork for the subsequent quantitative analysis by examining the conceptual and methodological issues involved in quantifying aspects of religious behaviour.

The dataset.

As with all historical research, the sources limit that which can be studied. The problems of studying secularisation in an historical context were highlighted in Religion and Modernisation, a volume in which historians and sociologists debated the secularisation 'thesis'.¹ A central problem is that historians, or at least quantitatively minded historians, have only limited information to draw upon: attendances, membership, buildings, rate of new building, level of donation, and more ingenious measures such as spare seating. For this study two main sets of religious data were utilised - two sources which have rightly been described as 'the

¹ S. Bruce (ed.), Religion and Modernization: Sociologists and Historians Debate the Secularization Thesis (Oxford, 1992).

two most famous enquiries' of British religious history.² First, and most importantly, the Religious Census of 1851 attempted to obtain, amongst other information, attendance and sittings data for all denominations at every place of worship on Sunday March 30th 1851. Secondly, the Compton census of 1676 can be used to estimate the numbers of conformists, nonconformists and Papists in many parishes in England and Wales. Appendix 1 of this thesis contains a full description of the data available from these sources.

A large part of the analysis is based upon attendance data of one type or another. Although many of the problems involved in using attendance data are highlighted in the following section, it is important to stress that there are many strengths attached to attendance data (relative to other sources). As Robin Gill has argued, in many circumstances attendance data is the best available, since compared to the other data (chiefly membership), it has the greatest consistency of meaning across the different religious organisations.³ This point is of particular importance to this thesis since it allows the comparison of the strength of the Church of England with the strength of nonconformity. This would not be possible with membership data, since membership of a dissenting denomination had a profoundly different meaning and status to membership of the established church, for which 'membership' statistics were not kept until 1891.

In addition to the religious data, a wide-ranging series of socio-economic variables were computerised from the published abstracts of the decennial censuses of 1831 and 1851, the poor law returns and the Imperial Gazetteer. These variables cover such factors as: population density; population growth rates; percentage of families employed in agriculture; percentage of families employed in trade; percentage (of the population) employed as agricultural labourers; percentage (of the population) employed in manufacturing; percentage (of the population) employed in retail and handicraft; the nature of parochial landholding; and many other factors. Such data permit very sensitive description of socio-

² R. Currie, A.D. Gilbert and L. Horsley, Churches and Churchgoers: Patterns of Church Growth in the British Isles Since 1700 (Oxford, 1977), p.10.

³ This point is made in R. Gill, 'Secularization and census data', in Bruce, Religion and Modernization, pp. 90-117.

economic conditions between 1811 and c.1861. Appendix 1 of this thesis contains a listing of the key socio-economic variables and the sources from which they were derived.

The computerised dataset was assembled at two spatial scales: *registration district* and *parish*. The 1851 Religious Census data were compiled for all 624 registration districts of England and Wales. The district boundaries were digitised to allow computerised mapping of this data. Secondly, for 15 entire registration counties, covering 2,443 *parishes*, the original returns of the 1851 Religious Census and the considerable range of socio-economic data and Compton Census data described above were all computerised. Parish boundaries were digitised for twelve of these fifteen counties to allow computerised mapping. Map 1 of Appendix 1 shows the boundaries of the 624 registration districts and makes clear the registration counties for which the parish-level data was collected. Appendix 1 also contains a description of the sources and methods used to create the registration-district and parish-level geographical information systems.

This is a dataset and geographical information system without rival in the field of the social history and historical geography/sociology of religion. It permits the first systematic and geographically sensitive analysis of religious affiliation in England and Wales. The forthcoming 'sister' publication by K.D.M. Snell and P.S. Ell makes use of the same dataset, furthering many issues in both the history and geography of religion in England and Wales.⁴

The first four Appendices of this thesis detail the sources and computerised dataset, and the complexities and problems associated with these sources and their computerisation. Many of the issues are of interest only to specialist readers - those requiring a critical assessment of the sources and the methods of computerisation.

⁴ K.D.M. Snell and P.S. Ell, forthcoming, Victorian Religion and the Cultural Regions of England and Wales (Cambridge, 1998/9).

Quantifying religion

In essence, the computerised dataset and geographical information system were assembled to allow a quantification and visualisation of various aspects of religious behaviour. Two aspects of religion are fundamental to this thesis; a measure of religious *practice* (i.e. the rate of church/chapel-going) and some measure of religious *pluralism*. This chapter aims to define these variables prior to the empirical analysis of chapter 4. Neither of these two aspects of religious life is easily quantified into empirically defined variables. While the rate of practice can at least be defined verbally without great contention, it cannot be measured directly from the 1851 Religious Census data. Religious pluralism is much less a 'social fact', and requires considerable attention to its definition to ensure appropriate quantification.

As a result of these differences between the two aspects of religion, the discussion relating to the measure of religious practice is largely technical, centred upon the reliability of using attendances in lieu of attendants (i.e. attenders). The discussion concerning religious pluralism is more conceptual. Herein the need is to define the parameters which are thought to determine the *intensity* of religious pluralism in a manner which is compatible with Berger's theory.

As observed in chapter 1 of this thesis, it is notable that from Horace Mann onwards, researchers have concentrated on the issue of how to measure religious practice from the Religious Census. In contrast, there has been very little thought given to the conceptualisation or measurement of religious pluralism, despite the frequent use of the term in academic parlance.

3.1 Quantifying Religious Practice

Measuring religious practice is fraught with technical difficulties. A verbal definition is relatively unproblematic: for instance, one could state that the rate of religious practice is 'the number of "active" worshippers as a percentage of all

“potential” worshippers within a given population’. As indicated by the quotation marks, the two words ‘active’ and ‘potential’ require further clarification. The notion of ‘potential’ worshippers (as opposed to the total population) is important since it allows consistent comparisons of religious behaviour over time and through space. It removes the effect of variations in the proportions of those too young, too old or too ill to attend worship. However, precisely who is counted as part of the ‘potential’ congregation is impossible to specify with the greatest of precision. For instance, the age at which a person was considered ready for religious worship is culturally specific.

The concept of an ‘active’ worshipper allows an even greater latitude in definition. Who are to be defined as active worshippers: those attending once a year, once a month, once a week, twice every Sunday?

There is a long tradition, dating back to Horace Mann himself, in devising indicators of the rate of religious practice from 1851 Religious Census data. Mann estimated (rather arbitrarily, and clearly at the expense of dissent) that half the attendances at the afternoon service, and a third of evening attendances were *multiple* (i.e. a product of people attending worship more than once on Census Sunday).⁵ Using such crude adjustments (as was inevitable prior to the use of computers), even a place of worship holding only *one* service on Census Sunday, would have had its attendance data adjusted according to Mann’s formula.

In short, the Religious Census data cannot be used to address directly either the *regularity* (i.e. attendance throughout the year) of worshippers recorded, or, more importantly, the *actual number* of worshippers on Census Sunday. The root of this deficiency is that the Census measured the number of attendances, rather than the number of attendants (i.e. attenders). Since there were up to three services recorded for each place of worship, it is not possible to measure the actual number of worshippers active on Census Sunday because of the

⁵ See H. Mann, Sketches of the Religious Denominations of the Present Day (London, 1854), pp. 86-103: see especially p. 87.

phenomenon of *multiple attendance*. It is thereby not possible to use the Religious Census to produce an entirely accurate measure of religious practice.

The clearly visible flaws in Mann's work led later scholars to abandon the quest for adjusting for multiple attendances and to converge upon a notion of an 'index of total attendances', henceforth shortened to the *index of attendances*. This index is usually defined as the sum of attendances at all three services (morning, afternoon and evening, and typically including Sunday scholars) divided by the total population and multiplied by one hundred.⁶

In this way there is general agreement that the best that can be achieved with the Religious Census data is a *relative* indicator of religious practice, most commonly the *index of attendances*. By relative indicator, I mean one in which the actual value has no exact meaning, but rather the value of one observation compared to another does have meaning. In more simple language, a relative measure of religious practice may not be as immediately useful as an exact indicator of precisely how many people went to church, but it can nevertheless indicate whether a greater proportion of people went to church in community *a* than community *b*.

The terms 'potential congregation' and 'active worshippers' forms a useful basis from which to examine to what extent the index of attendances is a *consistent* (and thereby empirically useful) indicator of religious practice. The stability of the index rests upon two main factors: the stability of multiple attendance behaviour (which relates to the number of 'active' worshippers), and the age structure (which relates to the number of 'potential' worshippers). The degree to which these two ratios are consistent over space - right down to the parish level - governs the utility of the index of attendances as a measure of religious practice.

⁶ In the published registration-district data, the attendance figures (morning, afternoon, evening) include Sunday scholars. In the Census returns Sunday scholars are listed separately, and one has the choice whether to include them in the total attendance figure.

Uncertainty 1: 'active' worshippers.

a) Multiple attendance.

Two types of multiple attendance behaviour can be defined; multiple attendance at the same place of worship and multiple attendance at different places of worship (sometimes places of the same denomination, but more typically of different denominations). Across the country as a whole, it seems that the former (multiple attendance at the same place of worship) was much more common. As will be shown subsequently, dissenters, in particular, were quite likely to worship more than once per Sunday at the same chapel. What was less common, but nevertheless a well-documented phenomenon, was 'partial conformity', that is attendance at a dissenting chapel and at an Anglican church (on the same Sunday). It seems likely that in certain areas partial conformity was quite common. Obelkevich's study of Lincolnshire showed that a 'ceremonial' or 'deferential' attendance at the parish church was, for many, followed by a 'religious' evening service at the Wesleyan Methodist Chapel. As one inhabitant is reported to have told his curate: 'We comes to the church in the morning to please you, Sir, and goes to chapel at night to save our souls.'⁷

It may well be that in agricultural areas with a strong Wesleyan Methodist presence, of which Lincolnshire was a prime example, inter-denominational multiple attendance was quite common. In other areas it would have been quite rare; adherents of most 'old' dissenting denominations, or branches of 'new' dissent more openly opposed to the Church of England (such as the Primitive Methodists or the Welsh Calvinistic Methodists), would have been unlikely to attend worship at an Anglican church.⁸ The issue of inter-denominational multiple

⁷ Reported in J. Obelkevich, Religion and Rural Society: South Lindsey 1825-1875 (Oxford, 1976), p. 157.

⁸ However, one should certainly observe caution when trying to associate measures of religious pluralism or dissenting strength with measures of religious practice derived from the 1851 Religious Census (when represented by some form of the index of attendances). To the extent that partial conformity was a common occurrence, dissenting strength and religious practice were linked automatically. The problems in attempting to demonstrate a causal effect of religious pluralism upon religious practice using contemporaneous measures of these two phenomena is a major theme of chapter 5 of this thesis.

attendance cannot be addressed by examining the 1851 Religious Census returns. The following paragraphs address the more common custom of multiple attendance at the same place of worship.

The degree of consistency between the number of attendances and the number of attendants depends upon the consistency of the proportion of *multiple attendance*, i.e. the consistency of the proportion of 'twicers' and 'thricers' recorded at each place of worship on Census Sunday. If the propensity to attend worship more than once was dependant upon some factor such as social class, regional location, or denominational allegiance, then the index of attendances becomes a systematically biased measure of religious practice. Since the constituencies of the various nonconformist denominations themselves had strong regional and class bases, the *inter-denominational* variations in attendance behaviour can reveal much about the likely consistency of multiple attendance behaviour. While it is impossible to deduce the exact numbers of those attending more than once, the attendance at the *best attended* service can be used to calculate the *maximum possible* number of multiple attendances. One can examine the degree to which the maximum possible number of multiple attendances was a low and consistent proportion of total attendances (across all denominations).

Table 3 makes clear two aspects of multiple attendance behaviour. The first column shows the percentage of churches/chapels holding just one service for each denomination.⁹ Clearly, in such places of worship the total attendances for that denomination was exactly the same as the attendance at the best attended

⁹ Certain places of worship have been excluded from the calculations concerning multiple attendance behaviour. When the dataset was computerised, in parishes where there was more than one place of worship for a given denomination, the data were combined into a single record. Such combined data is thereby unsuitable for examining attendance at the *best attended service*, since this may have been at different times of day in the different places of worship. Differing proportions of parishes were thereby excluded denominationally. 20% of parishes (with an Anglican presence) had more than one Anglican Church and were thereby excluded from table 3. For the major dissenting denominations the corresponding figures were 32% for the Independents, 16% for the Particular Baptists, 21% for the Baptists unspecified, 35% for the Wesleyan Methodists, 35% for the Primitive Methodists, 55% for the Welsh Calvinistic Methodists, and 23% for the Roman Catholics. Many of these parishes were 'overlapping' (i.e. contained more than one place of worship for more than one denomination), and in total only 23% of the 2,262 parishes with non-zero attendance data were excluded altogether from the analysis. The sample used in table 3 is thereby assumed to be broadly representative, although it is the places of worship in the more populous parishes which are most likely to have been excluded.

service. In other words the number of attendances was one and the same as the number of attendants. For the 'major' denominations, this proportion ranged from 33% for the Church of England to 11% for the Welsh Calvinistic Methodists.

The second column of table 3 shows what is termed the 'mean maximum percentage of multiple attendances' (this refers only to those places of worship holding more than one service). In more simple terms, this figure represents the maximum possible number of multiple attendances as a percentage of all attendances. This proportion of the maximum possible percentage of multiple attendances hovered around the 40% mark. For the 'major' denominations, the average figure ranged from 38% for the Church of England, to 47% for the Particular Baptists. The standard deviations were also quite consistent throughout, and since these variables are quite normally distributed, one can observe that approximately 95% of parishes fall within plus or minus two standard deviations of the mean (i.e. a maximum possible percentage of multiple attendances of between about 20% and 60%).

The maximum possible percentage of multiple attendances is not in itself an enlightening figure. The impact of the figure on the index of attendances can be clarified by considering the example that a maximum possible multiple attendance figure of 40% means that even if *every single* attendance not recorded at the best attended service was, in fact, a multiple attendance, then the total attendance figure would over-represent the number of attendants by a factor of *1 and two thirds*. To illustrate further, this ratio corresponds to a best attended service of 60 attendances and a total attendance figure of 100 attendances, i.e. 40 attendances *could* be multiple. In a parish of 100 people, the index of attendances would thereby be 100%, whilst the lowest possible index of attendants would be 60%.

Such figures are, however, based upon the extreme assumption, that all possible multiple attendances were indeed caused by 'twicers' and 'thricers'. In reality the divergence between attendances and attendants would have been much less than such assumptions imply. First, to recall from the left-hand column of table 3, there was a substantial minority of parishes in which there was no

Table 3

Some characteristics of the multiple attendance behaviour of the adherents of each denomination

Denomination	Of the churches/chapels holding more than one service:			
	Percentage of churches/chapels holding just one service	mean maximum percentage multiple attendances	standard deviation of percentage of multiple attendances	Number of churches/chapels active ¹
Church of England	33%	38%	0.09	1,756
Church of Scotland	40%	34%	0.09	10
United Presbyterian Church	14%	37%	0.13	14
Presbyterian Church in England	33%	40%	0.10	36
Independents	29%	43%	0.09	376
General Baptists	35%	40%	0.09	69
Particular Baptists	14%	47%	0.11	140
New Connexion General Baptists	9%	40%	0.12	11
Baptists (not defined)	24%	45%	0.10	238
Society of Friends (Quakers)	36%	38%	0.08	56
Unitarians	31%	41%	0.06	36
Moravians / United Brethren	25%	51%	0.08	4
Original Connexion Wesleyan	26%	42%	0.10	571
New Connexion Methodist	18%	42%	0.10	22
Primitive Methodist	22%	42%	0.10	291
Bible Christian	11%	45%	0.10	18
Wesleyan Methodist Association	38%	39%	0.10	42
Independent Methodist	32%	40%	0.11	19
Wesleyan Reformers	21%	42%	0.09	42
Welsh Calvinistic Methodists	11%	41%	0.10	105
Countess of Huntingdon	0%	47%	0.10	8
New Church	11%	39%	0.11	9
Brethren	14%	47%	0.02	7
Other Isolated Congregations	45%	42%	0.09	98
Roman Catholics	20%	36%	0.11	81
Catholic and Apostolic Church	12%	38%	0.15	17
Latter Day Saints (Mormons)	21%	50%	0.12	39

Notes

'Major' denominations (defined as those for which more than 100 parishes contained suitable data) were highlighted by shading.

¹ The figures reported refer to parishes with only one place of active worship for that denomination. On the computerised dataset, multiple places of worship belonging to the same denomination were combined into one record, making them unsuitable for this analysis. Also excluded were the few parishes which recorded places of worship but no attendance data. For example, of the 1,877 parishes recording one Anglican Church, 121 recorded no attendances on Census Sunday.

discrepancy between attendances and attendants. Of the 1,736 parishes with suitable data, in 404 (almost a quarter) the total attendance figure must have exactly equalled the number of attendants. Also reassuring is the fact that in the remaining 1,332 parishes in which one or more place of worship held more than one service, the *potential* for multiple attendances was very similar across all the major denominations.

One can go no further in discovering the exact degree of multiple attendance from the 1851 Religious Census data; table 3 takes any such analysis as far as is useful. To address the issue of multiple attendances in less speculative terms one needs to consult other historical sources. There are two sources upon which to draw, the 1829 Constable's Returns and the 1904 Daily News census of London.

Appendix 2 of this thesis examines the Constable's Returns of 1829 for Leicestershire, a source which recorded the estimated number of supporters of each dissenting denomination (and the Roman Catholic Church) in each parish.¹⁰ It is shown that the 1829 figures, which were free of the vagaries of multiple attendance, were very closely correlated with the 1851 attendance data. Most importantly, the 1829 figures were more closely correlated with the index of total attendances than with the minimum possible index of attendants (i.e. attendances at the best attended service). In Leicestershire at least, it appears that multiple attendance did not greatly distort the index of attendances. Further calculations are presented in Appendix 2, which suggest that, even taking a worst-case scenario, the percentage of multiple attendances in the county was 11.9%; this figure would lead one to conclude that the total attendance figure was 13.5% higher than the number of attendants in that county on Census Sunday.

¹⁰. In Appendix 2 it is shown that in Leicestershire the total (nonconformist) attendance figure for 1851 corresponded far more closely to the 1829 nonconformist estimates (which were not affected by the issue of multiple attendance) than did the nonconformist attendances at the best attended service in 1851 (an attendance figure free of multiple attendances).

Only one major survey has measured multiple attendance behaviour directly. This was the Daily News survey of London, edited by R. Mudie-Smith.¹¹ In some ways the Mudie-Smith report provides a 'worst case' scenario because it only covered London. It could well be assumed that the concentrated population, well developed road and street network, and high density of places of worship ensured that the journey to worship was shorter and easier in London than in much of the provinces. For instance, in relation to nineteenth-century Lambeth, J. Cox observed: 'Few Lambeth Streets lacked some sort of church or chapel'.¹² For this reason multiple attendance may well have been a more marked feature of religious culture in the capital than many provincial regions, but it is difficult to substantiate this point.

The Mudie-Smith report examined morning and evening attendances only, presumably because in early twentieth-century London, afternoon services were rather unusual. The London survey measured multiple attendance by requesting 'twicers' (double attendees) to hand in a card (given to them during the morning service) at the evening service of the same place of worship. The results, at first sight, seem to show huge levels of multiple attendance. Indeed, the rate of multiple attendance reported by Mudie-Smith is seemingly in excess of even the maximum possible level of multiple attendance in 1851. The Mudie-Smith report quoted a mean figure of 39% multiple attendants or 'twicers' for Inner London and 36% in Greater London. Many of the nonconformist chapels displayed a rate of 70% or more.¹³

These results are, however, entirely misleading. A closer examination of the Mudie-Smith report reveals that it did not purport to show the actual percentage of 'twicers', this was an imprecision of description. The 'percentage of twicers' in the report referred to twicers as a percentage of *morning attendances*. This was, at best, an uninformative ratio for the publication to utilise, given the great differences between the ratio of morning and evening attendances at different places of worship. While the original calculators seem to have been aware of what they were

¹¹ R. Mudie-Smith (ed.), *The Religious Life of London*, (London, 1904).

¹² G. Cox, *The English Churches in a Secular Society: Lambeth, 1870-1930*, (Oxford, 1982), p.24.

¹³ Mudie-Smith, *Life of London*, Appendix A, pp. 449-450.

doing, their ambiguous phraseology led some of the authors of the regional portraits of London to be informed by a misconceived empirical basis.¹⁴ The figures presented in Mudie-Smith are particularly misleading for many nonconformist chapels for which the morning service tended to be small in comparison with the evening service. For instance, the Baptist chapel in Queen's Road, Shoreditch, recorded 76% 'twicers' in the Mudie-Smith report. However, the figure of those attending twice as a percentage of *all* those attending (obtained by dividing the 104 'twicers' by the 479 total attendances) yields a 'percentage of twicers' of 21.7%.

It is, perhaps, ironic that R. Mudie-Smith was among the strongest critics of the methods and accuracy of the 1851 Religious Census, yet his own survey displayed a lack of comprehension of simple numeracy that is unparalleled in Mann's report.¹⁵ This potential for misunderstanding of the Mudie-Smith report has been realised in some of the secondary literature.¹⁶

For the 68 churches and chapels for which twicers were recorded in the Mudie-Smith report, the percentage of twicers (as a percentage of total attendances) was calculated for the major denominations. The results are shown in table 4. Given the small sample sizes (only a few places of worship were chosen to record twicers), it is reassuring to note that the results obtained for the

¹⁴ For instance, the chapter on East London by P.A. Alden painted an even more pessimistic picture of religious worship in this area than was the case. Alden clearly interpreted the 'percentage of twicers' literally from the descriptions presented to him, and thereby adjusted the total attendance figures of 47,282 men, 61,301 women, 70,930 children, to a mere 30,000 men, 39,000 women and 48,000 children. Alden stated in black and white his misconception 'that 35% or roughly one-third, of those attending a place of worship, attend twice in one day.' See P.A. Alden, 'The Problem of East London', in Mudie-Smith, Life of London, pp. 19-42; see especially pp. 24-25.

¹⁵ See Mudie-Smith, Life of London, p.1.

¹⁶ M. Watts stated (incorrectly) that 'an average of 62.8% of people ... who attended the least well attended service did not attend any other', M.R. Watts (ed.), Religion in Victorian Nottinghamshire: the Religious Census of 1851 Vol 1 (Nottingham, 1988), p.xii. However, this average of 62.8% was of 'twicers' as a percentage of *morning* service attenders, and morning service was not necessarily the best attended service (and in the case of dissent was atypically so). It is for this reason that Watts' estimation of multiple attendance was very high and that he (under?) estimated the rate of religious practice in 1851 using 'the formula of counting attendances at the best attended service ... plus an allowance for other services calculated by adding a third of the total attendances at the least well attended services'. Watts, Religion in Nottinghamshire, p.xiii. J. Cox's use of the Mudie-Smith figures for Lambeth is correct throughout (Cox, The English Churches). The adjustments made for the Croydon data in Appendix 3 of J.N. Morris, Religion and Urban Change: Croydon 1840-1914 (Woodbridge, 1992) are also correct, assuming that all places of worship help more than one service.

Table 4**The proportion of 'twicers' recorded in the Mudie-Smith survey of London****a) Results for Central London:**

Denomination	Total attendances	Total 'twicers'	Percentage 'twicers' [†]	'Inflation factor' [‡]	Number of churches / chapels
Church of England	8,675	904	10.4%	11.6%	12
Wesleyan Methodists	5,950	987	16.6%	19.9%	9
Baptists	11,519	1956	17.0%	20.5%	14
Congregationalists	5,853	879	15.0%	17.7%	9
Welsh Calvinistic Methodists	207	26	12.6%	14.4%	1
Presbyterians	442	49	11.1%	12.5%	1
Primitive Methodists	230	39	17.0%	20.4%	1
Total	32,876	4,840	14.7%	17.3%	47

b) Results for Greater London:

Denomination	Total attendances	Total 'twicers'	Percentage 'twicers' [†]	'Inflation factor' [‡]	Number of churches / chapels
Church of England	3,244	330	10.2%	11.1%	4
Wesleyan Methodists	716	150	20.9%	26.5%	2
Baptists	4,863	884	18.2%	22.2%	6
Congregationalists	2,015	325	16.1%	19.2%	4
Presbyterians	393	40	10.2%	11.3%	1
Primitive Methodists	185	23	12.4%	14.2%	1
Salvation Army	1,470	194	13.2%	15.2%	2
Brethren	138	27	19.6%	24.3%	1
Total	13,024	1,973	15.1%	17.8%	21

[†] This figure refers to 'twicers' as a percentage of total attendances. The Mudie-Smith report does not report this statistic in a consistent manner.

[‡] This figure expresses how much greater the attendances figure is than the actual number of attendants. Mathematically the percentage is expressed as: $((\text{total attendances} / \text{total attendants}) * 100) - 100$.

denominations in Central London were very similar to those obtained in Greater London. In both areas about 10% of all the Church of England attendances were due to twicers, and between about 12.5% and 17% of the various dissenting denominational attendances were due to twicers, with the Presbyterian figure being notably lower in both cases. Taking both Central and Greater London together, it can be stated the degree of inflation inherent in equating attendances as attendants would be 17.4%.¹⁷ In other words, for these churches and chapels, the index of total attendances was 17.4% higher than the index of attendants.

It is important to note that this figure refers solely to churches with two services. There is no information in the Mudie-Smith survey regarding the proportion of places of worship which held only one service, which, to recall from the Religious Census data lay between a fifth and a third for most denominations in 1851. If for example, a fifth of churches in the Mudie-Smith Census had held only one service, then the overall degree of inflation of using attendances in lieu of attendants would fall to 13.5%.¹⁸ These revised figures from the Mudie-Smith data tie in well with the 'worst-case' estimate of an inflation factor of 13.5% obtained for Leicestershire by comparing the 1851 Religious Census data with the 1829 Constable's Returns (see Appendix 2).

Combining the knowledge gleaned from tables 3 and 4, and the Leicestershire data presented in Appendix 2, one could estimate that in the Religious Census the total number of actual attendants was probably between 10 and 15 per cent less than the total number of attendances - a proportion much lower than that resulting from Mann's unsubstantiated formula of excluding half of all afternoon attendances and a third of evening services.

It is important to restate that it is not only important to demonstrate that the rate of multiple attendance was quite low, but that it was inter-denominationally quite consistent. In this regard, the most useful point to glean from Mudie-Smith is

¹⁷ By this I mean that the total attendances figure was 17.4% greater than the number of attendants.

¹⁸ This calculation assumes that the 'single services' of the places of worship with only one service were as well attended as all the services combined at the places of worship with multiple services. In reality, the latter tended to be more numerous.

that while the dissenting denominations did appear to attract higher levels of multiple attendance than the Church of England, the difference was quite modest (as one can discern from table 4). This helps assuage doubts that the use of total attendances in lieu of attendants flatters dissent at the expense of the Church of England.

In conclusion, the most accurate one can be is to estimate that the 'inflation factor' inherent in using attendances in lieu of attendants ranged from zero in parishes where each place of worship held only one service, to around 20% in parishes in which nonconformist chapels held multiple services. To illustrate the consequences of such differences, one can say that if both types of parishes had contained exactly the same proportion of church/chapel-goers, if the former type of parish recorded an index of attendances of 50%, the latter would record an index of attendances of 60%. This is really quite a small margin of inconsistency when viewed against the considerable variation in the index of attendances present in the parish-level data (the inter-quartile ranged from 35.4% to 73.8% across the total sample of 2,260 parishes). Thus, one can be quite confident that the greatest part of the variation in the index of attendances was not due to variations in multiple attendance behaviour.

b) Sunday scholars.

A further issue related to multiple attendance is whether to include Sunday scholars in the index of attendances. For this thesis, the decision was taken *not* to include them because of the probable high degree of 'multiple attendance' amongst Sunday scholars. Anyone who has examined the original Census returns will be familiar with the returns recording exactly the same number of Sunday scholars in the morning, afternoon, and sometimes evening also. Such returns are strongly suggestive that both Anglican and nonconformist Sunday schools often looked after children and adolescents for much of the day.¹⁹

¹⁹ This point was also made in Watts, Religion in Nottinghamshire Vol 1, p.xii.

This point can be illustrated by examining those parishes in the computerised dataset with a single Anglican Church in which more than one act of worship was carried out. There were 1,174 such parishes. In only 38 (3.2%) of these did the Returns report *exactly* the same congregation size in two or more of the main acts of worship (i.e. the morning, afternoon, and evening services). In contrast, of the 923 parishes with more than one Anglican Sunday school service, the returns recorded exactly the same number of children in at least two of the Sunday school 'services' (usually morning and afternoon) in 354 (38.4%). Thus if multiple attendance was a minority activity amongst adult worshippers, it was extremely common for Sunday scholars to 'attend' more than once. Indeed, one is not so much examining a certain proportion of 'twicers', but the re-recording of exactly the same 'congregation'.

To include Sunday scholars in the index of attendances in a routine fashion is therefore prone to considerable inconsistency between parishes without Sunday schools, parishes with one Sunday school service, and parishes with more than one Sunday school service. Such differences are illuminating if Sunday schools are the object of study, but do not help clarify the level of church-going amongst the adult population.²⁰ For this reason Sunday scholars were excluded from the index of attendances as calculated for the parish-level dataset. Sunday scholars and attendances at worship were not distinguished in the published Religious Census, and so Sunday scholars were unavoidably included in the attendance data computerised for the registration-district dataset (Appendix 1 clarifies this point).

Uncertainty 2: the 'potential' congregation.

Having examined the issue of multiple attendance - which was the major uncertainty regarding the number of 'active worshippers' - the discussion moves on to a consideration of the major uncertainty regarding the second key term, the

²⁰ Snell has recently examined the Sunday school data of the Religious Census in considerable detail, see Snell and Ell, Victorian Religion.

'potential congregation'. This uncertainty relates to local variations in the age-structure of the population.

For the parish-level data, the index of attendances is defined as the sum of attendances divided by the total population and multiplied by one hundred. Because Sunday scholars are excluded, this index tends to exclude a substantial number of the population under the age of 15 or 16. However, the degree to which such an index excluded children is far from clear.²¹ First, there is the issue of whether infants too young to attend Sunday school would have accompanied their parents to worship. It seems possible that wealthier parents might have left their infants at home with their servants, whilst those without servants would have brought their infants with them. Secondly, there it is uncertain whether older children attended Sunday school only, worship only, or both at different times of the day. A further possibility is that some of those making the returns may have included Sunday scholars in their returns for worship as well as in their returns for Sunday scholars. For all these reasons, one cannot assume that the attendances at worship were all adult attendances, or that adult attendances were a consistent proportion of total attendances across all places of worship.

Age Structure.

One part of this complexity can be examined in greater detail, and that is the age structure of the population. If one assumes for a moment that the attendances recorded in the 1851 Religious Census were overwhelmingly 'adult' attendances, then one can isolate the effects of any variations in age structure (i.e. the percentage of children) upon the consistency of the index of attendances.

Whereas the issue of multiple attendance has been considered by previous work relating to the Religious Census, the demographic dimension has been largely neglected. In an endnote, W.S.F. Pickering produced one of the few

²¹ Local customs differed regarding the maximum age of Sunday scholars. In many areas it would have been when the child was considered to become an adult - at 14-16 years - but in some areas the age may have been earlier or later.

remarks relating to this issue, though he did not attempt to investigate his own question. He commented that:

'Also, it might be noted that in analysing the census returns the question of age has not been taken into consideration. Some of the non-industrial towns might well have had an older age-structure than the industrial towns, which in turn might have accounted for the former's better church-going.'²²

Quite apart from the more subtle arguments relating to the age structure and religious activity (were older people always more likely to have attended church?),²³ there exists the demographic issue of whether the proportion of the population under the age of fifteen or sixteen was fairly constant. If the proportion of the population aged under fifteen varied greatly between parishes or registration districts, then this would raise caution about the consistency of the index of attendances (excluding Sunday scholars) as a measure of religious practice. Indeed, if one maintains the assumption that the attendance figures recorded in the Religious Census were largely adult attendances, then it is important to realise that any difference in the percentage of children in the population would lead to a proportionally greater difference in the index of attendances (irrespective of any actual variations in religious behaviour). For example, one can consider two parishes with identical levels of churchgoing amongst the population aged over 14 years. If in one parish 30% of the population was aged under 15 years and in the other the figure was 40%, the index of attendances recorded in the former would be 16.67% higher than the latter.²⁴

Without very considerable data entry from enumerators' returns of the decennial census, the issue of the age structure could not be examined for the

²² W.S.F. Pickering, 'The 1851 Religious Census - a useless experiment?', British Journal of Sociology, 18 (1967), 382-407, p. 407.

²³ It has been argued that in nineteenth-century Lincolnshire older people were more likely to have attended worship; Obelkevich Religion and Rural Society, p.18. Certainly, such characteristics are a well-observed feature of contemporary European societies. It remains to be concluded to what extent it reflects a lower propensity to attend worship amongst each successive generation, or to what extent there is a life-cycle of increasing religiosity as each generation ages. See, for example, P.K. Botvar, 'Belonging without believing? The Norwegian religious profile compared with the British one', in P. Repstad (ed.), Religion and Modernity: Modes of Co-Existence (Oslo, 1996), pp. 119-134.

²⁴ The age limit of 15 years is used because the proportion of the population aged under 15/over 14 can be obtained from the decennial census.

2,431 parishes individually. However, using the published census abstracts, the data describing the population aged less than 15 could be assembled for the 147 coterminous registration districts. E.A. Wrigley and R.S. Schofield estimated that 36.01% of the population was aged under 15 in 1851.²⁵ The mean figure for the 147 registration districts for which the parish data was compiled was 36.39% (in 1861), clearly very close to the national figure.²⁶ More importantly, the variability of the registration district figure was very low, the lowest recorded figure being 30.56% in Cambridge and the highest being 40.88% in Hailsham (Sussex) - an absolute range of just over 10%. Within this range the values were tightly centred around the mean (more tightly centred than in a normal distribution). In 127 of the 147 districts the percentage of the population aged under 15 lay between 34.68% and 38.11% (that is within one standard deviation from the mean).

Such a low degree of variation causes little impact upon the consistency of the index of attendances as a measure of religious practice. For example, in the 127 districts in which the percentage of the population aged under 15 lay within one standard deviation of the mean, the change caused to the index of attendances by 'adjusting' it according to this variation in proportion of the population aged under 15 (i.e. \pm one standard deviation) would lead to less than a 1% variation from the original index (and this is assuming that all attendances were 'adult').

At the parish level, the age structure of the resident communities was likely to have been more variable than at registration-district level: smaller area statistics are inherently more 'flashy' than larger area statistics for such demographic variables. In this respect the demographic data of the London registration districts are reassuring. The metropolitan districts tended to be smaller and more homogenous by age and social class than their provincial counterparts. The London districts were thereby more likely to present a higher degree of demographic variation, a degree more akin to the parish dataset. The mean percentage of the population aged under 15 for the 36 London districts was 31.7%.

²⁵ E.A. Wrigley and R.S. Schofield, The Population History of England, 1541-1871: a Reconstruction (London, 1981), Appendix 3, p.529.

²⁶ The figure for the 147 registration districts was calculated from the 1861 decennial census.

The distribution about the mean was highly normal - 25 districts (69.4%) displayed values between 28.27% and 35.07% (one standard deviation) and 34 (94.4%) were within 24.87% and 38.47% (two standard deviations). Thus, while the London data did display a considerably greater range and variability than the non-metropolitan districts, the range remained really quite small and free of any exceptional outliers.

As was concluded with respect to multiple attendances, the effect of variations in age structure seemed unlikely to seriously invalidate the index of attendances as a consistent indicator of religious practice.

b) 'migrant' worshippers.

There is one further potential problem associated with the use of Religious Census data. This uncertainty is specific to the parish-level attendance data. A problem arises when significant numbers of people systematically attended worship outside their parish of residence. To take an extreme illustration of this phenomenon, one could imagine two adjacent parishes where, for reasons of historical 'accident', one parish contained many churches and chapels, and the other contained very few. Under such circumstances, there would not just be a small trickle of reciprocal crossing of parish boundaries to attend worship (which was no doubt widespread), but rather, a systematic crossing of boundaries from one or more parishes into another.

If the places of worship were thus concentrated into one or two parishes, these parishes would record high indices of attendances (irrespective of the religiosity of the resident populace). Also, since dissenting chapels were much more likely to be thus concentrated than the Anglican Churches (since the Church of England administered upon the parochial system), such parishes would also record very high levels of dissenting support. This raises a potentially serious problem whereby the attendance behaviour and level of support for dissent of among the populace of two or more neighbouring parishes could have been identical, and yet, on Census Sunday one parish could have recorded a very high

index of attendances and strong dissenting support, while the others would have recorded much lower values. In this way, the systematic crossing of parish boundaries could be hypothesised as hampering the search for associations between aspects of religious behaviour and socio-economic conditions; associations which form the heart of the analysis of this thesis.

The religious data were examined closely for signs of any systematic crossing of parish boundaries. This was done by examining the data by eye for any 'extreme' contrasts in religious statistics within groups of neighbouring parishes. In particular, a very high index of attendance, in excess of around 200% was a clear indicator of 'immigration' of worshippers (since, even allowing for multiple attendances, only the most religiously active of resident communities could have sustained such an index). In total, only 29 parishes (1.2% of entire parish sample) recorded an index of attendances of over 200%. The data were further examined for sharp contrasts between neighbouring parishes - such that one parish recorded a very high index of attendances while the neighbouring parish recorded a very low index. Such occurrences were rare.²⁷ Very few sharply contrasting neighbouring indices of attendances came to light, and these seemed to be in the compact urban parishes of ancient towns. In both Cambridge and Ipswich, the parish data were aggregated to one overall 'combined parish', since the individual data of the component parishes were so very variable. The extreme case was the parish of Ipswich George Street which recorded almost 1,000 attendances for every resident person!

Having dealt with the two extreme cases of Ipswich and Cambridge, it was important to examine whether any less 'spectacular', but more widespread, crossing of parish boundaries in the remaining places might have been sufficient to affect the interpretation of the data offered in this thesis. To do this the parish-level data were compared with the registration-district data. The 1851 registration districts tended to cover between 10 and 25 parishes. At this larger spatial scale,

²⁷ The low incidence of such a problem may have been helped by the fact that in 1851, many parish boundaries had yet to be adjusted to take into account recent population growth. As a result, many of the newly industrialising urban parishes remained quite extensive at that date. For instance, the parish of Manchester covered 34,253 acres and contained 452,158 people. For such large urban parishes there could only have been limited migration of worshippers.

any transfer of worshippers across *district* boundaries must in all cases have been negligible in proportion to the total number of 'native' attendances *within* each district. The registration-district data is therefore an extremely sound basis with which to compare the parish-level data.

If the crossing of parish boundaries was to be a significant problem for the interpretation of religious change presented in this thesis then, *a priori*, one could hypothesise that the parish-level data would exhibit weaker associations between both the index of attendances and the dissenting percentage share (a measure of dissenting strength relative to the Church of England)²⁸ and the population density. These weaker associations would occur if parishes of similar socio-economic conditions contained highly variable indices of attendance and dissenting percentage shares as a result of the systematic migration of worshippers (especially dissenting worshippers) between neighbouring parishes. One can envisage a patchwork of parishes which were net 'exporters' and 'importers' of worshippers (in the manner of Cambridge and Ipswich). In this way, neighbouring parishes with similar population densities would display a mixture of high and low indices of attendances and high and low dissenting percentage share values (irrespective of any differences in the religious behaviour of their inhabitants).

Analysis was conducted to compare the parish and registration-district datasets on these two points. A series of Pearson correlations was carried out to investigate the relationship between the index of attendances, the dissenting percentage share, and the population density. The results are shown in table 5. The first column of table 5 reveals that the index of attendances was universally *negatively* associated with the population density. To best compare the registration-district data with the parish-level data in this manner it is necessary to *weight* the data.²⁹ The association became stronger (most markedly in the case of the parish dataset) once the data were weighted (the bottom two rows of table 5). The second column of table 5 reveals that the dissenting percentage share was

²⁸ The dissenting percentage share of attendances is defined in Appendix 1.

²⁹ This allows the parish-level data and the registration-district data to be compared in a far more systematic way than is possible using the raw data. Appendix 6 of this thesis contains a more technical explanation of the weighting of the datasets.

Table 5**A comparison of the parish and registration-district data: the relationships between the major religious variables**

Pearson correlation between the index of attendances and the population density	Pearson correlation between the dissenting percentage share and the population density
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Unweighted data:

Registration districts covered by parish-level data (n = 147)	- 0.22** (p = 0.006)	+ 0.06 (p = 0.499)
All parishes with attendance data (n = 2,214-2,259)	- 0.01 (p = 0.743)	+ 0.06** (p = 0.007)

Weighted data:

Registration districts covered by parish-level data weighted by their total populations (n = 147)	- 0.32** (p = 0.000)	+ 0.13 (p = 0.128)
All parishes with attendance data weighted by their total populations (n = 2,214)	- 0.18** (p = 0.000)	+ 0.11** (p = 0.000)

** indicates that the correlation coefficient exceeded the 99% confidence level.

universally positively associated with population density. Weighting the dataset increased the magnitude of the association, which achieved strong statistical significance in the parish-level analysis.

Thus the hypothesis - that the associations between both the index of attendances and the dissenting percentage and the population density would be weaker in the parish dataset - can be confidently rejected. Both datasets displayed the same directions of association, and in both cases the parish dataset recorded a *stronger* correlation.³⁰

The index of attendances defined statistically

Having examined the major uncertainties inherent in the use of the index of attendances as a measure of religious practice, the index can now be described statistically. The frequency distribution of the index of attendances is shown in figure 1 of Appendix 4. There is a clear positive skew. In addition to the cases shown on the graph, there were a further 10 parishes with indices of attendance greater than 300. For the 2,260 parishes with attendance data the mean index of attendances was 61.1. The standard deviation was quite high at 51.5, which demonstrated the influence of the positive skew. If the 170 parishes with 'zero' attendance data are included, the mean index of attendances becomes 56.8, with a standard deviation of 52.0.³¹ Thus one can observe that the mean index of attendances for the parishes of the fifteen counties lay somewhere between 56.8 and 61.1.

Estimating the 'real' rate of religious practice.

It is not necessary for this thesis that any precise estimate of the exact level of religious practice should be made. The entire point of this section has been to show that although quantitative methods can be used to further interpret the Religious Census data, there remain several unanswerable vagaries. However,

³⁰ It will be shown later in this thesis that the parish dataset tends to demonstrate stronger relationships precisely because it is far more geographically sensitive.

³¹ The issue of 'zero' attendance data is described in Appendix 1.

since the level of church-going is a point of considerable historical interest, and sophisticated quantitative work in this area remains lacking, I have included a few remarks on the subject.

An important point to re-iterate is that the published registration-district data included Sunday scholars in the attendance data, and so because of the very high level of multiple attendance among Sunday scholars, the parish data forms a far better starting point from which to estimate the rate of religious practice in 1851. Since most research has used the registration-district data, spectacularly high estimates of church-going have sometimes ensued. To illustrate, the total number of attendances (including Sunday scholars) reported by Mann (who included estimates for missing data) was 10,896,066.³² Subtracting about 10-15% from this total to allow for the likely rate of multiple attendance (as suggested by the previous analysis of this section), produces an estimated number of attendants in England and Wales in the range of 9,261,656 to 9,806,459. Mann estimated that 70% of the total population, would have been free to attend worship at some time on Census Sunday (from the total population figure he deducted three million for children aged up to between 5 and 10, one million as sick or disabled, and a proportion of persons in charge of houses and persons employed on Sunday).³³ This resulted in a potential congregation of 10,427,609. Combining Mann's estimate of the 'potential congregation' with the estimate of 9,261,656 to 9,806,459 'active worshippers', the resulting rate of religious practice lies in the range 89% to 94%. In other words, manipulating the figures in this manner would lead one to conclude that about nine out of ten of the 'potential congregation' were 'active worshippers' on Census Sunday.

Such high estimates are fallacious due to the very high levels of multiple attendance (if not double-recording) among Sunday scholars. Mann's response was to impose the rather arbitrary and inflexible formula which excluded half of all afternoon attendances and a third of all evening attendances. It is possible that Mann's realisation of the extraordinary high ratio of attendances to eligible people

³² Mann, Sketches, p. 87.

³³ Mann, Sketches, pp. 58-59.

led him to implement such a punitive formula (and one which reduced dissenting attendances in particular). However, it was the Sunday scholar data which needed punitive correction, if not outright exclusion, but this data was never isolated from the attendance data by Mann, and cannot be isolated from the published data.

Mann's final estimate, resulting from his corrective formula, was that active worshippers numbered 58% of the potential congregation on Census Sunday. Somewhat ironically, I would argue that this estimate is not far wrong, but his method of arrival at this figure was flawed. As already noted, in the parish-level data one can isolate Sunday school attendances from attendances at worship. Thus, the parish-level data for the fifteen registration counties allows a far more accurate estimate of the rate of church/chapel-going than can be achieved with the registration-district data. In short, adjusting the parish data for multiple attendances and the age structure of the population, one can estimate that between 61.5% and 65.1% of the 'potential congregation' attended worship on Census Sunday.³⁴ One can make a further refinement by allowing for the 'worst possible' degree of exaggeration in the total attendance figure revealed by the frequency of round numbers in the returned attendance figures.³⁵ This adjustment yields a rate of practice of between 56.9% (assuming 7.6% inflation of attendance figures, 15% multiple attendance and including parishes with 'zero' attendance data) and 60.1% (assuming 7.6% inflation of attendance figures, 10% multiple attendance and excluding parishes with 'zero' attendance data).³⁶

The level of religious practice in the parishes of these 15 counties appears to have been representative of England and Wales as a whole. This is revealed by comparing the index of attendances for the 147 corresponding registration districts,

³⁴ These estimates for the 2,431 parish dataset were produced as follows. Total attendances were 2,091,211. Total population was 4,592,165 or 4,645,702 (if the 170 parishes with 'zero' attendance data were included). The proportion of the population under 15 was 36.39%, a precise figure based upon the published registration-district census data. Using an 'inflation factor' of 10% for multiple attendances yielded a rate of practice for adults over 15 of 64.3% to 65.1% (depending upon whether parishes with 'zero' attendances were included). An 'inflation factor' of 15% yielded a rate in the range of 61.5% to 62.3%.

³⁵ One can produce a worst-case estimate that the total attendance figure needs to be reduced by 7.6% to reveal the 'actual' attendance figure. This estimate is derived in Appendix 2 of this thesis.

³⁶ This estimate was calculated as outlined in the previous footnote, except for the fact that the total attendance figure of 2,091,211 was reduced by 7.6% in addition to the reductions made for multiple attendances.

which was 61.4%, with the value of 60.2% obtained across all 624 districts (excluding the 36 London districts the index was 63.5%).³⁷ In other words, the index of attendances in the fifteen registration counties for which the parish-level data were assembled was broadly representative of the rest of non-metropolitan England and Wales.

The chief remaining unquantifiable uncertainty in this estimate is the number of children under 15 recorded in the attendance figures. The greater this number, the greater the degree of exaggeration of this estimate of church-going amongst the potential congregation (i.e. the population aged over 14 years).³⁸

As a final piece of analysis, one can check the validity of this estimate by changing the underlying assumptions. One can go to the opposite extreme and include children in the potential congregation, and balance this by also including Sunday school attendances. If only the best attended Sunday school 'service' is used, this removes the problem of multiple attendance. From the sub-sample of parishes with suitable data, the total population was 1,015,796, the total attendance figure was 584,998, and the total Sunday school attendance figure (at best attended service) was 109,001.³⁹ Adjusting the attendance figures as before (for a 10-15% 'inflation' factor for multiple attendances, and subtracting 7.6% for a 'worst-case' estimate of exaggeration in the returns) yielded an estimated rate of religious practice of between 54.2% and 59.1%.⁴⁰

This initial estimate is too simplistic, A certain number of infants could not have been considered eligible for Sunday school, nor would have attended (or necessarily been counted) with their parents at the main act of worship. A further

³⁷ These figures are taken from the computerised registration-district dataset used for this thesis which excluded a few of the very minor denominations (see Appendix 1 of this thesis).

³⁸ There is no doubt that a substantial minority of attendances would have been due to infants and children. However, this estimate of the potential congregation also took no account of the sick, the extremely elderly, and those engaged in essential Sunday employment (who Mann estimated to be quite numerous). The number of attendances due to children and the number of adults unable to attend worship due to illness and employment, will tend to balance out in the equation.

³⁹ These figures are calculated from the 1,736 parishes in which no denomination had two or more places of worship.

⁴⁰ The upper figure resulted from correction for a 10% 'inflation factor' and excluded the population data from parishes recording no attendances. The lower figure resulted from correction for a 15% 'inflation factor' and included all population data.

complexity is that the sub-sample of parishes from which this estimate was made contained an index of attendances (54.8% - 57.6%) which was considerably higher than the total sample used in the previous estimate (45.0% - 45.6%).⁴¹ In short, two further adjustments can be made to make these figures more realistic. One can adjust the estimate in proportion to the ratio of the index of attendances (approximately 1.24), and one can subtract infants aged under 5 years (13.29% of the population) from the potential congregation. This yielded an estimate of the rate of religious practice in the range 50.5% to 53.1%.⁴²

This barrage of figures may appear confusing, there being an almost infinite variety of ways in which one can adjust the data. The point I wish to conclude upon is that I have made two estimates of religious practice. The first estimate used a more sociologically useful definition of the rate of religious practice (i.e. religious practice amongst adults). I would argue that Sunday school attendances varied (both geographically and historically) with a whole host of factors, not least the provision of secular education.⁴³ While the first definition was the preferred one, due to the vagaries of the data, it was liable to over-estimate the rate of religious practice. For this reason a second series of assumptions were introduced. In short, the first estimate defined the potential congregation in a narrow way (the population aged over 14), and produced an estimate in the range 54.2% to 59.1%. The second defined the potential congregation in an inclusive manner (the population aged over 4), and yielded an estimate in the range 50.5% to 53.1%. It is the fact that the two estimates are so close which gives me reasonable confidence in concluding that the 'real' rate of religious practice lay between 50% and 60% in non-metropolitan England and Wales in 1851, and most likely was closer to 60%, since several of my assumptions were 'worst-case'.⁴⁴ Thus my final estimate is very similar to Mann's, but the means of arrival was very different.

⁴¹ These figures exclude Sunday scholars.

⁴² The remaining inaccuracy in the estimate is that not all Sunday school attendances outside of the best attended 'service' would have resulted from multiple attendance.

⁴³ Snell has shown how the 1851 Education Census data reveal that Sunday school attendances and 'secular' school attendances were inversely related. Snell and Ell, *Victorian Religion*.

⁴⁴ Most especially the deduction of 7.6% from the attendance figure for exaggeration in the returns; see Appendix 2 for details.

3.2 Conceptualising and Quantifying Religious Pluralism

The concepts.

Religious practice was a relatively simple phenomenon to define, and the uncertainties regarding its measurement were methodological as opposed to conceptual. In contrast 'religious pluralism' is a much used term, but remains a seldom defined concept.

Within the historical literature, religious pluralism has sometimes been used interchangeably with the strength of dissent or nonconformity - i.e. the strength of opposition to the established church. This aspect of religious culture is quite easy to quantify. Established measures of the *Anglican percentage share* of attendances or the *Anglican index of attendances* (or, conversely the dissenting percentage share or dissenting index of attendances) can quantify the strength of dissent and/or the established church relatively unproblematically.⁴⁵ The percentage share measure can be more useful since it is a measure of the strength of the Anglican Church relative to other denominations, and is thereby independent of the level of religious practice. The percentage share measure as an indicator of Anglican or dissenting strength has a long-established usage within the British context.⁴⁶

There is often an implicit assumption that dissenting strength equates to religious pluralism, however this is not necessarily the case. If one mentally replaces the words 'Catholic and Jewish immigration' with 'nonconformity' or 'dissent', the following quote from K. Christiano becomes pertinent to the British situation:

⁴⁵ Throughout this thesis, a denomination's *percentage share* refers to that denomination's attendances as the percentage of the sum of attendances for all denominations. A denomination's *index of attendances* is defined as that denomination's attendances multiplied by one hundred and divided by the total population of the parish or registration district. As already noted, where these variables were calculated using the registration-district data the attendance figures included Sunday scholars.

⁴⁶ See, for example, B.I. Coleman, *The Church of England in the Mid-Nineteenth Century* (Historical Association, 1980); Ell, 'Atlas of religious worship'; Snell and Ell, *Victorian Religion*.

'Historians ... have written extensively on how urban social life was changed by increases in Catholic and Jewish immigration at the close of the nineteenth century. Little is known however, about the generic relationship between urbanization and religious diversity; indeed, it is not known if such a relationship exists at all. Similarly, there is no evidence that religious diversity may not be composed differently in different cities, by varying proportions of the same ethnic groups. Diversity's meaning as a sociological concept is regrettably obscured by standard historical description.'⁴⁷

When geographers and historians have attempted to quantify religious pluralism beyond the two established measures of the *percentage share* and the *index of attendances*, they have used measures which are based upon the number of denominations or the number of denominations per capita. However, both these measures are flawed in the majority of research contexts, as is made clear in the following paragraphs.

The 'conventional' measures of religious pluralism.

a) The percentage share measure.

The percentage share measure is commonly expressed in three ways, as the *Anglican percentage share*, the *dissenting percentage share*, and denominationally specific percentage shares. The most important measures in this context are the Anglican and dissenting percentage shares. If all the non-Anglican denominations are taken to be 'dissenting' then the 'Anglican' and 'dissenting' percentage shares are two sides of the same coin. For instance, an Anglican percentage share of 20% would entail a dissenting percentage share of 80%. Both measure the strength of the 'official' church relative to the strength of dissent. Both measures are independent of the number of denominations present, other than the fact that where the dissenting percentage share is greater than zero (and less than one hundred), there must be at least two denominations present. This is the major weakness of the percentage share as a measure of religious pluralism - it does not reveal the degree of heterogeneity within dissenting support.

⁴⁷ K.J. Christiano, Religious Diversity and Social Change: American Cities 1890-1906 (Cambridge, 1987), p.67.

Another important property of the percentage share measure is that it is free of scale-dependence. By this it is meant that the spatial scale of measurement has no (direct) impact upon the percentage share measure. For example, the dissenting percentage share for ten towns combined will be the same as the weighted average (the average weighted by the number of total attendances) of the ten towns taken separately. This freedom from scale dependence becomes significant as a 'control' when the *religious diversity* measure is considered subsequently.

b) The number of denominations.

The most obvious shortcoming of the percentage share measure is its independence of the number of denominations present. However, the number of denominations is not, in itself, a revealing statistic. The number of denominations is a function of the size (in terms of population) of the unit area as well as any specifically religious factors. A simple count of the number of denominations within a parish (or any other unit of analysis with a non-constant population) is thereby potentially misleading - the most populous parishes will, *ceteris paribus*, contain the most denominations. Thus, in contrast to the percentage share measure, the number of denominations is *highly* scale dependent. Figure 2 illustrates the point by showing how close the relationship is between parochial total population and the number of dissenting denominations present.

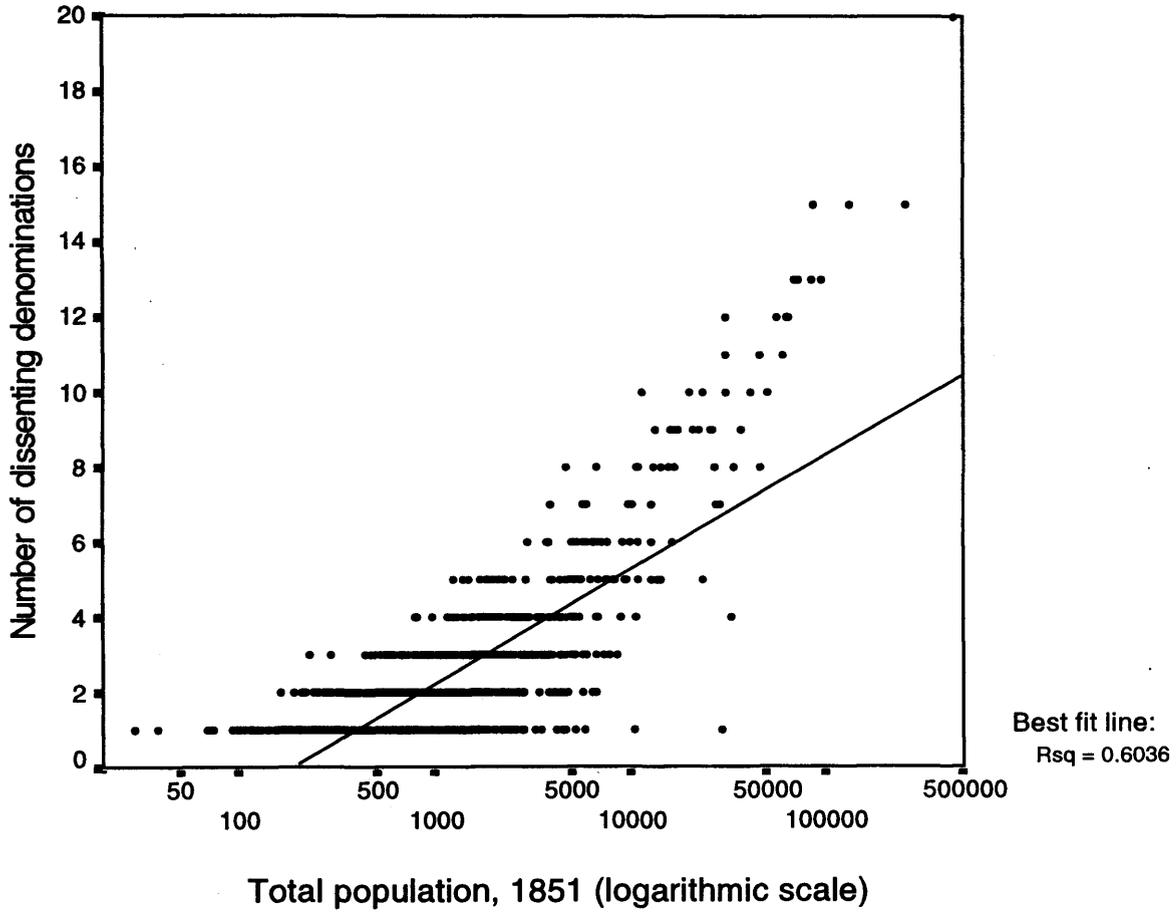
c) The number of denominations per capita.

The most simple way to attempt a scale independent measure of denominational heterogeneity is to divide the number of denominations by the total population, producing a measure of *denominations per capita*.⁴⁸ This measure is, however, fatally flawed as a measure of religious diversity. Figure 3 illustrates this point by plotting the number of dissenting denominations per capita against

⁴⁸ In practice, it is easier to interpret such a variable by calculating denominations per *thousand* people.

Figure 2

The relationship between the parish population and the number of dissenting denominations for all parishes with dissent present (n=1,459)



(Regression coefficient and best fit line refer to linear least squares equation)

population. It is evident that as population increases, the number of (dissenting) denominations fails to increase in line with population. This trend becomes most marked in parishes with more than 100,000 people. It can be seen that the number of dissenting denominations per capita falls markedly as population increases; the fall would be appear very marked indeed if population was not plotted logarithmically in figure 3. The graph shows that a power function can be used to model the downward curve of the number of dissenting denominations extremely closely (R squared = 0.72).

The reason for this lack of correspondence between population and denominations per capita is that there is a 'physical' ceiling to this latter number - in this case the 27 denominations recorded from the Religious Census. This ceiling is neared in the most populous parishes. For example, if a town of 75,000 people contained twelve denominations, a neighbouring city with 225,000 people would only be likely to have contained only a few extra denominations. The city could certainly not have contained 36 denominations - the number necessary to yield the same ratio of denominations per capita as obtained for the town. The city necessarily displays a lower ratio of denominations to population than the town.

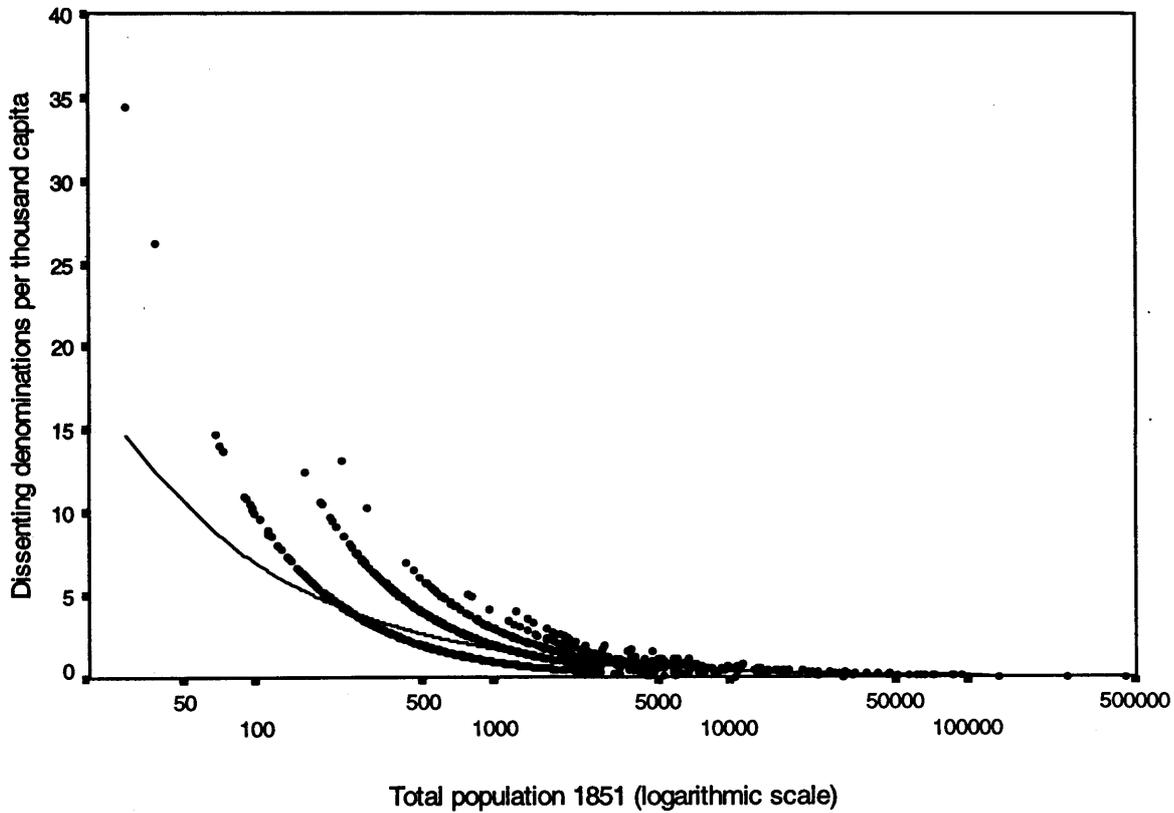
The extent to which each unit increase in population was associated with a progressively smaller increase in the number of dissenting denominations is highlighted in figure 4. The graph makes clear that it was only when both variables were transformed logarithmically that a linear relationship becomes apparent.

To conclude, although a measure of denominations *per capita* may initially seem a method of removing scale dependency from a simple count of the number of denominations, in practice it is also a highly scale-dependent measure. The fact that it is such a clearly flawed measure has implications for research in other contexts, in particular the theory of religion of Stark and Bainbridge.⁴⁹

⁴⁹ The work referred to here is R. Stark and W.S. Bainbridge, The Future of Religion: Secularization, Revival and Cult Formation (Berkeley, 1985), pp. 475-505. One of the authors' fundamental hypotheses is that 'cults will abound where conventional churches are weakest'. They used the evidence of, *inter alia*, a 'cults per million' measure and the rate of religious books published per annum (both calculated for entire European nations) to argue that the European evidence supported the hypothesis that cults were strongest where sects were weakest.

Figure 3

The relationship between the parish population and the dissenting denominations per thousand people for all parishes with dissent present (n=1,459)

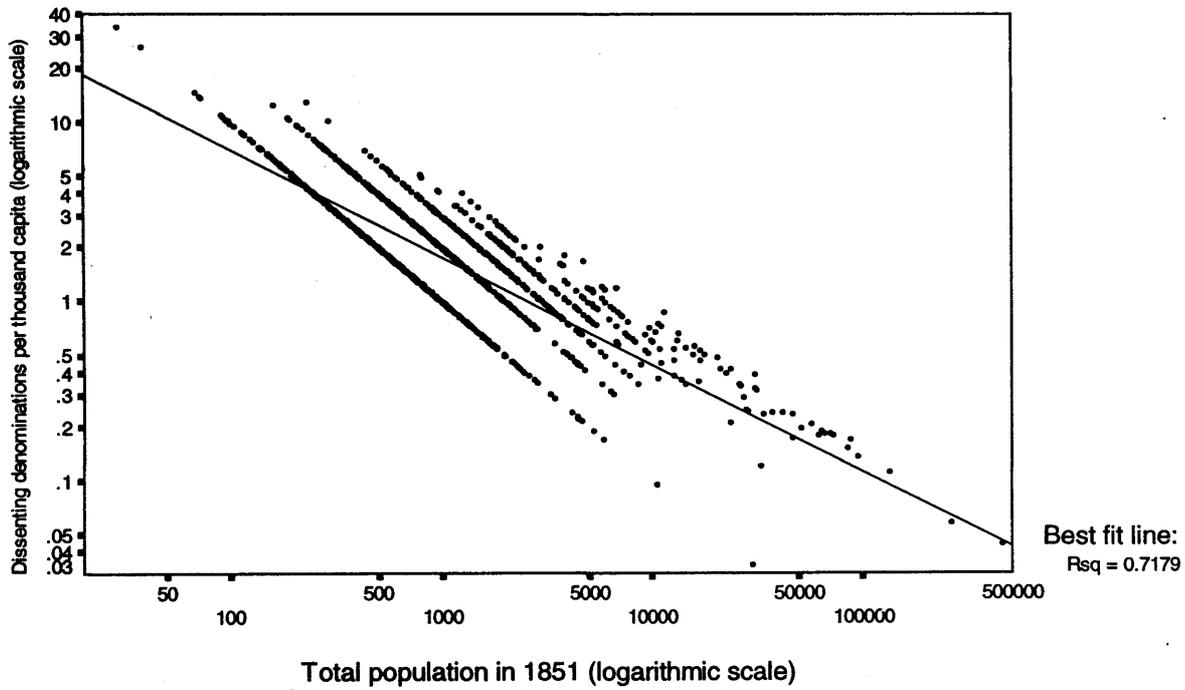


Rsq (power function) = 0.718

Equation of power function: $Y = 109.837 \cdot \text{total population}^{-0.598}$

Figure 4

The relationship between the parish population and dissenting denominations per thousand people: the log-log graph (n = 1,459)



(Regression coefficient and best fit line refer to linear least squares equation)

c) 'crop' combinations.

A more sophisticated attempt to standardise a measure of denominational heterogeneity has been achieved by using a measure associated with 'crop combinations'. This measure was successfully used by G.J. Lewis to map religious diversity in the Welsh borderlands.⁵⁰ Such a measure uses the method of least squares to identify whether the patterns of denominational support most closely resembled: a 'one denominational', 'two denominational' (i.e. one half support each), 'three denominational' (i.e. one third support each), or four or more denominational ideal type.⁵¹ While this method would be satisfactory in areas of relatively equal population size, it is not free of scale dependency, and thereby inappropriate to use in units of markedly unequal population size (such as the parish).⁵²

A solution? The Herfindahl-Hirschman index of market concentration

It is within the rational choice approach that the quantification of religious pluralism has been most clearly advanced. The analogy of religion-as-market leads rational choice theorists of religion to argue that one should address not only the overall *number* of religious choices, but also the *relative success* of competing choices (i.e. a measure of the concentration of consumption within the religious market). This is to argue, for example, that a locality with five equally popular denominations will experience a greater intensity of religious pluralism than another locality with five denominations where one denomination attracts 80% of all attendances and the other four attract 5% each.

Only one type of measure capable of reflecting both the number and relative popularity of religious choices has been used in major empirical research. This has become known as the 'diversity measure', a form of the Herfindahl-Hirschman

⁵⁰ See G.J. Lewis, 'The geography of religion on the middle borderlands of Wales in 1851', Transactions of the Honorary Society of Cymmrodorion, 1980, 123-142.

⁵¹ The method is outlined in J.T. Coppock, An Agricultural Atlas of England and Wales (London, 1976), Appendix I.

⁵² The least squares method proved invaluable in the production of map 20 of this thesis which serves to summarise both dissenting strength, *and* religious diversity.

index (a type of Gini coefficient) used to measure market concentration.⁵³ In the United States, the pioneering work of Kevin Christiano, Rodney Stark, Roger Finke, and others has led to the widespread acceptance and use of the diversity measure as a measure of religious pluralism.

One needs to examine whether the diversity measure is as amenable to the quantification of pluralism as understood by Berger as it is to the rational choice consideration of pluralism as market concentration. Berger's conceptualisation of religious pluralism rests upon the heterogeneity of religious world-views or plausibility structures. The notion of *choice* is central to both Berger's and the rational choice conceptualisations of pluralism. For example, Berger stated that:

'Pluralism denotes a state of affairs in which no single group constitutes the society as a whole and, in consequence, no group can serve as an all-embracing community for its members. This has enormous implications for the individual and his beliefs. Neither the individual's self nor his worldview can any longer be taken for granted. Inexorably, the self is forced into solitariness and any worldview becomes a matter of deliberate choice. Modernity is not the only age that has produced such pluralistic situations, but has made pluralism a uniquely massive and increasingly global reality. "Urbanity" neatly describes the human type emerging from the pluralistic situation - emancipated from the parochial solidarity of his original community ... This is the human type characterized by a high degree of freedom, defined as a state in which the individual can make many choices.'⁵⁴

To a certain degree, a measure of the *intensity* of religious pluralism which reflects the *number* and *popularity* of religious alternatives (i.e. choices) 'available' to the individual fits both Berger's theory and rational choice theory. The *popularity* of each alternative reflects the 'market share' (in the language of rational choice theory), and the likelihood with which the person on the street will be confronted by a 'disconfirming other' (in Berger's terminology).⁵⁵ The two approaches differ more

⁵³ See Christiano, Religious Diversity, especially pp. 62-64; see also R. Finke and R. Stark, 'Religious economies and sacred canopies: religious mobilization in American cities, 1906', American Sociological Review, 53 (1988), 41-49.

⁵⁴ P.L. Berger, A Far Glory (New York, 1992), p.86.

⁵⁵ Such a point was made by P.L. Berger, The Social Reality of Religion (Harmondsworth, 1973), p.154. The notion of a neo-classical style religious market has been advanced in the considerable

clearly in their consideration of what constitutes an 'available choice'. For rational choice theory it is the ability to be an active follower of a given religious organisation (i.e. a consumer). For Berger, the availability of a religious alternative hinges on *knowledge* of that alternative.

It is a major assumption of this thesis that the religious 'choices' - whether conceptualised as a 'religious market' or 'sacred canopies' - were *geographically* demarcated. This assumption is less easily arguable for Berger's conceptualisation than for the religion-as-market view of rational choice theory. One can observe that transport limited the majority of religious options (or at least options entailing personal participation in organised acts of worship) to a radius of a few miles, so one can argue that parish boundaries and religious markets bore a reasonable congruence between 1676 and 1851. However, the notion that one can 'map' plausibility structures as 'information fields' of a given radius is clearly problematical. Most geographers have long since moved away from the implied precision of mapping knowledge with 'mean information fields', to a more complex consideration of the geography of knowledge. One could attempt to use such geographical techniques to reconstruct the 'communicative lives' of the individuals of 1676 and 1851, but this lies beyond the scope of this thesis.⁵⁶

A point to make here is that however one quantifies religious pluralism, parish-level data enable a more meaningful analysis than is present in the majority of quantitative religious studies (which have tended to deal with large-area statistics). Parish-level data is highly sensitive to the range of places of worship potentially 'available' to each and every individual within the parish.⁵⁷ In contrast,

volume of work produced by R. Stark, W.S. Bainbridge, R. Finke, L.R. Iannaccone and associates. This work is addressed in chapter 5 of this thesis.

⁵⁶ The techniques of time geography would be useful in this context. I refer here to the ideas T. Hagerstrand as developed in A. Pred, 'Place as historically contingent process: structuration theory and the time-geography of becoming places', *Annals of the Association of American Geographers*, 74:2 (1984), 279-297; N. Thrift and A. Pred, 'Time-geography: a new beginning', *Progress in Human Geography*, 5 (1981), 277-286; A. Pred, 'Production, family and free-time projects: a time-geographic perspective on the individual and societal change in nineteenth-century U.S. cities', *Journal of Historical Geography*, 7:1 (1981), 3-36.

⁵⁷ Part of the critique of rational choice based research in the United States and elsewhere is that the geographical areas used to measure pluralism are so large, an issue raised in chapter 5 of this thesis.

the sociological meaning of regional, national, or continental measures of religious pluralism (however calculated) appears doubtful.⁵⁸

Investigating the Herfindahl-Hirschman index.

The Herfindahl-Hirschman index, henceforth referred to as the religious diversity measure, is a variable of the form originally used to study linguistic diversity and market concentration. Using the 1851 Religious Census data, the most obvious translation of the index is to the formula $1 - \sum_{x=1}^{x=n} (xa/ta)^2$, where ta is the total attendance figure, xa is the attendance figure for denomination x , and n is the number of denominations in the unit of analysis. The measure ranges from zero where only one denomination is present, and tends towards unity under conditions of 'complete diversity'. In mathematical terms complete diversity arises from an infinite variety of equally strong denominations. Of course, this limit is never reached in the real world, but rather, in mathematical language, is *tended towards*. This means the diversity measure increases by ever decreasing amounts as the number of denominations increases. For example, two equally strong denominations would yield a diversity score of one half (0.5), three a score of two thirds (0.66), four a score of three quarters (0.75), five a score of four fifths (0.8), and so on.

The effect of scale on the diversity measure.

The diversity measure appears attractive whether one approaches pluralism from the choices available to the individual (Berger's 'sacred canopy' perspective), or from the religious market place (the rational choice perspective). This superficial ability to 'please all' conceals some potential problems, the most serious of which is the potential scale-dependence of the measure.

Table 6 shows a fictitious example of the effect of the scale of observation upon the value of the dissenting percentage share and diversity measures of

⁵⁸ I refer here to variables such as Stark and Bainbridge's 'cults per million' measure: Stark and Bainbridge, Future of Religion, pp. 475-505.

religious pluralism. As noted previously, the dissenting percentage share is independent of the spatial scale of observation, and forms a useful 'control' for examining the diversity measure. The table shows religious data for five fictitious parishes and for a fictitious town comprising those five parishes. The dissenting percentage share is 66.7% in each of the five parishes and in the town. It is no coincidence that the value for the town is the same, since it is the *weighted mean* value of the five constituent parishes.⁵⁹ The percentage share measure for any spatial scale can be aggregated upwards, using the weighted mean, to provide the *same* value for a higher spatial scale as would have been recorded if the data had *only* been gathered at that higher scale. In contrast, the diversity measure is scale dependent. The example shown in table 6 makes this quite clear. The diversity score of the town (0.80) is higher than in *any* of its constituent parishes.

The conceptual problem is that not all scale dependence is undesirable. The sort of scale dependence previously demonstrated for the *number of denominations* or the *number of denominations per capita* very clearly made these measures quite unsuitable for most research purposes. In contrast, the scale dependency of the diversity measure is less 'mechanical'. The fact that the town's diversity score in table 6 was higher than that of the constituent parishes resulted because within the borders of the town there existed seven denominations, whereas within any single parish there existed only three. From this perspective it is not necessarily misleading to view the town as genuinely more religiously 'plural' than the sum of its constituent parts.

Appendix 4 of this thesis compares the parish data with the registration district data to produce an estimate of the scale dependency of the religious diversity measure evidenced by the 1851 Religious Census data. Since the computerised dataset covered both parishes and the corresponding registration districts (which were typically about sixteen times larger), it permits an interesting examination of the effects of the spatial scale of measurement on the magnitude of the religious diversity measure. The mean weighted average diversity measure

⁵⁹ The weighted mean refers to the mean calculated from each parish's percentage share weighted by the *total attendances* recorded in that parish.

Table 6

An illustration of the potential scale dependency of the religious diversity measure

Support for denomination (proportion of total attendances):

Denomination	Parish 1	Parish 2	Parish 3	Parish 4	Parish 5	Whole town (i.e. all 5 parishes combined)
Church of England	one third					
Wesleyan Methodists	one third	one third			one third	one fifth
Primitive Methodists	one third			one third		two fifteenths
General Baptists		one third	one third			two fifteenths
Particular Baptists			one third			one fifteenth
Unitarians				one third		one fifteenth
Quakers					one third	one fifteenth

Resulting diversity scores:

Parish 1	Parish 2	Parish 3	Parish 4	Parish 5	Whole town:
0.667	0.667	0.667	0.667	0.667	0.800

recorded for the registration district dataset (0.66) was 10% higher than that recorded for the parish dataset (0.6).⁶⁰ Increasing the spatial scale yet further, by combining the registration districts for all 15 registration counties into one unit containing nearly five million people, yielded a diversity measure of 0.75 - some 25% higher than the mean parish value.

As argued in Appendix 4, there is therefore clear evidence of considerable scale dependency in the diversity measure. This characteristic is cause for particular concern for this thesis, since a key empirical finding is a very close relationship between the intensity of religious diversity and urban environments. It is important to establish that this finding was not an artefact of the diversity measure itself. Table 3 of Appendix 4 shows that the religious diversity measure remained much more strongly associated with various key socio-economic variables even after the population was controlled for (by partial correlation). Thus one can be confident that the scale dependency of the religious diversity measure was not in itself a cause of misinterpretation of the data analysis presented in this thesis. From the perspective of Berger's theory (or rational choice theory), the limits of any possible utility of scale dependence are those whereby the size of the unit of analysis ceases to bear any relationship to the religious choices 'available' to each and every *individual* within the unit. From a rational choice perspective, these limits can be defined as the distance which people would have travelled to worship - a matter of a few miles for the vast majority of the population of England and Wales between 1676 and 1851. As already noted, from Berger's perspective, there are no such precise geographical boundaries - what matters is that the unit of measurement should reflect as sensitively as possible each resident individual's knowledge of competing religious choices, i.e. the likelihood with which they will be confronted by a 'disconfirming other' (the follower of another denomination). I would argue that the parish would reflect such knowledge far better than any other spatial scale of measurement. Many individuals would certainly only have had personal knowledge of people pursuing alternative religious approaches if they resided in the same parish.

⁶⁰ See table 1 of Appendix 4.

In the British context any measure of religious pluralism at registration district, county, or registration-division level would certainly not be as sensitive to first-hand (or even indirect) knowledge of competing convictions as a parish-level measure. For instance, in the northern division of registration districts, an Anglican resident of the West Riding would have been unlikely to have found a Presbyterian presence in northern Northumberland, or a Catholic presence in western Lancashire to exert a 'disconfirming' influence on his or her own faith. However, if these competing faiths existed in the same parish *and* Berger's theory is correct, one ought to be able to detect the disconfirming effects of religious pluralism.

The point to stress is that if the scale of investigation becomes too large, then *any* quantification of religious pluralism is open to question. To treat pluralism as any form of 'social fact' one has to be sure that the unit of measurement delineates, as far as possible, the individual's sphere of choice, or following Berger's conceptualisation, the individual's primary referents.

It is a combination of an increase in area ('geographical distance') and population size ('social distance') which makes both the assumptions of Berger and rational choice theory increasingly tenuous. As these two distances increase, the assumptions that a resident individual had knowledge of the religious choices within the unit, or that the unit defined a 'single religious market', become increasingly tenuous. In general, geographical area and population size were opposing trends in the 1851 parish dataset: the largest parishes tended to be in the sparsely populated areas, and the smallest in more highly populated areas. Only a few percent of the parishes in the dataset were both large and populous.⁶¹ Most of these were industrialising parishes in the north of England (Manchester being the extreme case), which had yet to be adjusted to take account of rapid

⁶¹ To impose the arbitrary limits of a population in excess of 10,000 people and an area in excess of 50 square kilometres, as spatial units in which any quantification of religious pluralism is likely to be inappropriate would reveal the following 27 parishes: Luton (Beds), Llanbadarn-fawr (inc. Aberystwyth, Cardiganshire), Bakewell (Derbs), Duffield (Derbs), Glossop (Derbs), Bedwelty (Monmouthshire), and (all in Lancashire), Blackburn, Bolton-moors, Bury, Childwall, Deane, Eccles, Kirkham, Lancaster, Leigh, Leyland, Manchester, Mottram, Ormskirk, Prescot, Preston, Prestwich, Ulverstone, Walton-on-hill, Whalley, Wigan, and Winwick. These parishes represent just over 1% of the total sample. Halving such limits, to populations in excess of 5,000 and areas in excess of 25 square kilometres, revealed only 72 parishes, about 3% of the total sample.

nineteenth-century population increase. Elsewhere, highly urban parishes tended to be quite compact and may have contained better transport than many rural areas. In any case, very few parishes contained high populations (irrespective of their size), less than two percent (40 parishes) contained populations in excess of 15,000.⁶²

It is concluded that for the great majority of parishes it may not be unrealistic to assume that the religious alternatives contained therein were 'available' choices about which any given resident was likely to have knowledge.

Religious pluralism and the Compton data.

The debate concerning the measurement of religious pluralism has thus far concentrated on the 1851 data. An important part of this thesis also rests upon a measurement of religious pluralism in 1676. The arguments concerning the 1676 data are much more simple, because the data are so much more limited. The Compton data are limited to: conformists, dissenters, and Papists. Conformists were almost always the vast majority of the population. For this reason, the 'diversity' measures of Compton pluralism and the percentage of dissenters and/or Papists were very similar variables.

The Compton census, as an historical source, is bedevilled with potential pitfalls. For reasons of space, the methodology of dealing with Compton data that I have pursued with K.D.M. Snell is not reported here. The interested reader is referred to Appendix 3 of this thesis and to our recent article.⁶³ There is a specific problem concerning the timing of the Compton census and using it to attempt to

⁶² Two of these cases were not, in fact, parishes, they were the amalgamated parishes of Cambridge and Ipswich. As noted in section 3.1, for both these towns the constituent parishes were merged into a single case on the computerised dataset because of the massive scale of crossing parish boundaries to attend worship on Census Sunday. The fact that this widespread crossing of boundaries occurred is in fact extremely suggestive that compact towns such as Cambridge (1851 population of 27,815) and Ipswich (1851 population of 30,540), could indeed be viewed as single religious 'markets'.

⁶³ See A. Crockett and K.D.M. Snell, 'From the 1676 Compton Census to the 1851 Census of Religious Worship: religious continuity or discontinuity?', Rural History: Economy, Society, Culture, 8:1 (1997), 55-89. See also A. Whiteman, The Compton Census of 1676: a Critical Edition (Oxford, 1976), for the definitive review of the census.

quantify the geography of religious pluralism. As discussed elsewhere, there is overwhelming evidence that old dissent did not display a strong degree of geographical continuity between 1676 and 1851.⁶⁴ While there are many valid reasons why this should be so, it is unfortunate that the Compton Census predates the Toleration Act of 1689. It could be argued that the fluctuating (but often severe) legal intolerance of dissent must have impacted upon its 'natural' geography (i.e. its geography had there been greater legal toleration). In particular, the Five Mile and Conventicle Act, although implemented with considerable flexibility by churchwardens and magistrates (some of whom were themselves dissenters), must have affected the geography of religion and augmented the transient quality of support for old dissent.⁶⁵

For this reason, a source compiled after the Toleration Act would appear more attractive than the Compton Census. There exists one such source - the Evans List of 1715.⁶⁶ Unlike the Compton Census this source also recorded precise denominational detail, this being a further advantage in calculating a religious diversity measure. However, an examination of the Evans List revealed it to be a less useful source than the Compton Census.⁶⁷ A major problem of the source was the estimation of the numbers of 'hearers' which appears to have been every bit as imprecise as the Compton headcounts.⁶⁸ Also, there has been no systematic publication of the Evans List and the survival of the list is rather patchy; for instance, the Evans List recorded no Baptists in Lincolnshire (due to the loss of part of the manuscript), while contemporaneous visitation returns recorded over two thousand Baptists.⁶⁹ Furthermore, the Evans List ignored Quakers almost

⁶⁴ See Crockett and Snell, 'Continuity or discontinuity?'. See also section 4.4 of this thesis.

⁶⁵ See M. Spufford (ed.) *The World of Rural Dissenters* (Cambridge, 1995).

⁶⁶ For a more comprehensive review of the Evans List see M.R. Watts, *The Dissenters (i): From the Reformation to the French Revolution* (Oxford, 1978), pp. 492-510.

⁶⁷ The Evans List of 1715, the Compton Census, the Return of Nonconformists of 1669, and the Episcopal Visitation Returns of 1717 were all examined for Bedfordshire. These sources were compiled in W.M. Wigfield (ed.), *Recusancy and Nonconformity in Bedfordshire: Illustrated by Select Documents, 1622-1842* (Aspley Guise, 1938), pp. 20-22. The Evans List appeared quite incomplete for this county. It is interesting to note that Watts also reports a probable underestimation in the Evans List figures for Bedfordshire and, more markedly, in Huntingdonshire, Lincolnshire, and Yorkshire. In contrast, he reported very close correspondence between the Evans List and Visitation returns (1706-1718) in Buckinghamshire and Leicestershire (other than the omission of Quakers in the Evans List returns). See Watts, *The Dissenters (i)*, Table VIII, p.497.

⁶⁸ See Watts, *The Dissenters (i)*, pp.492-493.

⁶⁹ Watts, *The Dissenters (i)*, Table VIII, p. 497.

entirely. For these reasons it was seen as unsuitable source for computerisation for this thesis.

Returning to the Compton Census, the approach taken here was to create a set of three measures, based upon the diversity (Herfindahl-Hirschman) measure.⁷⁰ These three measures were calculated using: the proportion of conformists and dissenters only (i.e. to systematically exclude Catholics), the proportion of conformists and Papists only (i.e. to systematically exclude dissenters), and finally, both dissenters and Papists were included to produce a measure labelled 'total religious diversity' in 1676. In this way any *a priori* judgements regarding the possible definition of religious pluralism in 1676 were avoided.

The main point to make regarding the 1676 diversity measures is that nonconformist diversity was not a true indication of the 'absolute' nonconformist diversity, since denominational detail was *not* given in the Compton census. The main sects of the Quakers, Baptists, Unitarians, Independents, Presbyterians, and their various subdivisions were treated *en masse* as a single nonconformist body.

One can use other sources to examine how far the diversity measure for 1676 would have under-represented the true level of diversity as a result of the lack of denominational detail. Bedfordshire was taken as a case-study to examine the typical levels of parochial diversity amongst dissent in the late seventeenth century. The Compton census revealed that Bedfordshire was a strongly nonconformist county in 1676. The mean percentage of nonconformists in Bedfordshire was 7.9% of the population (over twice the average figure of 3.9% for all twelve counties used in this study). Also, the Evans List of 1715 and other sources show that Bedfordshire was a centre of Particular Baptist and Quaker strength, and contained a considerable Independent presence.⁷¹ It therefore seems fair to conclude that Bedfordshire was a county in which dissenting diversity

⁷⁰ A parallel set of measures (based upon the simple percentage of dissenters, Papists, and dissenters and Papists combined) was used as a control. In all cases the results obtained with these measures were very similar to those obtained with the corresponding diversity measure.

⁷¹ See Watts, The Dissenters, vol. I, pp. 272-276.

was greater than in many other parts of England or Wales. The Nonconformist returns of 1669 for Bedfordshire were consulted to examine the level of dissenting diversity within parishes around the time of 1676. Very few parishes contained two nonconformist denominations, and only one (Kempston) contained three.⁷² For this reason it seems safe to conclude that the lack of denominational detail was unlikely to affect the substance of the statistical analysis using the diversity measures calculated from the Compton census.

The measures of religious pluralism defined statistically

To conclude this discussion of the quantification of religious pluralism, the frequency distributions of the chosen measures are described to give a basic 'feel' for the variables concerned. For the reasons already outlined, the diversity measure of religious pluralism (as applied to both the 1676 and the 1851 data) was seen as offering the greatest sophistication in its ability to measure the most important aspects of religious pluralism conceptualised by Berger. However, because of the potential for unwanted scale dependency in the diversity measure (although this is largely discounted in Appendix 4), the percentage share measure was used as a check on the diversity measure.⁷³

The following paragraphs provide a simple statistical description of the distribution of these variables with respect to the 1851 Religious Census data, which covered 2,432 parishes and the Compton Census data which covered 1,382 parishes. The frequency distribution of the dissenting percentage share and diversity measures obtained from the parish-level dataset using the 1851 Religious Census data are shown in figures 4 to 7 of Appendix 4. Both measures recorded large number of zeros - over a third of all parishes in both cases. The percentage share measure recorded zero in 826 parishes (those with no dissenting attendances), the diversity measure recorded zero in 930 parishes (those in which only one denomination was recorded). Since on over 80% of occasions the one

⁷² Wigfield, 'Nonconformity in Bedfordshire', pp. 145-249.

⁷³ This being the dissenting percentage share of attendances calculated from the 1851 data and the simple percentage of dissenters and/or Papists calculated from the 1676 data.

denomination recorded was the Church of England, one can observe that where there was no dissenting presence there was typically no religious diversity.

It can be seen that the diversity measure values (in the parishes with values greater than zero) followed a basically normal distribution (see figure 7 of Appendix 4). In contrast, the dissenting percentage share values (in the parishes with values greater than zero) displayed a more homogeneous distribution, with a shallow peak at around 65% and a more definite peak at 100% - this being where no Anglican attendances were recorded (see figure 6 of Appendix 4).

The Compton measures of religious diversity are shown in figures 8 and 9 of Appendix 4.⁷⁴ It can be seen that many parishes contained no religious diversity whatsoever (445 out of 1,382). Of the 1,382 parishes with Compton data, 525 (38%) contained no dissenters, and 1104 (80%) contained no Papists. In the 937 parishes that did contain some religious diversity, the distribution of values showed a marked positive skew. The dissenting and Papist measures produced highly similar frequency distributions, both exhibiting a strong positive skew.

3.3 An Evaluation of the Methodology

This section ties together some of the important issues which have surfaced in this chapter into two broad themes - the strengths and weaknesses of the methodology.

Strengths of the methodology.

a) Parish data.

For studying the effects of religious pluralism, the ideal context would be for all factors other than the degree of religious pluralism (and time) to be constant. This never occurs, of course. The strength of my approach is that it is a study

⁷⁴ For the sake of simplicity only the 'total religious diversity' measure is shown.

based upon a nearly constant parochial geography over along time period - 175 years. Both the geographical precision and the considerable time span are well suited to the identification of 'cultural' phenomena such as religious change. In comparison with demographic or economic changes, cultural changes are almost always very gradual with a strong inter-generational aspect. I would argue that one cannot expect to trace changes resulting from cultural phenomena, such as patterns of church-going on the time-scale of a few years.

As already noted, sociologists of religion (whether 'pro' or 'ante' secularisation), have rarely based their interpretation of religious change upon such detailed and sensitive data. The typical format of analysis has been to infer cause and effect from cross-sectional analysis of large-area statistics.

The use of parish-level data also contrasts with much of the existing sociological research, especially that carried out on American religion, which has concentrated on large cities, counties and states (see chapter 5 of this thesis). Such research is likely to run into distortions due to the scale dependency of the religious diversity measure. Geographers have long noted the ecological fallacy inherent in such research methods.⁷⁵ Certainly, when such measures as 'cults per million' are used, one has to question if there remains any residual sociological meaning.

Within the realm of social history, religious change has usually been investigated using time-series data.⁷⁶ While such data prove very useful in charting the (religious) changes themselves, they usually lack the geographical sensitivity to allow one to argue why the aggregate trends one has discovered should have occurred. For instance, the detailed trends reported by R. Currie *et al* can be agreed upon by almost all, but the *interpretation* of such time-series data is widely

⁷⁵ See S. Openshaw, 'A geographical study of scale and aggregation problems in region-building, partitioning and spatial modelling', Transactions of the Institute of British Geographers 2 (1977), 459-472.

⁷⁶ See, for example, A.D. Gilbert, Religion and Society in Industrial England. Church Chapel and Social Change 1740-1914 (London, 1976); Currie *et al*, Churches and Churchgoers; Gill. 'Census Data'.

contested.⁷⁷ Indeed, as noted in chapter 1 of this thesis, the same evidence has been used to argue for and against secularisation.⁷⁸

Parish-level data is a fundamental strength of this thesis. As will be addressed in the weaknesses of the methodology, to quantify Berger's theory, and to use the Herfindahl-Hirschman index to measure religious pluralism, is to push the limits of empirical research. To sustain any claim of meaningful quantification of Berger's theory requires the use of parish-level data. As Bruce rightly argued, if religious pluralism is to have a legitimate meaning for the historian it has to reflect religious choice available to the individual.⁷⁹ Indeed, to have any justification for treating religious pluralism as a 'social fact' in the Durkheimian sense - i.e. 'ways of acting which are external to the individual and which exert a coercive force over his or her behaviour' - it is vital to employ a sensitive measure.⁸⁰ In the period between 1676 and 1851, the parish would have had a great influence upon the individual's religious world view. This is not to ignore the role of migration, increases in the use of transport and 'remote' communication (regional and national media, religious pamphlets (which helped to spread Protestant dissent) and the humble letter.⁸¹ However, for a large proportion of people, the local environment of the home parish was instrumental in their socialisation and education. I would argue that while the *productive* components of 'modernity' were firmly in place by 1851, the elements which were to dislocate local cultures most profoundly - the railways, penny post, and national newspapers - had yet to make their major impact.⁸²

⁷⁷ The work referred to here is Currie *et al*, Churches and Churchgoers.

⁷⁸ Thus one can notice an agreement over the core facts - a downturn in church-going in the late nineteenth or early twentieth centuries - but contrast the interpretation of these facts in R. Gill, The Myth of the Empty Church (London, 1993); Gilbert, Religion and Society; and Cox, The English Churches.

⁷⁹ S. Bruce, 'Pluralism and religious vitality', in Bruce, Religion and Modernization, pp. 170-194.

⁸⁰ The reference to Durkheim is made in Christiano, Religious Diversity, p.61.

⁸¹ It is certainly important not to underestimate the degree of migration in the mid-nineteenth century. From a sample of convicts which was broadly representative of the working class, Nicholas and Shergold estimated that a third of English working men moved between counties. The tendency to move was related to skills and literacy. Even at this time labour market signals were effective across large distances; the median migration distance was 59 miles. See S. Nicholas and P.R. Shergold, 'Internal migration in England, 1818-1839', Journal of Historical Geography, 13:2 (1987), 155-168.

⁸² For the impact of penny post see D. Gregory, 'The friction of distance? Information circulation and the mails in early nineteenth-century England', Journal of Historical Geography 13:2, 1987, 130-154. For the impact of changing methods of transportation see J. Langton, 'The Industrial Revolution and the regional economy of England', Transactions of the Institute of British Geographers, 9 (1984), 145-167.

The 'optimal' spatial scale for measuring religious pluralism clearly varies over time and space. 'Communications' in all their guises will affect both the scale and the degree of the geographical patterning of religious affiliation. Thus, for much of England and Wales, a very small unit of investigation, such as the parish is desirable for the period 1676-1851, because of the localised 'information fields' of the majority of individuals. I would argue that religious pluralism ceased to be a geographically mediated phenomenon with the subsequent development of 'modernity'. The successive technologies of motorised transport, telephone, television, satellite and most recently the 'Internet' have radically reduced the influence of locality upon 'culture'. In other words, one could argue that religious pluralism is less of a geographically measurable phenomenon (at any scale) in the late twentieth century than ever before. As argued in section 2.4, under conditions of 'late modernity', religious pluralism has in any case become a less important aspect of religious change, as religion has become 'privatised', and denominational affiliation ceases to be a defining part of an individual's socialisation.

It is interesting to note that the methodologically sophisticated study of Land *et al* used a gravity model to detect the effects 'the influence of church membership in all other places, weighted by the inverse of the distance from the places', which they termed a 'diffusion variable'. It is interesting to note that the 'diffusion' variable apparently explained a considerable amount of the variation in adherence rates over and above local socio-economic and religious characteristics.⁸³ They also concluded that the explanatory power of the 'diffusion' variable declined over time, suggesting 'the increasing autonomy of aggregate behaviour in communities' between 1910 and 1930'.⁸⁴

⁸³ K.C. Land, G. Dean and J. Blau, 'Religious pluralism and church membership: a spatial diffusion model', *American Sociological Review*, 56 (1991), 237-249, p.247.

⁸⁴ Land *et al*, 'Religious pluralism', p.247.

Weaknesses of the methodology.

a) Quantification of phenomenology.

Although, as outlined, parish-level data have many strengths, the question remains to what extent a phenomenological account like Berger's can ever be made amenable to empirical investigation. As already noted, the central point upon which the application of Berger's theory rests is the quantification of religious pluralism in a way which retains some correspondence to Berger's theory. Though Berger himself seldom used empirical arguments, he argued that cultural analysis implied no preference for qualitative over quantitative techniques.⁸⁵ Although religion, in Berger's terms, is a phenomenon of *subjective* experience, using Berger's dialectics, religion also creates social *objects* and shared meanings. Both these phenomena can be observed empirically. For example Berger stated:

'Objectively, the man in the street is confronted with a wide variety of religious and other reality-defining agencies that compete for his allegiance or at least attention, and none of which is in a position to coerce him into allegiance. In other words, the phenomenon called "pluralism" is a socio-structural correlate of the secularization of consciousness.'⁸⁶

Religious pluralism can be well-seen as suited to empirical observation *precisely because* it tended to delineate the boundaries of shared meanings. As Berger stated:

'The plausibility structures lose massivity because they can no longer enlist the society as a whole to serve for the purpose of social confirmation. Put simply, there are always "all those others" that refuse to confirm the religious world in question. Put simply in a different way, it becomes increasingly difficult for the "inhabitants" of any particular religious world to remain *entre nous* in contemporary society. Disconfirming others (not just individuals, but entire strata) can no longer be safely kept away from "one's own".' [His italics].⁸⁷

⁸⁵ P.L. Berger, Sociology Reinterpreted (New York, 1981), p.46.

⁸⁶ Berger, Social Reality, p 131.

⁸⁷ Berger, Social Reality, p.154.

As already shown, the diversity measure is superficially well-placed to quantify this consideration of religious pluralism. It is sensitive to the numbers of 'disconfirming others' and the number of 'disconfirming religious worlds'. However, one crucial assumption is glossed over by such a consideration - that every denominational message had equal 'disconfirming' power upon every other denomination. This clearly will never be the case in the real world, and was certainly not true of England and Wales in the seventeenth or nineteenth centuries.

'Disconfirming power'

Denominations were not equally 'spaced' socially or theologically. Social structure had an effect upon the knowledgeability of an individual concerning disconfirming religious beliefs and the social and psychological status accorded to these competing beliefs.

Berger's account, which is centred on American-style denominationalism, tacitly assumed that all choices were equal in terms of their disconfirming potential. Clearly, the differences between the churches and denominations, whether theological, organisational, or in terms of membership status, were not of equal magnitude in England and Wales between 1676 and 1851. Some denominations were very close and presented little difference in their theology, liturgy, or rituals, others were mutually hostile. For instance, the Victorian commentator C.M. Davies noted the similarities between the Bible Christians (one of the many Wesleyan offshoots) and the Wesleyan Methodists. He stated that 'they are, in many respects akin to a sect of Methodists, whose forms of worship, again, border in some degree on that of the Jumpers, so much so as to have earned for them the uncomplimentary name of "Ranters"'.⁸⁸

The quote also draws attention to the rather imprecise and inter-changeable nomenclature that was applied to nonconformity. For instance, a number of denominations (though most typically the Primitive Methodists) were labelled

⁸⁸ Rev. C.M. Davies, Unorthodox London (London, 1876), p.65. The Bible Christians has split from the Wesleyan Methodists over the issue of the celibacy of evangelicals.

'rangers'. In this way the exact number and delineation of what Berger would call 'reality-defining agencies' could have gone unnoticed to the men and women of 1851. As Davies noted:

'If a bewildered Irishman strays into a ritualistic church, and asks the cassocked verger at the door, "Arrah, is this a Cathylick church?" That ecclesiastical attendant replies, as instructed by his supervisors, "Yes, this is a Catholic church;" and it is not until after a lengthened explanation that the astonished inquirer learns there are several "Catholic" churches, and that all outside his "Roman branch of the Church Catholic" are not Protestants.'⁸⁹

However, having observed that denominations could be highly similar, the fact that many denominations did occupy substantially different theological positions is not in doubt. One can contrast the inward focus of Quakerism, stemming from Fox's contention that there was 'that of god in every man', and the lack of a formal church and ministry, with the outward, political focus of Primitive Methodism. Davies' notes again serve to illustrate this point. He described a Quaker act of worship thus:

'At eleven o'clock our "silent" service commenced. The only outward visible sign that it had begun was the simultaneous removal of hats on the part of the congregation; then, for nearly an hour there was silence ... One by one they [the congregation] covered their faces with their hands and engaged in silent prayer, still retaining their sitting posture, which never changed throughout the entire proceedings.'⁹⁰

Whilst among the 'rangers' (Primitive Methodists) he noted:

'Here I heard the first instances of those utterances which afterwards occurred at frequent intervals during the meeting - "Hallelujah," "Glory be to God!" these interjectional utterances constantly went round the whole of the vast assembly like an irregular discharge of musketry, often bursting into a regular volley when something very telling was said, as, for instance,

⁸⁹ Davies, Unorthodox London, pp.64-65.

⁹⁰ Davies, Unorthodox London, pp.116-117.

about “Church parsons,” or the futility of receiving orders “through the soft fat palm of a bishop”.⁹¹

Not only were there major differences in theology, liturgy and ritual *between* different dissenting denominations, but also highlights the outward hostility of many dissenters to the ‘official’ religions of the Church of England and the Catholic Church.

However, one should not equate the magnitude of theological distance or hostility of denominations with their disconfirming potential. Indeed, under certain circumstances, ‘denominational distance’ and disconfirming power were inversely related. As Bruce noted with respect to Scotland, the immigration of Irish Catholics did little to challenge the religious beliefs of the Protestant Scots; the social and religious ‘distance’ of the Irish was such that they were ridiculed and stereotyped, and this behaviour acted to reinforce Protestant beliefs rather than challenge them. Conversely, the schism of the Scottish Protestant movements brought a necessity to chose and thereby results in religious pluralism of the form considered by Berger. As Bruce stated:

‘In some settings diversity was created by migration as peoples with different cultures mingled with one another. In others the expansion of the political unit brought a range of cultures into an emerging nation-state. A third source of cultural [and religious] pluralism was the internal fragmentation of the dominant culture ... the social psychological impact [of this third type] seems greater than in the other two instances.’⁹²

This is an extremely important point, and one which provides a general framework with which to contextualise a quantification of Berger’s theory. Berger’s theory of religious pluralism is very much concerned with the ‘third type’ of religious pluralism - the internal fragmentation of the dominant culture. I would argue that the pluralism resulting from regional and international migration cannot be theorised in the same manner, and this is shown to be the case in Chapter 7 of this thesis.

⁹¹ Davies, Unorthodox London, p.44.

⁹² S. Bruce, Religion in the Modern World: from Cathedrals to Cults (Oxford, 1996), p.45.

To assign differential 'weights' of disconfirming power to different denominations would inevitably be subjective and open to criticisms of *post hoc* rationalisation. For the purposes of this thesis the disconfirming power of all competing denominations is assumed equal, and each denomination is treated as possessing no 'internal diversity'.⁹³ These are clearly false assumptions, but they are seen as less open to criticism than attempting to assign individual 'disconfirming powers' to each denomination. In any case, most of these denominations were 'broad churches' containing a marked variation in belief and liturgy between different branches of the same denomination, so a single potential is in any case misleading. Also, denominational characteristics changed markedly over time.

The potential criticisms of quantifying religious pluralism are many. The central point to make is that in this thesis I use the religious diversity measure only as an approximate indicator of the intensity of religious pluralism as it was likely to have impacted upon the resident of the parish. The use of non-parametric statistics makes fewer assumptions of the accuracy with which one can quantify the data. The methodology does not generally require that one can measure absolutely the intensity of religious diversity (or any other variable) in each and every parish, but rather relies on the assumption that if one parish scores higher than another, then this does represent higher religious diversity (or any other variable); or at least that such an assumption is valid for the majority of the thousands of parishes used in this analysis.

One could go on to list other subtleties which are left to one side by a quantitative approach to religious pluralism. Ultimately, whether one believes that a theory such as Berger's is amenable to quantitative investigation hinges upon one's philosophy of science. In this thesis I have tried to be sensitive to many of the potential pitfalls of quantification, but the limits of my knowledge and the

⁹³ It can, of course, be argued that differences *within* the denominations, especially the established church also form part of religious pluralism, whether understood within the 'sacred canopy' or 'religious market' conceptualisations. This idea is not pursued here since the Religious Census made no report on whether Anglican incumbents were 'high', 'low', 'Ritualist', 'Tractarian' etc.

available data no doubt leave many issues unattended. I have tried to make the assumptions that I am aware of apparent at every stage, and alternative and competing explanations to Berger's theory are pursued where appropriate.

b) Rural Bias?

The second potential weakness of this approach is more distinctly methodological. There is a problem arising from the fact that the parish was a unit of highly unequal population. Using conventional methods of data analysis all parishes, whether containing 50 or 50,000 residents, would have equal statistical influence. I have labelled this issue 'rural bias', to indicate the potential for distortion when using parish-level data to pursue certain research questions. The bias is termed 'rural' because there were a large number of sparsely populated parishes and a much smaller number of highly populous parishes in the parish-level dataset. This latter group of highly populous parishes, although small in number, contained a large proportion of the population. This inequality is important when one is dealing with processes that relate to 'people' rather than the 'landscape'. There is a tendency for (unweighted) parish statistics to 'over-represent' the sparsely populated rural areas and 'under-represent' the densely populated urban areas.

In certain circumstances this tendency can be problematic, especially given the huge range of parish population sizes in the mid-nineteenth century - a time when few new parishes had been created in the newly industrialising urban centres. It is important to stress that this great variation in parochial populations is by no means a universal problem bedevilling all parish-level data analysis. As already argued, parish-level data is extremely sensitive to the 'cultural landscape' in a way that an arbitrary division of the country into units of more equal population (such as registration districts) could never be; parish boundaries left a strong print on local cultures, in contrast to the more recent units of administration, such as the registration district.⁹⁴

⁹⁴ In particular, the influence of parochial landholding forms a focus of chapter 7 of this thesis.

For certain, however, it is instructive to *weight* the parish data by the population. This removes any rural 'bias' by giving each parish a statistical influence (weight) proportional to its population. There is a relatively simple method of weighting the dataset, which is outlined in Appendix 6 of this thesis. The issues which benefit from examining the weighted dataset arise when the gaze turns from *geographical patterns* to *causal relationships*. In this thesis the weighted dataset plays an important role in the comparison of the parish and registration-district data. In addition, the weighted dataset is referred to in the main analysis of chapter 4, at points where it is important to confirm that the findings (of the unweighted) analysis are not the product of any 'rural' bias. As a general note, the statistics reported in the main body of the text all relate to the *unweighted* dataset. Appendix 6 contains the tables showing the results of the analysis using the weighted dataset. These tables are all referred to, where relevant, in the main text.

Chapter Four

A Quantitative Investigation of Religious Change in England and Wales between 1676 and 1851

4.1 Introduction: the Core Propositions

The core propositions of Berger's theory are summarised in figure 5. To recall, Berger's theory, albeit greatly reduced and simplified, is that the social and economic changes associated with modernity led to 'social structural' ('objective') secularisation. For Berger, social structural secularisation was most clearly manifested in the growth of religious pluralism. In the long term (i.e. inter-generationally) religious pluralism, because of the inherent heterogeneity of religious 'world-views' it expressed, led to a crisis of plausibility for religion *in toto*. In this manner, Berger proposes that 'secularisation' is both a product of the socio-economic changes associated with modernity and religious pluralism, and is itself intimately linked with these processes. Berger tied these two strands together when he stated:

'However, there would also be a crisis of credibility brought on by pluralism as a *social-structural* phenomenon, quite apart from its linkage with the "carriers" of secularization [i.e. the socio-economic transformations associated with modernity].'¹

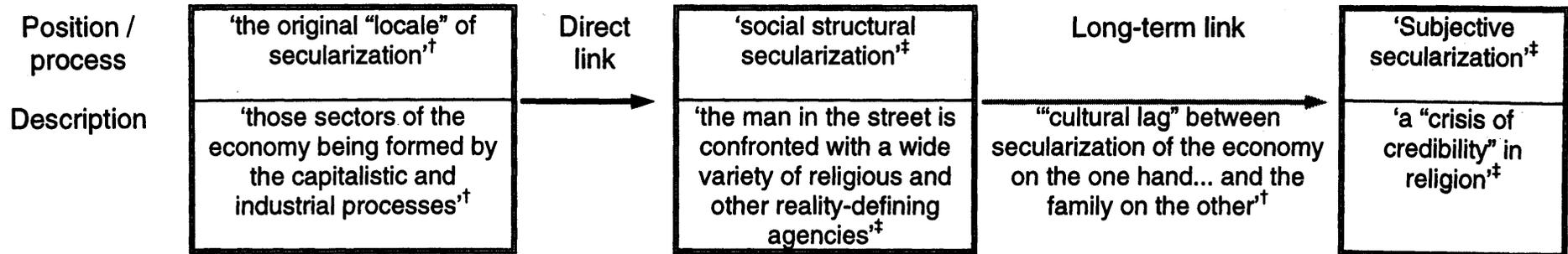
Figure 5 attempts to draw out and simplify these two main elements of Berger's theory into two core propositions. These 'core propositions' are displayed in 'Berber's terms' in the top line of figure 5 (position/process and description). To attempt an empirical analysis of religion in England and Wales between 1676 and 1851 requires a further translation of these two core propositions into propositions amenable to empirical investigation. Much of the groundwork necessary for an empirical investigation of religion was laid down in the lengthy discussions concerning how to measure religious 'variables' from historical sources (chapter

¹ P.L. Berger, The Social Reality of Religion (Harmondsworth, 1973), p.154.

Figure 5

Core propositions of the conceptual framework

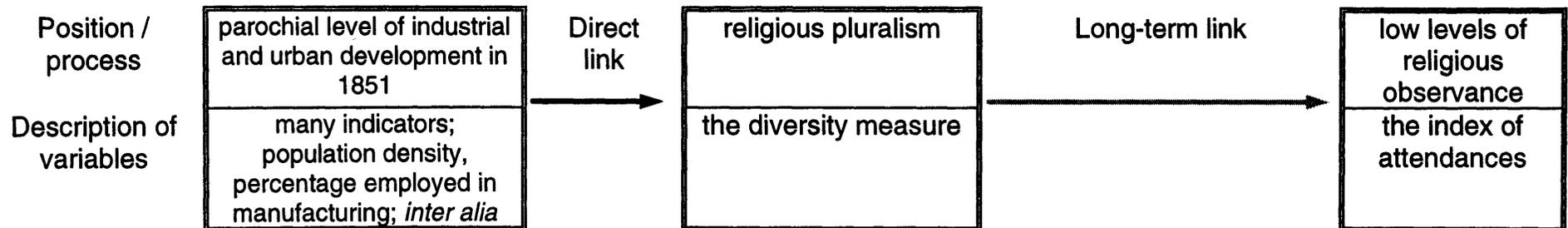
In Berger's terms:



[†] P.L. Berger, The Social Reality of Religion (Harmondsworth, 1973), p.133.

[‡] P.L. Berger, The Social Reality of Religion (Harmondsworth, 1973), p.131.

Empirical translation:



3). As concluded in the previous chapter, owing to the very sensitive nature of the parish-level data, both the religious and socio-economic characteristics of the parish can be described in considerable detail. What remains to be clarified is how the schema of Berger's theory presented in the top part of figure 5 can be investigated empirically. The lower half of figure 5 shows the empirical translation used in this thesis. The following paragraphs detail the translation of each process/position.

'The original locale of secularization'

From the top left of figure 5, it can be seen that the first areas in need of an empirical contextualisation of Berger's terms are 'those sectors of the economy being formed by the capitalistic and industrial processes'. Such phraseology is clearly very sweeping and linked to Berger's view of 'modernisation'. Terms such as 'modernisation' have the potential to tie one up in an endless series of definitions and qualifiers (as occurred with the discussion of the equally contentious term of 'secularisation'). For this reason, this part of Berger's theory is simplified to the 'parochial level of industrial and urban development' as shown in the bottom left of figure 5. This is to escape from a lengthy discussion of the nature of 'modernity', and to propose a rather more down to earth description of parochial socio-economic characteristics, more precisely, the 'parochial level of industrial and urban development' (as shown in the bottom left of figure 5).

Terminology such as the 'parochial level of industrial and urban development' remains rather sweeping and open to a variety of interpretations. The quantification of these elements is deliberately left as transparent as possible, so as not to obscure the specificities of the relationships discovered beneath a broad description, or the inevitable opacity of any single 'index' of 'urban/industrial development'. Thus, no *a priori* judgements were made concerning precisely what combination of variables would best demonstrate the intensity of the urban/industrial development of the parish. The dataset is so rich that many indicators can relate to this in a variety of ways. It can be seen in the bottom left of figure 5 that industrial and urban development was represented by several socio-

economic variables. From the published 1831 census were collated the number of: families in agriculture, families in trade, 'other' families, male and female servants, 'capitalists', those employed in manufacturing, those employed in retail and handicraft, and also information concerning agricultural occupiers. From the 1851 census were collated the number of men, women, houses, and parish areas. Figures for the number of men and women were also taken for 1811 (1801 was felt to be too inaccurate). From the Imperial Gazetteer the value of real property and the type of landholding were collated. From the poor law returns of 1832-4 the value of poor relief for each parish was collated. Appendix 1 gives a listing of all the sources and major variables assembled in the computerised dataset.

From this wide array of social, economic and demographic data, eighteen key variables were selected as being the most important indicators of parochial socio-economic conditions in the early and mid-nineteenth century. These were divided into three groups and a residual 'other' category:²

Agricultural:

Families chiefly employed in agriculture as a percentage of all families (1831)

Labourers in agriculture as a percentage of the total population (1831)

Labourers not agricultural as a percentage of the total population (1831)

Occupiers not employing labourers as a percentage of all occupiers (1831)

Occupiers employing labourers as a percentage of the total population (1831)

Urbanisation / demographic:

Total population (1851)

Population density (1851)

Mean annual population growth rate 1811-1831

Mean annual population growth rate 1831-1851

Mean household size (1851)

Sex ratio in 1811

Sex ratio in 1851

² The poor law data and the Imperial Gazetteer data were not used as a standard part of the analysis - i.e. the eighteen core variables - because the coverage of this data was far less complete than that of the decennial census data.

Industrialisation / local economic structure:

Families in trade, manufactures or handicraft as a percentage of all families in 1831

Percentage of the total population of capitalists, bankers, professional and other educated men in 1831

Percentage of the total population employed in manufacture or manufacturing machinery in 1831

Percentage of the total population employed in retail trade or handicraft as masters or workmen in 1831

Other:

Total occupied population as a percentage of the total population in 1831

Total servants as a percentage of the total population (1831)

An additional socio-economic variable used in some of the analysis was the estimated mean annual population growth rate between 1676 and 1811. The rate was based on the Compton population figure (see Appendix 3). Since Compton data were only available for about 60% of the parishes, this variable was *not* used in much of the subsequent analysis.

These variables can be used to describe not only the 'parochial level of industrial and urban development in 1851', but many other facets of parochial socio-economic conditions as well. In general, analysis precedes with all of these eighteen variables, and then uses certain of the variables - those which vary unambiguously on what is subsequently termed a 'rural/urban' or 'agricultural/industrial' axis - to specify the degree of 'urban/industrial' development. The logic behind the precise selection of variables is given at the relevant points of the subsequent analysis.

As a methodological note, the socio-economic variables derived from the decennial censuses tend to be expressed as percentages; these are percentages of the total population rather than percentages of the *occupied* population.³ It

³ For the purposes of multiple regression, it would be better to use the raw numbers (i.e. not expressed as percentages) and to include the total population of each parish, to account for the effect of scale in these 'raw' numbers. Percentages tend to 'non-normalise' a normal distribution (of the numerator). Since, however, the 'raw' variables were themselves seldom normally distributed,

made very little difference to the analysis whether the total population or the occupied population was used as the standard denominator; the two sets of measures were very highly correlated and produced very similar results in all contexts.⁴ As a precaution, the occupied population as a percentage of the total population was used as additional predictor variable in the subsequent regression analyses to detect for any significance in the variation of this ratio. A second point to note is that in the subsequent analysis, the description of the more 'wordy' variables is shortened somewhat from the previous list (and the list given in Appendix 1). Thus, 'families in trade, manufactures or handicraft as a percentage of all families in 1831' is referred to as the 'percentage of families in trade'. In similar vein, 'the percentage of the total population of capitalists, bankers, professional and other educated men in 1831', is referred to as 'capitalists as a percentage of the total population', and the 'percentage of the total population employed in manufacture or manufacturing machinery in 1831', is referred to as the 'percentage of the population employed in manufacturing'. Lastly, the 'percentage of the total population employed in retail trade or handicraft as masters or workmen in 1831', is referred to as the 'percentage of the population employed in retail/handicraft'. All other variables are described in very similar terms to the full descriptions offered in Appendix 1.

'Social-structural secularization'

Moving across to the top centre box of figure 5, one reaches the second element in need of empirical translation, Berger's notion of 'social-structural' secularisation. As already noted, for Berger the heterogeneity of world-view inherent in religious pluralism was the principal mechanism of 'socio-structural' secularisation. The previous chapter went to considerable lengths to argue that the diversity measure (Herfindahl index) was the best indicator of religious pluralism,

and regression was not the primary technique of this thesis, percentage measures were used throughout. Parochial populations themselves only tend towards a normal distribution when transformed logarithmically - an interesting demonstration of the 'rank-size rule' first noted by geographers with respect to the frequency distribution of city populations.

⁴ The related work of K.D.M. Snell and P.S. Ell usually expresses the socio-economic variables as percentages of the *occupied population*. See K.D.M. Snell and P.S. Ell, forthcoming, Victorian Religion and the Cultural Regions of England and Wales, (Cambridge, 1998/9).

and so this measure was chosen to measure religious pluralism, as shown in the lower part of figure 5.⁵ The intensity of religious pluralism in both 1676 and 1851 was measured by forms of the diversity measure (as defined in Appendix 1). The use of the 1676 data was particularly important since it enabled an investigation of the *long-term* effect of religious pluralism, which is Berger's central mechanism of 'subjective' secularisation. The long-term effects of religious pluralism have never before been analysed in a quantitative manner.⁶

'Subjective secularization'

The third element in need of empirical translation - 'subjective secularisation' (shown in the top right-hand of figure 5) - leaves considerably more latitude than the two elements considered previously. Berger viewed 'subjective secularisation' as the 'personal correlate' of social-structural secularisation. He proposed that subjective secularisation was the 'crisis of credibility' or the 'problem of plausibility' caused for all religious beliefs by the advent of social-structural secularisation (i.e. religious pluralism). The quantification of 'subjective secularisation' is clearly confined by the available data. To measure the strength and extent of religious beliefs, it would be desirable to have detailed attitudinal data. However, only attendance data is available. To return to Glock and Stark's dimensions of religiosity, it becomes clear that to use attendance data to measure 'subjective secularisation' is to use the *practice* dimension in lieu of the *belief* dimension. Further, it is to use one component of the practice dimension - *ritual practice* - and to ignore *devotional practice*. To recall the definition offered in section 2.2 of this thesis, 'Ritual practices refer to formal ceremonies, rites, and sacred activities - such things as baptism, attending worship services, and taking communion. Devotional practices are informal, often spontaneous, and frequently done in private. Bible reading and private prayer are common examples.'⁷

⁵ Though as noted in Appendix 4, the percentage share measures were used as a statistical 'control' for the diversity measure where pertinent.

⁶ The vast majority of quantitative research investigating of the effects of religious pluralism has been cross-sectional, as Chapter 5 of this thesis details.

⁷ As defined in R. Stark and W.S. Bainbridge, The Future of Religion: Secularization, Revival and Cult Formation (Berkeley, 1985), pp. 9-10.

Two assumptions are used to justify a reliance on attendance data. The first assumption is that men and women in 1851 with a strong and pervasive belief in Christianity (those who would have been described as 'God-fearing' in the language of the time), would have attended worship if at all possible. The second assumption is that all those attending worship were God-fearing. This second assumption is arguably the weaker of the two, especially in relation to 'deference' attending (whether this was Anglican attendance in certain landowner 'dominated' agricultural communities, or nonconformist attendance in certain factory-owner 'dominated' communities). Little can be concluded with regard to this point, suffice to say that when comparing the 'religiosity' of parochial populations, one would expect a close overall correlation between the intensity of religious belief and the rate of religious practice.

In this thesis 'subjective secularisation' is measured by the level of religious practice (i.e. the rate of church-going). Although, as already noted, it cannot be assumed that religious practice and religious belief varied in exact proportion, there seems no reason to believe that the two were not generally very highly correlated. The rate of religious practice is measured by the index of attendances, as shown in the bottom left of figure 5. As outlined in section 3.1, the index of attendances is the best available indicator of religious practice calculable from the 1851 Religious Census data, though there remain certain uncertainties in using the measure. To recall from section 3.1, the unknown variation in multiple attendance behaviour was the most notable uncertainty. One cannot automatically accept that those attending worship three times on the Sabbath held religious beliefs three times stronger than those attending once. Cultural factors relating to regional location and denominational custom also played a part in the frequency of attendance. Although the likely levels of multiple attendance behaviour were shown to be quite low in section 3.1, to discount any possibility of any misinterpretation resulting from any systematic differentials in the rate of multiple attendance, certain parts of the analysis were repeated using a second measure of religious practice which removed multiple attendances altogether.⁸

⁸ This alternative measure is subsequently termed the index of attendants (a measure of the minimum possible index of attendants). This is defined as the attendance at the best attended service divided by the total population and multiplied by 100.

From proposition to hypothesis.

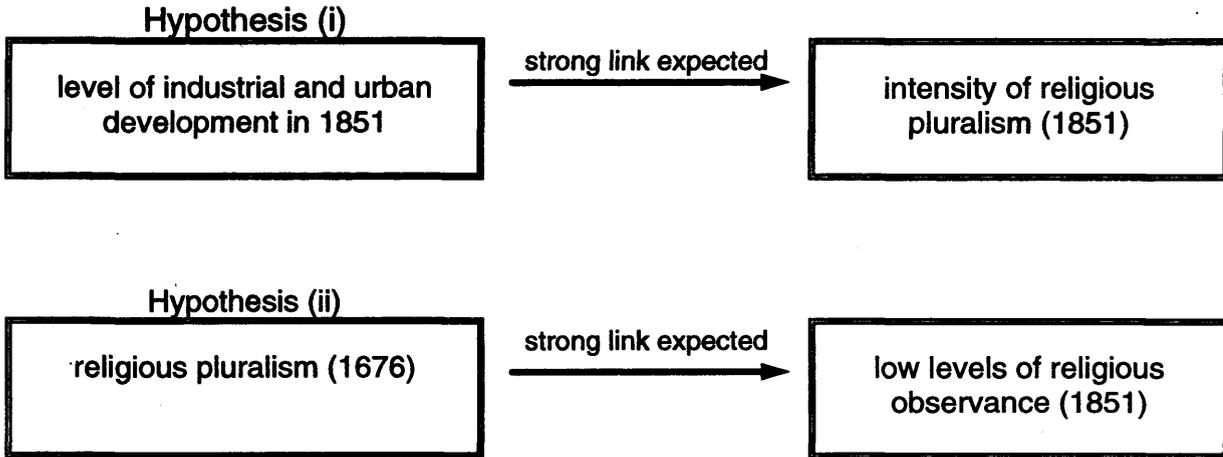
Figure 5 summarised how the core propositions - phrased in Berger's own words - were translated into 'empirically grounded' core propositions. In turn this empirical translation leads directly to two core hypotheses and less directly to what are termed three 'further research questions'. These hypotheses and research questions are detailed in figure 6. The following paragraphs explain this second stage in the translation from conceptual framework to empirical analysis.

The first hypothesis (see figure 6) stems directly from the left-hand side of the conceptual framework (see figure 5), i.e. the proposed link between the parochial level of industrial and urban development and the degree of religious pluralism. The hypothesis states that there should be a strong positive relationship between the degree of urban and industrial development and the intensity of religious pluralism in 1851. It should be noted that what Berger posited as a temporal relationship - the link between 'capitalistic transformation' and the rise of religious pluralism - is being investigated by a 'cross-sectional' hypothesis. This can be justified in two ways. First, the parishes of England and Wales contained a great variety of socio-economic conditions in 1851, with much of this variation reflecting the spread and growth of industrial and urban development following the 'industrial revolution'. Secondly, the geographically sensitive nature of the parish data makes a cross-sectional analysis more acceptable than most other examples of temporal relationships being investigated with cross-sectional data: one is not simply comparing inconsistently gathered data which refers to very different and distant places, one is comparing the subtleties of socio-economic and religious variations at the level of the parish within the countries of England and Wales. As will be argued subsequently, the risk of committing an ecological fallacy using this research design is really quite low.

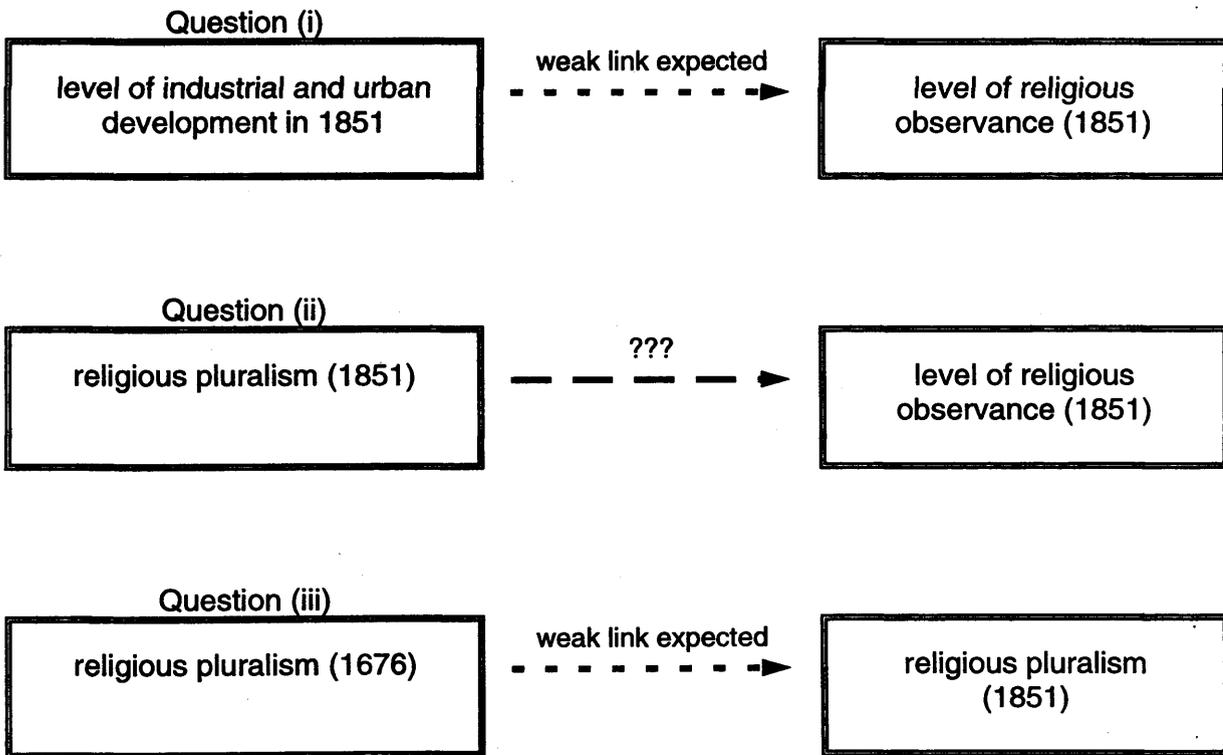
Figure 6

Hypotheses and further research questions

Hypotheses:



Further research questions:



The second hypothesis stems from the right-hand side of the conceptual framework (figure 5), i.e. the long-term link between religious pluralism and low levels of religious practice. The translation of this second proposition into an hypothesis is not quite so transparent and requires a more detailed explanation. To recall, the link between the rise of religious pluralism (i.e. 'social-structural secularisation') and the decline in religious belief (i.e. 'subjective secularisation') was posited as long-term (i.e. inter-generational). In Berger's terms, there was a 'cultural lag between secularisation of the economy ... and that of the family'. It is for this reason that the second hypothesis proposes a causal link between the measures of religious pluralism in 1676 (as opposed to 1851) and the level of religious practice in 1851. In other words, it is proposed that the influence of religious pluralism can be traced on religious practice some 175 years subsequently. It is noted in the subsequent chapter (chapter 5) that existing empirical research has used *contemporaneous* measures of religious pluralism and religious practice (i.e. cross-sectional analysis) to demonstrate a relationship between the two, and the resulting models of causality are open to question.

Further research questions.

Figure 6 also shows three further research questions. The two hypotheses raised two of these further research questions (questions (i) and (iii)). The second further research question arose because of the attention paid to the relationships between *contemporaneous* measures of religious pluralism and religious practice by the major body of research opposing Berger's theory of secularisation - the rational choice approach (as detailed in chapter 5 of this thesis). All three questions are listed in figure 6.

The first and third further research questions describe two important further implications of the core hypotheses. They propose relationships which, *a priori*, can be shown to be conceptually congruent with the conceptual framework. These questions can then be investigated for empirical congruence. In other words, they extend the scope of the research beyond the testing of Berger's core propositions, and offer insights into the interpretation of the patterns and processes of religious

change. They mark the point at which the analysis shifts from a 'testing' of Berger's theory to an investigation of the patterns of religious change in England and Wales (and Chapters 6 and 7 take this investigation much further).

Whereas the two hypotheses were investigated to show, as far as possible, that the empirical data supported Berger's theory and could not be explained by competing interpretations of religious change, this cannot be said of these two further research questions, since they could not be investigated with sufficient empirical precision. Thus, it is not claimed that only Berger's theory can explain why the patterns of religious practice were largely independent of the socio-economic environment in 1851 (further research question (i)), or why the patterns of religious pluralism in 1676 bore little relationship to the patterns of religious pluralism in 1851 (further research question (iii)). What is argued is that such findings are entirely congruent with the logic of the conceptual framework. The following paragraphs detail why this should be so.

The first research question addressed the relationship between religious practice in 1851 and parochial socio-economic characteristics. This is an area of interest because it is argued that the degree to which the cultural lag (between 'social-structural' and 'subjective' secularisation) predicted by Berger existed has a direct bearing upon the expected relationship between the level of religious practice and local socio-economic conditions. More precisely, one can argue that if a long-term cultural lag existed between religious pluralism and religious practice, one would expect there to be little or no relationship between the level of religious practice and parochial socio-economic conditions.

Such an argument rests upon the known changes in the regional economic geography of England and Wales between 1676 and 1851. To elucidate, in 1851, the main era of iron, steel and coal-based industrialisation had only arrived in large parts of these countries quite recently - affecting only a generation or two of the population at most. Thus, industrialisation was a recent process in much of the north of England, especially Lancashire, Durham, the West Riding, Derbyshire and Staffordshire. Secondly, significant areas which had been industrial in the late

seventeenth or early eighteenth centuries were largely de-industrialised by 1851. In the 'old' textile areas of Wiltshire, parts of Bedfordshire and East-Anglia, and the iron-industry of the Weald, the early nineteenth century (and earlier) had been a time of de-industrialisation.⁹ The point of relevance for this thesis is that some of the earliest areas to industrialise were thereby substantially de-industrialised by 1851, while many of the 'newer' areas to industrialise in 1851 had not been at all industrial in character in 1676.

If the first hypothesis is correct - i.e. there was always a close link between economic development and religious pluralism - then the patterns of religious pluralism would have responded quite quickly to the changing regional economic geography. However, since religious practice was linked to the patterns of economic development only in the long-term (and through the patterns of religious pluralism), it would seldom match the economic geography of any one point in time. One could derive two hypotheses from this argument; first, that the patterns of religious pluralism should have reflected closely the contemporary economic geography at any (and every) time between 1676 and 1851, and secondly, that the patterns of religious practice should only show a connection with the contemporary economic geography where this had been stable for a considerable preceding time period.

To investigate either of these hypotheses, is well beyond the scope of this thesis, since the socio-economic data (and much of the religious data) are confined to the mid-nineteenth century. What one can say is that one would expect only very weak associations between the geography of religious practice and the contemporaneous economic geography of 1851 (further research question (i)), and secondly, one would expect only very weak associations between the geography of religious pluralism in 1676 and the geography of religious pluralism in 1851 (further research question (iii)).

⁹ See E. Richards, 'Margins of the Industrial Revolution', in P. O'Brien and R. Quinault (eds), The Industrial Revolution and British Society (Cambridge, 1993), pp. 203-228.

As already noted, the second further research question did not arise directly from the conceptual framework, but was of importance because a considerable volume of rational choice based research has attacked Berger's theory primarily on the basis of a cross-sectional analysis of contemporaneous measures of religious pluralism and religious practice. As argued in chapter 5 of this thesis, such a methodology is a tenuous way of establishing cause and effect. However, since the comparison of contemporary patterns of religious pluralism and religious practice has dominated a large part of the recent debates within the sociology of religion, it is instructive to examine this relationship in England and Wales in 1851, and this forms the scope of the second further research question.

The format of analysis.

The following sections of analysis (sections 4.2, 4.3 and 4.4) are presented in two stages. First, each hypothesis and research question is investigated using a variety of statistical techniques. Each analysis is opened with robust, but quite 'blunt', techniques. The main statistical tests are Spearman's rank correlation for measuring monotonic association between two ordinal variables, and non-parametric tests for differences in the mean rank of ordinal variables according to group membership (i.e. Mann-Whitney and Kruskal-Wallis tests). Such tests were seen as the most robust way of establishing whether there was any statistical evidence to support each hypothesis and research question. Once these 'robust' non-parametric techniques had laid the groundwork, multivariate parametric statistics, chiefly regression, were used to help summarise the relationships discovered.

The second stage of the analysis was to discount any possible 'statistical artefacts' of the analysis or any 'alternative explanations' which could account for the same statistical results. Only once such statistical artefacts and alternative explanations had been discounted was it credible to move from that which has been demonstrated statistically to talk of the 'causative relationships' in the manner proposed in figure 5. Many quantitatively-minded social scientists would only conduct one stage of analysis and progress immediately with linear regression

modelling, since this is taught as the model of 'causality', while correlation is accorded the lesser status of a test of linear 'association'.¹⁰

While linear regression can *mathematically* be interpreted as a model of causality - since it predicts the value of the dependant variable (y) based upon the equation of a straight line ($y = ax + b$) - it should not be assumed to demonstrate causal *relationships* in the sociological sense of causality. In short, regression is dangerous; one can easily become transfixed by the desire to raise the 'R squared' value to ever higher levels, a process which tends to focus the researcher's energies on the capitalisation on chance, and to 'explain away' much of the original subject matter of the research project. Using regression one always has to be cautious for, *inter alia*, inbuilt dependence between the dependant and independent variables, inconsistent transformation (i.e. 'normalisation') of variables, and reliance upon the effects of multi-collinearity. Without a combination of healthy scepticism of statistics and a knowledge of the subject matter under consideration, regression could be used to 'prove', to quote a famous example, that harvest flies ('thunderbugs') *cause* thunderstorms.¹¹

This chapter is concluded by a detailed case study of Derbyshire (section 4.5) which aims to examine how the 'general relationships' between religious practice, religious pluralism, and socio-economic conditions, investigated in the preceding sections, could be used to describe and explain the patterns of religious behaviour within a single county. As D.A. Martin noted, general tendencies might be universal if things were equal 'But things are not equal - ever ...'¹² This part of the analysis aimed to examine where and why things were not equal. This geographically sensitive case-study also fulfilled a second function. It was important to examine whether the conceptual approach used here proved capable of investigating religious change when confronted with the specificities of history and geography. To recall from chapter 2, the aims of this thesis are twofold - to test certain aspects of secularisation theory, and to use this theory as a means of

¹⁰ Though non-parametric correlation is not a measure of linear association, but of *monotonic* association.

¹¹ A more detailed outline of the statistical methodology of this thesis is presented in Appendix 5.

¹² D.A. Martin, A General Theory of Secularization (Oxford, 1978), p. 3.

describing, understanding, and explaining religious behaviour in the mid-nineteenth century. Presented in these terms, the Derbyshire case-study marks the point at which the primary subject of investigation moves from a 'testing' of Berger's theory to an interpretation of the historical geography of religion using Berger's theory as a conceptual framework.

4.2 Investigating Hypothesis (i) and Further Research Question (i)

For convenience of interpretation, the first hypothesis and the first further research question were analysed simultaneously. To recall from figure 6, the first hypothesis was that the intensity of industrial and urban development should be strongly linked to the intensity of religious pluralism. The first further research question suggested that the level of religious practice would not be closely linked to parochial socio-economic conditions. Analysing these two proposals together allows one to contrast the strength and consistency of the relationships discovered between urban-industrial development and religious pluralism, with the weakness and inconsistency of the links discovered between any aspects of the socio-economic environment and the level of religious practice.

a) Empirical analysis.

As an opening investigation of both sets of relationships, the diversity measure (the principal measure of religious pluralism) and the index of attendances (the principal measure of religious practice) were correlated with fourteen of the core socio-economic variables. These variables measured aspects of the demography, society and economy of each parish. The strength and direction of the correlations between the diversity measure, the index of attendances, and these fourteen variables, can reveal much about what sorts of socio-economic environments were associated with intense religious diversity and with high rates of religious practice.

The results of the correlations are shown in table 7. They reveal that the religious diversity measure was strongly associated with *all* fourteen of the socio-economic variables (at the 99% confidence level or higher).¹³ Indeed, nine of the correlation coefficients were greater than ± 0.3 , and six were higher than ± 0.4 . In marked contrast, the correlation coefficients obtained with the index of attendances only passed the 99% confidence level for three of the 14 socio-economic variables, and none of the coefficients was greater than ± 0.2 .

To shed further light on the relationships between religious pluralism, religious practice, and the socio-economic variables, it was instructive to weight the parish data (proportional to their total populations), and re-run the correlations (these are presented in tables 1 and 2 of Appendix 6 of this thesis).¹⁴ As noted in section 3.3, weighting the data removes the possibility of 'rural bias' in the parish dataset.

The most noticeable feature was that almost all the weighted correlations were far stronger, with all but two of the correlation coefficients exceeding the 99% confidence level. The correlations between the diversity measure and the socio-economic variables tended to remain proportionately stronger than those obtained with the index of attendances. For example, all fourteen of the correlation coefficients obtained with the diversity measure were in excess of ± 0.3 , and eight were greater than ± 0.5 . In contrast, only seven of the correlation coefficients obtained with the index of attendances were greater than ± 0.3 , and none was greater than ± 0.5 .

Thus, both the weighted and unweighted correlation analysis suggested that the religious diversity measure was far more closely associated with socio-economic conditions than was the index of attendances. The relationships between the index of attendances, religious diversity, and the socio-economic variables can be examined further using multivariate statistical techniques, namely

¹³ As a stylistic note, where the term statistical significance is used in the empirical analysis, this refers to the test statistic exceeding the 95% confidence level (for Type I error). Where the term *strong* statistical significance is used, this refers to the 99% confidence level.

¹⁴ Appendix 6 details the reasons for weighting the data and the methods used to do so.

Table 7**The associations between religious diversity, the index of attendances and selected socio-economic variables**Spearman's rank correlations (r_s)

Description of socio-economic variables	Index of total attendances	Religious diversity measure
correlation results (n = 2,231 - 2,260)		

Agricultural

Percentage of families in agriculture (1831)	$r_s = - 0.02$ (p = 0.296)	$r_s = - 0.43^{**}$ (p = 0.000)
Labourers in agriculture as a percentage of the population (1831)	$r_s = - 0.05$ (p = 0.032)	$r_s = - 0.42^{**}$ (p = 0.000)
Labourers not agricultural as a percentage of the population (1831)	$r_s = - 0.07^{**}$ (p = 0.001)	$r_s = + 0.27^{**}$ (p = 0.000)
Occupiers not employing labourers as a percentage of all occupiers (1831)	$r_s = + 0.02$ (p=0.251)	$r_s = + 0.30^{**}$ (p = 0.000)

Demographic / urbanisation

Population density in 1851	$r_s = + 0.04$ (p = 0.046)	$r_s = + 0.40^{**}$ (p = 0.000)
Total population in 1851	$r_s = - 0.04$ (p = 0.043)	$r_s = + 0.63^{**}$ (p = 0.000)
Mean annual population growth rate 1811-31	$r_s = + 0.03$ (p = 0.168)	$r_s = + 0.18^{**}$ (p = 0.000)
Mean annual population growth rate 1831-51	$r_s = - 0.03$ (p = 0.168)	$r_s = + 0.40^{**}$ (p = 0.000)
Sex ratio: males to females (1851)	$r_s = - 0.11^{**}$ (p = 0.000)	$r_s = - 0.10^{**}$ (p = 0.000)
Mean household size in 1851	$r_s = - 0.17^{**}$ (p=0.000)	$r_s = - 0.15^{**}$ (p=0.000)

Industrialisation / local economic structure

Percentage of families in trade (1831)	$r_s = + 0.03$ (p = 0.224)	$r_s = + 0.43^{**}$ (p = 0.000)
Percentage of the population employed in manufacturing (1831)	$r_s = - 0.01$ (p = 0.722)	$r_s = + 0.38^{**}$ (p = 0.000)
Percentage of the population employed in retail / handicraft (1831)	$r_s = + 0.03$ (p = 0.113)	$r_s = + 0.35^{**}$ (p=0.000)
'Capitalists' as a percentage of the population (1831)	$r_s = - 0.01$ (p = 0.531)	$r_s = + 0.12^{**}$ (p = 0.000)

** indicates that the correlation coefficient exceeded the 99% confidence level.

linear regression. Regression can give an *overall* measure of the strength of the relationship between religious pluralism, religious practice, and the socio-economic environment, while (zero-order) correlation can only examine each relationship *in isolation* from every other relationship.

Many of the socio-economic variables were correlated *amongst each other*, so a series of correlations, such as that presented in table 7, gives little indication of the 'combined' (i.e. net) influence of all the socio-economic variables upon the two religious variables. Indeed, the 'combined' influence of the socio-economic variables could be very little different from the effect of the single variable displaying the strongest correlation; or, if the variables had an influence *independent* of each other, it could be very much greater. Regression analysis can dispel this uncertainty and provide further useful information concerning the relationships between religious pluralism, religious practice, and the socio-economic environment.

Two regression analyses were carried out using the eighteen core socio-economic variables as predictor variables and the religious diversity measure and the index of attendances as dependent variables.¹⁵ The results are summarised in tables 8 and 9. The most important point to note is the far greater 'R squared' coefficient obtained when the diversity measure was the dependent variable compared to the value obtained for the index of attendances. If these regression analyses were to be interpreted as models of causality then one would conclude that 31% of the variance of the religious diversity measure could be accounted for by the selected socio-economic indicators, whereas only 2% of the variance of the index of attendances could be accounted for in this manner.¹⁶

¹⁵ See Appendix 1 for a list of the eighteen core socio-economic variables.

¹⁶ It is not standard practice to 'normalise' variables in this thesis (since not all variables could be normalised). However, the index of attendances displayed an almost perfect log-normal distribution. Even using the logarithmically transformed variable (which yielded an almost perfect set of residuals - displaying homogeneous variance and a normal distribution), yielded an adjusted R squared of just 0.027, barely higher than the value obtained with the untransformed index.

Table 8

Regression analysis to demonstrate the influence of selected socio-economic variables upon the intensity of religious diversity in 1851

<p>Regression analysis with selected socio-economic variables as predictor variables and the religious diversity measure as the dependent variable.</p> <p>N = 2,150</p> <p>Variable selection based on minimum significance of 'T' at 95%</p>		
<u>Variables in the equation</u> (in order of 'B')	<u>B</u>	<u>T (sig.)</u>
Percentage of families in agriculture (1831)	- 0.26	- 7.9 (0.0000)
Occupiers not employing labourers as a percentage of all occupiers (1831)	+ 0.17	+ 8.7 (0.0000)
Mean annual population growth rate 1831-51	+ 0.15	+ 7.5 (0.0000)
Percentage of families in trade (1831)	+ 0.14	+ 4.6 (0.0000)
Occupiers employing labourers as a percentage of the population (1831)	+ 0.12	+ 5.2 (0.0000)
Total occupied population as a percentage of the population (1931)	- 0.11	- 3.8 (0.0001)
Mean household size in 1851	- 0.09	- 4.4 (0.0000)
Percentage of the population employed in retail / handicraft (1831)	+ 0.08	+ 3.3 (0.0008)
Total servants as a percentage of the population (1831)	- 0.07	- 2.4 (0.0173)
Mean annual population growth rate 1811-31	+0.06	+ 3.2 (0.0014)
'Capitalists' as a percentage of the population (1831)	- 0.06	- 2.6 (0.0102)
Sex ratio: males to females (1851)	+ 0.04	+ 2.2 (0.0280)
Ratio of male servants to female servants (1831)	+ 0.04	+ 2.0 (0.0466)
<p>Regression result:</p> <p>adjusted R²= 0.31</p>		

Table 9**Regression analysis to demonstrate the influence of selected socio-economic variables upon the index of attendances in 1851**

Regression analysis with selected socio-economic variables as predictor variables and the index of attendances as the dependent variable.		
N = 2,150		
Variable selection based on minimum significance of 'T' at 95%		
<u>Variables in the equation</u> (in order of 'β')	<u>β</u>	<u>T (sig.)</u>
Total servants as a percentage of the population (1831)	+ 0.12	+ 3.8 (0.0001)
Mean household size in 1851	- 0.11	- 5.1 (0.0000)
Occupied population as a percentage of the population (1831)	- 0.08	- 2.5 (0.0118)
Percentage of the population employed in manufacturing (1831)	- 0.06	- 2.8 (0.0058)
Regression result: adjusted R² = 0.02		

As argued with respect to the correlations, a further insight can be gained by repeating the analysis using the weighted dataset. A parallel regression analysis was conducted using the weighted dataset and the results are shown in tables 2 and 3 of Appendix 6. As with the correlation analysis, it was immediately obvious that the weighted analyses were statistically far stronger.¹⁷ In technical terms, over half (51%) of the variance in the religious diversity measure, and a quarter (25%) of the variance of the index of attendances was accounted for by the selected socio-economic variables.

To interpret the regression analyses further and to describe the influence of each and every socio-economic variable upon the index of attendances or the diversity measure would be to misuse the technique. Neither the presence or absence of a variable in the analysis nor the level of explanatory power of selected variables (as indicated by the beta weights (β)) was directly interpretable due to the high level of multi-collinearity (i.e. many of the socio-economic variables were highly correlated amongst themselves). Given such conditions, it would not be wise to interpret the nature of the relationship between the diversity measure or the index of attendances and each and every socio-economic variable, or to assume that those variables absent from the analysis contained no explanatory power in themselves.

Instead of examining each and every beta value, one can examine the beta weights 'in the broad'. In particular, it is instructive to examine whether intense religious diversity and high religious practice were linked with 'urban/ industrial' or 'rural/agricultural' parochial environments. The socio-economic variables were divided into two broad categories, 'urban/industrial' and 'rural/agricultural'. In the 'urban/industrial' group were placed the population density, mean annual population growth rates (1811-31 and 1831-51), the percentage of the population employed in manufacturing (1831), the percentage of families in trade (1831), the percentage of non-agricultural labourers in the population (1831), the percentage of the population employed in retail/handicraft (1831), and the percentage of

¹⁷ Though caution is needed in interpreting the statistical 'significance' of analysis using the weighted data (see Appendix 6 for further details).

'capitalists' in the population (1831). In the 'rural/agricultural' group were placed the percentage of families in agriculture (1831) and the percentage of agricultural labourers in the population (1831). Due to their complexity and possible ambiguity, the remaining variables were not used as indicators of 'urban/industrial' or 'rural/agricultural' environments.¹⁸

To invoke an 'urban/industrial' : 'rural/agricultural' dichotomy is not to propose a single, linear urban-rural dimension of parochial characteristics in the mid-nineteenth century, but merely to highlight some of the most patent expressions of rural/urban differences. It is to suggest that, all things being equal, variables grouped as 'urban/industrial' indicators would have been high in 'urban/industrial' parishes and lower elsewhere. Conversely, the variables grouped as rural/agricultural would have been high in rural/agricultural settings and lower elsewhere. If religious pluralism was universally linked to urban/industrial environments, as proposed in the first hypothesis, this should be reflected in positive beta weights of the 'urban/industrial' indicators, and negative beta weights of the 'rural/agricultural' indicators.

It is immediately clear from table 8 (and table 2 of Appendix 6) that the intensity of religious diversity was positively related to how 'urban' and 'industrial' the parish was and negatively related to how 'agricultural' or 'rural' the parish was. To detail, the beta weight of the percentage of families in agriculture was negative, while the beta weights of the percentage of families in trade, the mean annual population growth rates (1831-1851, and 1811-1831), and the percentage of the population employed in retail/ handicraft were all positive. Only the percentage of 'capitalists' displayed an unexpected negative beta weight, and this was due to the effects of multi-collinearity.¹⁹

¹⁸ These variables were mean household size (1851), occupiers not employing labourers as a percentage of all occupiers (1831), occupiers employing labourers as a percentage of the total population, the total occupied population as a percentage of the total population (1831), the percentage of servants (1831), and the sex ratio (1831 and 1851). There were, *a priori*, reasons why all these uncategorised variables need not have lain neatly upon an urban/industrial - rural/agricultural dimension. For instance, an excess of females (as evidenced by a low sex ratio) could have been a sign of textile production or pastoral agriculture; a high percentage of servants could occur in agricultural parishes or the more affluent urban parishes.

¹⁹ The negative sign of the beta weight represented the effects of the interaction of other variables under conditions of high multi-collinearity, and cannot be interpreted as indicating a *direct* negative

A similar interpretation, removing the complexities arising from multicollinearity, can be reached by examining the sign of the correlation coefficients presented in table 7. The intensity of religious pluralism quite unambiguously tended to be higher the higher the percentage of families in trade, population density, population growth rates (1811-1831 and 1831-51), percentage employed in retail/handicraft, percentage employed in manufacturing, percentage 'capitalists', and percentage non-agricultural labourers. In contrast, religious diversity tended to be lower the higher the percentage of families in agriculture and the higher the percentage of agricultural labourers. Thus, both the regression and correlation analysis suggested that the more urban and industrial the parish, the higher the level of religious diversity, and thereby the first hypothesis was supported strongly at this stage of the analysis.

The links between the socio-economic environment and the index of attendances were far weaker, as both the correlation analysis (table 7) and the regression analysis (table 9) have shown. The correlation analysis (table 7) revealed no clear associations between the rate of religious practice and broadly urban or rural environments. Only the correlation analysis using the weighted data (table 1 of Appendix 6) provided any substantial support for the argument that church-going was proportionately lower the more urban and industrial the parish. In this way, the weighted correlations form the strongest support for a 'traditional' account of secularisation as the decline in religious practice as a direct, simple response to urbanisation and industrialisation.²⁰ However, even using the weighted data, the socio-economic variables could not account for three quarters of the

relationship between the percentage of capitalists and religious diversity. Indeed the Pearson correlation between the two variables was positive ($r_p = + 0.06$, $p = 0.006$, $n = 2,249$).

²⁰ In this regard the weighted dataset is arguably more sociologically informative than the unweighted dataset. Many criticisms of the traditional 'pessimist' interpretations of secularisation (including this thesis) have made the point that highly rural areas, such as Cumberland and Northumberland, contained levels of religious practice as low as the slums of the biggest industrial cities. However, while indisputably true, this observation alone does not carry much force as a dismissal of urbanisation as an agent of decline in religious observance. Very few people lived in remote rural areas; they were not areas in which, in sociological language, a great number of children were socialised into abstaining families - as were some of the major urban centres (most especially London). The rates of religious observance may have been lower in some remote rural parishes, but the sociological significance of the large cities - as areas in which a large number of children and migrants were confronted by an environment in which fewer people than average attended worship - was clearly much higher.

variance of the index of attendances (see table 3 of Appendix 6), indicating that such explanations are at best partial.

To conclude this first part of the analysis, as a result of the correlation and regression analysis it is argued that religious diversity was closely linked to parochial socio-economic conditions. The more urban and/or industrial the parish, the more intense the religious diversity. Both the correlation and regression analyses provided strong statistical backing for this conclusion. Thus, the first hypothesis - that the intensity of religious diversity would be higher the more urban/industrial the environment - received strong support. The index of attendances was shown to be far more weakly related to the socio-economic environment as was expected from the first further research question. In this way this first section of the analysis supported strongly both the first hypothesis and the first further research question. The following paragraphs report the second stage of the analysis, which examines whether the findings reported thus far could either be dismissed as 'statistical artefacts' or accounted for by 'alternative explanations'.

b) A consideration of alternative explanations and statistical artefacts.

Before accepting these results at face value, it is important to evaluate critically the quantitative methods used in the previous analysis. In particular, it could be argued that the apparent closeness of the relationships discovered between religious pluralism and the local socio-economic conditions, compared to the weaker links discovered between religious practice and these socio-economic conditions, was no more than a statistical artefact. In particular, the known potential scale dependency of the religious diversity measure of religious pluralism (see Appendix 4 of this thesis) and the known complexity of multiple attendance, which affected the consistency of the index of attendances as a measure of religious practice (see section 3.1 of this thesis), could lead one to argue that the preceding analysis cannot be interpreted as 'proof' that 'religious pluralism' was more closely linked to the socio-economic environment than 'religious practice'.

A response to such uncertainties is to repeat the analysis using alternative measures of both religious pluralism and religious practice and examine how similar the results were to those already obtained with the religious diversity measure and index of attendances respectively.²¹ Alternative measures of both religious pluralism and religious practice are available. To recall from Appendix 4, the 'relative' percentage share measure (the percentage share of the largest denomination) is a simple (albeit limited) alternative measure of religious pluralism. Most importantly, it is a variable which lacks the potential scale dependency of the religious diversity measure.²² Thus, the relative percentage share can be used to examine to what extent the relatively strong regression results reported in table 8 (and table 2 of Appendix 6) could be repeated using a measure of religious pluralism free of scale dependency.

The relative percentage share was regressed against the eighteen core socio-economic variables to produce a parallel analysis to that presented in table 8. The resulting 'R squared' value was 0.27. Eleven variables were entered into the analysis, ten of which were among the thirteen variables which had been selected in the previous analysis using the diversity measure (table 8). The signs of the beta weights were the same for all ten of these common variables. A parallel regression was also carried out using the relative percentage share measure and the *weighted* dataset. The resulting 'R squared' value was 0.44, very close to the value of 0.51 obtained using the diversity measure. Further, of the eight variables selected in the analysis, all were among the twelve variables which had been selected in the previous analysis using the diversity measure. Again, the signs of the beta weights of the common variables were all identical.

Thus, the regression results obtained using the 'relative' percentage share measure were extremely similar to those obtained using the diversity measure of religious pluralism.

²¹ It has already been noted that normalising the index of attendances variable did very little to improve the power of the regression analysis.

²² Questions of scale dependency become even more important when the weighted dataset is used, see Appendix 6 of this thesis.

A similar check was carried out using an alternative measure of religious practice - the 'minimum index of attendants' - in place of the index of attendances. This alternative measure was calculated in the same manner as the index of attendances, but using the attendances at the best attended service in place of the total attendance figure. Henceforth it is referred to as the 'index of attendants', since, barring cross-denominational multiple attendance, this index is the mathematical expression of the minimum possible index of attendants on Census Sunday.²³ Using the index of attendants in place of the index of attendances, the resulting regression yielded an 'R squared' value of 0.05, very close to the value of 0.02 obtained using the index of attendances (see table 9). Further, two of the five variables selected in the analysis were amongst the three variables which had been selected in the previous analysis using the index of attendances. For these two common variables the signs of the beta weights were the same in both analyses. Repeating the regression analysis using the weighted dataset and the index of attendants, an 'R squared' value of 0.30 was obtained - very similar to the value of 0.25 obtained using the index of attendances. Nine variables were selected, of which all nine were amongst the twelve variables which had been selected in the corresponding analysis using the index of attendances. Once again the sign of these nine beta weights were the same in both analyses.

Thus, as with the alternative measure of religious pluralism, the results obtained with this second measure of religious practice were extremely similar to those obtained with the index of attendances, both with the weighted and unweighted data.

A further piece of evidence that the weakness of the relationship discovered between religious practice and the socio-economic environment was not an artefact of the methods of measurement used in this thesis can be gleaned from examining a similar regression analysis conducted by Callum Brown. Brown obtained an 'R squared' value of 0.04 using urban population sizes and growth rates (1801-1851 and 1841-1851) as predictors of attendances for 63 in towns in

²³ In practice this variable could not be calculated entirely accurately in all parishes, as detailed in Appendix 4 of this thesis.

England and Wales in 1851.²⁴ Since Brown's regression was based upon the population of entire towns, and thereby escapes the problems of attendants crossing parish boundaries (as described in section 3.1), it forms a useful independent reinforcement of the findings presented here using parish-level data.

To conclude this section of analysis, it has been verified, as far as empirically sensible, that parochial socio-economic characteristics were strongly linked to the intensity of religious pluralism. More specifically, religious pluralism tended to be most intense in the most urban and/or industrial parishes (hypothesis (i)). The level of religious practice was not closely linked to parochial socio-economic characteristics, supporting the *a priori* arguments which led to the first further research question.

4.3 Investigating Hypothesis (ii)

The second hypothesis is the most profound test of Berger's core proposition - that religious pluralism 'secularises'. To recall from figure 6, the hypothesis predicted that the intensity of religious diversity in 1676 would display a negative relationship with the index of attendances in 1851.

a) empirical analysis.

The most basic and robust way of testing for association between the intensity of religious pluralism in 1676 and the rate of religious practice in 1851 is to use non-parametric correlation. Table 10 shows the results of the correlations between the three possible measures of religious pluralism in 1676 and the two measures of religious practice in 1851 (the index of attendances and the index of

²⁴ It is also noteworthy that if Brown had not used a 'forced' entry method of regression, which fosters capitalisation on chance, the results would have been more similar still. Using the regression criteria used in this thesis - a minimum entry of 'T' at the 95% confidence level - then none of the variables would have been selected in the analysis. Using a minimum significance of 'T' at the 90% confidence level then the 'population in 1851' would probably have been entered into the regression equation (though I have not checked the exact critical value). The three 'T' values listed in Brown's regression equation were -1.61 (population in 1851), -1.35 (growth rate 1841-1851) and -0.65 (growth rate 1801-1851). See C.G. Brown, 'Did urbanisation secularise Britain?', Urban History Yearbook, 1988, 1-14 (Brown's regression results are presented on p. 7).

Table 10

The associations between the various measures of religious diversity in 1676 and the two measures of religious practice in 1851

N = 1,382

Spearman's rank correlations (r_s)

	Index of attendances in 1851	'Index of attendants' in 1851
Religious diversity in 1676 - Protestant nonconformity measure	$r_s = - 0.08^{**}$ ($p=0.003$)	$r_s = - 0.10^{**}$ ($p = 0.000$)
Religious diversity in 1676 - Catholic measure	$r_s = - 0.09^{**}$ ($p=0.001$)	$r_s = - 0.12^{**}$ ($p = 0.000$)
'Total religious diversity' in 1676	$r_s = - 0.12^{**}$ ($p=0.000$)	$r_s = - 0.13^{**}$ ($p = 0.000$)

** Indicates that the correlation coefficient exceeded the 99% confidence level.

attendants). A parallel analysis was carried out using the weighted dataset, this is reported in table 4 of Appendix 6.

Leaving aside the nuances of the various measures for a moment, the most notable feature of the analysis is that the correlations between the three measures of religious pluralism in 1676 and the two measures of religious practice in 1851 were all negative, and all achieved strong statistical significance. Once again, it was the weighted dataset (table 4 of Appendix 6) which provided the statistically stronger results. The measure of 'total religious diversity' (which, to recall, is most closely analogous to the diversity measure calculated using the 1851 religious data), yielded the strongest associations. Somewhat surprisingly, the 'Catholic' measure of religious diversity, which entirely excluded dissenters from the calculation, displayed stronger correlations than the 'dissenting' diversity measure, which entirely excluded Catholics (see Appendix 4 for details of the computation of these variables).

While non-parametric correlation yields a robust test of monotonic association, it does not describe how the levels of religious practice varied according to the levels of religious pluralism in 1676. Further non-parametric statistical analysis was carried out to show exactly how much lower the rates of religious practice were, on average, according to presence/absence and intensity of religious pluralism in 1676. Three Mann Whitney 'U' tests were carried out as shown in table 11.²⁵ The results, all exceeding the 99% confidence level, showed that parishes *with* religious pluralism in 1676 displayed significantly lower average indices of attendances in 1851 (in terms of mean rank) than did parishes *without* religious pluralism in 1676. This finding held true whichever measure of religious pluralism in 1676 was used. As can be summarised from the three parts of table 11, the mean index of attendances for parishes with religious pluralism in 1676 averaged between 55% and 60%, while the mean index for those without religious pluralism was around ten percent higher at 65% to 72%. As was evident in the

²⁵ The Mann-Whitney 'U' test is essentially a non-parametric form of the 'T' test. See Appendix 5 for further details.

Table 11**A comparison of how the average index of attendances varied according to the presence of religious diversity in 1676****a) How the average index of attendances varied according to the presence and absence of Protestant nonconformity in 1676:**

	Parishes without nonconformists in 1676 (n=525)	Parishes with nonconformists in 1676 (n=857)
Mean index of attendances in 1851	69.3%	59.2%
Mean rank index of attendances in 1851	739.3	662.2
Overall Mann-Whitney test statistic (corrected for ties) $z = -3.48^{**}$ ($p = 0.0005$)		

b) How the average index of attendances varied according to the presence and absence of Catholicism in 1676:

	Parishes without Catholics in 1676 (n=1,104)	Parishes with Catholics in 1676 (n=278)
Mean index of attendances in 1851	64.9%	55.7%
Mean rank index of attendances in 1851	708.68	623.26
Overall Mann-Whitney test statistic (corrected for ties) $z = -3.19^{**}$ ($p = 0.0014$)		

c) How the average index of attendances varied according to the presence and absence of any religious diversity in 1676:

	Parishes without any non-conformists or Catholics in 1676 (n=445)	Parishes with nonconformists and / or Catholics in 1676 (n=937)
Mean index of attendances in 1851	71.7%	58.9%
Mean rank index of attendances in 1851	760.3	658.8
Overall Mann-Whitney test statistic (corrected for ties) $z = -4.42^{**}$ ($p = 0.0000$)		

** indicates that the 'Z' statistic exceeded the 99% confidence level.

previous correlation the combined measure of Protestant and Catholics religious diversity appeared stronger than either factor alone.

Not only can one trace the substantial differences in the index of attendances in 1851 according to the presence or absence of religious pluralism in 1676. Table 12 takes the analysis one step further, and charts the substantial variation in the mean (rank) of the index of attendances according to the intensity of religious diversity in 1676. As one moves from left to right in table 12, the mean index of attendances, which stood at over 70% in parishes with no religious pluralism in 1676, lay below 60% in the two groups of parishes where the diversity measure was up to 0.4, and lay close to 50% in the parishes with a diversity measure of over 0.4. The mean rank of the index of attendances showed a similar decline as the level of religious pluralism in 1676 increased. The Kruskal-Wallis test statistic, shown in the bottom row of table 12, shows that the mean rank of the index of attendances varied significantly between the four groups.²⁶

This first stage of analysis has strongly supported the second hypothesis. It is clear that in general, the higher the levels of religious pluralism in 1676, the lower the level of religious practice in 1851.

b) A consideration of alternative explanations and statistical artefacts.

The main reason for not accepting the previous analysis at face value is that some other relationship (i.e. one not considered thus far) could be producing these links. It is clearly impossible 'prove' causality between two religious variables across almost two centuries, no matter how precise one's hypothesis or how elegant one's empirical analysis. However, to argue forcefully that the intensity of religious pluralism in 1676 really did exert a causal influence on the rate of religious practice in 1851, it is particularly important to discount the effects of any possible 'mediating' variables - 'third-party' variables which were the cause of the apparent link between religious pluralism in 1676 and religious practice in 1851. A

²⁶ The Kruskal-Wallis test is essentially a non-parametric one-way analysis of variance. See Appendix 5 for details.

Table 12

How the index of attendances varied according to the intensity of 'total religious diversity' in 1676

	Level of 'total religious diversity' in 1676:			
	zero n = 445	up to 0.2 n = 755	0.2 to 0.4 n = 137	greater than 0.4 n = 45
Mean index of attendances	71.7	59.5	58.3	51.5
Mean rank index of attendances	760.3	669.7	636.4	544.7

Kruskal-Wallis test statistic:

Chi-squared = 24.2** (p = 0.000)

** Indicates that the chi-squared statistic exceeded the 99% confidence level.

priori, both religious diversity in 1851 and various of the socio-economic variables could be such mediating variables.

Complicating factor (i): the relationship between religious pluralism in 1676 and urban parishes.

The first complicating factor which could, *a priori*, be responsible for the apparent negative relationship between religious pluralism in 1676 and religious practice in 1851, was the relationship between religious pluralism in 1676 and urban/industrial parishes. It is known that many of the Protestant nonconformist sects and denominations, such as the Quakers, were concentrated in *urban* environments. It could be argued that the explanation of the apparent relationship between religious diversity in 1676 and the index of attendances in 1851 was not so much a product of the crisis of credibility that religious pluralism caused for religious belief (in the manner envisaged by Berger), but could rather more simply be related to urbanisation. For example, one could invoke a rather more orthodox interpretation that if religious diversity in 1676 was highest in the parishes which were more urban and/or industrial in 1851, and that these also tended to be parishes with lower rates of religious practice, then it was the processes of urbanisation/industrialisation which caused the variations in religious practice.

In Berger's terms one needs to show that 'there would also be a crisis of credibility brought on by pluralism as a *social-structural* phenomenon, quite apart from its linkage with the "carriers" of secularization.'²⁷ To achieve this it was necessary to discover whether a 'third party' socio-economic variable - one associated with both religious diversity in 1676 and the index of attendances in 1851 - was responsible for the statistically significant negative association between religious diversity in 1676 and religious practice in 1851. A series of partial correlations was conducted to address this eventuality. The 'total religious diversity' measure was correlated with the key socio-economic variables, as shown in table 13. The second column of table 13 reveals that total religious diversity in 1676 was statistically significantly correlated with nine of the sixteen variables. The

²⁷ Berger, Social Reality, p.154.

Table 13

An investigation of the effect of any associations between religious diversity in 1676 and 'urban environments' upon the association between religious diversity in 1676 and the index of attendances in 1851

Pearson correlations (r_p)

Description of socio-economic variables	Correlation between variable listed in column 1 and 'total religious diversity' in 1676	Partial correlation between 'total religious diversity' in 1676 and the index of attendances in 1851 controlling for the variable shown to be significantly correlated in column 2
correlation results (n=1,353 to 1,382)		

Agricultural

Percentage of families in agriculture (1831)	$r_p = - 0.09^{**}$ (p=0.002)	$r_p = - 0.08^{**}$ (p=0.002)
Labourers in agriculture as a percentage of the population (1831)	$r_p = - 0.04$ (p=0.105)	
Labourers (not agricultural) as a percentage of the population (1831)	$r_p = + 0.09^{**}$ (p=0.002)	$r_p = - 0.08^{**}$ (p=0.003)
Occupiers not employing labourers as a percentage of all occupiers (1831)	$r_p = - 0.06$ (p=0.020)	

Demographic / urbanisation

Population density in 1851	$r_p = + 0.03$ (p=0.204)	
Total population in 1851	$r_p = + 0.08^{**}$ (p=0.004)	$r_p = - 0.08^{**}$ (p=0.004)
Estimated mean annual population growth rate 1676-1811	$r_p = + 0.22^{**}$ (p=0.000)	$r_p = - 0.07^{**}$ (p=0.006)
Mean annual population growth rate 1811-31	$r_p = + 0.01$ (p=0.764)	
Mean annual population growth rate 1831-51	$r_p = + 0.08^{**}$ (p=0.002)	$r_p = - 0.07^{**}$ (p=0.006)
Sex ratio: males to females (1851)	$r_p = + 0.08^{**}$ (p=0.000)	$r_p = - 0.08^{**}$ (p=0.003)
Mean household size in 1851	$r_p = + 0.03$ (p=0.176)	

Industrialisation / local economic structure

Percentage of families in trade (1831)	$+ 0.08^{**}$ (p=0.005)	$- 0.08^{**}$ (p=0.002)
Percentage of the population employed in manufacturing (1831)	$- 0.03^{**}$ (p=0.236)	
Percentage of the population employed in retail / handicraft (1831)	$+ 0.11^{**}$ (p=0.000)	$- 0.08^{**}$ (p=0.003)
'Capitalists' as a percentage of the population (1831)	$+ 0.08$ (p = 0.004)	$- 0.08^{**}$ (p = 0.004)

** Indicates that the correlation coefficient exceeded the 99% confidence level.

third column of table 13 shows the partial correlations between 'total religious diversity' in 1676 and the index of attendances controlling for each of these nine socio-economic variables in turn. All the partial correlations between religious diversity in 1676 and the index of attendances in 1851 were negative and maintained a strong statistical significance.²⁸

Thus, controlling for the effect of any given socio-economic variable had little impact upon the strength of the association between religious diversity in 1676 and the index of attendances in 1851. Although religious pluralism in 1676 was indeed associated with many of the variables characteristic of urbanisation and industrialisation, these links in no way cast into doubt the independence of the relationship between religious diversity in 1676 and the index of attendances in 1851.²⁹ As an aside, the correlations shown in table 13 are also of interest in their own right. Whilst it is clearly historically 'back-to-front' to seek to explain the patterns of religious diversity in 1676 with nineteenth-century socio-economic data, the results are nevertheless worthy of brief comment. Religious diversity in 1676 was associated with areas of more rapid subsequent population growth, and more industrial / less agricultural parishes. It is interesting to note that two of the largest positive correlations were with the most contemporaneous population growth figure (1676-1811), and with the percentage of the population employed in 'retail/handicraft'. This latter term covers the traditional industrial occupations, and was thereby likely to show greater geographical continuity before and after the industrial revolution than many of the other variables, such as percentage of the population employed in manufacturing.³⁰ Furthermore, these were precisely the occupations with which nonconformity was associated in the late seventeenth century.³¹

²⁸ The zero-order correlation between 1676 pluralism and 1851 level of practice was $r_p = 0.08$ ($p = 0.003$). It can be seen that none of the partial correlations diverged greatly from this value.

²⁹ The independence of the relationship is also demonstrated in the regression presented in table 17.

³⁰ See E.A. Wrigley, 'Men on the land and men in the countryside: employment in agriculture in early nineteenth-century England', in L. Bonfield, R. Smith and K. Wrightson (eds), The World We have Gained: Histories of Population and Social Structure (Oxford, 1986), pp. 295-336.

³¹ See M. Spufford (ed.) The World of Rural Dissenters (Cambridge, 1995), especially B. Stevenson, 'The social and economic status of post-Restoration dissenters 1660-1725', in Spufford Rural Dissenters, pp. 332-359. See also M.R. Watts, The Dissenters (i): From the Reformation to the French Revolution (Oxford, 1978), pp. 346-366.

Complicating factor (ii): religious pluralism in 1851

The second possible 'complicating' factor was the relationship between religious diversity in 1676 and religious diversity in 1851. Since religious pluralism in 1676, religious pluralism in 1851, and the index of attendances in 1851 were all correlated with each other, it was instructive to examine the effect of religious diversity in 1676 on the index of attendances in 1851, *controlling* for the level of diversity in 1851. This can be most simply achieved by calculating the partial (first-order) correlation between the measures of religious diversity in 1676 and the index of attendances in 1851 controlling for the level of religious diversity in 1851. Controlling for religious diversity in 1851 in this way acted to *increase* the strength of the negative association between the Protestant and 'total' measures of religious diversity in 1676 and the index of attendances in 1851.³² In contrast, the negative association between the Catholic measure of religious diversity in 1676 and the index of attendances slipped from statistical significance once religious diversity in 1851 was controlled for.³³

As is made clear subsequently (section 4.4), Protestant dissent in 1676 was more closely linked to subsequent religious diversity in 1851 than Catholicism was. Since there was generally a positive association between religious pluralism *in 1851* and the index of attendances (as is also made clear in section 4.4), it is not surprising the once the intensity of religious diversity of 1851 was controlled for, Protestant dissent in 1676 was shown to display a stronger negative association with the index of attendances, and Catholic diversity was shown to display a weaker association. In this way one can 'explain' the earlier finding, that Catholic diversity should have appeared a stronger negative influence upon the index of attendances than Protestant diversity (see table 10); it is clear that once religious

³² The result of the zero-order Pearson correlation between the 'total religious diversity' measure of 1676 and the index of attendances was $r_p = -0.08$ ($p = 0.003$, $n = 1,383$). The result of the first-order correlation, controlling for religious diversity in 1851, was $r_p = -0.09$ ($p = 0.001$, $n = 1,383$). The result of the zero-order Pearson correlation between the Protestant diversity measure of 1676 and the index of attendances was $r_p = -0.06$ ($p = 0.021$, $n = 1,383$). The result of the first-order correlation, controlling for religious diversity in 1851, was $r_p = -0.07$ ($p = 0.007$, $n = 1,383$).

³³ The result of the zero-order Pearson correlation between the Catholic diversity measure of 1676 and the index of attendances was $r_p = -0.06$ ($p = 0.038$, $n = 1,383$). The result of the first-order coefficient, controlling for religious diversity in 1851, was $r_p = -0.05$ ($p = 0.060$, $n = 1,383$).

diversity in 1851 was controlled for, Protestant diversity in 1676 appeared the stronger influence upon religious practice in 1851.

The complicating effect of religious pluralism in 1851 upon the relationship between religious pluralism in 1676 and religious practice in 1851 can be highlighted in a different way. Just as the correlation analysis was refined by controlling for religious diversity in 1851, the Mann-Whitney analysis (table 11) can be extended by examining the differences in the index of attendances between parishes with religious diversity in 1676 *only* (i.e. no diversity in 1851) and parishes with religious diversity in 1851 *only* (i.e. no diversity in 1676).³⁴ The results, shown in table 14, are most striking. Whichever measure of religious diversity in 1676 was used, the mean index of attendances in 1851 for parishes with religious diversity in 1676 *only* hovered around the 45% mark. In contrast, the mean index of attendances in parishes with religious diversity in 1851, but not in 1676, lay between 72% and 82%. The difference (in mean rank) was extremely strong and significant in all three cases (as revealed by the 'z' statistic). Again, the result was strongest when both Catholic and Protestant diversity were combined in the 'total religious diversity' measure (i.e. the third part of the analysis shown in table 14).

The contrasting influences of religious pluralism in 1676 and 1851 upon the index of attendances in 1851 can be further elucidated. Table 15 shows the results of a Kruskal-Wallis test examining the differences in the mean rank of the index of attendances between *four* groups of parishes: those with religious diversity in 1676 *only*, those without any religious diversity at either date, those with religious diversity in 1676 *and* 1851, and those with religious diversity in 1851 *only*.³⁵

³⁴ No 'religious diversity' refers to a diversity score of zero. With the 1851 data this did not necessarily mean that there was no dissent, though in the large majority of cases (826 parishes) this was the case. In 104 parishes a diversity score of zero arose because a single dissenting denomination received *all* the religious attendances recorded in that parish.

³⁵ In this analysis only the 'total religious pluralism' measure is used to measure religious diversity in 1676.

Table 14**A comparison of how the average index of attendances varied according to the presence of religious diversity in 1676 and 1851****a) How the index of attendances varied according to the presence and absence of Protestant dissent in 1676 and religious diversity in 1851:**

	Parishes with religious diversity in 1851 but without Protestant diversity in 1676 (n=282)	Parishes with Protestant diversity in 1676 but without religious diversity in 1851 (n=278)
Mean index of attendances in 1851	78.1%	44.7%
Mean rank index of attendances in 1851	356.3	203.6
Overall Mann-Whitney test statistic (corrected for ties) $z = - 11.2^{**}$ ($p = 0.0000$)		

b) How the index of attendances varied according to the presence and absence of Catholicism in 1676 and religious diversity in 1851:

	Parishes with religious diversity in 1851 but without Catholic diversity in 1676 (n=671)	Parishes with Catholic diversity in 1676, but without religious diversity in 1851 (n=88)
Mean index of attendances in 1851	72.8%	45.3%
Mean rank index of attendances in 1851	402.7	207.1
Overall Mann-Whitney test statistic (corrected for ties) $z = - 7.9^{**}$ ($p = 0.0000$)		

c) How the average index of attendances varied according to the presence and absence of 'total religious diversity' in 1676 and religious diversity in 1851:

	Parishes with religious diversity in 1851, but without any religious diversity in 1676 (n=238)	Parishes with some form of religious diversity in 1676, but without religious diversity in 1851 (n=314)
Mean index of attendances in 1851	81.3%	45.4%
Mean rank index of attendances in 1851	365.8	208.8
Overall Mann-Whitney test statistic (corrected for ties) $z = - 11.5^{**}$ ($p = 0.0000$)		

** indicates that the 'Z' statistic exceeded the 99% confidence level.

Table 15

How the average index of attendances varied according to the presence and absence of religious diversity in 1676 and 1851

A Kruskal-Wallis Analysis

	Religious diversity in 1676 only (n = 314)	No religious diversity at either date (n = 207)	Religious diversity in 1676 and 1851 (n = 623)	Religious diversity in 1851 only (n = 238)
Mean index of attendances	45.4	60.6	65.8	81.3
Mean rank index of attendances	467.0	621.4	755.5	881.1

Kruskal-Wallis Test statistic:

Chi-squared = 175.5 (p = 0.000)**

**** Indicates that the chi-squared statistic exceeded 99% confidence level.**

Note

In this table the presence of 'religious diversity' is defined as a diversity measure of greater than zero. In 1676 the diversity measure referred to is the 'total religious diversity' measure.

As table 15 clearly shows there was a steady increase in both the mean and the mean rank of the index of attendances as one moves along the table from parishes in which religious pluralism was present only in 1676 (the extreme left-hand column), to parishes in which religious pluralism was present only in 1851 (the extreme right-hand column).

The independence of the statistical influence of religious diversity in 1676 on the index of attendances - over and above the effects of religious pluralism in 1851 and the socio-economic environment - can be further clarified by regression. Two regression analyses were carried out to model the index of attendances. The first analysis used just the eighteen core socio-economic indicators as predictor variables.³⁶ This analysis is reported first to provide a 'benchmark' from which to examine the greater statistical power of the religious pluralism variables. As shown in table 16, this first analysis, using just the socio-economic variables, modelled the patterns of religious observance extremely poorly, 'explaining' just 2% of the variance of the index of attendances ($R^2 = 0.02$). The regression was repeated adding the religious diversity measures for both 1676 and 1851 to the eighteen socio-economic variables used as predictor variables in the previous analysis. The results are shown in table 17. This second analysis was also a poor predictor of religious observance, but a considerable improvement upon the first ($R^2 = 0.08$).³⁷ As expected, the beta weight of religious diversity in 1851 was positive while the beta weight total religious diversity in 1676 was negative. Once again it became clear that the eighteen socio-economic variables exerted little visible influence on the patterns of church-going, reinforcing the findings of the analysis of the first further research question presented in section 4.2.³⁸

³⁶ This is the same analysis as reported in table 9, other than the fact that it is restricted to the Compton sub-sample of parishes.

³⁷ As noted earlier one can normalise the index of attendances by logarithmic transformation. Using the natural log of the index of attendances as the dependent variable yielded the following regression results: using just the eighteen socio-economic variables as predictor variables, adjusted $R^2 = 0.03$; using the socio-economic variables and the diversity measures for 1676 and 1851, adjusted $R^2 = 0.14$. Both religious variables were selected in the analysis. As expected, religious diversity in 1676 appeared a negative influence, while religious diversity in 1851 appeared a positive influence.

³⁸ A very similar trend emerged in the analysis using the weighted dataset. The regression using just the socio-economic variables was again extremely weak (adjusted $R^2 = 0.09$). Once again the predictive power was substantially improved by the addition of the religious diversity variables (adjusted $R^2 = 0.15$).

Table 16

Linear regression to demonstrate the influence of selected socio-economic variables upon the index of attendances in 1851: an analysis of parishes with Compton data

Regression analysis with selected socio-economic variables as predictor variables and the index of attendances as the dependent variable.		
N = 1,322		
Variable selection based on minimum significance of 'T' at 95%		
<u>Variables in the equation</u> (in order of 'β')	<u>β</u>	<u>T (sig.)</u>
Mean household size in 1851	- 0.09	- 3.1 (0.0018)
Total servants as a percentage of the total population (1831)	+ 0.09	+ 3.2 (0.0014)
Occupiers not employing labourers as a percentage of all occupiers (1831)	+ 0.07	+ 2.9 (0.0077)
Mean annual population growth rate 1831-51	- 0.06	- 2.3 (0.0237)
Regression result: adjusted R² = 0.02		

Table 17

Linear regression to compare the influence of religious pluralism upon the index of attendances with the influence of the socio-economic variables

<p>Regression analysis with selected socio-economic variables and the religious diversity measure for 1676 and 1851 as predictor variables and the index of attendances as the dependent variable.</p> <p>N = 1,321</p> <p>Variable selection based on minimum significance of 'T' at 95%</p>		
<u>Variables in the equation</u> (in order of 'β')	<u>β</u>	<u>T (sig.)</u>
Religious diversity measure (1851)	+ 0.27	+ 9.1 (0.0000)
Mean annual population growth rate 1831-51	- 0.12	- 4.6 (0.0000)
Percentage of families in trade (1831)	- 0.11	- 3.8 (0.0002)
Total servants as a percentage of the total population (1831)	+ 0.11	+ 4.0 (0.0001)
'Total religious diversity' in 1676	- 0.08	- 2.9 (0.0041)
Sex ratio: males to females (1811)	- 0.06	- 2.2 (0.0293)
<p>Regression result: adjusted R² = 0.08</p>		

To conclude this section of analysis investigating the second hypothesis, the picture emerging is of the clear negative influence of religious diversity in 1676 upon religious practice in 1851. This negative influence was independent of the socio-economic variables or religious diversity in 1851. As far as statistically possible, the analysis has suggested that one can trace a causal relationship between religious pluralism in 1676 and religious practice in 1851.

An unexpected finding of the analysis was the positive association between religious pluralism in 1851 and religious practice in 1851. This is a finding unanticipated by the conceptual framework of this thesis, and a finding congruent with a major body of work which disputes fundamentally secularisation theory - the rational choice theorisation of religion. The relationship between religious pluralism in 1851 and religious practice in 1851 is therefore of considerable interest, and is analysed in the following section (4.4), and is a theme returned to in chapter 5.

4.4 Examining the Further Research Questions (ii) and (iii)

Thus far the two core hypotheses and the first further research question have been investigated, and, as far as was deemed to be statistically sensible, tested empirically. It has been shown that religious diversity in 1851 showed strong and consistent links with urban/industrial environments (Hypothesis (i)). The index of attendances showed much weaker and more ambiguous relationships, with the socio-economic environment (further research question (i)). Lastly, it has been shown that religious diversity in 1676 exerted a negative influence on the index of attendances in 1851 (Hypothesis (ii)).

Two further research questions remain. First, it became apparent in the previous section (4.3) that the intensity of religious pluralism in 1851 appeared to be positively associated with religious practice in 1851. It is notable that Berger's ideas have been challenged empirically by cross-sectional analysis using

contemporaneous measures of religious pluralism and religious practice.³⁹ The nature of the relationship between religious pluralism in 1851 and the index of attendances is therefore an extremely pertinent one. This forms further research question (i) in figure 6 and is considered presently.

Secondly, there is the nature of the relationship between the patterns of religious diversity in 1676 and 1851. To recall, it was argued, *a priori*, that since the regional economy of England and Wales changed markedly between 1676 and 1851, that this would have led both to a lack of relationship between religious practice and the socio-economic environment in 1851 (already demonstrated in the analysis of further research question (i)), and also to a lack of relationship between the geography of religious pluralism in 1676 and the geography of religious pluralism some 175 years later in 1851. This latter issue forms the third further research question, and is considered latterly.

Further research question (ii): the relationship between religious pluralism in 1851 and the index of attendances in 1851.

It is difficult to describe the 'general' relationship between religious diversity in 1851 and the index of attendances in 1851. At first sight, the associations between religious diversity in 1851 and the index of attendances vary markedly between the registration-district data and the parish data. For the total parish sample, the correlation between religious diversity and the index of attendances was positive and statistically significant ($r_p = + 0.12$, $p = 0.000$, $n = 2,260$).⁴⁰ For the corresponding 147 registration districts, the correlation was negligible ($r_p = - 0.00$, $p = 0.973$, $n = 147$). For all 624 districts, the association was weak and positive ($r_p = + 0.07$, $p = 0.090$, $n = 624$).

³⁹ This point is expanded upon in the critique of the rational choice approach offered in chapter 5 of this thesis.

⁴⁰ The Pearson correlation coefficient is given in preference to the Spearman coefficient in this instance, since these results are subsequently compared to correlations obtained using the *weighted* dataset. Appendix 6 details the problem of non-parametric correlation of weighted data.

As already demonstrated, the two datasets can be made more readily statistically comparable by *weighting* the data (see Appendix 6). Once both datasets were weighted by the population, the correlation results became extremely similar - a statistically significant *negative* correlation between religious diversity in 1851 and the index of attendances.⁴¹ Thus, in both weighted datasets it appeared quite unambiguous that religious diversity in 1851 was negatively related to the index of attendances across the fifteen registration counties or England and Wales.

Thus, for the parish level data especially, there was a marked contrast between the unweighted and weighted correlation between religious pluralism and religious practice.⁴² Without becoming embroiled in the minutiae of the differences between the weighted and unweighted data, the two analyses have been presented to show that it is very difficult to argue that there is a strong or consistent relationship between religious diversity and religious practice. The two variables were never particularly closely associated (especially in the registration district data, which covers the whole of England and Wales), and in the parish-level data, the nature of the association varied according to whether the data were weighted. The absence of any clear overall relationship between religious diversity in 1851 and the index of attendances can be demonstrated more visually, in the form of scatterplots of the two variables. Figure 7 shows the scatterplots of religious diversity against the index of attendances for both the entire parish and registration-district datasets.⁴³ In both cases it can be seen (from the random nature of the 'scatter' and the low 'R squared' coefficient of the best-fit lines) that religious pluralism and religious practice are not at all closely linked.

⁴¹ For the weighted parish data, $r_p = -0.12$, $p = 0.000$, $n = 2,260$; for the corresponding weighted registration-district data, $r_p = -0.22$, $p = 0.009$, $n = 147$; for the entire registration-district data, $r_p = -0.06$, $p = 0.118$, $n = 624$.

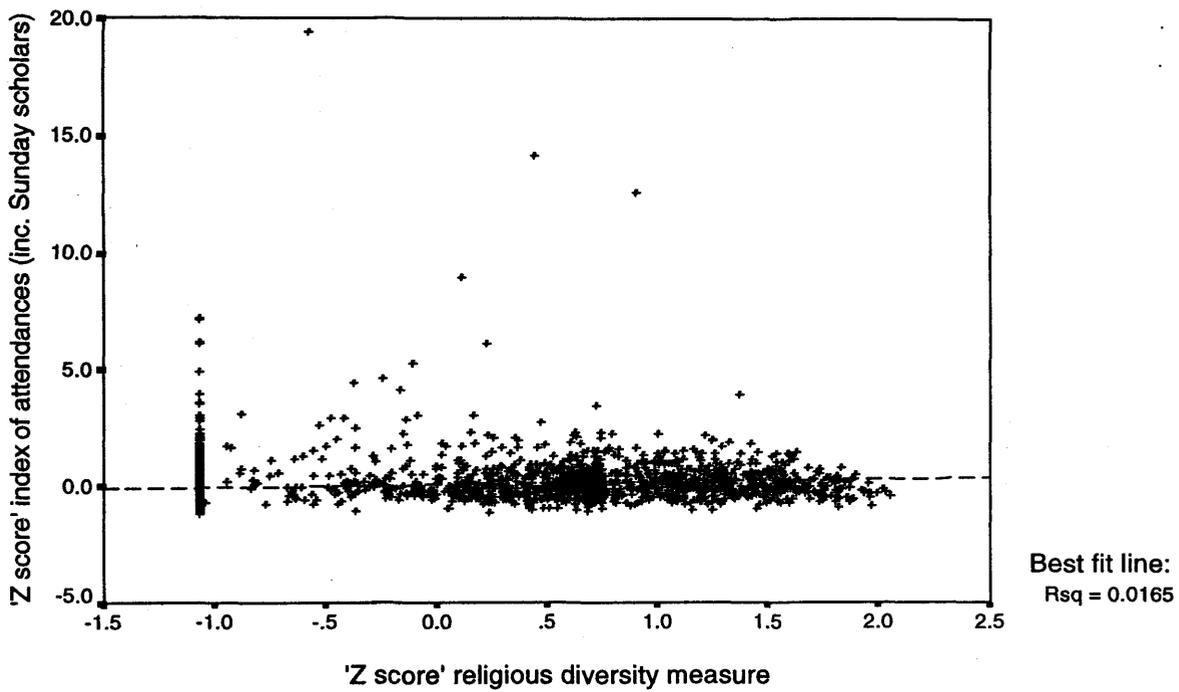
⁴² The reasons for this contrast can be illuminated by examining the 'extreme' parishes in terms of those containing low populations (and low population densities). There was a considerable number of sparsely populated parishes, for example, 237 parishes contained population densities of less than 25 people per square kilometre. Many of these 'rural' parishes contained very low religious diversity. Many also contained low indices of attendances. This one 'extreme' loses much of its statistical influence when the data are weighted.

⁴³ Both variables were standardised into 'z scores' to make the plots more interpretable. The 'z score' of a variable always has a mean of zero and a standard deviation of 1.

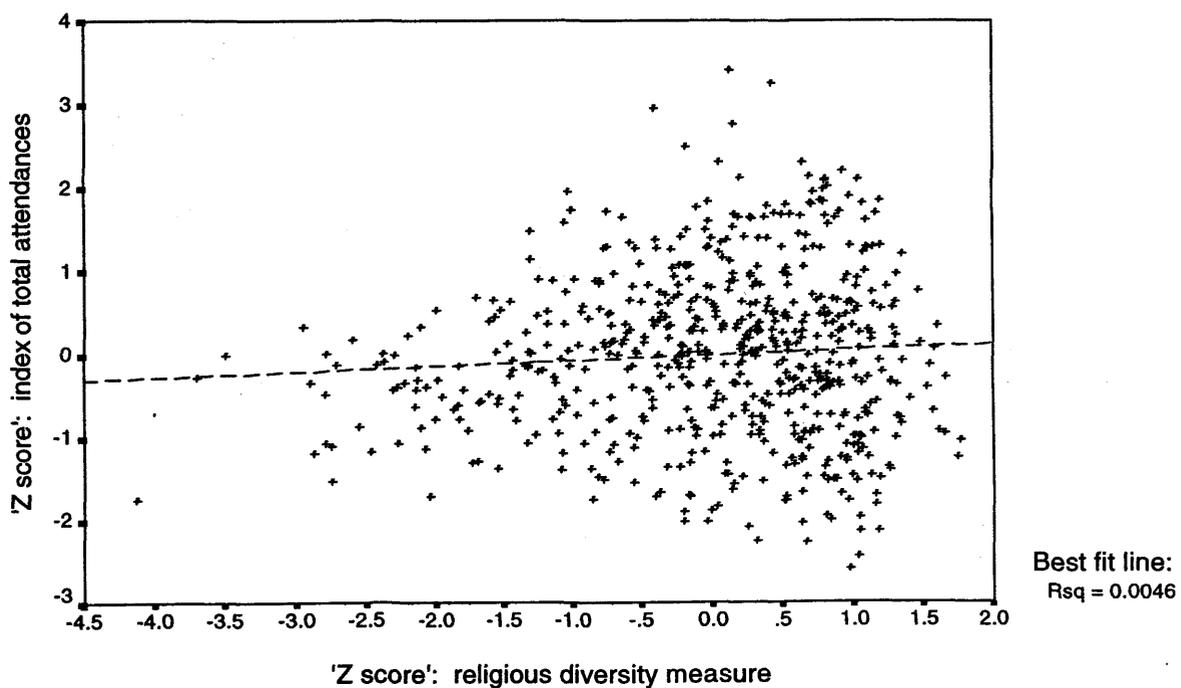
Figure 7

The relationship between religious diversity in 1851 and the index of attendances in 1851 expressed graphically

a) The parish-level picture (n = 2,262)



b) The registration-district picture (n = 624)



This interpretation appears to conflict with the finding in section 4.3, that religious diversity appeared quite closely and positively associated with the index of attendances (see especially table 17). To account for this apparent discrepancy, one must be recall that this part of the analysis (i.e. section 4.3) referred only to the Compton sub-sample of 1,382 parishes (i.e. 61% of the total parish dataset). To recall, this Compton sub-sample of parishes excluded the entire registration counties of Dorset, Lancashire, and Northumberland and parts of the twelve other counties. In this Compton sub-sample, as with the parish dataset as a whole, the *unweighted* correlation between religious diversity in 1851 and the index of attendances was positive and statistically significant ($r_p = + 0.15$, $p = 0.000$, $n = 1,383$). Most importantly, even once the data were weighted, the correlation *remained* significant and positive ($r_p = + 0.16$, $p = 0.000$, $n = 1,383$). A very similar picture can once again be traced with the corresponding registration-district data (unweighted correlation: $r_p = + 0.30$, $p = 0.003$, $n = 98$; weighted correlation: $r_p = + 0.14$, $p = 0.158$, $n = 98$).⁴⁴

Thus, in the Compton sub-sample one can trace a marked positive association between religious pluralism and religious practice in 1851. The distinctiveness of the Compton sub-sample highlights the fact that the relationship between religious pluralism in 1851 and religious practice in 1851 was by no means simple or stable geographically. Table 18 shows the associations between religious diversity in 1851 and the index of attendances for the fifteen counties with parish-level data. In the majority of counties there was a statistically significant positive correlation between the diversity measure and the index of attendances. In Sussex, Rutland and Caernarvonshire there was a positive, but statistically insignificant association. In Lancashire, the association was negative (though statistically insignificant). As already noted, the Compton sample excluded all Lancashire parishes, and this may present a clue as to why the correlation between religious diversity and the index of attendances remained positive in the Compton sub-sample of parishes even once the data were weighted.

⁴⁴ One would not expect an exact correspondence between the parish and registration-district data for the Compton sub-sample. This is because the Compton data rarely covered *all* parishes within any given registration district, and excluded substantial parts of the twelve registration counties.

Table 18**The associations between religious diversity and the index of attendances in 1851:
an analysis by county**Spearman's rank correlations (r_s)

County (number of parishes)	Correlation between the index of attendances and religious diversity in 1851
Anglesey (n = 63)	$r_s = + 0.32^*$ (p = 0.013)
Bedfordshire (n = 120)	$r_s = + 0.43^{**}$ (p = 0.000)
Caernarvonshire (n = 57)	$r_s = + 0.03$ (p = 0.837)
Cambridgeshire (n = 143)	$r_s = + 0.36^{**}$ (p = 0.000)
Cardiganshire (n = 90)	$r_s = + 0.30^{**}$ (p = 0.004)
Derbyshire (n = 104)	$r_s = + 0.23^*$ (p = 0.017)
Dorset (n = 257)	$r_s = + 0.36^{**}$ (p = 0.000)
Lancashire (n = 76)	$r_s = - 0.01$ (p = 0.931)
Leicestershire (n = 219)	$r_s = + 0.14^*$ (p = 0.034)
Monmouthshire (n = 107)	$r_s = + 0.52^{**}$ (p = 0.000)
Northumberland (n = 88)	$r_s = + 0.39^{**}$ (p = 0.000)
Rutland (n = 55)	$r_s = + 0.16$ (p = 0.254)
Suffolk (n = 440)	$r_s = + 0.45^{**}$ (p = 0.000)
Sussex (n = 277)	$r_s = + 0.11$ (p = 0.075)
East Riding (n = 164)	$r_s = + 0.33^{**}$ (p = 0.000)

** Indicates that the correlation coefficient exceeded the 99% confidence level.

* Indicates that the correlation coefficient exceeded the 95% confidence level.

What made Lancashire unique amongst the 15 registration counties was the degree of industrial development present in the mid-nineteenth century. For example, the average percentage of the total population employed in manufacturing in the Lancashire parishes was almost 5%; in the other fourteen counties the corresponding figure was less than 1%. For this reason, the distinctiveness of Lancashire presented a clue that it might have been the most industrial and urban contexts in which religious diversity was not associated with higher, but rather with lower, indices of attendances. Table 19 divides the parish and registration-district data into groups based upon population density. These groups were arbitrarily classified as 'highly rural', 'rural', 'mixed', 'urban' and 'highly urban' according to the density of the population.⁴⁵ The two datasets displayed highly similar trends. In both cases religious diversity was not significantly linked to the index of attendances in 'highly rural' areas. In 'rural' areas religious diversity and the index of attendances were strongly and positively linked. In mixed areas this link was even closer, and the correlations of the parish dataset and the registration-district dataset both achieved strong statistical significance. In both cases the strength of the association was markedly lower in 'urban' areas, and the registration-district data showed a very weak negative association. In the 'highly urban' areas the association between religious diversity and the index of attendances was more strongly negative in both cases, and the correlation achieved statistical significance in the case of the parish dataset.

As table 19 makes clear, the association between religious diversity and the index of attendances was strongest in the sizeable majority of areas with around average population densities. At the two extremes of very low (and more markedly) very high population densities, the association ran in the opposite direction - religious diversity was generally highest where the index of attendances was lowest.

⁴⁵ The scales defining these groups were slightly different in each case, owing to the greater range of population densities present in the parish-level data.

Table 19**How the relationship between religious diversity and the index of attendances varied by population density****a) The parish data (N = 2,214)**

Description	Spearman correlation between religious diversity and the index of attendances
'Highly rural' (less than 15 people per square kilometre) n = 66	$r_s = - 0.16$ ($p = 0.188$)
'Rural' (15 to 50 people per square kilometre) n = 911	$r_s = + 0.24^{**}$ ($p = 0.000$)
'Mixed' (50 to 150 people per square kilometre) n = 1042	$r_s = + 0.38^{**}$ ($p = 0.000$)
'Urban' (150 to 500 people per square kilometre) n = 143	$r_s = + 0.21^*$ ($p = 0.013$)
'Highly urban' (over 500 people per square kilometre) n = 52	$r_s = - 0.31^*$ ($p = 0.025$)

b) The registration-district data (all districts, N = 624)

Description	Spearman correlation between religious diversity and the index of attendances
'Highly rural' (less than 30 people per square kilometre) n = 32	$r_s = + 0.27$ ($p = 0.138$)
'Rural' (30 to 50 people per square kilometre) n = 78	$r_s = + 0.23^*$ ($p = 0.044$)
'Mixed' (50 to 150 people per square kilometre) n = 351	$r_s = + 0.24^{**}$ ($p = 0.000$)
'Urban' (150 to 1000 people per square kilometre) n = 92	$r_s = - 0.01$ ($p = 0.574$)
'Highly urban' (over 1000 people per square kilometre) n = 71	$r_s = - 0.10$ ($p = 0.403$)

** Indicates that the correlation coefficient exceeded the 99% confidence level.

* Indicates that the correlation coefficient exceeded the 95% confidence level.

Table 19 makes it even clearer why the relationship between religious diversity and the index of attendances was positive in the Compton sub-sample of parishes and registration districts (even when the data were weighted). Of the 52 parishes in the 'highly urban' group 14 (26.9%) were in Lancashire. The Compton sub-sample contained 61.1% of the total number of parishes in the dataset, but contained only 38.5% (20) of the highly urban parishes, and 47.0% (31) of the highly rural areas.⁴⁶

The difficulty in attempting to propose a single definitive relationship from the cross-sectional analysis of religious pluralism and religious practice hinges upon the issues of 'non-stationarity', and the 'modifiable areal unit problem' which are major concerns within contemporary spatial analysis.

Some of the recent developments within geographical analysis, especially *geographically weighted regression* could be used to constructively portray the geographical variations in the relationship between religious pluralism and religious practice with far greater elegance than is possible with conventional statistical analysis, or mapping regression residuals in the manner used to construct map 5.⁴⁷ Such a technique could (and in the British context, probably would) reveal that religious pluralism was both positively and negatively related to the level of religious participation in different parts of England and Wales in 1851. As is argued in chapter 5 of this thesis, those who rely on cross-sectional analysis (especially of spatially aggregated data) to propose cause and effect between variables are open to criticisms of ecological fallacy.

Further research question (iii): the geographical continuity of religious diversity between 1676 and 1851.

It was argued at the beginning of this chapter that the great changes in the regional economic geography of England and Wales between 1676 and 1851

⁴⁶ These figures refer to the 2,262 parishes with non-zero attendance data.

⁴⁷ Geographically weighted regression is largely a brainchild of the department of geography, University of Newcastle. See C. Brunsdon, A.S. Fotheringham and M.E. Charlton, 'Geographically weighted regression - a method for exploring spatial nonstationarity', *Geographical Analysis*, 28 (1996), 281-298.

would lead one to argue, *a priori*, that to the extent to which religious pluralism responded to these economic changes (as one would predict from figure 5), one would not expect the geography of religious diversity in 1676 to approximate closely the geography of religious diversity in 1851. The following analysis examines the degree of continuity and change in the geography of religious pluralism between 1676 and 1851. It is important to reiterate that to demonstrate a low degree of continuity does nothing to prove that this occurred *because* religious pluralism changed with the changing economic geography over this period. To prove this point would require parish-level socio-economic data for the late seventeenth century, which was not available for this present research.

The main body of work examining the continuity of religious affiliation lies within the realm of local history, most notably the work of Margaret Spufford.⁴⁸ The local focus of such approaches has tended to leave unanswered questions of continuity and change over longer periods of time and over wider areas. The methodology used by local historians has tended to trace familial continuity in areas of high dissenting strength using primary sources.⁴⁹ While this method is clearly unparalleled in its ability to reconstruct the world in which dissenters lived, it is perhaps far from ideal if one's aim turns to a consideration of continuity and change over wider time-spans and larger areas. After all, it will rarely be possible to reconstruct inter-generational religious 'biographies' for all but a small percentage of people in quite small areas. The resulting information can thereby only hint at the wider levels of religious continuity. In addition, a family for which records survive showing continuity of religious affiliation may be easier to trace than one showing discontinuity, so such methods may have a latent bias towards discovering continuity.

To examine the geographical continuity of religious affiliation using quantitative methods raises different, but equally serious, methodological problems; quite apart from the specific problems of comparing disparate historical sources. Many of the potential criticisms of a quantitative approach to the study of

⁴⁸ Spufford, *Rural Dissenters*.

⁴⁹ See Spufford, *Rural Dissenters*, especially pp. 273-331.

religious continuity can be discounted if the interpretation of the analysis is explicitly limited to *geographical* continuity. Using a quantitative approach it is much easier to investigate geographical, as opposed to familial, continuity. In the following discussion no assumptions are made about *familial* continuity, suffice to say that the two phenomena of geographical and familial continuity may have displayed similar trends in many places between 1676 and 1851. It certainly has been made clear that certain Catholic landed families formed a nucleus of continuity, both geographically and genealogically.⁵⁰ With regards to Protestant dissent, when the following analysis suggests a very limited *geographical* continuity, the question remains whether old dissenting families were simply quite mobile, or whether familial continuity of old dissent was also low between 1676 and 1851. It is certainly interesting to note that P. Spufford and N. Evans reported a very marked lack of mobility amongst Lollard dissenters in the sixteenth and seventeenth centuries in a number of English counties.⁵¹

Analysis.

The correlation between the total religious diversity measure of 1676 and the 1851 diversity measure, although positive and statistically significant, was really quite weak ($r_s = + 0.08$, $p = 0.002$, $n = 1,382$). Thus, the intensity of religious pluralism in 1676 was only quite weakly associated with the intensity of religious pluralism in 1851.

To pursue the issue of a lack of religious continuity in greater detail, one needs to delve beneath the generic measure of religious diversity and examine the continuity of denominational *affiliation* in greater detail. This can be achieved because measures of both Catholic and dissenting support can be created for both 1676 and 1851. It is known what Protestant denominations existed in 1676, and these can be examined with respect to their strength 175 years later (these

⁵⁰ A. Crockett and K.D.M. Snell, 'From the 1676 Compton Census to the 1851 Census of Religious Worship: religious continuity or discontinuity?', Rural History: Economy, Society, Culture, 8:1 (1997), 55-89.

⁵¹ See P. Spufford, 'The comparative mobility and immobility of Lollard descendants in early modern England', in Spufford, Rural Dissenters, pp. 309-331; N. Evans 'The descent of dissenters in the Chiltern Hundreds', in Spufford, Rural Dissenters, pp.288-308.

denominations are henceforth collectively labelled as 'old dissent').⁵² Likewise the changing geography of Catholicism can be elucidated. The issues of the geographical continuity of religious affiliation is of considerable historical interest in its own right, and many of the issues raised are beyond the realm of this thesis.⁵³

Detailed historical work has pieced together the overall trends of religious affiliation of old dissent and Catholicism over time, but reveals little of the changing geographical patterns.⁵⁴ Thus, one can estimate (with some certainty) that the Catholic population of England and Wales was around 540,000 in 1676, and shrank steadily to a low point of about ten percent of this figure (around 55,000) by 1800. As a result of Irish immigration, the number of Catholics subsequently increased massively, to around 900,000 by 1851. Similar trends can be revealed for the old dissent denominations, namely a decline from 1676 to the late eighteenth century followed, in certain areas, by a revival associated with the rise of Methodism.

Such trends over time reveal that the issue of continuity of both Catholicism and old dissent between 1676 and 1851 must be interpreted against the background that both phenomena were stronger at the two dates considered here (i.e. 1676 and 1851) than at almost any time in-between. Thus an 'absolute' geographical continuity - in terms of the continuous presence of either Catholicism or old dissent - is unlikely in all parishes. The different processes affecting the histories of Catholicism and old dissent make a pertinent analysis of continuity rather different in each case. For Catholicism, the important issue is the degree to which there was a local continuity of 'native' Catholicism (albeit against a background of absolute decline), once the issue of Irish immigration has been accounted for. A secondary question, not touched upon in this thesis, is whether

⁵² The denominations comprising old dissent are listed in Appendix 1.

⁵³ The issue of continuity and change in the geography of religious affiliation is the focus of Crockett and Snell, 'Continuity or discontinuity?', and A. Crockett and K.D.M. Snell, forthcoming, 'From Henry Compton to Horace Mann: stability or relocation in Catholicism and Nonconformity, and the growth of religious pluralism', forthcoming in Snell and Ell, *Victorian Religion*.

⁵⁴ The most extensive piece of research remains R. Currie, A.D. Gilbert and L. Horsley, *Churches and Churchgoers: Patterns of Church Growth in the British Isles Since 1700* (Oxford, 1977).

the residual presence of 'native' Catholicism had any impact upon the geography of settlement of Irish immigrants.

The method used to compare the Compton data with the 1851 data was to compare the percentage of Compton nonconformists with the percentage share of old dissent in 1851.⁵⁵ Likewise, the percentage of Compton Papists could be compared with the Roman Catholic percentage share in 1851. Such *ratio methods* were used to minimise the uncertainties arising from the fact that the Censuses recorded information differently.⁵⁶ The percentage share measure was chosen for the 1851 data to allow the measures at both dates, as far as possible, to refer to the religiously active community.⁵⁷

Table 20 shows the correlations between the two sets of measures for the 12 counties with Compton data. The results suggest that there was a greater degree of continuity of Catholicism than nonconformity. The correlations in the bottom row of the table show that the overall degree of association for Catholicism was over twice as strong as for nonconformity. In three of the counties - Cambridgeshire, Derbyshire and Leicestershire - there were strong correlations between the measures of Catholicism at the two dates (all exceeding the 99% confidence level). The parishes of Suffolk yielded a weaker, but substantial, correlation (exceeding the 95% confidence level). The correlations obtained for Monmouthshire and Sussex fell just short of statistical significance. Considering the virtual absence of Papists in the Welsh counties other than Monmouthshire in 1676, only in Bedfordshire, Rutland (where there were no Catholic attendances in 1851) and the East Riding displayed what could be termed a meaningful discontinuity in the geography of Catholicism at the two dates.

The degree of continuity revealed by the two measures of dissent was much more limited. Only in Leicestershire and the East Riding were there strong

⁵⁵ As already noted, the denominations taken to comprise old dissent are listed in Appendix 1.

⁵⁶ The full logic behind the use of ratio methods is presented in Crockett and Snell, 'Continuity or discontinuity?'

⁵⁷ It was also possible to use the Roman Catholic and old dissent index of attendances in place of the percentage share measures. The two measures are extremely similar. The percentage share was the preferred measure because of its clear relation to the *religiously active* community.

Table 20

The geographical continuity of support for nonconformity in 1676 through to old dissent in 1851 and Papism in 1676 through to Roman Catholicism in 1851: an analysis by county

Spearman's rank correlations (r_s)

	Correlation between percentage Papist in 1676 and Roman Catholic percentage share of attendances in 1851	Correlation between percentage nonconformists in 1676 and old dissent percentage share of attendances in 1851
Anglesey (n = 54)	no Compton Papists	$r_s = -0.03$ $p = 0.847$
Bedfordshire (n = 116)	$r_s = -0.03$ $p = 0.720$	$r_s = +0.07$ $p = 0.466$
Caernarvonshire (n = 49)	$r_s = -0.07$ $p = 0.621$	$r_s = +0.08$ $p = 0.565$
Cambridgeshire (n = 130)	$r_s = +0.34^{**}$ $p = 0.000$	$r_s = +0.06$ $p = 0.529$
Cardiganshire (n = 72)	no Compton Papists	$r_s = +0.18$ $p = 0.122$
Derbyshire (n = 86)	$r_s = +0.32^{**}$ $p = 0.002$	$r_s = +0.15$ $p = 0.164$
Leicestershire (n = 207)	$r_s = +0.27^{**}$ $p = 0.000$	$r_s = +0.22^{**}$ $p = 0.002$
Monmouthshire (n = 74)	$r_s = +0.22$ $p = 0.054$	$r_s = +0.23^*$ $p = 0.047$
Rutland (n = 49)	no Catholics in 1851	$r_s = +0.02$ $p = 0.888$
Suffolk (n = 186)	$r_s = +0.15^*$ $p = 0.043$	$r_s = +0.12$ $p = 0.100$
Sussex (n = 256)	$r_s = +0.12$ $p = 0.051$	$r_s = +0.12$ $p = 0.060$
East Riding (n = 103)	$r_s = +0.12$ $p = 0.236$	$r_s = +0.33^{**}$ $p = 0.001$
All Counties (n = 1,382)	$r_s = +0.21^{**}$ $p = 0.000$	$r_s = +0.09^{**}$ $p = 0.001$

** and dark shading indicate that the correlation coefficient exceeded the 99% confidence level.
* and pale shading indicate that the correlation coefficient exceeded the 95% confidence level.

correlations (exceeding the 99% confidence level). Monmouthshire showed a weaker but substantial correlation (exceeding the 95% confidence level). The correlation in Sussex fell just short of statistical significance. Elsewhere the correlations were very weak and statistically insignificant.

The interpretation of the low size of almost all the correlation coefficients shown in table 20 is that there were no substantial pockets of continuity of either old dissent or Catholicism in any of the twelve counties. Any continuity was especially limited in the case of old dissent. This interpretation could not be accepted at face value, however. This is because ratio methods do not overcome all the problems involved in comparing the two historical sources. A major inconsistency arises from the fact that the 1851 Religious Census measured *attendances*, which were always 'concentrated' into the parish containing the church or the chapel. In contrast, the Compton census measured people in their parish of *residence*. This difference leads to an unknown degree of 'spatial concentration' between 1676 and 1851, the degree of this concentration depends upon the extent to which people systematically left their parishes of residence in 1851 to converge on a single parish containing the place of worship of their denomination (an issue considered in section 3.1 of this thesis).

Cartographic evidence.

Precisely because of the unknown extent of any 'spatial concentration', it could be argued that parish-upon-parish comparisons, such as the correlations already presented, would inevitably under-estimate the extent of any continuity.⁵⁸ To address this issue, the measures of Catholic and nonconformist strength were mapped for 1676 and 1851. Parish maps were created for Anglesey, Caernarvonshire, Monmouthshire, Derbyshire, the East Riding and Leicestershire. If it was the 'spatial concentration' inherent in comparing the sources which masked the discovery of high levels of continuity, this should be immediately obvious from the parish maps of these six counties. Cartographic inspection revealed no evidence for anything other than the very low degree of continuity

⁵⁸ These ideas are presented in greater detail in Crockett and Snell, 'Continuity or discontinuity?'

suggested by the correlation analysis. In other words, there was evidence for a reasonable level of Catholic continuity, especially given the complicating effect of Irish immigration, but there was very little evidence of any widespread continuity of Protestant dissent in any of the study counties.

To illustrate this point map 6 shows the parochial distribution of the percentage of dissenters in 1676 and the old dissent percentage share in 1851 in Leicestershire. Leicestershire represents the best single 'test-case' with which to show any evident continuity, since, to recall from table 20, it was the only county displaying statistically significant correlations for both Catholicism and old dissent.⁵⁹ If the relatively high levels of correlation were barely visible on the ground in Leicestershire, then one could be fairly sure the other counties would be worse.⁶⁰ Map 6 reveals very little continuity of local support for old dissent between the seventeenth and nineteenth centuries. For example, the Leicestershire Wolds (along the north-east border), and parts of the Rutland border were both heartlands of old dissent in 1676, but few parishes in these areas recorded any old dissenting presence in 1851. Conversely, old dissent appeared much stronger in parts of the south and west of the county in 1851 than in 1676. The 1829 and 1851 distributions of old dissent were highly similar (see Appendix 2 of this thesis), suggesting that the redistribution of old dissent occurred well before the mid-nineteenth century.

The level of Catholic support was mapped for Leicestershire, as shown in maps 7 and 8. It can be seen that Catholics were still widespread in Leicestershire in 1676 - long after the Reformation. However, over the following century intense legal persecution and public intolerance caused the decline in Catholicism to a few (mostly isolated) enclaves by 1829. As shown in map 7, these were the parishes of Eastwell, Eaton, Husband's Bosworth and Hinckley. As documented elsewhere,

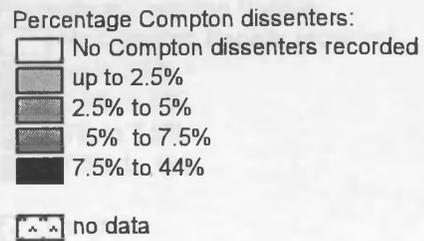
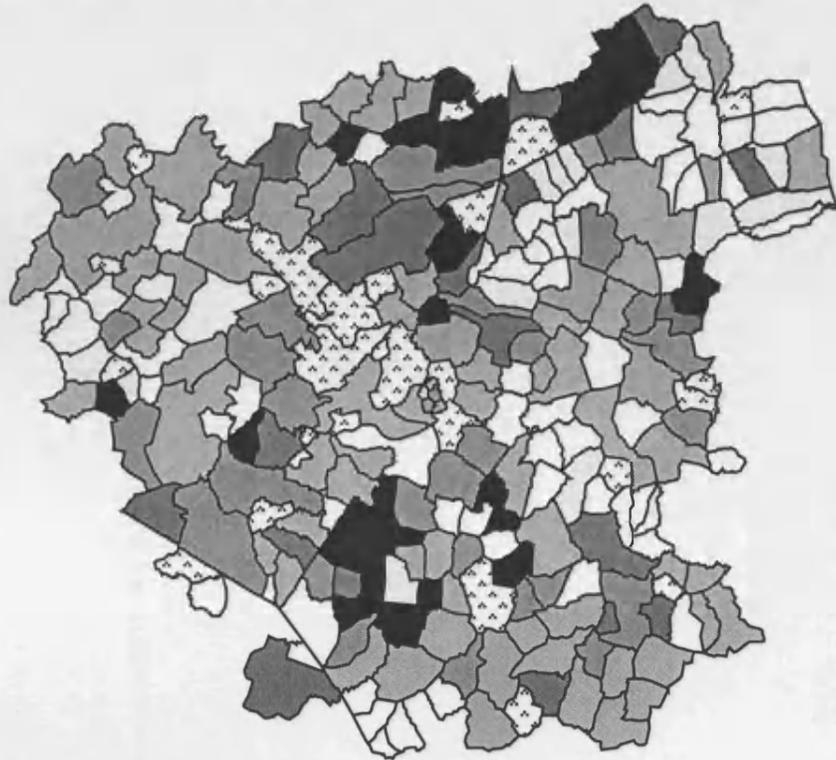
⁵⁹ Leicestershire also had the advantage of computerised data for the Constable's return of 1829, an independent source with which to substantiate the accuracy of the 1851 data. As outlined in Appendix 2 of this thesis, the returns of 1829 presented an almost identical picture of religious affiliation to the Religious Census of 1851.

⁶⁰ The other counties were indeed 'worse', but for reasons of space the maps are not presented here. Further maps of Catholicism have been published in Crockett and Snell, 'Continuity or discontinuity?'

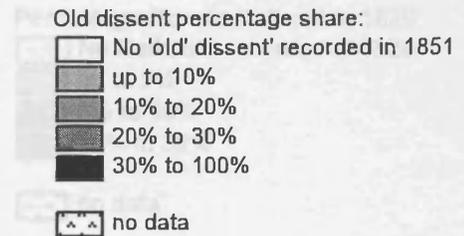
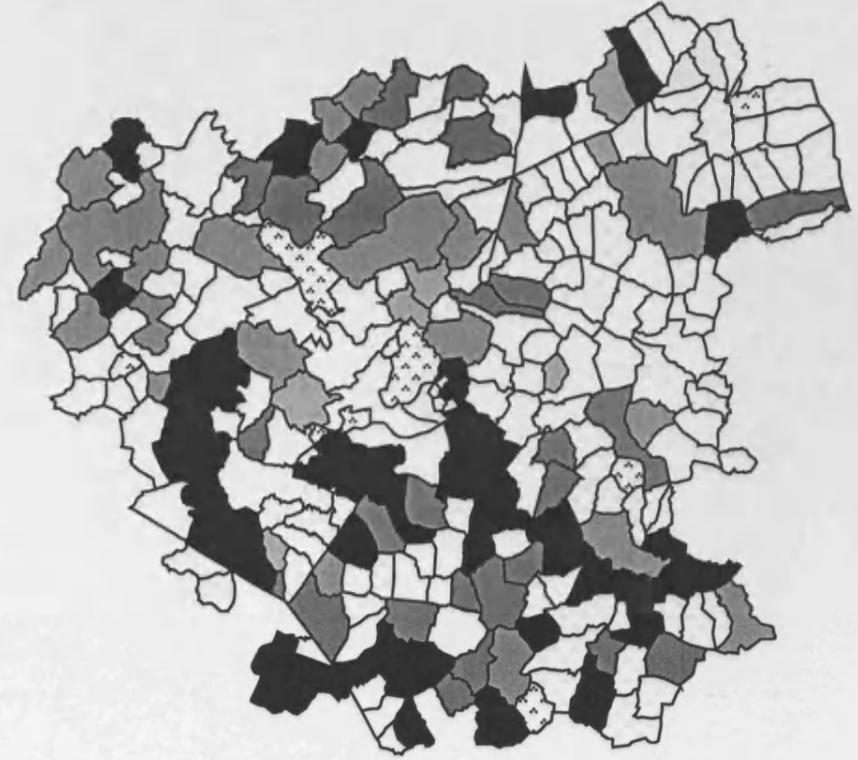
Map 6

The changing geography of old dissent in Leicestershire, 1676-1851

Dissenters as a percentage of the 'total population' in 1676



Old dissent percentage share of attendances in 1851

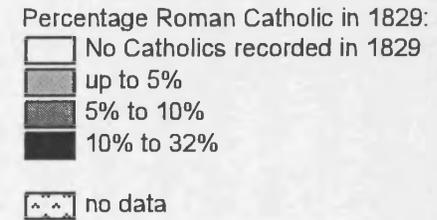
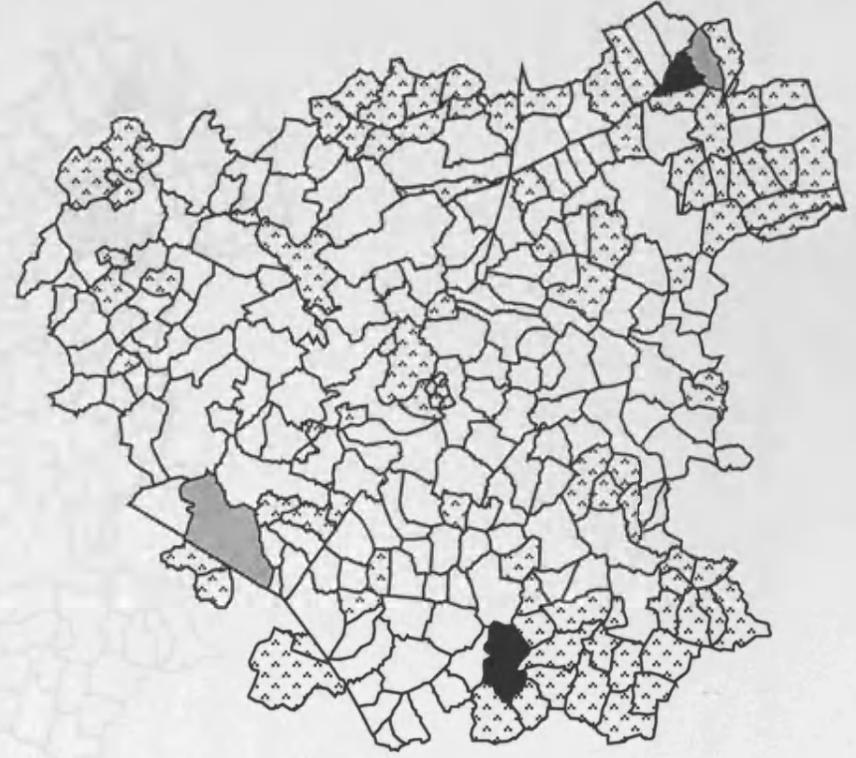
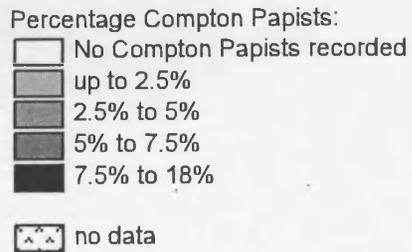
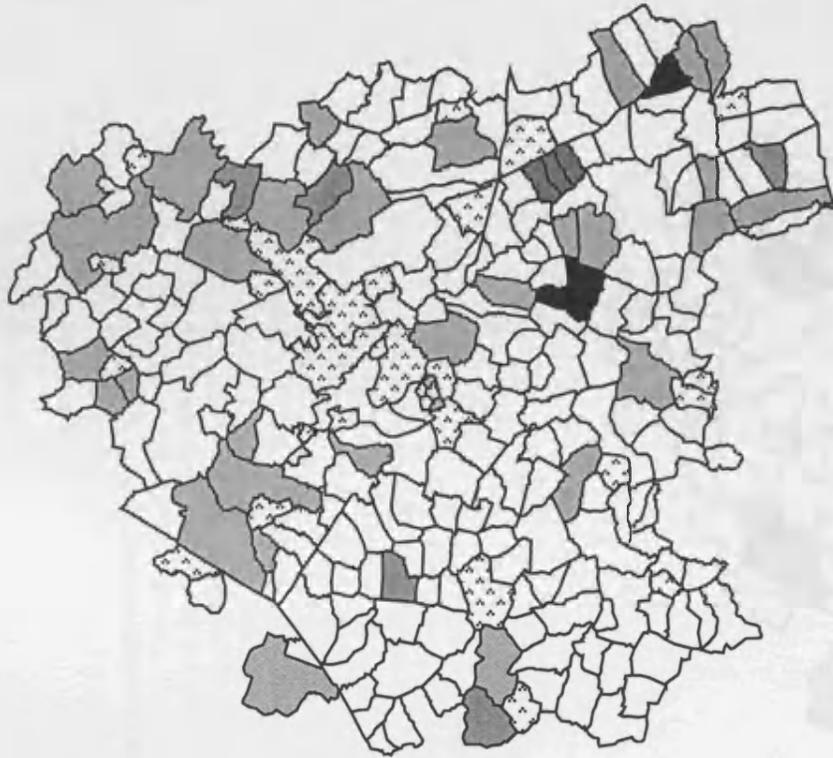


Map 7

The changing geography of Catholicism in Leicestershire, 1676-1829

Papists as a percentage of the 'total population' in 1676

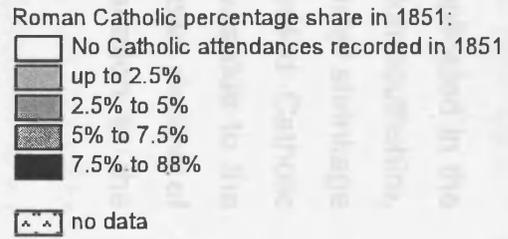
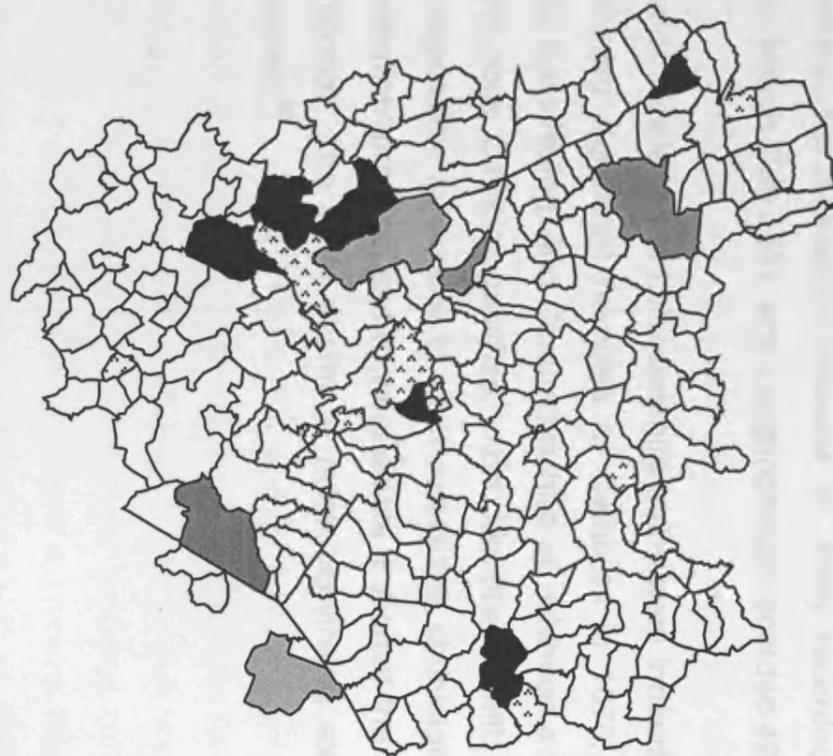
Catholics as a percentage of the estimated population in 1829



Map 8

The geography of Catholicism in Leicestershire, 1851

Roman Catholic percentage share of total attendances in 1851



where Catholicism survived into the nineteenth century it was usually a result of the resilience of land-owning families who had retained the Catholic faith since the Reformation.⁶¹ Map 8 shows that by 1851 the residual Catholic strongholds of Eastwell, Hinckley and Husband's Bosworth had been joined by several other parishes, mostly of a very different character - Cossington, Leicester St. Mary, Loughborough, Melton Mowbray, Monks Kirby, Sheepshed (Shepshed) and Whitwick. The rise of Catholicism in these parishes, many of which had not contained Catholics since the Reformation, was due to Irish immigration following the potato famine. It was thus the urban centres which now showed the greatest Catholic presence. For example, Leicester St. Mary recorded 1,099 Catholic attendances on March 30th 1851, and Loughborough recorded 490.

The trends visible in the Leicestershire maps were indeed replicated in the counties containing significant numbers of Catholics in 1676; Monmouthshire, Derbyshire, the East Riding, and Cambridgeshire all exhibited a similar shrinkage back to a few core Catholic parishes, most identifiable with landed Catholic families. It is impossible to deduce to what extent this shrinkage was due to the 'spatial concentration' process, and to what extent it charted the known decline of English Catholicism. The latter seems a more convincing explanation in the majority of parishes.⁶²

⁶¹ See Crockett and Snell, 'Continuity or discontinuity?'

⁶² Though spatial concentration did, no doubt, produce a shrinkage. Elsewhere, I have shown how one could apply a gravity model to the distribution of Catholics in Leicestershire in 1851 to create a 'virtual' map of Catholics in their probable parish of residence. To some extent, the predictions of the gravity model were testable in Leicestershire, since the 1829 returns had recorded Catholics prior to Irish immigration (though the source is inconsistent towards recording people in their parish of residence and congregations in their parish of worship, and is not complete for all parishes, so a full evaluation was not possible). The distribution of Catholics predicted by the gravity model displayed a notably higher correlation with the 1676 Catholic distribution than the unadjusted 1851 data. In particular the model predicted a small Catholic presence (ten people) in Eaton - a parish adjacent to the Catholic stronghold of Eastwell. The 1829 returns indicated that four Catholics had been present in Eaton just 22 years earlier, a fact suggestive that a few Catholics might well still have resided there in 1851. See A. Crockett, 'Religious continuity and change in England and Wales, 1676-1851', unpublished paper presented at the Royal Geographical Society and Institute of British Geographers Annual Conference, University of Exeter, January 1997.

Old dissent and new dissent

In relation to the proposed low levels of geographical continuity of old dissent, one further uncertainty is the relationship between support for the old dissenting denominations of 1676 and the 'new' dissenting denominations of 1851.⁶³ If the geography of support was similar this would suggest that dissenting affiliation may not have been denominationally rigid across the generations, and that localities (and perhaps families) may have remained dissenting in nature, but displayed a fluidity in their specific denominational allegiance. There was some evidence to support such arguments. Table 21 compares the relationships between both the presence and strength of Compton dissent with the presence and strength of each old dissent denomination and the major new dissent denominations.

The first column of table 21 shows the number of parishes with Compton data which contained one or more places of worship for each denomination. The second column shows the number of parishes with Compton data *and* Compton dissenters which contained one or more places of worship for each denomination. All things being equal, each denomination would have been present (in 1851) in the same proportion in the parishes which had recorded dissenters in 1676 as in all Compton parishes. Thus, taking the top line of the table as an example, if 72 of the 1,383 Compton parishes (i.e. 5.2%) contained a General Baptist Chapel (column 1), one would expect that 45 of the 857 parishes containing Compton dissenters (i.e. 5.2%) would also have contained a General Baptist chapel. One can compare this figure with the actual figure of 56 parishes, and likewise, the 812 parishes (i.e. 857-45) in which one would have expected both Compton dissent and an Independent chapel with the actual figure of 801 (i.e. 857-56) in order to calculate the chi-squared (χ^2) statistic to test for any statistical significance in the difference between the observed and expected values (column 4 of table 21).

⁶³ The denominations taken to comprise new dissent are listed in Appendix 1.

Table 21**The relationships between Compton dissent, 'old dissent', and 'new dissent'**

Denomination	Number of Compton parishes recording place of worship	Observed number of Compton parishes with dissenters in 1676 recording place of worship	Expected number of Compton parishes with dissenters in 1676 recording place of worship ¹	χ^2	Spearman Correlation between percentage Compton dissenters and percentage share of denomination n = 1,383
old dissent:					
Independents	327	216	203	1.1	+ 0.02
Baptists unclassified	195	141	121	3.8*	+ 0.13**
Particular Baptists	129	91	80	1.1	+ 0.07*
General Baptists	72	56	45	2.8	+ 0.04
Quakers	23	22	14	4.6*	+ 0.11**
Unitarians	22	19	14	1.8	+ 0.06*
Presbyterian Church in England	6	5	4	0.25	+ 0.00
new dissent: (selected denominations)					
Wesleyan Methodists	497	364	308	15.9**	+ 0.13**
Primitive Methodists	223	171	138	9.4**	+ 0.07*
Welsh Calvinistic Methodists	139	42	86	25.0**	- 0.20**
Wesleyan Reformers	34	30	21	4.0*	+ 0.01
Wesleyan Methodist Association	16	12	10	0.4	- 0.02
Bible Christians	15	14	9	2.8	+ 0.09**

* Indicates test statistic exceeded the 95% confidence level (critical $\chi^2 = 3.8$).

** Indicates test statistic exceeded the 99% confidence level (critical $\chi^2 = 6.6$).

¹ The observed figure was calculated by multiplying the number of Compton parishes which contained a church/chapel for a given denomination (the figure in column 1) by the ratio of Compton parishes with dissenters to all Compton Parishes (i.e. 857/1383). The resultant figure was rounded to the nearest whole number - this being the figure appearing in the third column of the table. The second and third columns of the table formed one row of a cross-tabulation.

² The χ^2 statistic was calculated from a 2 by 2 cross-tabulation (i.e. 1 degree of freedom). The top row was comprised of the figures appearing in columns 2 and 3 of the table, the bottom row was the observed and expected frequency of 'non-occurrence' of a denomination (i.e. 857 - column 1 and 857 - column 2). One could more easily (and identically) test for statistical significance using the binomial test, but I have presented the results as χ^2 statistics because many readers are familiar with this test.

In this way, one can see that of the old dissent denominations, only Quaker and Baptist unspecified chapels were significantly more likely to be located (in 1851) in parishes which had contained dissenters in 1676. However, of the new dissenting denominations, Wesleyan Methodist, Wesleyan Reformer, and Primitive Methodist chapels were all more likely to be located in parishes which had recorded dissenters in 1676, and in the case of the Wesleyans and the Primitives, the likelihood was considerably greater than chance alone. The strongest result of all was that of the Welsh Calvinistic Methodists, whose chapels were extremely *unlikely* to be located in parishes which had recorded Compton dissenters.

Whereas the chi-squared statistic illuminated the degree of overlap between each denomination's presence and the presence of Compton dissent, it did not reveal the degree of association between each denomination's support and dissenting support in 1676. The final row of Table 21 shows the correlation between each denomination's percentage share of attendances and the percentage Compton dissenters. In general, it can be seen that the correlations followed a similar trend to the chi-squared statistics. Of the old dissent denominations, the Quaker and Baptist unspecified percentage shares showed strong correlations with the percentage of Compton dissenters. The Particular Baptist and Unitarian percentage shares showed weaker correlations. Of the new dissenting denominations, the Wesleyan Methodists and Bible Christian percentage shares showed a strong positive association with the percentage of Compton dissenters, while the Primitive Methodist percentage share exhibited a weaker association. The Welsh Calvinistic Methodist percentage share showed a strong *negative* association with the percentage of Compton dissenters.

The point to emerge from both the chi-squared and the correlation results is the very low level of connection between the presence and/or strength of any dissenting denomination in 1851 and the presence and/or strength of Compton dissent. By far the strongest result (both in terms of chi-squared and correlation) demonstrated the mutual exclusivity of Compton dissent and Welsh Calvinistic Methodism, this being a function of the latter's pre-eminence in central and north Wales, rather than an active 'repulsion' between the two. Overall, one could

certainly conclude that the largest new dissent denominations - the Wesleyan Methodists and the Primitive Methodists - displayed as strong a spatial relationship with Compton dissent as any old dissenting denomination. The strength of this relationship contrasts with the absence of any visible relationship between the largest old dissent denomination - the Independents - and Compton dissent.

Sociological implications.

To recall, a low level of continuity of religious pluralism between 1676 and 1851 is entirely congruent with the conceptual framework, which suggested that the geography of religious pluralism would change with the geography of economic activity between 1676 and 1851. While the lack of detailed socio-economic data for the earlier leaves speculative any claim that low continuity 'proves' such an interpretation. Nonetheless, the low levels of geographical continuity have considerable implications for this thesis.

It has already been made clear that to invoke propose religious pluralism as a cause of a decline in religious practice in the manner proposed by Berger requires that religious pluralism should have been present for a long-time. It is clearly arbitrary to define the length of time necessary for the long-term disconfirming impulse of religious pluralism to be realised, but one could argue that fifty years (i.e. two generations) could be taken as an approximate benchmark. In order to test Berger's theory more definitively than is achieved in this thesis, it would be important to have knowledge of the level of religious pluralism in-between 1676 and 1851. One would expect that, all things being equal, the disconfirming impulse of religious pluralism would have been realised most powerfully (in 1851) in parishes containing intense religious pluralism throughout the seventeenth and eighteenth centuries.

Such complexities cannot be addressed with the dataset used for this thesis. Even where continuity is suggested between 1676 and 1851, due to the lack of denominational detail in the Compton Census, it uncertain whether this is a genuine continuity or a 'coincidence'. Only for Catholicism can continuity be traced

with greater certainty, and even this requires considerable further primary research. In other words, one cannot say in which parishes, according to Berger's theory, one would expect the strongest negative relationship between religious pluralism in 1676 and the index of attendances in 1851, and in which one would expect a weaker relationship. In particular, the lack of any major continuity in support for old dissent tends to shut off any further avenues of investigation using the 1851 data: the presence of old dissent in 1851 cannot in any way be taken to indicate a long-run presence of dissent within the parish. Had it done so, then Berger's theory could have been tested more powerfully by comparing the effects of old and new dissent (in 1851) upon levels of church-going.

What can be speculated upon with slightly more confidence is that where there was religious pluralism recorded in 1676, but not in 1851, no continuity of dissenting or Catholic affiliation was possible (though one still does not know at what date religious pluralism ceased). An *a priori* argument from the sociology of knowledge perspective is that such parishes - with religious pluralism in 1676, but not in 1851 - were the most 'secularised' at this latter date. More precisely, one could argue that the disconfirming impulse of religious pluralism had run its course, and caused a decline in religious practice, to the point where no support for any dissenting denomination remained. Table 14 has already revealed that the mean index of attendances in parishes with religious diversity in 1676 but not in 1851 was lower than in parishes with religious pluralism at both dates. Indeed, the mean index of attendances in the 314 parishes with religious pluralism in 1676 but *not* in 1851 lay at 45.5%, while the mean index in the 623 parishes with religious pluralism at both dates was 65.8%. The mean index of attendances in the entire sub-sample of the 1,382 Compton parishes was 63.1%. In other words, the presence of religious diversity in 1676 only appeared to be associated with markedly lower than average indices of attendance in the parishes which, from an *a priori* theoretical standpoint, one could define as the most 'secularised'.

Such an interpretation remains at best tenuous, due to the lack of information regarding religious pluralism and religious practice *in-between* 1676

and 1851. It is nevertheless reassuring that the group of parishes proposed to be most 'secularised' did exhibit the lowest indices of attendances.

What can be argued with rather more substance is that that Berger's sociology of knowledge approach anticipates the greater continuity of Catholicism as opposed to dissent. Berger drew a distinction between being a Jew in an Eastern European Ghetto and being a Jew in the contemporary United States. While for the former:

'To be Jewish was a taken-for-granted given of the individual's existence, ongoingly reaffirmed with ringing certainty by everyone in the individual's milieu (including the non-Jews in that milieu).'⁶⁴

For the latter:

'For more and more individuals it became a viable project to step outside the Jewish community. Suddenly, to be Jewish emerged as one choice among others.'⁶⁵

A lesser dualism can be drawn between Catholics and dissenters in seventeenth and eighteenth-century England and Wales. While both suffered variable and often high levels of persecution, the social isolation of the Catholics always tended to be higher because of the greater threat perceived from the Roman Church. Indeed, in certain localities, even at times of supposedly high intolerance, dissenters showed a considerable degree of social integration with the wider (Anglican) community.⁶⁶

The Catholic landholding families and their converted servants were perhaps less likely to lose or denounce their Catholicism, owing to the continual reinforcement of their Catholic identity from the combination of social isolation and persecution. The higher levels of social integration of the dissenters meant that there was a more open choice of religious affiliation for them (and, more especially, for their children). The greater the degree of toleration and knowledge

⁶⁴ P.L. Berger, The Heretical Imperative: Contemporary Affirmations of Religious Affirmation (London, 1980), p. 29.

⁶⁵ Berger, Heretical Imperative, p. 29.

⁶⁶ See Stevenson, 'Post-Restoration dissenters'.

of other faiths, the more likely a change of affiliation, and if Berger is correct, the subsequent decline of all religious beliefs. It seems more than just coincidence that old dissent remained strong in the face of over a century of adversity and persecution and yet once the Toleration Act of 1689 was passed, it tended to decline. As H.W. Clark observed, 'Upon the passing of the Toleration Act a decline of vital religion set in, to endure until the Evangelical Revival kindled warmth again.'⁶⁷ Likewise, M.R. Watts concluded: 'Toleration had bought with it, as Bunyan feared it might, material benefits which threatened to sap the spiritual zeal of Dissent.'⁶⁸ Watts went further, to propose that toleration facilitated the transition from sect to denomination and thereby the loss of momentum that 'worldliness' could entail. Such observations challenge the rational choice theorisation of religion, which proposes that the 'freer' the religious market, the greater the religious vitality (see chapter 5 of this thesis).

Historical implications.

Whatever the precise reasons for the decline of old dissent, it is important to realise that the major growth of dissent in the late eighteenth and early nineteenth century had involved a revival of the old dissent (especially the Baptists and the Independents), almost as much as the rise of Methodism. This second wave of dissent appears to have all but wiped clean the local geographies of the first wave.⁶⁹ This is graphically demonstrated in table 22 which shows the percentage of Compton nonconformists in each county, the percentage nonconformist in 1715, and the old dissent percentage share in 1851.⁷⁰ The two right-hand columns of table 22 give an indication of the mean annual growth rates in the percentage of dissenters between 1676 and 1715 and between 1715 and 1851.

⁶⁷ H.W. Clark, History of English Nonconformity Vol 2 (London, 1913), p. 137.

⁶⁸ Watts, The Dissenters (i), p.386.

⁶⁹ I would argue that the geography of old dissent reflected the geography of industrial activity before the 'industrial revolution' (as dominated by the textile industries), while the geography (and timing) of the onset of new dissent and the revival of old dissent, was intimately linked to the 'industrial revolution'. These are clearly sweeping claims and cannot be directly supported with the dataset used for this thesis.

⁷⁰ The figures for 1715 were derived from the Evans List, visitation returns, denominational records and other sources. They are taken from M.R. Watts, The Dissenters (i), pp. 509-510 (tables XII and XIII).

Table 22

A comparison of the strength of nonconformity in 1676, 1715 and 1851:
an analysis by county

County (number of Compton parishes)	Percentage nonconformist in 1676	Percentage nonconformist c. 1715 ¹	Old dissent index of attendances in 1851 ²	Mean annual growth rate of old dissent 1676 - 1714	Mean annual growth rate of old dissent 1714 -1851
Anglesey and Caernarvonshire (n = 115)	0.48	0.65	20.26	0.80%	2.54%
Bedfordshire (n = 120)	7.79	9.35	26.53	0.48%	0.76%
Cambridgeshire (n =134)	3.37	6.78	18.49	1.86%	0.73%
Cardiganshire (n = 75)	1.82	6.94	37.39	3.59%	1.24%
Derbyshire (n = 87)	1.89	5.07	6.43	2.63%	0.17%
Leicestershire (n = 213)	2.98	6.48	13.41	2.07%	0.53%
Monmouthshire (n = 82)	10.67	11.47	26.37	0.19%	0.61%
Rutland (n = 49)	1.60	3.08	11.67	1.74%	0.98%
Suffolk (n = 195)	4.04	5.29	21.21	0.71%	1.02%
Sussex (n = 287)	4.20	4.78	8.67	0.34%	0.44%
East Riding (n = 105)	5.67	3.68 (all Yorkshire)	4.59	- 1.13%	0.16%
All counties (n = 1,382)	3.71	4.93	14.32	0.75%	0.78%

¹ These figures were derived from the Evans List, visitation returns, denominational records and other sources. They are taken from M.R. Watts, *The Dissenters (i): From the Reformation to the French Revolution* (Oxford, 1978); Tables XII and XIII, pp. 509-510.

² All parishes were used in this calculation. This includes parishes with no Compton data and parishes with zero attendance data in 1851.

These figures are by no means entirely accurate, due to the vagaries of each source and the different methods of computation at each date, but they can nevertheless be used to highlight certain trends. Chief among these is the massive rise of old dissent in North Wales *after* 1676, particularly the Independents and Particular Baptists - both denominations had scarcely a foothold in 1676 or 1715. In contrast, the three counties with the highest mean percentages of dissenters in 1676 and 1715 - Monmouthshire, Bedfordshire and the East Riding - all displayed a downturn in the growth of old dissent between 1715 and 1851. In the case of the East Riding this was not just a *relative* downturn, but an absolute decline in the proportion of support for old dissent (in the face of a massive rise in support for Wesleyan Methodism).

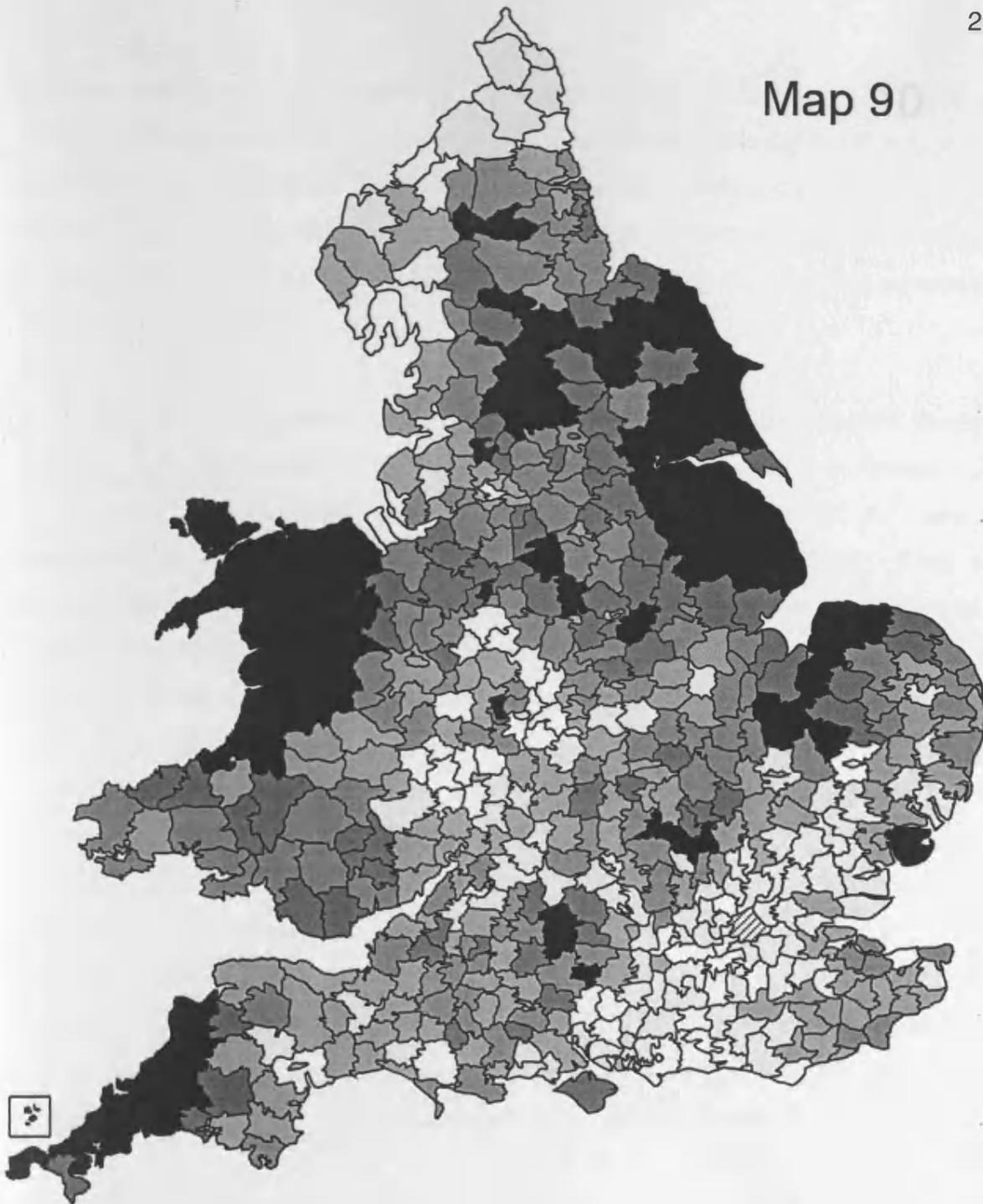
Although old dissent can be viewed to have been revived 'on the coat-tails' of Methodism, it did not necessarily grow up in close geographical proximity to Methodism - as the case of the East Riding illustrates. This point can be made visually by mapping the registration-district data. Map 9 shows the new-dissent index of attendances. It can be seen that the 'Severn-Wash' line broadly separated the areas of new dissent strength and weakness. New dissent was strongest in Wales, especially north Wales, Cornwall, and from the midlands northwards to Lancashire and Durham (the extreme north of England displaying much lower levels of new dissent). In contrast, map 10 shows that the old dissent index of attendances, with the exception of the Presbyterian influence along the Scottish border, was strongest in the south and east.⁷¹

Some historians seem to have assumed that the patterns of old dissent revealed by the 1851 Religious Census serve to illuminate the geography of old dissent as it had been in previous centuries. This is certainly not so, as table 22 has already revealed. The earlier geography of old dissent has been mapped from the Evans List of 1715, Quaker registers and other sources by M.R. Watts.⁷² His county-level maps reveal that although the Presbyterians, Independents, Particular

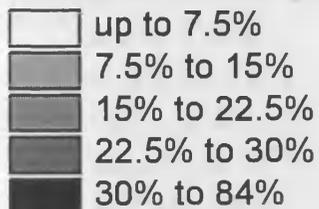
⁷¹ In fact, the Presbyterian influence in Northumberland and Cumberland was much stronger than indicated in map 10 (compare with map 22). This is because the United Presbyterian Church and the Church of Scotland were not classified as old dissent.

⁷² See Watts, *The Dissenters (i)*, pp. 272-276.

Map 9



New-dissent index of attendances:



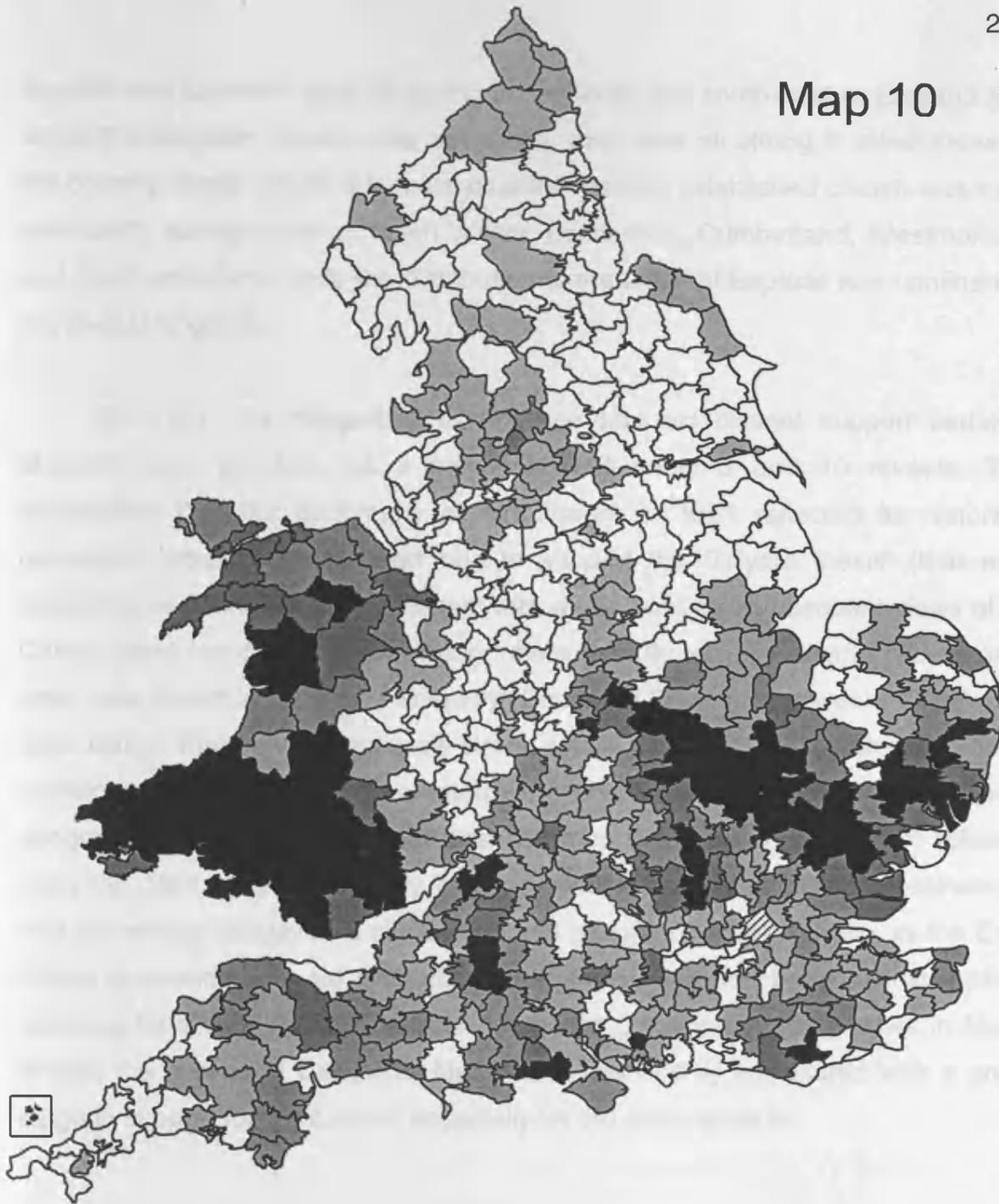
 London Division (see inset)

The London Division

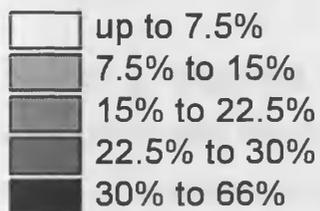


New-dissent index of attendances
in England and Wales, 1851

Map 10



Old dissent index of attendances:



 London Division (see inset)

The London Division



Old-dissent index of attendances
in England and Wales, 1851

Baptists and Quakers were all strong in the south and south-east of England (i.e. where the Anglican Church was strongest), they were all strong in other areas of the country; areas where it is more doubtful that the established church was ever particularly strong, such as south Wales, Lancashire, Cumberland, Westmorland and Northumberland. Only the distribution of the General Baptists was confined to south-east England.

By 1851, the geography of Anglican and old dissent support certainly showed many parallels, as a comparison of maps 3 and 10 reveals. The assumption that the geography of old dissent in 1851 reflected its historical geography would certainly lead one to support the 'Tillyard thesis' (that new dissent grew strong where old dissent was weak), and the subsequent views of R. Currie - that old dissent grew strong where the Church of England was strong, while new dissent grew strong where the Church of England was weak.⁷³ While the latter claim - that new dissent grew strong where the Anglican Church was weak - contains considerable truth (as emerges in chapter 6 of this thesis), the similar geographies of Anglican and old dissent support may be an artefact of reliance upon the 1851 data. As already demonstrated, many old dissent denominations had not always displayed a similar regional geography. For example, in the East Riding a considerable old dissenting strength in 1676 had been almost entirely replaced by a very strong Wesleyan Methodist presence in 1851, while in North Wales, the spread of Calvinistic Methodism was closely associated with a great surge in support for old dissent, especially for the Independents.

4.5 A Case-Study of Derbyshire

It is important that the hypotheses and research questions thus far investigated with the entire dataset, should be visible in the specific geographical setting of a single county. Derbyshire provides a useful context for exploring the hypotheses and research questions. Derbyshire was chosen for three reasons.

⁷³ R. Currie, 'A micro-theory of Methodist growth', Proceedings of the Wesleyan Historical Society, 36, 1967.

First, both Compton and 1851 data were available for Derbyshire (and the Compton data was more complete than for many other counties). Secondly, as will become apparent, Derbyshire contains a distinctive series of sub-regions which stem from the physical structure of the county, and also affect social and economic characteristics. Thirdly, a useful body of literature exists examining religious change in the county.⁷⁴

This section attempts to explain the patterns of religious practice and religious pluralism in Derbyshire in terms of the relationships considered in chapter 4 thus far. To summarise, it has been shown that the major influence on the patterns of religious pluralism in 1851 was the degree of urban and industrial development of the parish (Hypothesis (i)). The major influence on the patterns of church-going in 1851 was the intensity of religious diversity in 1676 (Hypothesis (ii)).

In addition to these core relationships, it has been shown that the socio-economic environment displayed very little direct influence upon the rates of church-going (as investigated for further research question (i)). The intensity of religious diversity in 1851 displayed a geographically variable relationship with the level of church-going (as investigated for further research question (ii)), though as shown in table 18, there was a strong positive association between the two in Derbyshire.

The patterns of religious practice and religious pluralism in Derbyshire are explored in turn in the remainder of this section.

⁷⁴ The 'Leicester School' of local history is among those who have undertaken research in Derbyshire. See M. Tranter (ed.), The Derbyshire Returns to the 1851 Religious Census (Chesterfield, 1994); M. Tranter, 'Landlords, labourers, preachers: rural nonconformity in Derbyshire, 1772-1851', Derbyshire Archaeological Journal, 101 (1981), 119-138; M. Tranter, "Many and diverse dissenters" - the 1829 religious returns for Derbyshire', The Local Historian, 18:4 (1988), 162-167; K.D.M. Snell, Church and Chapel in the North Midlands: Religious Observance in the Nineteenth century (Leicester, 1991).

Patterns of religious practice

To open the case-study, two regression analyses were carried out with the index of attendances as the dependent variable. These analyses examined whether the Derbyshire parishes displayed similar relationships to those described for the entire Compton sub-sample of parishes (see especially tables 16 and 17). In the first regression, the eighteen core socio-economic variables were entered as predictor variables. Using a stepwise procedure, no variables were entered into the analysis.⁷⁵ In other words, the index of attendances was almost entirely independent of the eighteen core socio-economic variables.

In the second analysis, the religious diversity measures of 1676 and 1851 were added to the list of predictor variables. The results are shown in table 23. From these results it becomes clear that the findings for Derbyshire are very similar to the results reported for the entire Compton sub-sample (see tables 16 and 17). Both religious diversity measures were selected in the regression analysis. As expected, religious diversity in 1676 appeared as a negative influence on the index of attendances, and religious diversity in 1851 appeared as a positive influence. Figure 8 indicates that the assumption of homogeneous variance of residuals was not broken by this regression analysis. The beta weights of both the religious variables were higher than that of the single socio-economic variable achieving statistical significance - the mean annual population growth rate (1831-51).⁷⁶ Lastly, as with the entire Compton sub-sample, the explanatory power of the model was low ($R^2 = 0.10$) indicating the extremely 'partial' nature of this model of religious practice.⁷⁷

⁷⁵ The entry criteria for the selection of variables was probability of 'T' less than 0.10.

⁷⁶ As shown in table 23, the beta weights were: religious diversity in 1851, $\beta = + 0.36$; religious diversity in 1676, $\beta = - 0.28$; and mean annual population growth rate (1831-51), $\beta = - 0.20$.

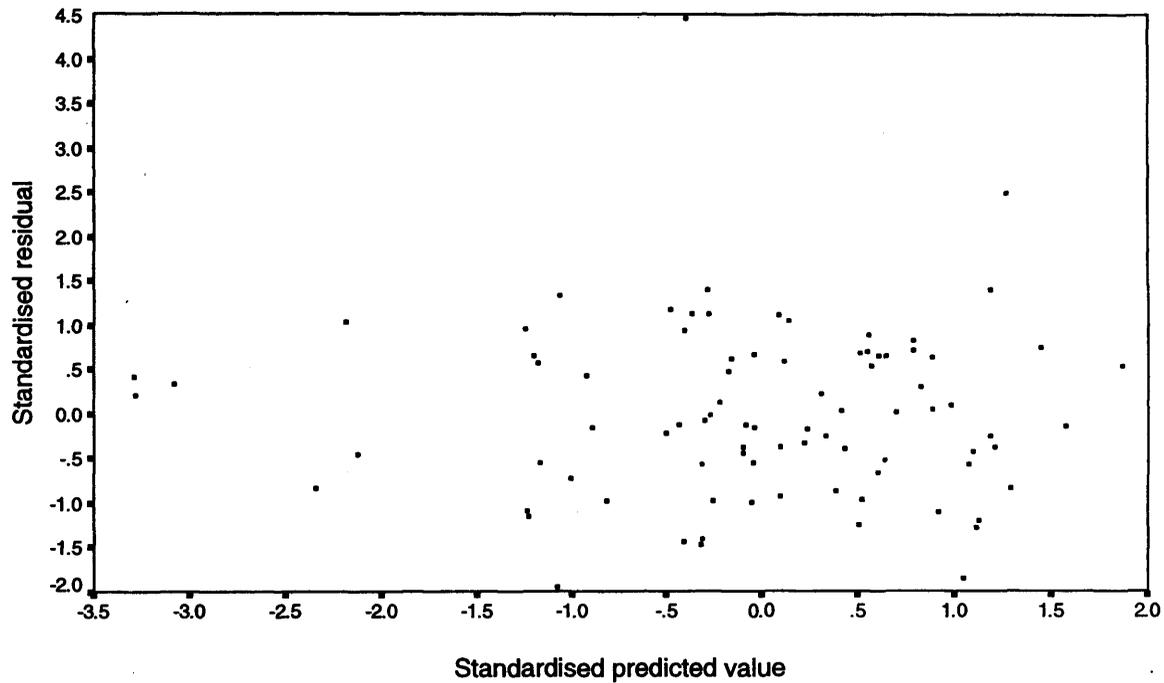
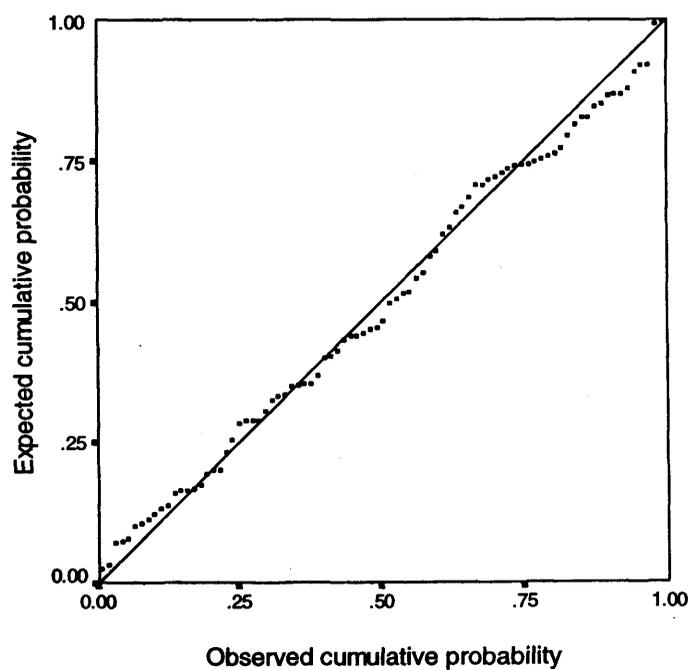
⁷⁷ The model may have low predictive power overall, but the predictive power was equal across all levels of the index of attendances, as the constant variance of the residuals in figure 8 demonstrates.

Table 23Linear regression analysis to predict the index of attendances in Derbyshire

Regression analysis with selected socio-economic variables and the religious diversity measure for 1676 and 1851 as predictor variables and the index of attendances as the dependent variable.		
N = 86		
Variable selection based on minimum significance of 'T' at 90%		
<u>Variables in the equation</u> (in order of 'β')	<u>β</u>	<u>T (sig.)</u>
Religious diversity (1851)	+ 0.36	+ 2.8 (0.0067)
Mean annual population growth rate 1831-51	- 0.28	- 2.1 (0.0369)
'Total religious diversity' in 1676	- 0.20	- 1.9 (0.0627)
Regression result: adjusted R² = 0.10		

Figure 8**Selected diagnostic graphs for the regression analysis of the index of attendances
in Derbyshire**

These diagnostic graphs refer to the analysis presented in table 30.

Standardised residuals plotted against standardised predicted values**Normal P-P plot of standardised residuals**

Interpretation.

The patterns of church-going in nineteenth-century Derbyshire have proved hard for the historian to explain. As the local historian M. Tranter noted:

'Indeed, the distribution of parishes with the highest values [of religious practice] appears to be unrelated to any specific topographical or economic variable. Some industrialised parishes, like Measham, Donisthorpe and Stretton in the extreme south, have an attendance index of 61 per cent; others in the north, such as Stavely, under 31 per cent.'⁷⁸

I would argue that it is far more pertinent to attempt to explain the patterns of religious practice in terms of the patterns of religious pluralism. To test this assertion further than the regression analysis carried out here would require a much more detailed scrutiny of the many historical sources detailing the religious history of Derbyshire. At this very local scale the uniqueness of places and people, especially those whom Tranter categorises as 'personalities and preachers', comes to the fore and any measurable tendency for religious pluralism to secularise becomes more latent; a tendency observable only if all things remain equal, which, to paraphrase D.A. Martin, they seldom do.⁷⁹ A consideration of the regional geography of Derbyshire serves to suggest some of the more structural reasons why things were 'not equal'.

Tranter has proposed that Derbyshire comprises three natural regions which are based upon the underlying geology, and have impacted upon the historical geography of the county throughout the ages.⁸⁰ These three regions are the millstone grit and limestone of the Peak District, which, in the registration county, runs from Glossop across to Hathersage in the north, down to Carton across to Duffield in the south. This area was historically associated with upland cattle farming, resulting in irregular field systems and subdivided landholding.⁸¹ To the

⁷⁸ Tranter, Derbyshire Returns p. xxxi.

⁷⁹ A similar point is made in Martin, Theory of Secularization, p.3.

⁸⁰ See Tranter, 'Landlords, labourers, preachers'. A similar map, and a description of 'farming regions' is to be found in J.V. Beckett and J.E. Heath (eds), Derbyshire Tithe Files Derbyshire Record Society, 1995: see especially p. vi and pp. xxxviii - liv.

⁸¹ See Beckett and Heath, Derbyshire Tithe Files, pp. xlv - l.

east of this highland zone is a narrow band of parishes situated on coal measures. In the registration county this area stretched from Dronfield across to Killamarsh in the north, down to Horsley across to Bramcote in the South. This area was associated with subdivided landholding and mixed farming, and by 1851, considerable exploitation of the coalfields.⁸² To the south of both these zones, from Ellastone in the north-west to Attenborough in the north-east, lay the Trent and Soar Valleys. This was a zone of predominantly arable farming with some permanent pasture.⁸³

These natural regions were mapped in relation to the parish boundaries in map 11. The map was produced from the 1:50,000 Ordnance Survey solid geology maps and Tranter's map of the Derbyshire regions.⁸⁴ Although parish boundaries rarely followed the geological boundaries, the majority of parishes clearly lay in one region rather than another.⁸⁵

These three regions provided a useful division within which to examine the regression model of religious practice (table 23). It is instructive to examine how well the relationships picked out by the regression analysis fitted each of the three regions. The first column of table 24 shows the correlation between the actual index of attendances and the predicted index of attendances. It can be seen that this correlation was statistically significant in the eastern coalfield and the Trent and Soar Valleys, where the correlation coefficients approached a value of 0.5, but was not significant in the White Peak area.⁸⁶

⁸² See Beckett and Heath, *Derbyshire Tithe Files*, pp. xl - xliv.

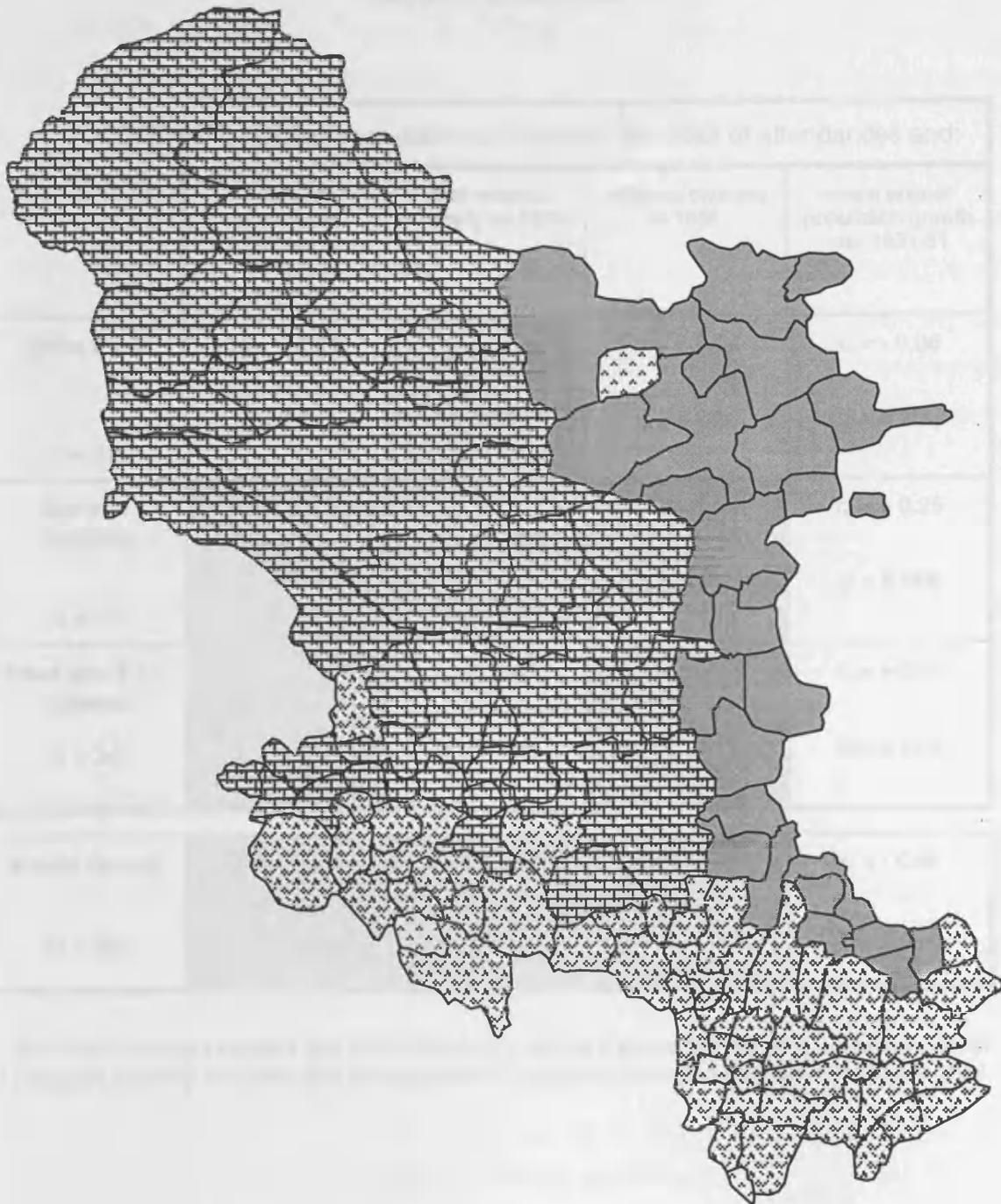
⁸³ Beckett and Heath, *Derbyshire Tithe Files*, pp. l - liii.

⁸⁴ Tranter, 'Landlords, labourers, preachers', p. 123.

⁸⁵ The apparent anomalies to the smooth borders (between the White Peak and the Trent Valley) were both due to detached portions of Ashborne.

⁸⁶ It would be statistically more correct to re-run the regression analysis in each region, rather than to interpret the 'goodness of fit' of a regression model through correlation. However, the low number of cases in the sub-regions left the regression results open to the influence of any single parish. For this reason non-parametric correlation was used in table 24. The regression results for each region do broadly tie in with the correlation results: in the White Peak no variable exceeded the criterion of 'T' exceeding the 90% confidence level, in the eastern coalfield the adjusted R^2 was 0.16 (sig. $F = 0.041$), and in the Trent and Soar Valleys the adjusted R^2 was 0.24 (sig. $F = 0.002$).

The natural regions of Derbyshire



Key:

-  White Peak
-  Eastern coalfield
-  Trent and Soar valleys
-  Extra parochial area

Table 24

How the general regression model predicting the index of attendances fitted the regions of Derbyshire

Spearman correlation (r_s) between the index of attendances and:				
	index of attendances predicted by regression analysis	'total religious diversity' in 1676	religious diversity in 1851	mean annual population growth rate 1831-51
White Peak (n = 31)	$r_s = + 0.24$ (p = 0.200)	$r_s = - 0.36^*$ (p = 0.045)	$r_s = + 0.04$ (p = 0.838)	$r_s = - 0.06$ (p = 0.756)
Eastern coalfield (n = 21)	$r_s = + 0.48^*$ (p = 0.027)	$r_s = - 0.43^*$ (p = 0.050)	$r_s = + 0.47^*$ (p = 0.030)	$r_s = + 0.25$ (p = 0.284)
Trent and Soar valleys (n = 34)	$r_s = + 0.44^{**}$ (p = 0.009)	$r_s = - 0.01$ (p = 0.959)	$r_s = + 0.46^{**}$ (p = 0.006)	$r_s = + 0.01$ (p = 0.973)
Whole county (n = 86)	$r_s = + 0.38^{**}$ (p = 0.000)	$r_s = - 0.29^{**}$ (p = 0.006)	$r_s = + 0.22^{**}$ (p = 0.046)	$r_s = - 0.05$ (p = 0.638)

** and dark shading indicates that the correlation coefficient exceeded the 99% confidence level.

* and pale shading indicates that the correlation coefficient exceeded the 95% confidence level.

¹⁰ The percentage of Papists and nonconformists were shown in preference to the total religious diversity measure on account of their transparency.

Table 24 shows that religious pluralism in 1676 was significantly associated with the index of attendances in all regions except the Trent and Soar Valleys. Religious pluralism in 1851 was significantly associated with the index of attendances in all regions except the White Peak. The single socio-economic variable - the mean annual population growth rate (1831-51) - was not significantly associated with the index of attendances in any of the regions.

The bottom row of table 24 shows the correlation results for the whole county. At this level the two religious components of the model - religious diversity in 1676 and 1851 - were strongly associated with the index of attendances, and religious diversity in 1676 was the strongest influence. Once again, no statistically significant association was displayed by the only 'non-religious' component of the model - the mean annual population growth rate (1831-51).

The question is whether the historical geography of these regions reveals why the apparent influences on the index of attendances should have varied regionally, and in particular, why the model appeared less strong in the White Peak than elsewhere.

The White Peak.

Table 25 summarises the characteristics of the pertinent variables in the three Derbyshire regions. In the White Peak it can be seen that there were high levels of dissent and, more notably, Papism in 1676.⁸⁷ There were also high levels of religious diversity in 1851. The mean annual growth rate (1831-51) was extremely low, indicative of the tendency to migration out of such upland areas in the mid-nineteenth century. As already shown, in the White Peak region the predicted index of attendances was not closely associated with the actual index of attendances. To reiterate, the correlations suggested that this weakness was not primarily due to the lack of any negative influence of religious diversity in 1676, but rather because of the weakness of any positive influence of religious diversity in

⁸⁷ The percentages of Papists and nonconformists were shown in preference to the 'total religious diversity' measure on account of their transparency.

Table 25**Religious and socio-economic characteristics of parishes in the three Derbyshire regions**

	Median index of attendances	Median diversity measure in 1851	Median 'total religious diversity' in 1676	Median percentage Papist in 1676	Median percentage dissenters in 1676	Median mean annual population growth rate 1831-51
White Peak (n = 31-34)	44.6	0.59	0.02	0.06	0.65	0.00
Eastern coalfield (n = 22-26)	34.5	0.60	0.05	0.00	0.60	0.93
Trent and Soar valleys (n = 34-45)	49.1	0.48	0.01	0.00	0.00	0.20

1851. Why should this have been so? It is interesting to recall the finding of section 4.4, that it was in the highly 'rural' and highly 'urban' parishes that religious pluralism in 1851 was not positively associated with religious practice. It is proposed that the parishes of the White Peak exemplified these large, isolated, 'rural' parishes, and thereby document this wider trend.

Religious diversity was certainly not lacking in the White Peak parishes, nor in upland parishes elsewhere. Neither did geographical isolation and sparse population reflect the complete absence of economic development, especially along the valleys, and hence quite high levels of religious diversity existed in 1851. As Farey stated in 1811:

'In the parts of the County where the large Parishes are situated, the number of dissenting and Methodist Meeting Houses seem very numerous, and are appropriated to most, if not all, the prevailing Religious Sects. ... At the time when the very large districts which I have alluded to were laid out as single Parishes, it is to be presumed that the population was very low, and most of the land unproductive Commons and Moors but ... populous Villages of Manufactures have arisen ... far removed from the Church or any Chapels of Ease.'⁸⁸

The isolation of these large upland parishes fostered different attitudes to dissent, and such differences were evident to contemporary commentators. As Farey noted:

'It has been the opinion of several intelligent Gentlemen with whom I have conversed, though far from being favourers of Dissenters from the National Church, that the morals of the lower classes among them would have suffered very materially from this cause [i.e. geographical isolation from the established church] but for the exertions of the Dissenting and Methodist preachers.'⁸⁹

Such contemporary commentary is suggestive that 'religious pluralism' was a qualitatively different phenomenon in these large upland parishes, this difference being a result of geographical isolation and the 'stretching' of the Anglican

⁸⁸ J. Farey, A General View of Agriculture of Derbyshire (1811) p.93; cited in Tranter, 'Landlords, labourers, preachers', p. 121.

⁸⁹ Farey, Agriculture of Derbyshire, p.94; cited in Tranter, 'Landlords, labourers, preachers', p. 131.

parochial system of spiritual provision. In such areas it is important to know whether, as A.D. Gilbert argued, dissent grew strong in the nineteenth century *because* the established church was necessarily stretched by the parochial system of administration. Gilbert stated that 'The higher ratio of inadequate benefices in the "highland" sector meant that pluralism [of parochial administration] was more often an economic necessity and non-residence more widespread.'⁹⁰ It is under such circumstances that nonconformity could be seen to have arisen not so much as a direct competition to the established church, but rather to fill a long-standing weakness of religious provision. Thus 'religious pluralism' in these areas would be noticeably different in form and consequence from elsewhere.

In such circumstances, it could be argued that nonconformity was more likely to fulfil Wesley's original goal, and complement the Anglican church where it was weak, thereby entailing a less 'competitive' form of religious pluralism. It certainly seems apparent that the established church was generally weak in many upland areas, and that weakness of support was seldom the result of intense denominational competition. As Gilbert stated:

'Not only did the pastoral agriculture and domestic industry of "highland" regions encourage more diffuse settlement patterns than were normal in arable farming areas, but the relative weakness of the landed interest in such regions, and in mining and quarrying districts, reduced both the influence of the clergy and the basis of their financial support.'⁹¹

It is one of Gilbert's central arguments that the Anglican church was weak in the upland sector largely because the terrain and settlement patterns did not suit a parochial system of administration, and also because of the weakness of landed interests.⁹² What remains open to speculation is the extent to which this long-run weakness of the Anglican church in 'upland' areas led to the rise of nonconformity engendering a less 'competitive' spirit.

⁹⁰ A.D. Gilbert, *Religion and Society*, p.100.

⁹¹ Gilbert, *Religion and Society*, p. 99.

⁹² See Gilbert *Religion and Society*, see especially pp. 97-121. Gilbert also examined this inflexibility with regards to urban parishes, where population growth tended to outstrip the available Anglican seating and manpower. Both these tendencies are interpreted by Gilbert as favouring secularisation in the nineteenth century. A very different view is presented in R. Gill, *The Myth of the Empty Church* (London, 1993). Gill's theory is examined in chapter 6 of this thesis.

Though this point would be very difficult to investigate empirically, it is argued here that the intensity of religious diversity was less likely to have reflected the intensity of *competition* for religious affiliation than elsewhere. The dissenting denominations filled a gap in spiritual provision. Under such conditions religious pluralism may have taken on a different form from elsewhere. It is clear that many of the new-found attendants at dissenting chapels in these large 'upland' parishes would (and indeed could) only have been occasional attendants at the Anglican Church. Under these conditions dissent had gathered up the previously unchurched more than in other regions and vied for a change of spiritual allegiance less than in other regions. Such a proposition - that the relationship between religious pluralism (in 1851) and religious practice would be less strong in these areas because religious pluralism did not represent a competitive religious market - fits well the rational choice theorisation of religious change considered in chapter 5 of this thesis.⁹³

Whether or not religious pluralism engendered religious competition in these 'upland' parishes in the same way as elsewhere, a further point to note is that the religious diversity measure would, in any case, have been less able to measure the strength of such competition in 'upland' parishes. It was noted in section 3.2 that it was in large, but nevertheless populous, parishes that the religious diversity measure would be least accurate in representing the religious choices available to the individual. The large parishes, dispersed settlement, and scattered industrial activity of the White Peak provides such large and relatively populous parishes. To recall from section 3.2, only about 1% of the total parish dataset (27 parishes) contained more than 10,000 people and an area in excess of 50 square kilometres. Of the 31 White Peak parishes with Compton data, three (Bakewell, Duffield and Glossop) fitted these criteria. In other words, there are methodological as well as conceptual reasons why any general model did not fit the White Peak as well as the other two regions.

⁹³ However, to recall from table 19, it was the most urban parishes which displayed the most negative association between religious diversity and religious practice, a finding which would be difficult to reconcile with the rational choice perspective.

The eastern coalfield.

The correlations presented in table 24 suggest that this second area of Derbyshire, the eastern coalfield, fitted the three variable regression model quite well. There was a statistically significant correlation between the actual and predicted index of attendances. Total religious diversity in 1676 was significantly and negatively associated with the index of attendances, and religious diversity in 1851 was significantly and positively associated with the index. Only the single socio-economic variable in the model - the mean annual population growth rate (1831-51) - displayed no statistically significant association with the index of attendances.

It is argued that unlike the White Peak, the eastern coalfield contained the necessary conditions to fit the 'general' model. From table 25 it can be seen that this was the region with the greatest degree of religious diversity, especially Protestant dissent, in 1676. It was also an area of very high religious diversity in 1851 and very high population growth rates (these both being in part a reflection of the considerable extent of coal mining already present in the area in 1851). This presence of considerable religious diversity in both 1676 and 1851, and sharply contrasting socio-economic conditions provided useful conditions with which to test the model.⁹⁴ It is interesting to note that even in this small region which presented sharp differentials of parochial economic development, it was the religious aspects of the model (the short-term and long-term effects of religious pluralism) which were powerful influences on the index of attendances, while socio-economic conditions appeared to have little influence, even given this juxtaposition of 'industrial' and 'agricultural' parishes.⁹⁵

⁹⁴ The degree of exploitation of the coalfield varied considerably by parish. For instance in Dale Abbey, at the southern edge of the coalfield, 64.3% of families were engaged in agriculture in 1831, and 14.25% of the population were agricultural labourers. Only 2% of the population were employed in manufacturing. In contrast, in parishes such as South Wingfield, only 30.2% of families were engaged in agriculture in 1831 and 47.8% were in trade. 10.2% of the population were employed in manufacturing and only 5.1% were agricultural labourers.

⁹⁵ Correlations between the index of attendances and the following variables: percentage of families in agriculture, percentage of families in trade, percentage of the population employed in manufacturing, percentage of the population employed in retail/handicraft, the percentage of agricultural labourers and the percentage of non-agricultural labourers, were all statistically insignificant.

The Trent and Soar Valleys

The third region of Derbyshire, the Trent and Soar Valleys, provides a contrasting example to both the White Peak and the eastern coalfield. Overall, the model predicting the index of attendances fitted reasonably well, as demonstrated by the high correlation in the first column of table 24. In contrast to the eastern coalfield, the correlation between religious pluralism in 1676 and the index of attendances was not statistically significant. The mean annual population growth rate also failed to display any statistically significant association with the index of attendances. It was the positive effect of religious pluralism in 1851 which was the single dominant influence on the index of attendances. In the absence of any strong negative influences, the region was, unsurprisingly, characterised by the highest average index of attendances of the three regions (see table 25).

One explanation why the predicted negative, long-term effect of religious pluralism on the index of attendances was lacking in this area is that religious diversity was very weak in this area in 1676. Indeed, of the 34 parishes with Compton data, 16 displayed no religious diversity whatsoever in 1676.⁹⁶ Given such a low frequency of religious diversity, it was, perhaps, unsurprising that no strong correlation was evident.

Patterns of religious pluralism.

As well as examining the patterns of religious practice in the three regions of Derbyshire, one can also examine the patterns of religious pluralism. A regression analysis was carried out to examine the closeness of the relationship between the intensity of religious diversity in 1851 and parochial socio-economic conditions. The results are shown in table 26. Once again, the Derbyshire parishes reproduced the general trend (reported in table 8) - a very close relationship between religious pluralism and urban-industrial environments. In Derbyshire, religious pluralism was positively associated with high population growth rates

⁹⁶ In the White Peak and the eastern coalfield, over three-quarters of parishes contained religious diversity in 1676.

Table 26**Linear regression analysis to predict religious diversity in Derbyshire in 1851**

Regression analysis with selected socio-economic variables as predictor variables and the religious diversity measure (1851) as the dependent variable.			
N = 98			
Variable selection based on minimum significance of 'T' at 95%			
<u>Variables in the equation</u> (in order of 'B')	<u>B</u>	<u>T (sig.)</u>	
Mean annual population growth rate 1831-51	+ 0.55	+ 6.7	(0.0000)
Mean household size in 1851	- 0.33	- 4.3	(0.0000)
Agricultural labourers as a percentage of the population (1831)	- 0.21	- 2.6	(0.0113)
Regression result: adjusted R² = 0.46			

(1831-51), a low percentage of agricultural labourers, and a low mean household size. Overall, these three variables accounted for 46% of the variance of the religious diversity measure. Figure 9 shows that the key assumptions of regression analysis were not violated in the regression analysis.

Interpretation.

As for the preceding consideration of religious practice, further geographical sensitivity can be added to the case-study by examining the three regions of Derbyshire. Table 27 shows the correlation between the religious diversity measure (1851) and the diversity measure predicted by the regression model (as reported in table 26). The high correlation coefficients suggest that the model fitted very closely in all three regions - as one would have expected by the high 'R squared' coefficient of the regression equation for Derbyshire as a whole. Religious diversity was universally high where the population had been increasing fastest and where the percentage of agricultural labourers was lowest. Thus the general hypothesis (hypothesis (i)) - that religious diversity would increase in intensity the more urban/industrial the parish - was very clearly demonstrable in all three regions, despite their very different patterns of socio-economic development.

Conclusions to the case-study.

The case-study has served to reinforce the point that the short-term and long-term characteristics of religious pluralism were indeed important influences on religious practice. More conventional explanations, attempting to explain the levels of religious practice with recourse to 'economic' or 'topographical' variables would force one to conclude, as Tranter did, that:

'Indeed, the distribution of parishes with the highest values [of religious practice] appears to be unrelated to any specific topographical or economic variable. Some industrialised parishes, like Measham, Donisthorpe and Stretton in the extreme south, have an attendance index of 61 per cent; others in the north, such as Stavely, under 31 per cent.'⁹⁷

⁹⁷ Tranter, Derbyshire Returns, p. xxxi.

Figure 9**Selected diagnostic graphs for the regression analysis of the religious diversity measure in Derbyshire**

These diagnostic graphs refer to the analysis presented in table 33.

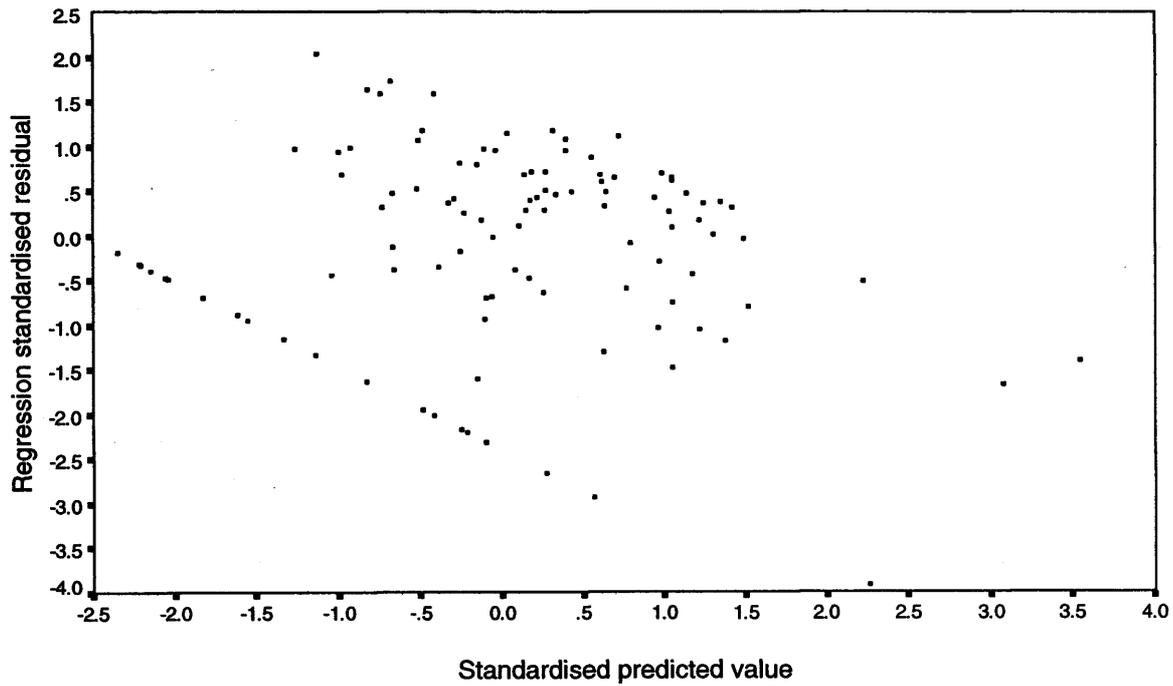
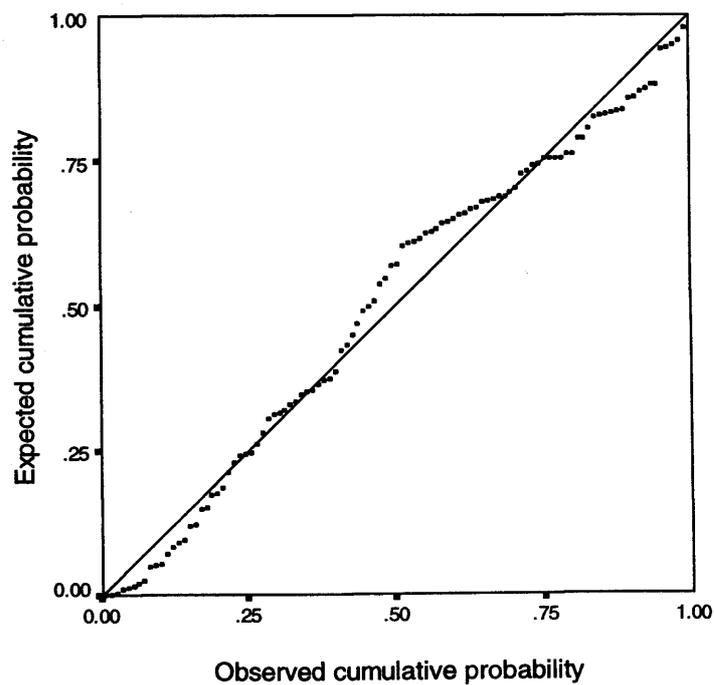
Standardised residuals plotted against standardised predicted values**Normal P-P plot of standardised residuals**

Table 27

How the general regression model predicting religious diversity fitted the regions of Derbyshire

Spearman correlation (r_s) between actual religious diversity in 1851 and religious diversity predicted by regression analysis

White Peak (n = 34)	$r_s = + 0.74^{**}$ (p = 0.000)
Eastern coalfield (n = 25)	$r_s = + 0.63^{**}$ (p = 0.027)
Trent and Soar valleys (n = 45)	$r_s = + 0.57^{**}$ (p = 0.009)
Whole county (n = 104)	$r_s = + 0.65^{**}$ (p = 0.000)

** indicates that the correlation coefficient exceeded the 99% confidence level.

It was shown how the patterns of religious pluralism in 1676 and 1851 were far more closely related to the patterns of religious practice than any other socio-economic characteristics of the parish. In contrast, and as expected, the patterns of religious pluralism in the county appeared largely explicable in terms of such socio-economic variables.

Chapter Five

Competing Theories of Religious Pluralism - Overly Zealous Positivism?

5.1 Theorising Religion: Sacred Canopies or Religious Markets?

The previous chapter has shown that Berger's theory of religious pluralism was well supported by the best available data for England and Wales. Many of the findings presented, most especially that there was a negative long-term impact of religious pluralism upon the rate of religious practice, contradict the major competing body of theory - the rational choice theorisation of religion.

The major body of work centred on rational choice theory is often proposed to be a 'new paradigm' in the sociology of religion. This 'new paradigm' is now widely identified as offering a major challenge to the 'old' (secularisation) 'paradigm'.¹ While the invocation of the term 'paradigm' is questionable, the considerable differences between the 'old' and the 'new' interpretations of religion under conditions of modernity are not disputed.² The rational choice approach forms the most organised and systematic alternative understanding of religious change to the secularisation 'paradigm' in general, and to Berger's theory of religious pluralism in particular. This chapter evaluates the considerable body of research conducted within the new 'paradigm'. This research proposes that religious pluralism is central to religious vitality, not just in the contemporary United

¹ The claim for a new paradigm was made most influentially in R.S. Warner, 'Work in progress toward a new paradigm for the sociological study of religion in the United States', American Journal of Sociology, 98:5 (1993), 1044-1093. See also N.J. Demareth, 'Rational paradigms, a-rational religion, and the debate over secularization', Journal for the Scientific Study of Religion, 34:1 (1995), 105-112.

² P. Repstad rightly questions the validity of the invocation of the term 'paradigm' to describe this body of work, See P. Repstad, 'Introduction: a paradigm shift in the sociology of religion?', in P. Repstad (ed.), Religion and Modernity: Modes of Co-existence (Oslo, 1996), pp. 1-10. However, one can certainly observe that the small number of authors contributing so much material, and their frequent collaboration, reveals that this new 'paradigm' fits far closer Kuhn's notions of a *disciplinary matrix* and a single academic community than the disparate and highly individual works of the secularisation 'paradigm' (as reviewed in chapter 2 of this thesis).

States, but in *all* historical and geographical settings.³

In many ways the rational choice approach to the sociology of religion is to be congratulated. It presents a way of theorising religion which offers many empirically testable propositions. In contrast to the secularisation 'paradigm', which facilitated very little innovative quantitative research. The study of religious change in almost any historical contexts before the rise of the new 'paradigm' was aptly summarised by K.J. Christiano:

'Seldom, for instance, have the data been examined by historians for systematic trends or related in their works to emerging conditions or coincident events. More common is an almost casual resort to Census tables for a number or several to insert into an otherwise impressionistic narrative on a certain religious group or a general social history of a particular region or period.'⁴

It was concluded in section 2.3 of this thesis that the seeming inability of the secularisation 'thesis' to provide a basis for empirical research had more to do with the vicissitudes of the *term* secularisation itself than any inherent impossibility of empirical research based upon secularisation theory (as I have tried to demonstrate with this thesis). In short, the term secularisation had become a cover-all *explanans* and *explanandum* of religious change. The invocation of the term was in itself seen to furnish a description *and* explanation of religious change

³ The literature I refer to here, and the list is by no means exhaustive, is:

a) In an historical setting: R. Finke and R. Stark, 'Religious economies and sacred canopies: religious mobilization in American cities, 1906', *American Sociological Review*, 53 (1988), 41-49; R. Finke and R. Stark, *The Churching of America 1776-1990: Winners and Losers in our Religious Economy* (New Brunswick, 1992); R. Stark, R. Finke and L.R. Iannaccone, 'Pluralism and piety: England and Wales, 1851', *Journal for the Scientific Study of Religion*, 34:4 (1995), 431-444; R. Finke, A.M. Guest and R. Stark, 'Mobilizing local religious markets: religious pluralism in the Empire State, 1855 to 1865', *American Sociological Review*, 61 (1996), 203-218.

b) In a contemporary setting: R. Stark and W.S. Bainbridge, 'Towards a theory of religion: religious commitment', *Journal for the Scientific Study of Religion*, 19:2 (1980), 114-128; R. Stark and W.S. Bainbridge, *The Future of Religion: Secularization, Revival and Cult Formation* (Berkeley, 1985); R. Stark and W.S. Bainbridge, *A Theory of Religion* (New York, 1987); L.R. Iannaccone, 'The consequences of religious market structure', *Rationality and Society*, 3:2 (1991), 156-177; R. Stark and L.R. Iannaccone, 'A supply-side reinterpretation of the "secularization" of Europe', *Journal for the Scientific Study of Religion*, 33:3 (1994), 230-252; L.R. Iannaccone, 'Why strict churches are strong', *American Journal of Sociology*, 99:5 (1994), 1180-1211; L.R. Iannaccone, D.V.A. Olson and R. Stark, 'Religious resources and church growth', *Social Forces*, 74:2 (1995), 705-731.

⁴ K.J. Christiano, *Religious Diversity and Social Change: American Cities, 1890-1906* (Cambridge, 1987) p.43.

in any given context.⁵ It is in this sense that the rational choice approach has marked the possibility of a return to the ability to investigate the subject of religious change free from the inevitability and circularity that the term secularisation had come to mean.

The rational choice approach to the sociology of religion was most forcefully established by R. Stark and W.S. Bainbridge, who proposed a deductive theory of religion based upon rational choice theory, a theory centred upon the concepts of *rewards* and *costs* as empirically measurable determinants of behaviour.⁶ Under such a formulation, '*Religion* refers to systems of general compensators based on supernatural assumptions.' [Their italics].⁷ A central proposition stemming from rational choice theory was that secularisation became self-limiting and cyclical, with cults appearing and flourishing whenever and wherever established religion became weak.⁸ R. Finke and R. Stark subsequently developed the religion-as-market analogy one stage further to argue that 'religious economies are like commercial economies in that they comprise a market of current and potential customers, a set of firms seeking to serve that market, and the religious "product lines" offered by the various firms.'⁹ It is from this basis that religious pluralism was proposed to be universally associated with religious vitality, which was used to explain why the religious vitality of the United States was no longer a 'deviant case', but the logical outcome of intense competition in the religious market.

⁵ In the British context this tendency was perhaps most notable in R. Currie, A.D. Gilbert and L. Horsley, Churches and Churchgoers: Patterns of Church Growth in the British Isles Since 1700 (Oxford, 1977): see especially pp. 99-101. This otherwise excellent piece of research tended towards circularity by invoking secularisation as a cause of decline in church membership, but only charting this causal efficacy by charting this decline through, *inter alia*, falling membership. In this way secularisation was not 'proven', other than in a very generic sense of the downturn of church membership, which does little to elucidate the causes of this religious change. A.D. Gilbert has produced a far more persuasive examination of the causes and effects of secularisation in A.D. Gilbert, Religion and Society in Industrial England: Church Chapel and Social Change 1740-1914 (London, 1976) and A.D. Gilbert, The Making of Post-Christian Britain: A History of the Secularization of Society (London, 1980).

⁶ This is the argument presented in Stark and Bainbridge, Future of Religion, and R. Stark and W.S. Bainbridge, 'Secularization revival and experimentation', chapter 9 of Stark and Bainbridge, Theory of Religion, pp. 279-313.

⁷ Stark and Bainbridge, 'Towards a theory of religion', p.123.

⁸ This proposition was analysed in Stark and Bainbridge, 'Secularization and experimentation'.

⁹ Stark *et al*, 'Pluralism and piety', p.432.

Economists have since taken the religion-as-market analogy even further and examined resource mobilisation as a model for predicting church growth and explaining why stricter churches are more successful.¹⁰ In this way religion became 'a "product" derived from inputs of time and money.'¹¹ Thereby, measures of church attendance and contributions could be understood as proxies for time and money resources.

One part of the rational choice theorisation of religion, and the most frequently researched aspect of it, is of particular relevance to this thesis. This is the proposition that the vitality of religion, as principally evidenced by attendance and membership, lies in proportion to the degree of religious pluralism.¹² As Stark *et al* recently stated: 'Of the many issues now in serious dispute between what Stephen Warner (1993) has identified as the old and new paradigms in the social scientific study of religion, one of the most important concerns the effects of pluralism.'¹³ A large volume of research set in many contexts, including nineteenth-century England and Wales, has been interpreted as demonstrating that religious pluralism is indeed always *positively* related to levels of church-going. For instance, Stark *et al* stated: 'the theory is not about today, nor is it about the United States - it purports to be *general*. ... data for ninth-century China would be even better than data for nineteenth-century England.' [Their italics].¹⁴

In linking religious pluralism with religious vitality, the rational choice approach fundamentally disagrees with Berger's view that religious pluralism acts to disconfirm, and thereby reduce the propensity towards religious belief, attendance, and membership. For instance, Finke *et al* argued that 'Unlike Berger, however, we view competition as a stimulus for religious growth and not an avenue for its demise.'¹⁵ If such views are correct, they clearly pose a powerful challenge to the conceptual framework of this thesis (as summarised in figure 5).

¹⁰ See Stark and Iannaccone, 'Supply-side reinterpretation'; Iannaccone, 'Strict churches'; Iannaccone *et al*, 'Religious resources'.

¹¹ Iannaccone *et al*, 'Religious resources', p.705.

¹² This relationship has been the core proposition of much of the collaborative work of Finke, Stark and Iannaccone.

¹³ Stark *et al*, 'Pluralism and piety', p.431.

¹⁴ Stark *et al*, 'Pluralism and piety', p.436.

¹⁵ Finke and Stark, 'Religious economies', p.42.

This chapter forms an examination of this core proposition of the rational choice approach - that religious pluralism vitalises religion. The following section (5.2) is an examination of the empirical results of the rational choice research. Two related issues bear particular relevance; the methods of statistical analysis and the spatial scale of investigation. Section 5.3 of this thesis proposes some fundamental weaknesses in the approach based upon an imputation of causality from cross-sectional analysis of contemporaneous measures of religious pluralism and religious practice. Finally, in section 5.4, more profound questions are raised concerning the ability of the rational choice approach to consider the fundamental relationships between religion and society.

5.2 Rational Choice Research of the Relationship Between Religious Pluralism and Religious Vitality

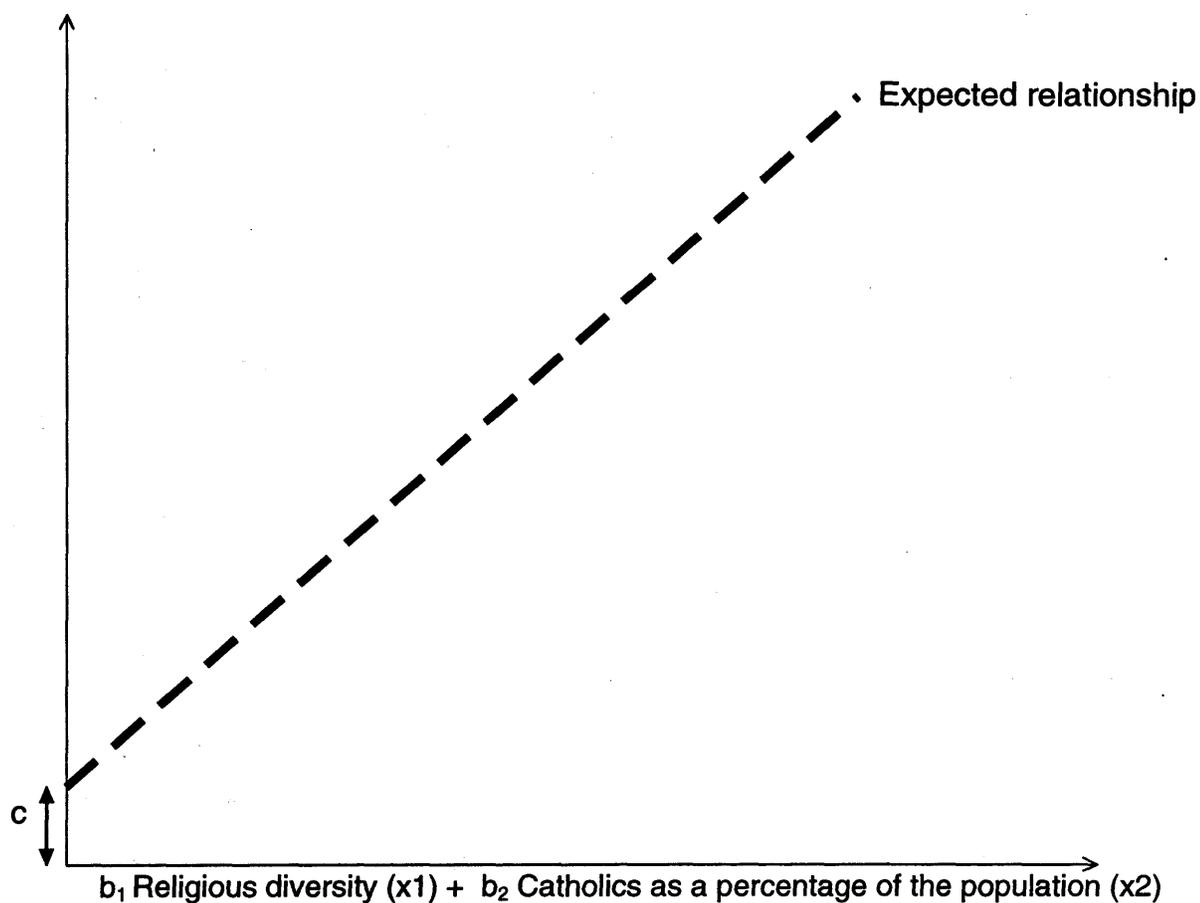
The core methodology of the rational choice approach has been to conduct cross-sectional analysis to investigate the proposition that religious diversity is positively related to religious practice or membership rates. A common refinement of the model is to incorporate the influence of a third variable - the percentage Catholic in the population. Even within the rational choice research, religious diversity and the rate of church-going/membership are usually found to be negatively associated (in terms of zero-order correlation), but when the percentage of Catholics is added to the regression equation (with religious practice/membership as the dependent variable), the desired positive beta weight for the religious diversity measure is obtained.

The net effect of such regression models is to measure how well the geographical variation of attendance/membership fits a straight line according to variations in religious diversity, the percentage Catholic and other variables. The core model is that the gradient of the line representing the rate of religious practice is a linear combination of the intensity of religious diversity and the percentage Catholic. Such a model is highlighted in figure 10.

Figure 10

The rational choice model of the relationship between religious diversity and religious vitality

People attending religious worship or members of religious organisations as a percentage of the population (Y)



The regression equation would be of the form:

$$Y = b_1x_1 + b_2x_2 + c$$

Where Y is the dependent variable, x1 and x2 are predictor variables, b₁ and b₂ are the unstandardised regression weights, and c is a constant.

Variations of this model have been applied to a variety of contexts and time-periods. The following paragraphs introduce the major rational choice studies of the United States, international comparisons, and England and Wales.

a) Research on the United States.

The seminal work testing the hypothesis that religious diversity fosters religious mobilisation was that of Finke and Stark in 1988 in which they presented a series of regression analyses.¹⁶ These analyses referred to a dataset of the 150 largest towns and cities in the United States in 1906/1910, for which the variables of religious diversity, percentage Catholic, population growth, and Sunday school attendance were used to predict the rate of religious adherence. The results were most impressive; high 'R squared' values were achieved in all the regression equations, demonstrating that the data fitted the model well.¹⁷ Furthermore, religious pluralism was shown to have a marked *positive* impact upon religious practice.

The methods used to produce these results were not without attendant criticism, however. A part of the analysis provoking considerable comment lay in the correlation matrix reported at the end of Finke and Stark's article.¹⁸ Although, as already reported, their regression analysis suggested that religious pluralism caused *higher* levels of adherence, the (zero-order) correlation between religious diversity and rate of adherence was shown to be very strongly *negative* ($r_p = - 0.4$).

¹⁶ The work referred to is Finke and Stark, 'Religious economies'.

¹⁷ The following results were reported in Finke and Stark, 'Religious economies'. All reported regressions referred to the 150 American cities with more than 25,000 people in 1910. The standardised regression coefficients (beta weights) are shown in parenthesis; * indicates variable (presumably the 'T' value) exceeded the 95% confidence level, ** indicates variable exceeded the 99% confidence level.

First Analysis: (Finke and Stark, 'Religious economies', Table 3, p.45).

Rate of church adherence = religious diversity (0.84**) + percent Catholic (1.40**): $R^2 = 0.60$.

Second Analysis: (Finke and Stark, 'Religious economies', Table 4, p.45).

Rate of church adherence = religious diversity (0.79**) + percent Catholic (1.35**) + population growth (-0.12*): $R^2 = 0.62$.

Third analysis: (Finke and Stark, 'Religious economies', Table 5, p.46).

Rate of church adherence = religious diversity (0.29*) + percent Catholic (1.14**) + population growth (- 0.14**) + Sunday scholars (0.51**): $R^2 = 0.76$.

¹⁸ Finke and Stark, 'Religious economies', p.48.

The correlation between percentage Catholic and rate of adherence indicated the expected strong positive relationship ($r_p = + 0.66$). The correlation between the percentage Catholic and religious diversity was extremely strong and negative ($r_p = - 0.88$). The correlation results raised concern because it appeared that if (zero-order) correlation was used to interpret the data, it would be concluded that religious diversity was strongly and *negatively* associated with the level of religious adherence. It was only by incorporating the percentage Catholic into the regression models that the remaining relationship between religious diversity and religious adherence was shown to be positive.

In many circumstances regression analysis can be used to reveal genuine sociological relationships, which can remain obscured in correlation analysis. However, since the percentage Catholic formed a part, in fact the *major* part, of the diversity measure, a reliance on the results of controlling for this variable as a sole means of explication is, perhaps, less than ideal. In technical terms the situation is one of extreme multi-collinearity. The authors were aware of the potential problem, but claimed that 'multicollinearity does not arise' because 'Multicollinearity results when two independent variables hold a nearly fixed relationship and lack independent variation with the dependent variable.'¹⁹

If Catholics were some minor denomination, with no overriding influence on the diversity measure, then multi-collinearity may indeed not have been problematic. However, since over 60% of all the adherents in the dataset were Catholics, it appears that the 'percentage Catholic' measure and the diversity measure could not be viewed as structurally 'independent'. Far more worrying, but not emphasised by the secondary literature, is that 33% of the population were Catholic. Thus, the percentage Catholic measure - a supposedly 'independent' predictor variable - must also have been structurally related to the dependent variable, i.e. the rate of adherence.²⁰ The Finke and Stark analysis not only

¹⁹ Finke and Stark, 'Religious economies', p.45; footnote number 5.

²⁰ The rate of adherence is defined as total religious adherents (of whom 60% were Catholic) divided by the total population. The percentage Catholic was defined as Catholics as a percentage of the total population, see Finke and Stark, 'Religious economies', p.44. Finke *et al* themselves realised this difficulty some years later, see 'Mobilizing religious markets', p.208.

presented extreme multi-collinearity, but a structural dependence between the dependant and 'independent' variables.²¹ Such problems could have been overcome if Catholics had been excluded altogether from both the adherence and diversity measures.²²

These problems in using linear regression were highlighted by K.C. Land *et al* who presented an alternative analysis based on American county-level data (in contrast to the 150 largest towns and cities studied by Finke and Stark).²³ To make the study comparable with Fink and Stark's work and yet allow a wider geographical coverage, their analysis was carried out on a large sample of counties (over 700) and on the subset of counties which contained the 150 cities analysed by Finke and Stark. Both analyses failed to give support to the conclusions of Finke and Stark. Land *et al*'s total county analysis suggested that religious diversity had a *negative* impact on the rate of adherence. This impact persisted even when the 'percentage Catholic' and 'population change' variables used by Finke and Stark were entered into the regression equation. When the analysis was repeated on just those counties containing the 150 cities with more than 25,000 people, the effect of religious diversity, which remained initially strongly negative, became positive when the percentage of Catholics was entered into the equation. However, the religious diversity variable did not achieve statistical significance in the regression equation.²⁴ The weak positive relationship

²¹ Using an 'independent' variable that is structurally related to the dependent variables is certainly one way to guarantee an impressive R^2 coefficient. This issue was not commented upon by Finke and Stark in 'Religious economies', although in a later work on New York State, when the issue was not so nearly as pressing, Finke *et al* commented: 'Readers may justifiably be concerned because percentage Catholic is also part of the church attendance measure'; Finke *et al* 'Mobilizing religious markets', p.212.

²² This was the solution adopted in Christiano, Religious Diversity.

²³ K.C. Land, G. Dean and J. Blau, 'Religious pluralism and church membership: a spatial diffusion model', American Sociological Review, 56 (1991), 237-249.

²⁴ Land *et al* report the following regression analyses in 'Religious pluralism'. Since they reported the unstandardised coefficients (B) and the 'T' values, these analyses cannot be reported in exactly the same format as the Finke and Stark analysis. The 'T' values are shown in parenthesis. ** indicates 'T' exceeded the 99% confidence level. *** indicates 'T' exceeded the 99.9% confidence level.

For all selected counties in 1910 (n = 732):

Rate of church adherence = religious diversity (- 3.45***) + percent Catholic (6.89***)+ population growth (- 5.87***): $R^2 = 0.13$

For counties containing cities with more than 25,000 people (n = 137):

Rate of church adherence = religious diversity (1.84) + percent Catholic (6.81***) + population growth (- 5.52**): $R^2 = 0.51$.

between religious diversity and religious adherence failed to reach statistical significance even when a population growth variable was added to the equation.

A point of further interest is that Land *et al* repeated their analyses of the 1910 U.S. census data (and 1906 religious data), using 1920 (1916 religious data) and 1930 (1926 religious data) U.S. census data. They discovered that for the entire sample of counties, the influence of religious diversity became much *more strongly negative over time*.²⁵ In the counties selected to contain the 250 towns and cities analysed by Finke and Stark, the effect of religious pluralism was *positive*, but statistically insignificant at all three dates.²⁶

Land *et al* concluded that the analysis of Finke and Stark was rather profoundly rather flawed, and that irrespective of these statistical deficiencies, reliance upon the major cities made their results unrepresentative of the United States as a whole.

The nature of the relationship between religious diversity and the rate of adherence in the united States becomes even less certain when one enters the findings of K.D. Breault into the debate.²⁷ Breault carried out a similar analysis on the effects of religious pluralism and percentage Catholic on the rate of religious adherence, this time using data from 1980. His regression analyses indicated that religious diversity in 1980 had a persistent and statistically highly significant

²⁵ For the entire sample of counties, for all three years 1910, 1920, and 1930, the 'T' value for religious diversity was negative and significant at the 99.9% confidence. The values were: T = - 3.45 (1910 analysis); T = - 6.56 (1920 analysis); and T = - 6.17 (1930) analysis. See Land *et al*, 'Religious pluralism', p.244.

²⁶ When the analysis was repeated using just those counties containing cities with more than 25,000 people, the 'T' values for religious diversity were positive but *not* significant at the 95% confidence level in any year. They were as follows: T = + 1.84 (1910); T = + 1.73 (1920); T = + 0.61 (1930).

²⁷ K.D. Breault, 'New evidence on religious pluralism, urbanism and religious participation', American Sociological Review, 54 (1989), 1048-1053.

negative impact on the rate of adherence.²⁸ Breault offered four main sources of explanation for the differences between his analysis based on 1980 data and Finke and Stark's 1906/1910 data. These potential reasons for difference were: unknown measurement errors, real differences reflecting historical change, either the 1906 or 1980 data reflected unique historical events, or Finke and Stark's conclusions were based on a faulty analysis. Breault concluded that the last of these reasons was by far the most likely explanation. He launched a powerful critique of Finke and Stark's work, which he concluded was completely flawed for many of the reasons already presented (biased and limited sample, high multi-collinearity).²⁹

Revealingly, Breault contrasted the approach of Finke and Stark with the less spectacular results reported in the work of K.J. Christiano.³⁰ Indeed, it is notable that of the dozens of regressions carried out by Christiano very few showed any strong statistical relationship between rates of adherence, religious pluralism, ethnicity, and other socio-economic indicators.³¹ It is also notable that Christiano excluded Catholics from both the diversity measure and the level of religious adherence, which allowed him to study Protestant religious diversity in areas of high Catholic strength avoiding both multi-collinearity, and a structural dependence between the dependent and independent variables in his regression analyses. A further point raised by Christiano (whose analysis, like that of Finke and Stark centred on the largest towns and cities in the United States), was the problem inherent in using cities with more than 25,000 inhabitants as a sampling frame. Such places represented only 22% of the United States population in 1890,

²⁸ Breault reported the following regression analyses in Breault, 'New evidence', p.1049. Standardised regression coefficients (beta weights) are shown in parenthesis. *** indicates variable (presumably the 'T' value) exceeded the 99.9% confidence level.

For 310 random counties:

Rate of church adherence = religious diversity (- 0.21***) + percent Catholic (+ 0.35***): $R^2 = 0.196$.

For 300 Urban counties:

Rate of church adherence = religious diversity (- 0.20***) + percent Catholic (+ 0.42***): $R^2 = 0.346$.

For States (corrected data):

Rate of church adherence = religious diversity (- 0.36***) + percent Catholic (+ 0.03): $R^2 = 0.143$.

²⁹ Breault, 'New evidence'.

³⁰ See Breault, 'New evidence', p.1050. The work he refers to is Christiano, Religious Diversity.

³¹ The majority of these regressions were weighted least squares, so no 'R squared' coefficient could be reported. See Christiano, Religious Diversity, pp. 185-186.

26% in 1900, and 31% by 1910.³² In contrast, 61% of the population lived in settlements of under 1,000 people in 1890, and 50% still did so by 1910.³³ The choice of cities with more than 25,000 people was clearly not a representative sample at any of these dates. As Christiano stated:

'The 122 cities that qualified for inclusion in the group are therefore mostly places that had amassed large populations and considerable urban experience by 1890. Hence, older and more populous places predominate as units of analysis.'³⁴

The selection of relatively few urban places is not necessarily a cause of concern, especially if the very link between urbanisation and religious change is a research focus. In practice, however, this selection matters. The religious diversity measure (as demonstrated in section 3.2 of this thesis, and as Finke *et al* have subsequently acknowledged) is not a scale-free measure.

Without a more sensitive methodology one is tempted to suggest that Finke and Stark's major findings - the positive relationship between religious diversity and the rate of adherence, and the higher rate of religious practice in cities than rural areas (a finding not detailed here) - are expressions of one and the same phenomenon. The most numerous immigrants of the late nineteenth-century - Irish and southern European Catholics - were more likely to live in the major urban centres than their northern European immigrants of earlier centuries.³⁵ This combination of ethnic diversity and a strong Catholic presence ensured that the largest American cities were both more religiously active and less religiously diverse than less populous settlements.

R. Finke, R. Stark and associates have recently responded to the many criticisms made of their earlier work.³⁶ In response to perhaps the most important point - the reliance upon the percentage Catholic measure - they stated: 'To avoid

³² Christiano, *Religious Diversity*, Table 1.2, p.6.

³³ Christiano, *Religious Diversity*, Table 1.3, p.6.

³⁴ Christiano, *Religious Diversity*, p.17.

³⁵ A detailed quantification and discussion of immigration into the United States during this period is provided in Christiano, *Religious Diversity*.

³⁶ Finke *et al*, 'Mobilizing religious markets'. See also Stark *et al*, 'Pluralism and piety', p.434-435.

this problem, the model should be applied to an area where Catholics do not dominate large segments of the religious market and thus do not force a negative correlation between pluralism [sic, recte adherence?] and diversity.³⁷ To do this they analysed data from New York State.

In their New York State regression analyses, Finke *et al* showed that religious diversity was a strong positive influence on religious practice, irrespective of whether or not the percentage Catholic was included in the model.³⁸ The most sociologically powerful finding of the analysis was that the positive influence of religious diversity *remained* even when the level of church adherence ten years earlier (1855), was entered into the regression equation.³⁹ This latter finding is the strongest piece of empirical evidence to suggest that religious diversity does indeed foster religious adherence, since it begins to incorporate change over time.

b) International comparisons.

The other major empirical underpinning of the rational choice approach to the effects of religious pluralism was offered by L.R. Iannaccone.⁴⁰ In many ways Iannaccone's empirical base is weaker than Finke and Stark's, being based upon published data for a self-selected sample of 18 'western' countries, with Ireland later being excluded from this sample precisely because it was a statistical outlier, (which no doubt reduced the goodness of fit of the regression model).⁴¹ Further, some of the data were estimated, as Iannaccone stated:

³⁷ Finke *et al*, 'Mobilizing religious markets', p. 208.

³⁸ The following regression results are reported in Finke *et al*, 'Mobilizing religious markets', p.212. In the following results, * indicates 'T' exceeded the 95% confidence level and ** indicates 'T' exceeded the 99% confidence level.

Model 1-A (all towns, n = 838):

Religious adherence = high population density (0.19**) + medium density (0.14**) + urban place (0.09*) + sex ratio (- 0.15**) + percent foreign born (- 0.02) + percent illiterate (- 0.08) + percent owning land (0.04): $R^2 = 0.10$.

Model 1-B (all towns, n = 838):

Religious adherence = high population density (0.08) + medium density (0.04) + urban place (0.01) + sex ratio (- 0.10*) + percent foreign born (- 0.05) + percent illiterate (- 0.01) + percent owning land (0.01) + religious diversity (0.44**): $R^2 = 0.25$.

³⁹ See Finke *et al*, 'Mobilizing religious markets', Table 2, p.214.

⁴⁰ Iannaccone, 'Religious market structure'.

⁴¹ Iannaccone, 'Religious market structure', p. 175 (endnote 15).

'Because the *Encyclopedia* [Barrett's World Christian Encyclopedia] does not typically report religious activity by denomination and because raw data from the ISV [International Study of Values] surveys were not available to me, I estimated both of these models at the national level.' [His italics].⁴²

At first sight Iannaccone's data offers little support for rational choice theory; the correlation between weekly attendance and the Herfindahl index of religious diversity was negative and statistically insignificant ($r_p = - 0.01$, $n = 18$).⁴³ Likewise there was no positive association between the Herfindahl index of religious diversity and belief in god ($r_p = - 0.12$, $n = 15$).

However, Iannaccone reported his findings in the form of regression equations, which predicted the church attendance and various religious beliefs, the multiple R values ranged from 0.9 to 0.97. These results, although hard to 'unpack' from the form they are presented, seemingly indicated that religious pluralism, church attendance and belief go rather perfectly hand-in-hand.⁴⁴ Once again, it was Catholicism which remained a fly in the ointment. Iannaccone noted:

'we find that Protestant attendance rates are strongly related to market structure but Catholic attendance rates are largely independent of it. Catholics attend church at much the same rate regardless of whether their church constitutes a large or small fraction of the national market, but Protestants are much less likely to attend church when a single Protestant denomination monopolizes their market.'⁴⁵

c) The United Kingdom.

Finke, Stark and associates have recently analysed the registration-district

⁴² Iannaccone, 'Religious market structure', p. 166.

⁴³ I calculated these correlations using the figures presented in table 1 of Iannaccone, 'Religious market structure', p. 165.

⁴⁴ Iannaccone, 'Religious market structure', p. 168.

⁴⁵ Iannaccone, 'Religious market structure', p. 169.

data for England and Wales for the Census of Religious Worship of 1851.⁴⁶ This work offered a rebuttal to the arguments of S. Bruce that the geographies of religious pluralism and religious adherence appeared unrelated in mid nineteenth-century England and Wales.⁴⁷ However, some comments are necessary to raise a note of caution concerning their findings.

The first point to note is that in marked contrast to their analysis of American data, Stark *et al* used seating rather than attendance data to create the diversity measure (Herfindahl index) of religious pluralism. They noted that 'It could be argued that an even more accurate measure of market share could be based on sitters rather than seats, for some denominations may have had extra seating capacity, compared with others.'⁴⁸ They concluded, however, that 'Although it is not inappropriate to use attendance statistics in both measures, it is better to calculate the independent and dependent variables without involving any of the same data in both calculations'.⁴⁹ As already noted, such caution was not noted in the Finke and Stark study of American cities.

The problem with using seating as a proxy for 'market share' in England and Wales, is that the provision of seating in 1851 was not a consistent reflection of current religious 'demand'. One has to remember that the provision of religious 'supply' dates back quite a long time in the United Kingdom. In particular, the majority of Anglican Churches had been built (as Catholic churches) many centuries before the 1851 Census. Intervening changes in population distribution often meant that Anglican seating provision did not always reflect the population in 1851 (leaving aside variations in religiosity). On the one hand epidemics, outmigration and outright depopulation left some churches seemingly over-sized in relation to the local population. Relatively few of these 'stranded' churches and chapels had fallen into outright dereliction by 1851.⁵⁰ On the other hand, the

⁴⁶ Stark *et al*, 'Pluralism and piety'.

⁴⁷ See S. Bruce, 'Pluralism and religious vitality', in Bruce, Religion and Modernization, pp. 170-194.

⁴⁸ Stark *et al*, 'Pluralism and piety', p.436.

⁴⁹ Stark *et al*, 'Pluralism and piety', p.436.

⁵⁰ See R. Morris, Churches in the Landscape (London, 1989), especially pp.388-392.

provision of seating did not always keep up with population increase in rapidly urbanising places.⁵¹

As becomes clear in the following chapter of this thesis, the over-provision of seating (i.e. 'excess supply') was a major theme of the mid-nineteenth century. In fifteen of the 624 registration districts of England and Wales, there were more seats than people (including infants and children). In Wales the over-provision of seating was most marked, with nine of the 48 Welsh districts containing more seats than people. In such districts 'demand' could clearly never approximate 'supply', however religious the community. Not only did supply of seating not match demand for these historical reasons, but in many areas the supply of seating was increased most rapidly where 'demand' was falling. This is a central argument of the British historian Robin Gill, whose work is considered in chapter 6 of this thesis.

In comparison with these many complications associated with using the provision of seating as a measure of market share, the number of attendances in 1851 appears to be an extremely accurate and unproblematic indicator of the relative success in 'mobilising' religious adherents by each denomination on Census Sunday. If one wanted to calculate the market share of Universities, one would be better placed to use student numbers than seats in lecture theatres.

The second point to note about the analysis of Stark *et al*, is that it commenced using registration *counties* as a unit of analysis rather than registration districts. As has been argued at length throughout this thesis, to have a valid sociological meaning, the diversity measure of religious pluralism must reflect the religious choices available to the individual. The rational choice approach is no exception, requiring a high degree of precision in the geographical delineation of 'religious markets' as areas within which religious choices should be *actively available* to each and every resident individual. In this context the use of registration counties as the unit of measurement is highly problematic, for example, a farmer in Berwick on Tweed is rather unlikely to have heard of, and would certainly not have been able to have been 'mobilised' by, a congregation of

⁵¹ Though see the arguments of Robin Gill presented in chapter 6 of this thesis.

Quakers in Newcastle (upon Tyne). According to Stark *et al*, in England and Wales in 1851 each person was capable of being 'mobilised' by any denomination in his or her home county, and thereby there were a maximum of 55 'religious markets' for eighteen million people.⁵² The use of British counties is indeed surprising given the importance attached to the more geographically sensitive data of New York State. New York State counties were, on average, slightly smaller than their British counterparts. In criticising Land *et al* for using (American) counties, Finke *et al* stated that the:

'The final measure of diversity for each county does not represent an average for each of the separate communities or religious markets; it treats the county (or a set of merged counties) as if it were a single religious market from which people choose their religious options. In so doing, the county measure misrepresents the actual religious situation of most individuals.'⁵³

Seemingly happy to analyse England and Wales at the county-level, Stark *et al* discovered a very similar result to that found in their American analyses already reported - a positive relationship between religious diversity and the index of attendances, that is, once the percentage of Catholicism was 'controlled for'. They asked:

'Why does Catholicism suppress the correlation between pluralism and attendance? ... Catholicism must be serving as a proxy variable for more basic social factors ... We suspect that one of these more basic social factors is the presence of a rapidly growing, urban, industrial working class.'⁵⁴

This answer is in large part correct. As a result of Irish immigration, Catholic support was quite closely associated with urban environments by 1851.⁵⁵ However,

⁵² The article does not report whether the individual Welsh counties were used or the aggregate 'South Wales' and 'North Wales' 'counties' reported in the official Report of the 1851 Religious Census. The use of the individual Welsh counties would have yielded a total of 55 counties in the analysis. It is also unclear whether the analysis included London.

⁵³ Finke *et al*, 'Mobilizing religious markets', p.213.

⁵⁴ Stark *et al*, 'Pluralism and piety', pp. 437-438.

⁵⁵ For the 624 registration districts of England and Wales there was a strong correlation between the Catholic index of attendances and the population density ($r_s = + 0.19$, $r_p = + 0.33$, $p = 0.000$ for both correlations). This correlation would be even stronger if 'native' Catholicism, which, as already

to use this fact as a basis from which to argue that Catholicism *suppressed* the underlying relationship between diversity and adherence, one has to concede that religious practice was low in these urban-industrial environments.⁵⁶ In so doing Stark *et al* cast doubt upon the universality of another of the 'universal propositions' upon which their work has been based - 'that the received wisdom about the relationship between cities and religion is a nostalgic myth. We show that urbanites are far more likely than rurals to *actively participate* in religion'. [Their italics].⁵⁷

When Stark *et al* subsequently confined their analysis of the English and Welsh data to 'cities', religious diversity was shown to be consistently and *negatively* related to the index of attendances, even when a variety of measures of Catholic strength was controlled for.⁵⁸ In the case of the last analysis they reported - which used the more reliable religious diversity measure calculated using *attendances* (in place of sittings) - religious diversity was shown to be a statistically significant *negative* influence upon the index of attendances. Whatever the nuances involved in the precise manner in which the variables were defined, to an outside observer this last analysis that Stark *et al* report appears to be extremely similar to the analysis of S. Bruce which they report alongside.⁵⁹

The final piece of analysis Stark *et al* conducted with the United Kingdom data was more geographically sensitive, being based upon registration districts (those of Wales) rather than entire counties. The choice of Welsh districts to optimise geographical sensitivity seems rather odd. Stark *et al* argued that ' Welsh

shown, was concentrated in remote rural areas, was separated from the Catholicism of Irish immigrants.

⁵⁶ Stark *et al*, 'Pluralism and piety', p.438.

⁵⁷ Finke and Stark, 'Religious economies', p.41.

⁵⁸ Stark *et al*, 'Pluralism and piety', Table 2, p.439.

⁵⁹ The following regression results are summarised from Stark *et al*, 'Pluralism and piety', p. 439. Standardised regression coefficients (beta weights) are shown in parenthesis. * Indicates 'T' exceeded the 95% confidence level. ** indicates 'T' exceeded the 99% confidence level.

Finke and Stark's equation:

index of attendances = religious diversity (- 0.25*) + % Catholic (-0.26*) + population (- 0.39**).

Bruce's reported findings:

index of attendances = religious diversity (- 0.29**) + % Catholic (- 0.30**) + population (-0.23*).

registration districts offer another crucial aspect: They were *compact*. ... These areal units more closely reflect real religious options - the array of religious choices available *nearby*.⁶⁰ [Their italics].⁶⁰ Using these criteria, Wales seems a strange choice indeed, since the average size of the Welsh districts was twice that of their English counterparts.⁶¹ If one sought after small, compact districts, south-east England would be a better place to look.

The regression carried out by Stark *et al* using the Welsh districts revealed once again that when the Catholic index of attendances was entered into the analysis, religious diversity exhibited a strong positive relationship with the index of total attendances.⁶² In contrast to their previous table analysing the city data, Stark *et al* only reported the results using the diversity measure calculated using the *seating data*. There was no mention of the results of any analysis carried out using the more desirable religious diversity measure based upon *attendance data*.

Using the registration district dataset assembled for this thesis suggests why such a choice may have been made. The regression analysis that Stark *et al* reported was repeated taking the diversity measure based upon attendances.⁶³ The result was that neither the percentage Catholic nor the religious diversity was entered into the regression analysis (using a stepwise entry method based on the minimum entry of 'T' at the 95% confidence level). Even forcing the variables into the equation revealed a very weak result indeed.⁶⁴ This weak result was *not* a product of differences in the two datasets. The analysis of Stark *et al* using the 'seating' measure of religious diversity was replicated using the dataset assembled

⁶⁰ Stark *et al*, 'Pluralism and piety', p.441.

⁶¹ The mean size of the 576 English registration districts was 226 square kilometres (the median was 207). The mean size of the 48 Welsh districts was 442 square kilometres (the median was 414).

⁶² Stark *et al*, 'Pluralism and piety', Table 3, p.441.

⁶³ Stark *et al*, 'Pluralism and piety', Table 3, p.441.

⁶⁴ The regression equation with the diversity measure based upon attendances and the % Catholic calculated, as by Stark *et al*, as the total Catholic attendances divided by the total population (i.e. a form of the Catholic index of attendances), was:

index of attendances = religious diversity (0.1) + % Catholic (- 0.27)

The 'T' value of religious diversity was 0.67 (p = 0.51) and for the percentage Catholic was - 1.7 (p = 0.09). The adjusted R² was 0.02.

for this thesis, and the results were extremely similar.⁶⁵ The minor differences probably arose from the interpolation of 'missing' data in the dataset analysed in this thesis (the method of interpolation is detailed in Appendix 2 of this thesis).⁶⁶

In conclusion to their foray into the English and Welsh data, Stark et al explained their disappointing results by concluding that 'proposition 4a' may have come into play. They posited:

'Assume a society having a rigid caste system of a dozen castes. Assume that each caste is of relatively similar size and that each is served by its own independent, distinctive religious firm. The Herfindahl Index for such a society would indicate an extraordinary level of pluralism - far greater than that found in the United States today. Yet, because it is *impossible* for any person in this society to shift religious affiliation, since *eligibility is entirely limited at birth*, there is no religious competition whatsoever in this society. Functionally, the situation of any given individual in such a society would be identical with the situation of individuals in societies having only one monopoly religious firm.' [My italics].⁶⁷

It is somewhat strange, but quite typical of the rational choice approach, to pack such a large number of hitherto unconsidered and unsubstantiated points into a conclusion. In this way what many consider to be the heart of sociology appears to be relegated to a somewhat trivial post-hoc excuse for why the deductive propositions did not appear to work in a given instance. The result is typically a new, '*nth*' proposition (in this case a relatively modest '4a') to be bolted onto the next regression analysis. N.J. Demareth observed of the related work of L.R. Iannaccone that 'Throughout Iannaccone's analyses the theory seems to enjoy a higher priority than the reality at stake. His objective is not so much to *test* his models as to *mine* them for potential insights.' [His italics].⁶⁸ I would argue that

⁶⁵ Stark *et al* reported the following analysis for the 48 Welsh registration districts. See Stark *et al*, 'Pluralism and piety', Table 3, p. 441.

index of attendances = religious diversity (0.52) + % Catholic (-0.36): $R^2 = 0.32$.

The following highly similar results were obtained from the dataset used in this thesis:

index of attendances = religious diversity (0.46) + % Catholic (-0.36): $R^2 = 0.25$.

⁶⁶ No method of interpolation is mentioned in Stark *et al*, 'Pluralism and piety'.

⁶⁷ Stark *et al*, 'Pluralism and piety', p.442-443.

⁶⁸ Demareth, 'Rational paradigms', p.106.

once the door is opened to allow a consideration of cultural, ethnic, social, historical and geographical complexity, the notion of a rational choice 'theory' of religion appears every bit as flawed as the most deterministic workings of the secularisation 'thesis'. The following sections further these criticisms.

5.3 Cross-Sectional Analysis and Cause and Effect

Leaving aside the unresolved problems with multi-collinearity, and the Catholic 'problem' of the American analyses, and the very different interpretation offered by the analysis of England and Wales, a more fundamental criticism of the rational choice approach is its assumption that a cross-sectional analysis of contemporaneous measures of religious pluralism and religious practice can be used to demonstrate a *causal* relationship between the two. Even if one agrees entirely with the religion-as-market analogy, one needs to demonstrate that religious 'supply' *creates* religious 'demand', and not simply that localities with higher religious diversity tend to be characterised by higher levels of religious mobilisation.

As already evident, all the major rational choice inspired investigations of religious pluralism have used *differences across space* in lieu of *differences over time*. In this manner, the verification of an hypothesis along the lines of 'places with the highest levels of religious diversity will also display the highest rates of religious adherence' has been used to support the proposition of a *causal* relationship between religious pluralism and religious mobilisation, or a Finke *et al* put it 'As communities *gain* religious alternatives, the attendance rate *increases*'. [My italics].⁶⁹ Even where data would permit longitudinal analysis, as in Sweden, this has yet to be published.⁷⁰

⁶⁹ Finke *et al*, 'Mobilizing religious markets', p.210.

⁷⁰ A recent analysis suggested that the Swedish data supported the rational choice model of religious pluralism, but noted that longitudinal analysis was needed to substantiate this interpretation. See E.M. Hamberg and T. Pettersson, 'The religious market: denominational competition and religious participation in contemporary Sweden', Journal for the Scientific Study of Religion 33:3 (1994), 205-216.

Geographers have long recognised the problems of inference from aggregate data. Almost thirty years ago, H. Alker produced a typology of 'ecological fallacies' which proves extremely pertinent to the rational choice inspired research. In particular, one can invoke the *individualistic fallacy* - in which the whole is seen as no more than the sum of the parts; the *universal fallacy*, which assumes that the pattern observed in a sample - often not randomly selected - holds for its population; the *selective fallacy*, in which data from carefully selected cases are used to 'prove' the general hypothesis; and the *cross-sectional fallacy*, the assumption that what is observed at one point in time applies to other times.⁷¹ The overall conclusion to be drawn is that although (statistical) relationships may be observed, a causal relationship cannot be assumed. At best, cross-sectional analysis of spatially aggregated data can be said to produce findings consistent with an hypothesis, and if the *selective fallacy* has come into play, such consistency is unsurprising.

Little caution has been made apparent by those interpreting differences across space as a proxy for causal effects over time. However, it is clearly vital to demonstrate that religious pluralism can be separated from the melting pot of ethnic, class, and cultural factors inherent in the geography of any country - not least the United States. A less contestable conclusion from cross-sectional data analysis would be that places with a higher religious diversity also displayed a higher level of religious practice (not that such a relationship has yet to be unambiguously demonstrated for any country at any time period). Phrased in this way it becomes less easy to tell which is the chicken and which the egg. If one town has more ice-cream salesmen than another, perhaps one would not be surprised that total ice-cream sales were also higher. The question would remain as to whether the presence of a greater 'diversity' of ice-cream salesmen had itself created this greater market, or whether it reflected a pre-existing difference in the cultural affinity towards ice-cream consumption in the population of the two towns - a difference resulting, perhaps, from variations in ethnic composition, social class, or the climate of the two towns.

⁷¹ H.R. Alker, 'A typology of ecological fallacies', in M. Dogan and S. Rokkan (eds), Quantitative Ecological Analysis in the Social Sciences (Massachusetts, 1969), pp. 69-86.

Whatever the weight of evidence proves to be when the religious history of the United States is analysed more convincingly, the more open-minded rational choice theorist would need to observe, as Ammerman noted that 'both the diversity and the high rates of participation may be the product of a common antecedent factor, a factor inherent in the culture, rather than in the structure of the market itself. In much of the U.S. cultural context, a strong religious culture may produce both diversity and participation.'⁷²

In short, the cross-sectional analyses (at least in their current format) do little to advance the sociology of religion. To return to a more sociological consideration of the processes of religious change, one can propose that the discovery of a negative relationship between *contemporary* measures of religious pluralism and religious adherence does little to support Berger's contention that pluralism secularises, and conversely, that the discovery of a positive relationship does little to strengthen the view that pluralism vitalises religion.

Even if one could be sure that the discovery of a relationship between pluralism and adherence was not the product of some ecological fallacy, uncertainties would remain as to whether the discovery of a positive relationship between religious pluralism and religious practice represented a *short-term* and *transient* social trend, or a *progressive, longer-term* trend. The premise underlying this thesis is that the effects of religious pluralism upon religious practice were *long-term, gradual, and progressive*. In chapter 4 it was shown that one could trace the effects of religious pluralism in 1676 upon the levels of church-going in 1851. It was argued that over this 175 year time period one could begin to isolate the effects of religious pluralism upon levels of church-going behaviour. In short, it was shown that the areas with the highest pluralism in 1676 showed the lowest rates of religious practice in 1851, even when the complicating effects of the varying socio-economic conditions were taken into account.

⁷² N.T. Ammerman, 'Religious choice and religious vitality: the market and beyond', in L.A. Young (ed.), Rational Choice Theory and Religion (New York, 1997), pp.119-132, pp. 122-123.

It is argued that changes in religious behaviour are cultural phenomena, and thereby differ profoundly from more familiar market decisions, such as choice of toothpaste brand (or whether to use dental floss). Whether one considers the disconfirming power proposed by Berger, or the stimulus offered by greater choice in the religious market, one would expect that such *cultural* aspects of social change (i.e. changes in religious belief and behaviour) would emerge only gradually and over several generations. The question is not necessarily as simple as whether pluralism 'secularises' or 'vitalises' but whether these effects are *long-term and progressive* or *transient and self-limiting*. If the rational choice mechanism is transient then one might observe an initial stimulus as a result of increased religious choice (and this was certainly offered by nonconformity in nineteenth century England and Wales, as will be argued in chapter 7 of this thesis). However, religious diversity would become its own-grave digger, if in the longer term, the disconfirming power of religious pluralism becomes the dominant trend.

It is hard to see how Berger's mechanism could be reversed in such a manner, though I would argue that the disconfirming power of religious pluralism is self-limiting and historically bounded. One could not invoke a disconfirming power of religious pluralism in a society which had been intensely religiously plural for centuries. As Repstad noted, one should not be surprised that the 'doubt-creating' power of pluralism should shrink over time.⁷³ I would not seek to apply Berger's theory to the contemporary United Kingdom, since, for the reasons outlined in section 2.4, I consider his to be a theory applicable to 'early' rather than 'late' modernity. It may well be that the social significance of religious pluralism in the United States has itself diminished, to the point where it can best be understood in terms of market forces.

In England and Wales between 1676 and 1851, this thesis has supported Berger's view that:

⁷³ P. Repstad, 'Introduction: a paradigm shift in the sociology of religion?', in Repstad Religion and Modernity, pp. 1-10.

'One of the most obvious ways in which secularization has affected the man in the street is as a "crisis of credibility" in religion. ... This manifestation and secularization on the level of consciousness ("subjective secularisation", if one wishes) has its correlates on the social-structural level (as "objective secularisation"). Subjectively, the man in the street tends to be uncertain about religious matters. Objectively, the man in the street is confronted with a wide variety of religious and other reality-defining agencies that compete for his allegiance or at least attention, and none of which is in a position to coerce him into allegiance. In other words, the phenomenon called "pluralism" is a social-structural correlate of the secularization of consciousness.'⁷⁴

The situation has been described in less phenomenological language by S. Bruce:

'Every increase in competition challenges that taken-for-grantedness [of world-view] and makes certainty more difficult to maintain. If the competing faith belongs to some subordinate social minority it can be dismissed as fitting only for that kind of people. ... But when small communities of socially similar people start to fragment so that some stay in the Church of Scotland and some go to the Free Church down the road and some attend a Baptist meeting around the corner, and you live and work with these people, it becomes more and more difficult to insist that your own link with God is unique and the others are all wrong. Gradually the way in which people hold their belief changes, so that the absolute certainty and the intolerance diminish'.⁷⁵

Of course, such an increase in choice, especially the presence of an alternative to Anglicanism, may have also have led to individuals *starting* to participate in acts of worship - believers who, for whatever reason, had previously felt alienated from worshipping at the established church. As argued in chapter 7 of this thesis, one can certainly detect distinctive cultural regions which had been alienated from the Anglican Church in which the rise of dissent greatly increased the rate of religious adherence.

⁷⁴ Berger, The Social Reality of Religion (Harmondsworth, 1973), p.131.

⁷⁵ S. Bruce, Religion in Modern Britain (Oxford, 1995), p.10.

Whatever the answers to the debate concerning religious pluralism, and whether these answers themselves vary historically and geographically, the United States in the late nineteenth century is an extraordinarily difficult example to prove either side of the argument. It provides a context in which the impact of religious diversity could only have been felt in the short term, since this was a period of mass immigration from diverse religious and ethnic backgrounds.⁷⁶ Of course, a reliance on cross-sectional data is partly the result of available time-series data. Even where religious sources are available for different time periods, considerable methodological problems ensue in making such sources comparable, as has become apparent in this thesis with respect to the Compton Census of 1676 and the 1851 Religious Census. However, I would argue that the findings presented in this thesis with respect to England and Wales between 1676 and 1851, and the finding that in the United States, the more *recent* the cross-sectional analysis the more *negative* the relationship between religious diversity and the rate of adherence (the trend from 1910 to 1930 reported in Land *et al*, and the leap to the 1980 data of Breault), are suggestive that the long-term effects of religious pluralism upon rates of religious practice were indeed negative.⁷⁷

5.4 The Catholic 'Problem'

To criticise the rational choice approach solely in terms of its methodology is to challenge it on its own terms, and thereby to invite further analyses with appropriate innovation of context, measurement, and proposition. While such developments will probably strengthen support for the approach in the United States, some more profound issues of concern would remain. As N.J. Demareth asked: 'Isn't it possible that competition among churches bears about the same relation to religion that competition among fast food franchises bears to nutrition?'.⁷⁸ If such doubts appear less than trivial, then the 'religious market'

⁷⁶ This is a central theme in Christiano, Religious Diversity.

⁷⁷ Though a shadow seems to hang over the findings of Breault. See R. Finke and R. Stark, 'Evaluating the evidence: religious economies and sacred canopies', American Sociological Review, 54 (1989), 1054-56.

⁷⁸ Demareth, 'Rational paradigms', p.109.

becomes a questionable analogy for understanding the bigger picture: the relationship between religion and society. The following paragraphs explore some potential doubts.

It is well documented that the universalism and inevitability implied by the secularisation 'thesis' has been most forcefully challenged by the vitality of religion in the contemporary United States.⁷⁹ The original works defining secularism and secularisation were almost entirely Eurocentric,⁸⁰ and later works did little to consider the United States, other than concluding (rather dismissively) that some form of 'internal secularisation' of the American churches had ensued, or by viewing it as a 'deviant case'.⁸¹ If American 'exceptionalism' has thereby proved the point at which secularisation theory appeared most frail and lacking in explanatory power, then it is the consideration of *Catholicism* that serves to open up the limitations of the rational choice approach. The examination of the methodology of the rational choice approach of the previous two sections of this thesis has made clear that there was a continual need to statistically 'control' for the 'percentage of Catholics' (whether in the United States or the United Kingdom) in order to produce the desired positive relationship between religious diversity and religious adherence.

Whether one is examining data for the United States in 1910 or the United Kingdom in 1851, to 'control' for the percentage Catholic is to treat separately the immigrants from southern and eastern Europe or Ireland.⁸² The fact that Catholics

⁷⁹ See, for example, R. Finke, 'An unsecular America', in Bruce, *Religion and Modernization*, pp. 145-169; J.K. Hadden, 'Toward desacrilizing secularization theory', *Social Forces*, 65:3 (1987), 587-611.

⁸⁰ Here I refer to many of the most famous founding fathers of the social sciences, Auguste Comte, Emile Durkheim, Max Weber, and Karl Marx. As Turner noted 'nineteenth-century theories of industrialisation were also theories of secularisation', B.S. Turner, *Religion and Social Theory* (London, 1991), p.134.

⁸¹ The main body of later work, as reviewed in chapter 2 of this thesis, stems from Bryan Wilson, Peter Berger, Thomas Luckmann and David Martin. Other than Martin, all these authors have stated quite regularly that American exceptionalism can be explained by 'internal secularisation' of American churches. However, they have done little to substantiate such claims. See, for example T. Luckmann, *The Invisible Religion*, (New York, 1967) pp. 36-37; Berger, *Social Reality*, p.114.

⁸² Catholicism in England and Wales was largely due to Irish immigration by 1851, since 'native' English Catholicism existed only in a few isolated enclaves by the early nineteenth century. See A. Crockett and K.D.M. Snell, 'From the 1676 Compton Census to the 1851 Census of Religious Worship: Religious Continuity or Discontinuity?', *Rural History: Economy, Society, Culture*, 8:1

had arrived from countries with a religious 'monopoly', and yet were more likely to have maintained their faith than their Protestant counterparts (who were often from religiously tolerant and plural backgrounds) is rather neatly swept to one side. In contemporary Europe, it is the Catholic southern countries, Ireland and Poland, all of which retain a Catholic near-monopoly, which display the highest rates of religious practice, whereas many of the northern European countries with the lowest rates of practice were amongst the first to 'pluralise' (the United Kingdom being an exemplar).⁸³ Even within the United States themselves, it is the Catholic Church which has displayed the greatest tendency to 'monopolise' whilst also attracting the adherence of a large proportion of the total population.

The method used to solve the Catholic 'problem' facing the rational choice interpretation of religious change has been to move from a consideration of *religious adherence*, on which the approach so patently stumbles, to a focus upon the *intensity of religious commitment*.⁸⁴ R. Stark argued that the Catholic level of commitment varied inversely to the proportion of Catholics in the population (in a self-selected sample of 45 countries). He examined the ratio of priests per 10,000 capita, and discovered that the apparently most Catholic countries of Central and South America had about a tenth the ratio of Catholic priests per capita compared with countries in which Catholicism was one denomination amongst many (especially North America and Scandinavia). He thereby concluded that Catholicism did indeed obey the general principle that the greater the 'competition' the higher the level of vitality.

Although Stark stated that 'One needs no statistical techniques to detect the overwhelming pattern in these data',⁸⁵ he made much of the former, in the shape of Pearson correlation coefficients. In terms of contextualising the correlations, he observed that 'In Iceland, where only 0.9% of the population is Catholic, there are

(1997), 55-89. In the United States in 1910 the majority of recent Catholic immigrants were southern Europeans, see Christiano, *Religious Diversity*.

⁸³ This point was raised by S. Bruce, 'Religion and rational choice: a critique of economic explanations of religious behavior', *Sociology of Religion*, 54:2 (1993), 193-205: see especially pp. 197-198. Also pertinent to a purportedly universal theory are the extremely high levels of religious adherence in many countries with an Islamic monopoly.

⁸⁴ R. Stark, 'Do Catholic societies really exist?', *Rationality and Society*, 4:3 (1992), pp. 261-271.

⁸⁵ Stark, 'Catholic societies', p. 266.

45 priests for every 10,000 members as is also the case in Finland.⁸⁶ He contrasted such figures with the ratios of less than 1 priest per 10,000 capita reported for several Central American countries. The question is whether such crude ratios have any valid sociological meaning. To return to the Iceland example, if 0.9% of the population were Catholic, this represented about 2,330 Catholics.⁸⁷ To obtain a ratio of 45 Catholic priests per 10,000 Catholics would require only about 10 or 11 such priests in the whole of Iceland. With what meaning, if any, ten priests can be said to demonstrate a greater intensity of commitment to their faith by Icelandic Catholics compared with their South American counterparts appears open to question; the question being whether such analysis represents valid sociological evidence, or whether it is empiricism gone quite mad.

Another solution to the Catholic 'problem' proposed by those adhering to the rational choice approach has been to conclude that Catholicism is so successful because it has a high internal diversity not captured by the Herfindahl index.⁸⁸ For instance, Finke *et al* have recently expanded Finke's earlier argument:

'He [Finke] went on to explain that the capacity of the Catholics to dominate many urban markets was due, in part, to their ability to sustain *internal diversity*. "The local parish appealed to a specific immigrant group or social class, and the diversity of parishes appealed to a broad spectrum of the population".' [My italics].⁸⁹

No doubt there is truth in such remarks. However, the acknowledgement of such complexity again opens the door to doubts concerning the merits of an approach centred upon linear regression using a measure of religious pluralism calculated using an Herfindahl index of market concentration. One again, one is faced with the point where the explanatory power of the rational choice approach ends and a more 'sociological' sociology needs to begin.

⁸⁶ Stark, 'Catholic societies', p. 267.

⁸⁷ This estimate assumes the population of Iceland to be 259,000.

⁸⁸ Finke *et al*, 'Mobilizing religious markets', p.206.

⁸⁹ Finke *et al*, 'Mobilizing religious markets', p.206. The quote they make is referenced to Finke, 'Unsecular America', p.158, but it appears on p.160.

Rationality and the problem of plausibility.

The special case attached to Catholicism within the rational choice approach tends to mask a more fundamental limitation of the approach, a limitation at the root of rational choice theory in which it was born.⁹⁰ In the language of Stark and Bainbridge's rational choice theory of religion, '*Religion* refers to systems of general compensators based on supernatural assumptions.' [Their italics].⁹¹ It is widely agreed, within both the secularisation and the rational choice theories that in the Christian tradition the ultimate compensator is salvation (i.e. the promise of an afterlife).⁹² If, in most Christian cultures, attendance at religious worship is an integral part of ensuring such salvation, then, even working under the auspices of rational choice theory, the 'compensator' (for unrealisable material rewards) of *salvation* has to be uniformly *needed* and uniformly *plausible* across space and over time in order for market principles to be invoked as the sole means of explaining the observed differentials in religious attendance behaviour. While it has shown that rational choice theory can provide a basis for studying differences in the *need* for salvation,⁹³ the *plausibility* of salvation remains a problem. For instance, the twenty-fifth proposition of Stark and Bainbridge's theory of religious commitment reads: 'Regardless of power, persons or groups will tend to accept religious compensators when desired rewards do not exist.'⁹⁴ The implication is that the need for supernatural compensators is a constant whenever and wherever desired rewards are not obtainable. Quite apart from the issue raised by Knudsen concerning whether one can quantify religious needs (especially the need for

⁹⁰ See Stark and Bainbridge, Theory Of Religion and Future of Religion; Iannaccone, 'Religious market structure' and 'Strict churches'.

⁹¹ Stark and Bainbridge, 'Towards a theory of religion', p.123.

⁹² B.R. Wilson posits salvation as the central manifest function of Christianity, See B.R. Wilson, Religion in Sociological Perspective (Oxford, 1982). In similar vein Stark and Bainbridge state that 'All societies utilize compensators. Perhaps the most universal is some promise of a triumph over death'; Stark and Bainbridge, 'Towards a theory of religion', p.121.

⁹³ C.Y. Glock, in particular, has argued that because lower status people are less able to secure desired rewards and thereby have a greater need for religious compensators (i.e. a version of the 'comfort thesis'). While it has been shown with respect to the Episcopal church that people of lower social status displayed greater levels of religious commitment, this remains virtually the only demonstration of this effect. Rational choice theory has had to raise the issue of differentials of *plausibility* to explain why, in general, religious adherence appears to *rise* with social status. These issues are discussed in K. Dobbelaere, 'Secularization a multi-dimensional concept', Current Sociology, 29:2 (1981), 3-216, see especially pp. 130-133.

⁹⁴ Stark and Bainbridge, Theory of Religion, p.126.

nomos) in the same way as what he calls 'rather trivial' consumer needs, I would argue that the least sustainable assumption is the uniformity of plausibility.⁹⁵

If the plausibility of religion's claims to offer salvation is not a cultural constant (which I would argue it clearly is not), then differentials in plausibility become central to the theorisation of religious change. Indeed, I would argue that such differentials are sociologically far more fundamental to the relationship between religion and society than market dynamics - at the very least they govern the size of the 'potential market'. The conclusion offered here is that while market forces retain a utility in explaining the distribution of religious affiliation within the body of the population which finds religious salvation plausible, they are incapable of addressing the wider picture of the plausibility of religion *in toto*, an issue which is surely fundamental to religious change in the contemporary world. Plausibility raises many complex issues. It is the point at which no number of additional propositions bolted onto a rational choice theory of religion and added into regression analyses can serve to stop the complexities of geography and history (not to mention cosmology) come flooding back into the sociology of religion.

Since rational choice theory tends to be totalising, even such fundamental deficiencies are seen as being solvable within the rational choice approach; which is seen as suffering from a 'demand-side' weakness. Sherkat has recently offered a general theory of religious change noting that 'While religious markets bear some resemblance to markets for automobiles, textiles, and gasoline, they are more profoundly influenced by preexisting social relationships than are markets for such non-cultural goods of less social import'.⁹⁶ However, Sherkat's solution is not to look beyond rational choice theory for an understanding of culture, but to bolt a quantification of social and cultural context onto the existing model. He stated:

⁹⁵ The work I refer to here is J.P. Knudsen, 'The modern myth of cultural diffusion and the quest for the social causes of religious preferences', in Repstad, Religion and Modernity, pp. 45-61.

⁹⁶ D.E. Sherkat, 'Embedding religious choices: integrating preferences and social constraints into rational choice theories of religious behavior', in L.A. Young (ed.), Rational Choice Theory and Religion, (New York, 1997), pp. 66-86, pp. 68-69.

'A religious choice is a function of the utility derived from preferences at both the individual and social levels, and an individual will choose commodity 1 over commodity x when:

$$\text{Equation 1: } u(E_{1ik}) + u(S_{1il}) > u(E_{xik}) + u(S_{xil})$$

where $u(E_{1ik})$ is the utility associated with satisfaction of egoistic preferences for individual i and for the k dimensions of egoistic value produced by a commodity. $U(S_{1il})$ is the utility associated with pressures from family relations, social ties, normative expectations, or internalized norms for individual i and the l possible relational pressures of sympathy or antipathy, example setting, or sanctions. This should hold between all pairs of comparisons in the religious market, with x defining the number of products being evaluated for choice, the feasible set of options available to actors in the market, which is itself subject to constraints both from the supply side directly [which Sherkat sees as the more established pursuit of rational choice theory] ... and also from cultural barriers which prevent particular goods from being considered as part of the feasible set [Sherkat's addition to the rational choice theorisation of religion] ... Who, for instance, seriously considers Aztec religion as a viable choice in the American religious market?⁹⁷

For those whose faith lies in rational choice theory such arguments mark the beginnings of a more effective and culturally sensitive rational choice theorisation of religion. To those who argue that the totalising ambition of rational choice theory has already over-stretched its utility, it marks the pushing of the limits of quantification way beyond what is sensible (or indeed feasible). I would argue that the essential weakness of the rational choice theory of religion would remain, somewhat ironically, in its lack of consideration of 'rationality' (beyond the guiding principle of 'optimising behaviour').⁹⁸ If one asks a question along the lines of 'is understanding religion compatible with believing?'⁹⁹, one comes to an issue which secularisation theory rightly attached central importance. Rational choice theory has said little about the relationship between the possibility and probability of

⁹⁷ Sherkat, 'Religious choices', p. 78.

⁹⁸ Hechter recently noted: 'there is little consensus about the meaning of rationality in social science, let alone among commentators on rational choice theory'; M. Hechter, 'Religion and rational choice theory', in L.A. Young (ed.), Rational Choice Theory and Religion (New York, 1997), pp. 147-159, p. 147.

⁹⁹ I allude here to A. Macintyre, 'Is understanding religion compatible with believing?', in B.R. Wilson (ed.), Rationality (Oxford, 1974), pp. 62-77.

religious belief and modernity, beyond rather trivial observations such as that quoted above - that 'Aztec' religion may be a non-starter in the contemporary United States.

European exceptionalism revisited.

If the secularisation approach was too quick to propose that salvationism would decline as meliorism rose (to use G.B. Shaw's distinction),¹⁰⁰ or that the explicit function of 'salvation' made religion uniquely anathematic to rationality,¹⁰¹ then the rational choice approach ducks such fundamental issues altogether. To deny the possibility of secularisation, or view secularisation as cyclical and self-limiting as Stark and Bainbridge do, one is forced to argue that the potential plausibility of salvation (and religious beliefs in general) is a constant across history and across cultures. Almost all research within the rational choice approach has attempted just this. Indeed, it has been argued that Europe is not secularised precisely because the plausibility of salvation is as high in the supposedly most 'secularised' countries of northern Europe as it is in the United States.¹⁰² The evidence used to support this argument is that in most northern European countries attendance of religious worship is low or minimal, but between a third and three quarters of the population answered questions such as do you 'believe in god?', or 'are you a religious person?', affirmatively.¹⁰³ On this evidence Stark and Iannaccone argue that the situation is not one of secularisation but rather an historic 'supply-side weakness'.

A superficial response to such claims is to argue that reliance upon such opinion-poll data is extremely tenuous.¹⁰⁴ I would certainly describe myself as a

¹⁰⁰ See Gilbert, Post-Christian Britain.

¹⁰¹ Not that secularisation theory has posited a single answer to this question. To Wilson and others, rationality is strongly anathematic to religious belief in the modern world. For Berger, there is no such clear dissonance, and much of his later work aims to reconcile theological and sociological claims to truth. The relativism inherent in Berger's sociology of knowledge has much in common with post-modern claims that no claims to truth should hold a privileged position.

¹⁰² See Stark and Iannaccone, 'Supply-side reinterpretation'.

¹⁰³ Stark and Iannaccone, 'Supply-side reinterpretation', p.245.

¹⁰⁴ The nuances of opinion-poll style data were considered in S. Bruce, 'The truth about religion in Britain', Journal for the Scientific Study of Religion, 34:4 (1995), 417-430; and Religion in the Modern World: from Cathedrals to Cults (Oxford, 1996), pp. 32-33. See also F.J. Lechner, 'Secularization in the Netherlands?', Journal for the Scientific Study of Religion, 35:3 (1996), 252-264, pp. 256-257.

'religious person' if confronted by a market researcher, but this is because I consider myself to have a spiritual depth and a moral code for living, not because I am a follower of an organised faith. A more measured response rests upon Stark and Iannaccone's contention that were these European countries to be opened up to vigorous free-market style religious competition, then church-going levels would reach the 43% or so reported for the contemporary United States. They concluded: 'The data show that *potential demand* varies little across these nations, so lack of demand cannot account for their low levels of religious participation.' [Their italics].¹⁰⁵

There are clearly many differences between North America and Europe (assuming either can be meaningfully represented as a monolith) apart from the differing intensity of competition in the religious market. Verweij *et al* have recently noted that the degree of welfare and social security provided by the state and the level of religious attendance showed a negative relationship.¹⁰⁶ If one equates high social welfare provision with increased security and well-being of the poorest, then this observation fits well the contention that as 'meliorism' rises 'salvationism' declines.

However, broad-brush comparisons based on the quantitative analysis of secondary data for self-selected lists of nations cannot be used to 'prove' or 'disprove' secularisation theory. To persuasively interpret international religious trends will require much greater scholarly attention than is currently presented.

To argue that Stark and Iannaccone's 'supply-side' re-interpretation of the secularisation of Europe is blind to some basic history and geography, one can return to the context of England and Wales, which invites a very different interpretation of the interactions of supply and demand.¹⁰⁷ The first wave of 'religious pluralism' - the spread of old dissent after the Reformation - remained notably vibrant until around the time of the Toleration Act of 1689. Thereafter there

¹⁰⁵ Stark and Iannaccone, 'Supply-side reinterpretation', p.245.

¹⁰⁶ J. Verweij, P. Ester and R. Nauta, 'Secularization as an economic and cultural phenomenon: a cross-national analysis', *Journal for the Scientific Study of Religion*, 36:2 (1997) 309-324.

¹⁰⁷ See also the critique of Stark and Iannaccone presented in Bruce, 'Truth about religion'.

was a century or so of decline. As H.W. Clark noted, 'Upon the passing of the Toleration Act a decline of vital religion set in, to endure until the Evangelical Revival kindled warmth again.'¹⁰⁸ Thus, when the state was most active in trying to exclude any religious competition, such competition thrived, and when toleration increased, dissent declined. A possible explanation is that the very persecution to which it was subjected created the martyrs necessary to spread the dissenting faiths.¹⁰⁹

A parallel process occurred with the new dissent of the evangelical awakening, a movement which bought nonconformity from the minimal legal toleration of the eighteenth century, to the verge of complete equality and the calling for the disestablishment of the Anglican Church.¹¹⁰ Such had been the reforming influence of dissent that by the late nineteenth century virtually no legal barriers stood in the way of dissent or dissenters. The 1851 census had demonstrated that for the past 25 years or so dissent had been at least as popular as the Church of England. It was from precisely this point of the mid to late nineteenth century - when a competitive religious market was in place and religious participation was very high - that popular support for religion started to decline.¹¹¹ Most importantly, this decline occurred first, and most intensively, amongst the 'free-market' nonconformist denominations.¹¹² The decline continues unabated to the present day (indeed it could be said to be accelerating). In 1975, 18.5% of the population claimed membership of the major denominations (including the Free Churches), by 1980 the respective figure was 16.8%, by 1985 it was 15.6%, falling further to 14.9% in 1990 and to 14.4% by 1992.¹¹³

¹⁰⁸ H.W. Clark, *A History of English Nonconformity* Vol 2 (London, 1913), p. 137.

¹⁰⁹ This argument was proposed in M.R. Watts, *The Dissenters (i): From the Reformation to the French Revolution* (Oxford, 1978), pp. 382-393.

¹¹⁰ These points were summarised in section 1.1 of this thesis.

¹¹¹ The decline occurred in both membership and attendances.

¹¹² The best available trends in membership statistics were presented in Currie et al, *Churches and Churchgoers*. The historic decline continues to the present day with the Methodists losing members at 2.6% and all denominations losing membership at 1.9% per annum between 1985 and 1995 (figures reported in Davie, *Religion in Britain*, Table 4.1, p.49). Similar trends are also reported in Bruce, 'Truth about religion'.

¹¹³ Figures reported in Davie, *Religion in Britain*, Table 4.1, p.46.

To Stark and Iannaccone, even such low contemporary memberships figures cannot be used to evidence religious decline, because 'in 1800 there were a total of 1,230,000 church members (Protestant dissenters and Catholics as well as Anglicans) from a population of 10,686,000 (England, Scotland, and Wales). That comes to 11.5% of the population. In 1850 there were 3,423,000 church members, or 16.7% of the population.'¹¹⁴ Leaving aside the considerable problems with the data (which predate any measurement, or even concept of Anglican 'membership' - which was equated as the number of Easter communicants, this number itself being imputed as 78.52 times the number of Anglican incumbents, which was itself estimated for 1800),¹¹⁵ nagging questions remain.¹¹⁶ Why was it the 'free-market' denominations, which had so successfully recruited adherents until the late nineteenth century, which displayed the sharpest fall in membership?¹¹⁷ The Catholic 'monopolists' have retained members far more successfully, outnumbering all major Protestant denominations (including Anglicans) by 1970.¹¹⁸

In the United Kingdom one cannot attempt to account for religious change without acknowledging that a massive, and hitherto unchecked, decline in visible religion occurred after a period of intensive religious pluralism and the growth of a virtually free religious market. Even the British historians and sociologists most sceptical of secularisation theory acknowledge almost universally that by most measurable indicators (most typically attendance and membership), a decline in visible religious involvement commenced in the late nineteenth or early twentieth century and has continued to the present day.¹¹⁹ As G. Davie observed:

¹¹⁴ Stark and Iannaccone, 'Supply-side reinterpretation', p.243.

¹¹⁵ The assumptions inherent at every stage of the Episcopalian membership estimates, 1800-1970, were presented in Currie et al, Churches and Churchgoers, pp.25-27.

¹¹⁶ Indeed, the very need for the Anglican Church to define its members evidences a substantial religious change that many would interpret as symptomatic of the declining influence and power of the established church.

¹¹⁷ This point is made in M.R. Watts, Why Did the English Stop Going to Church? (London, 1995), p.13. For a detailed calculation of the changing rates of church membership, see Bruce, 'Truth about religion'.

¹¹⁸ Currie et al, Churches and Churchgoers, Table 2.3, p.25.

¹¹⁹ Here I refer most notably to Robin Gill, Callum Brown, Hugh McLeod, and Jeffrey Cox. The work of Cox is perhaps the most clear demonstration of this point. Cox opens with a forceful criticism of the term secularisation. Much of the rest of the book documents the substantial decline in membership and attendances which occurred even over this relatively short period. It is not so much the decline that is disputed (beyond precise details of history and geography), but the *causes* of

'Statistically there can be no doubt about the trends; they go downward. Whichever indicator is selected - electoral roll figures, communicant numbers, baptisms per live birth, the proportion of marriages taking place in church, confirmations or ordinations'.¹²⁰ It is against this background of an almost universal recognition of overwhelming and unhalted decline of religion in the United Kingdom that the work of Stark and Iannaccone offers a curious re-interpretation.

Conclusion

To conclude this chapter, it has been shown how the rational choice approach portrays religious dynamics as market forces. The Catholic Church and every other religious organisation is thereby best understood as a pin factory.¹²¹ The milieu of cosmology, culture, ethnicity, gender, geography, history, class, intellect and personality that affect the possibility of religious adherence are conceptualised and quantified as supply and demand. Religious change is understood in terms of market dynamics. To be sure, this analogy has considerable methodological use in understanding the day-to-day running of religious organisations, but it can say little concerning the bigger picture - the relationship between religion and society. This is why Berger's approach, founded as it is upon a dialectical theory of culture, remains so durable. Indeed, Berger's approach shares the consideration of the rise of a religious 'market'. For instance he stated:

'The pluralistic situation is, above all, a *market situation* In it, religious institutions become marketing agencies and the religious traditions become consumer commodities. And at any rate a good deal of religious activity in this situation comes to be dominated by the logic of market economics.' [His italics].¹²²

decline. See J. Cox, The English Churches in a secular Society: Lambeth, 1870-1930 (Oxford 1982).

¹²⁰ G. Davie, Religion in Britain Since 1945 (Oxford, 1992), p.52. The quote refers to the Church of England, but could be applied to any of the major churches or denominations.

¹²¹ Adam Smith, the founder of neo-classical economics has been invoked by those working within the rational choice approach on several occasions. See, for example, Stark *et al*, 'Pluralism and piety', p. 433; Iannaccone, 'Strict churches', p. 1,192; and Stark and Iannaccone, 'Supply-side reinterpretation', p.233.

¹²² Berger, Social Reality, p.142.

It is, perhaps, this compatibility of Berger's approach with the rise of the religious 'market', but at the same time his insistence that religion has declined in social significance, that has led to proponents of the rational choice approach being preoccupied with disproving Berger's theory of religious pluralism (other theories of secularisation are seldom mentioned). This point is of more than just passing interest, if one were to undertake reflexive examination of the changes in the sociology of religion (i.e. conduct a sociology of the sociology), it would be hard not to arrive at the same ironic observation as R. Robertson, that the very popularity of rational choice theory is itself a profound signal of secularisation - religion is now best understood as one consumer choice amongst many, with no sociological or cultural distinction.¹²³ Viewed in this light the similarities between the 'Bergerian' perspective and the rational choice approach becomes quite explicable. Rational choice theory is a 'desacrilised' sociology of religion, religion no longer holds a unique or sacred status within social theory. As S. Bruce observed:

'the validity of the rational choice models is not a small methodological quarrel but goes right to the heart of the nature of religious belief. If one considers what sort of society it would be in which economic models of religious behavior worked well, the answer must be one in which religion (the supreme producer of cultural limitations on economizing) no longer matters at all.'¹²⁴

However, one need not predict an entirely rational choice based future for the sociology of religion. Perhaps it is time for sociologists of religion to take note of the experience of human geographers, who, following the 'quantitative revolution' of the 1970s shied away from excessive quantification. To many geographers it appeared that the very heart of their discipline - the richness and variety of human experience and behaviour - had been removed, and they were left staring at an isotropic plain. Uniqueness or particularities were ignored, partitioned off, or explained away by general models.¹²⁵ Having abandoned

¹²³ See R. Robertson, 'The economization of religion? Reflections on the promise and limitations of the economic approach', *Social Compass*, 39:1 (1992), 147-158: see especially pp. 148-149.

¹²⁴ Bruce, 'Rational choice', p. 205.

¹²⁵ See M. Billinge, D. Gregory, and R.L. Martin, *Recollections of a Revolution: Geography As Spatial Science* (London, 1984).

'economic man' and his less extreme (but more politically correct) 'satisficing' offspring, human geographers found a more interesting (if more difficult) subject of investigation. As T. Barnes and D. Gregory recently summarised:

'One of the most pervasive and durable of these imported theories has been rational choice theory, itself a critical element of neoclassical economics ... Like all grand theories, rational choice theory was sustained by the belief that every facet of life - literally from birth to death - could be understood by referring to a single principle, getting the most from the least. From this core postulate a set of conceptual corollaries were mathematically derived, and, once in place, geographers strove to find confirming empirical instances: the shopping habits of Nebraskan consumers, ... the planting practices of Kentish hop farmers, ... and the location decisions of Mexican iron and steel magnates ... The curious thing, though, was that, once found, the empirical examples were forgotten, or at least archived within a textbook. Theory always came first.'¹²⁶

An acknowledgement of geographical and historical specificity may allow a more constructive approach to the study of religious change on both sides of the Atlantic than has been possible within the extreme positions of the secularisation and rational choice 'paradigms'.

As N.J. Demareth noted, in his recent influential commentary upon the state of the sociology of religion:

'Whereas most sociologists try to shape explanations to fit the world, most economists try to shape the world to fit their explanations - hence the fabled "assumptions" so crucial to their "modelling process". Put another way, while sociologists tend to seek out explanations inductively for independent testing, most economists tend to build their constructs deductively and then seek out kindred applications. The models may be elegant even if the world is not; indeed, many models' simplicity comes at the end of the world's complexity. Some are downright tautologous'.¹²⁷

¹²⁶ T. Barnes and D. Gregory (eds), Reading Human Geography: the Poetics and Politics of Enquiry (London, 1997), p.85.

¹²⁷ Demareth, 'Rational paradigms', pp. 105-106.

Chapter Six

Did Pluralism Secularise or were 'Physical' Factors more Important?

6.1 Introduction: Empty Churches, Cause or Effect?

The previous chapter argued that the rational choice approach provided, at best, a limited understanding of religious change. The highly quantitative methodology used left many questions concerning the effects of religious pluralism largely unanswered. Furthermore, it was argued that rational choice theory, as it is conventionally applied, is itself incapable of addressing the more profound relationship between religion and society.

This chapter addresses a more singular body of research set up in opposition to a 'secularisation' interpretation of religious change. This is the work of British historian Robin Gill. Gill's work presents an interesting reworking, if not an outright challenge, to both secularisation theory and the accepted wisdom of the 'pessimist' school of social history. Gill's ideas were introduced in Competing Convictions and formalised in The Myth of the Empty Church.¹

Gill's ideas add an intriguing new twist to some of the arguments presented by Victorian commentaries upon religion. Such commentaries typically argued that religious decline stemmed not from an increase in 'secularism' and hostility towards religion, and not even from the growth of active 'unbelief', but rather from apathy and passive indifference towards religious practice.² In this vein, Horace Mann blamed the lack of provision of religious accommodation for spiritual apathy and non-attendance.³ He argued that if greater accommodation could be provided, especially in the cities, then the decline in religious practice could be stemmed and ultimately reversed.

¹ R. Gill, Competing Convictions (London 1989); R. Gill, The Myth of the Empty Church (London, 1993).

² See H. Mann, Sketches of the Religious Denominations of the Present Day (London, 1854); R. Mudie-Smith (ed.), The Religious Life of London (London, 1904).

³ Mann, Sketches, see especially pp. 57-85.

Gill has turned such interpretations on their head and proposed that the *over-provision* of accommodation was ultimately the factor of utmost importance in causing a decline in religious practice in the late nineteenth and early twentieth centuries.

The increasing provision of religious accommodation, even in urban areas, was not unbeknown to the Victorian commentators. For instance, Mann noted that:

'The chief addition [of Anglican Churches] has occurred, as was to be expected and desired, in thickly-peopled districts, where the rapid increase of inhabitants has rendered such additional accommodation most essential. Thus, in Cheshire, Lancashire, Middlesex, Surrey, and the West Riding of Yorkshire, the increase of churches has been so much greater than the increase of the population, that the proportion between the accommodation and the number of inhabitants is now considerably more favourable than in 1831. ... in the whole of England and Wales collectively the proportion shows no increase, but a decrease.'⁴

The sharp contrast between the views of Mann and Gill's re-interpretation, lie in the fact that, for Mann, an increase in religious accommodation was part of the future solution to the problem of religious indifference, while for Gill it was a major reason behind the subsequent decline in levels of church-going. Gill proposed his theory as an alternative to the 'secularisation approach', but since his work concentrates on denominational competition and decline in practice, it is very much an account of the decline of the social significance of religion, and thereby an account of 'secularisation' according to the definition of the term used in this thesis. Gill's account is more a rebuttal of the 'pessimist' school of social history (as outlined in chapter 1 of this thesis).

What Gill rightly felt uneasy about was the applied universality and inevitability of the term 'secularisation', which had become both explanans and explanandum (as already detailed in section 2.3 of this thesis). For Gill, the dismissal of secularisation appears to be more an issue of conflicting definition than contrasting subject matter. For instance he stated:

⁴ Mann, Sketches, p.13.

'But what if church decline is less a product of secularisation than of churches competing to their mutual disadvantage?'⁵

Within Berger's theory of secularisation these phenomena were part and parcel of the same process - social-structural secularisation leading to subjective secularisation (see figure 5). Thus, up to a certain point, Gill's account can be seen as compatible with Berger's theory of secularisation. Both posited inter-denominational competition as a very important mechanism. Gill stated:

'The interaction of these two patterns - subsidised persistence [of the Church of England] and free market expansion and collapse [of nonconformity] - seems to have been mutually destructive.'⁶

After this point the two accounts diverge markedly. As has already been made clear, for Berger, pluralism was a direct cause of loss of faith - via the disconfirming power inherent in heterogeneous religious world views. For Gill, the explanation was less directly 'psychological'. He proposed that inter-denominational competition led to an intense period of church building, with the increase in seating outpacing the increase in population.

Gill argued that while denominational competition may have been most intense in urban areas, its effects were usually most strongly felt in rural areas. Many rural areas were experiencing depopulation in the nineteenth century. In areas experiencing church and chapel-building against a backdrop of out-migration and outright depopulation, the ratio of seats to people increased markedly. The net result was an increase in the *emptiness of the churches* (and chapels) in many areas. It is central to Gill's thesis that such growing emptiness could have occurred (and Gill argues did occur) *irrespective* of any change in the rate of church-going. Gill argued that such empty churches became a potent symbol of decline in the mid to late nineteenth century - a period before any widespread or sustained decline in church-going had occurred. For Gill, empty churches were a *potent*

⁵ R. Gill, 'More pews than parishioners', Church Times, 4.5.1990, p.6.

⁶ Gill, 'More pews', p.6.

symbol of religious decline, because they led believers to perceive that they were becoming a declining minority at a time when they were not.⁷

In essence, Gill's thesis is that the over-provision of religious accommodation led to churches and chapels appearing emptier at a time when no fewer people were going to church. This increasing emptiness, both as a powerful psychological symbol, and in terms of the drain on denominational resources of this unnecessary provision of accommodation, was a major contribution to the subsequent decline of church-going and religious vitality. It is interesting to note that Gill's view of the effects of 'free-market' competition are very different from those hypothesised within the rational choice approach.

Examining Gill's thesis with 1851 Religious Census data.

Although Gill's theory is one of religious change over a fairly long period - much of the nineteenth and the early twentieth centuries - many of his ideas can be investigated using the dataset assembled for this thesis. It is possible to study religious change in a 'temporal' manner with (largely) cross-sectional data for two reasons.

First, a large proportion of the dissenting accommodation recorded in the 1851 Religious Census was of nineteenth-century origin. In this way the 1851 data provides a document of the recent effects of denominational competition. As Gill noted:

'The 1851 Religious Census as a whole supplies abundant evidence of inter-church rivalry. In every Registration District throughout England and Wales several rival denominations were present. Indeed, the rate of church building was accelerating (only in part in response to the challenge of urbanization). On Horace Mann's calculations, between 1801 and 1811

⁷ In this way Gill is rather hasty to proclaim that his theory rests solely on 'physical' variables. If the empty church was a potent symbol of religious decline, part of the potency Gill ascribes to it was 'psychological'. Gill dismisses secularisation as a 'cultural factor'; Gill, *Empty Church*, p.73. Very few social scientists would attempt to make such a distinction between 'physical' and 'cultural' variables.

1,224 new churches and chapels were built; another 2,002 were built by 1821; 3,141 by 1831; 4,866 by 1841; and 5,594 by 1851.⁸

Secondly, by using data from the 1811, 1831 and 1851 decennial censuses, it is possible to identify parishes which had undergone major depopulation. The main measure of 'marked' depopulation used here is population decline between either 1811 and 1851 or the shorter time-period of 1831-1851.

For these two reasons, one can use the parish dataset to provide a strong basis from which to examine the heart of Gill's thesis - the inter-relationships between denominational competition, out-migration, provision of seating, emptiness of churches, and (ultimately) levels of practice. The registration district data can also be used (in a more descriptive way) to allow the consideration of the picture across the whole of England and Wales.

To analyse Gill's thesis, one can split it into two parts. The first proposes that denominational competition (both urban and rural) and out-migration (chiefly rural), led to certain areas (both urban and rural) having a greatly inflated provision of seating in the nineteenth century. This increase in seating resulted in churches becoming emptier, despite the fact that just as many people may have been going to church. The second part of the thesis proposes that in the longer term these empty churches, both as a potent symbol of decline in themselves, and as an administrative and financial burden, induced a decline in levels of practice and other aspects of religious behaviour.

These two parts of the argument are dealt with in turn. The first part is addressed in section 6.2 - which attempts a description of the geographical distributions of the provision of seating, depopulation, denominational competition, and empty churches. The second part is examined in section 6.3 via a detailed scrutiny of the core causal propositions of Gill's theory using the parish-level data.

⁸ Gill, Empty Church, p.47.

Notes about the analysis

In the following sections of analysis population decline between 1811 and/or 1851 or 1831 and 1851 is referred to as 'depopulation'. 'Denominational competition' was measured by the religious diversity measure, which to recall, is zero when only one denomination is present in a given parish.⁹ Provision of seating is measured by seats per capita (total population in 1851). The provision of seating was also calculated at the registration-district level, to allow a useful overview of the provision of religious accommodation across the whole of England and Wales in 1851.¹⁰ The *emptiness of churches* was represented by the percentage of empty seats during the best attended service (all denominations).¹¹ Finally, the rate of religious practice is measured by the index of attendants, which was seen as a better measure of the pressure on religious accommodation than the index of attendances used elsewhere in this thesis.¹²

It should be noted that the 'best attended service' figure used in the computation of the 'emptiness of church' and 'index of attendants' variables could not be calculated entirely accurately for every parish.¹³ For the registration-district data the attendance at best attended service could not be calculated at all accurately, since the majority of districts contained several places of worship for

⁹ The religious diversity measure - a Herfindahl-Hirschman index of market concentration - is arguably even better placed to measure denominational competition than religious pluralism (as conceptualised by Berger). See Appendix 4 and section 3.2 of this thesis for a detailed consideration of the diversity measure.

¹⁰ It should also be noted that the following analysis refers to only 1,914 parishes. 348 parishes were excluded for having no seating data recorded for at least one place of worship (other than Quaker meeting houses) in the 1851 census. Only parishes with full attendance and seating data were included in the analysis presented in this chapter.

¹¹ The 'emptiness of church' variable is defined as the percentage of empty seats at the *best attended service*. This 'emptiness' variable could (rarely) achieve a negative value - when attendances exceeded seating. This occurred in 46 of the 1,914 parishes. A negative percentage of empty seats, although something of an oxymoron, was not re-computed to zero, because the information a negative value communicated about pressure on seating was seen as sociologically meaningful.

¹² The index of attendants is defined as attendances at the *best attended service* for each place of worship divided by the population and multiplied by 100.

¹³ It should be noted that the *best attended service* figure was not always entirely accurate, owing to the combining of attendance data on the computerised dataset. This occurred when more than one place of worship existed for a given denomination. However, in the sample of 1,914 parishes used for this analysis, the best attended service figure was entirely accurate in 1,484 cases (i.e. 78%). As a check, the analysis was carried out using just this sub-sample of 1,484 parishes. There were no significant differences from the results presented for all 1,914 parishes in this thesis.

each resident denomination. It cannot be assumed that these all received their largest congregations at the same time of day. Also, the registration-district attendance data included Sunday scholars. For these reasons the 'emptiness of church' and 'index of attendants' variables could not be meaningfully measured using registration-district data.

As a final note, unless specified as being Anglican churches, the term 'empty church' is used in a generic sense to describe the emptiness (or fullness) of *all* places of worship within a parish, and thereby includes nonconformist chapels and Roman Catholic churches.

6.2 The Geography of Parishioners and Pews

This section provides a contextual basis for the more detailed scrutiny of Gill's thesis offered in section 6.3. This section describes the geography of denominational competition and out-migration (depopulation) to see if these processes did appear to be causing the widespread over-provision of religious accommodation (i.e. seating) in 1851.

Depopulation.

Since detailed demographic data were not assembled for the registration-district data, the following introductory geography of depopulation (i.e. outright population decline) is limited to the 15 registration counties for which parish-level data were assembled. The county-level geographies of depopulation and denominational competition are illuminated in table 28. It is clear that between 1811 and 1851 there were already high levels of depopulation over large parts of these 15 counties. This provides a graphic illustration of the high levels of internal migration at this time, particularly migration from rural to urban areas.¹⁴ In

¹⁴ S. Nicholas and P.R. Shergold estimate that a third of English working men moved between counties in the early nineteenth century. The tendency to move was related to skills and literacy. Even at this time, labour market signals were effective across large distances. The median

particular, the Welsh counties (except Monmouthshire) experienced widespread depopulation, with almost half the Cardiganshire parishes losing population. Population loss was also frequent in the English counties, with between a fifth and a third of parishes losing population in the majority of counties. Only in the East Riding (15.0%), Bedfordshire (15.5%), and most notably, Cambridgeshire (3.5%), were lower frequencies of depopulation evident.

Across the 15 counties as a whole, 528 parishes (27.6% of the sample) experienced depopulation between 1811 and 1851 and/or 1831 and 1851, indicative that depopulation was a widespread feature of the early to mid nineteenth century. Table 28 shows that average population densities for parishes experiencing depopulation (column 3) were consistently lower than in parishes in general (column 1). As in Gill's two study areas - part of Northumberland and the Merionethshire village of Glan-Llyn¹⁵ - the findings reported here confirm the expected: depopulation appeared to be a predominantly rural phenomenon in the nineteenth century.

Since 'depopulating' parishes typically contained very small populations, when the extent of depopulation is described with respect to the proportion of the population residing in the parishes concerned (as opposed to the geographical extent of depopulation), a contrasting picture emerges. Only 8.7% of the total population of the 1,914 parishes resided in 'depopulating' parishes. As will be argued later, such a small percentage raises doubts concerning the potency of any negative *psychological* impact of empty churches resultant from depopulation on the levels of church-going across England and Wales as a whole.

Denominational Competition.

The extent of denominational competition can be described for the whole of England and Wales using the registration-district data.¹⁶ Denominational

migration distance was 59 miles. See S. Nicholas and P.R. Shergold, 'Internal migration in England, 1818-1839', *Journal of Historical Geography*, 13:2 (1987), 155-168.

¹⁵ Gill, *Empty Church*, p.56.

¹⁶ The religious diversity measure is mapped in map 16.

Table 28**The distribution and population densities of parishes experiencing depopulation and denominational competition: an analysis by county**

	All parishes: (n=1,914)	Parishes with depopulation: (1811 to 1851 or 1831 to 1851) (n=528)		Parishes with denominational competition: (n=1,088)	
	median population density	as a % of county total	median population density	as a % of county total	median population density
Anglesey (n=58)	63.4	31.0%	38.7	72.4%	71.4
Bedfordshire (n=103)	73.9	15.5%	61.4	70.9%	83.1
Caernarvonshire (n=51)	49.9	31.4%	36.9	76.5%	54.1
Cambridgeshire (n=113)	63.8	3.5%	44.0	68.1%	66.6
Cardiganshire (n=73)	38.1	49.3%	37.7	80.8%	38.1
Derbyshire (n=86)	73.4	40.7%	49.0	81.4%	80.5
Dorset (n=218)	47.4	23.9%	36.2	39.9%	63.3
Lancashire (n=64)	110.3	28.1%	49.8	84.4%	138.9
Leicestershire (n=205)	56.2	33.7%	45.5	66.8%	70.1
Monmouthshire (n=89)	40.8	20.2%	34.4	47.2%	51.3
Northumberland (n=71)	27.6	35.2%	19.2	66.2%	36.1
Rutland (n=54)	49.3	31.5%	28.7	46.3%	62.2
Suffolk (n=386)	64.7	32.1%	56.1	41.2%	76.4
Sussex (n=216)	52.5	27.8%	40.8	35.6%	65.5
East Riding (n=127)	38.0	15.0%	27.0	78.7%	39.4
Whole sample (n=1,914)	54.9	27.6%	40.9	56.8%	66.3

competition was universal at this spatial scale, since every registration district in England and Wales contained places of worship affiliated to at least two denominations. Indeed, only nine of the 624 districts contained less than four denominations (including the Church of England), and 336 districts contained seven or more denominations. However, as noted in Appendix 4, a large spatial scale inevitably 'flatters' the degree of religious diversity compared to the religious choices available to a typical resident individual. Registration districts usually covered several hundred square kilometres. In an era when most walked a few miles to worship, a plurality of denominations in a given registration district need not have signalled 'competition' for a given individual's allegiance.

The occurrence of denominational competition, in terms of potential choices available to each and every resident individual, can be more accurately detailed at the parish level. The right-hand side of table 28 shows that the majority of parishes in Dorset, Rutland, Suffolk, Sussex, and (more surprisingly) Monmouthshire, recorded no denominational competition in 1851.¹⁷ In all other counties, more than half the parishes experienced denominational competition; the percentage of parishes with more than one denomination present ranged from 66.2% in Northumberland to 84.4% in Lancashire. Taking all the parishes of the fifteen counties together, over half (56.8%) experienced denominational competition in 1851. In contrast to depopulation, when the extent of denominational competition is described in terms of the proportion of the population residing in the parishes concerned, the frequency increases rather than declines. Indeed, 91.4% of the population of the 1,914 parishes resided in parishes with more than one denomination present. This percentage was so high because of the high average populations of parishes with a plurality of denominations. Only in the East Riding and Cardiganshire was the presence of dissent linked with parishes of around average population density (as the fifth column of table 28 shows).

¹⁷ It is important to note that the vast majority (89%) of parishes with no denominational competition (i.e. where only one denomination recorded attendances on Census Sunday) were 'Anglican'. The Welsh Calvinist Methodists displayed pockets of 'monopoly' in their Welsh heartland. This 'monopolising' tendency of the Welsh Calvinistic Methodists is considered in chapter 7.

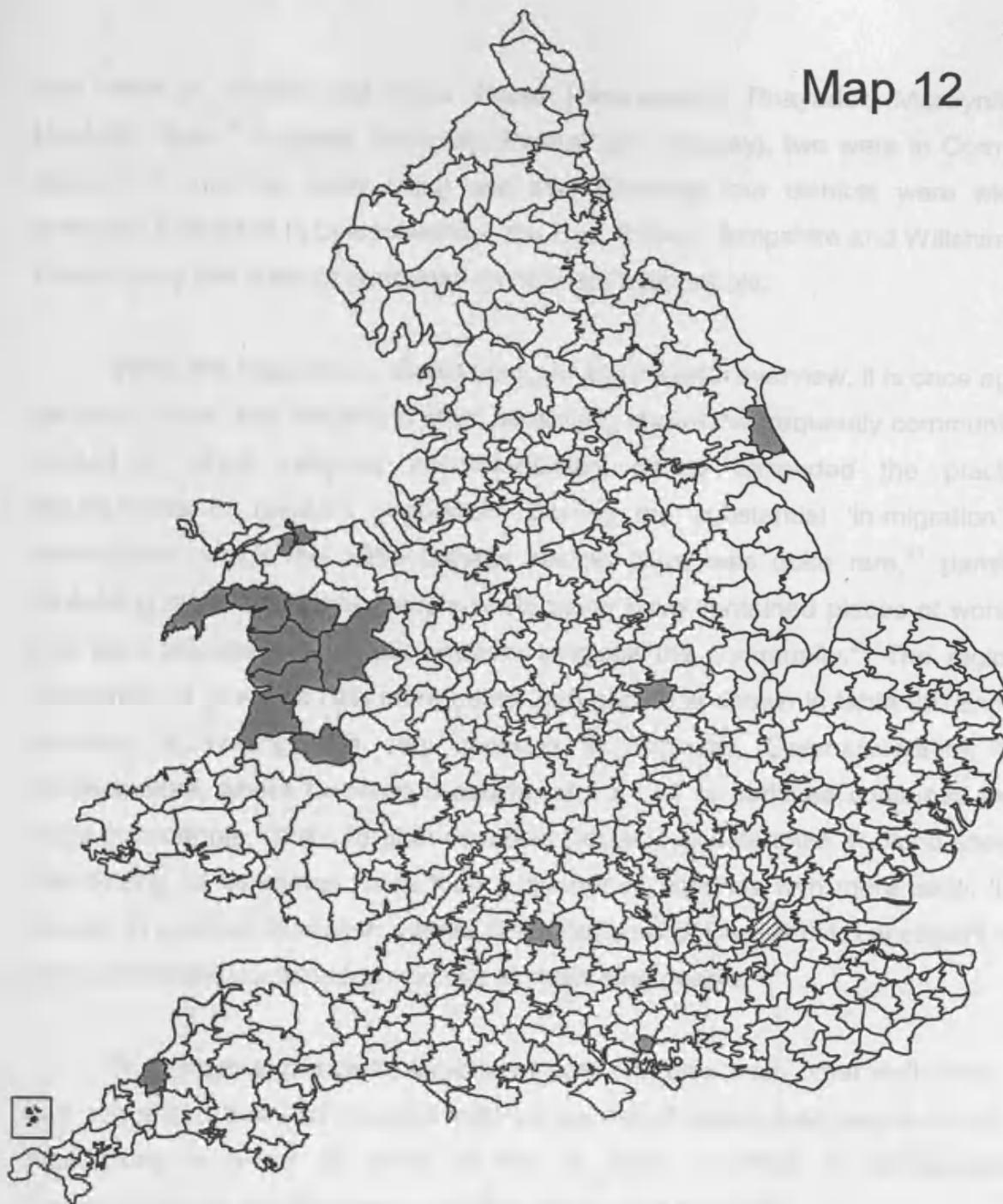
The important point to note from this introductory examination of the geography of depopulation and denominational competition is that the latter had the potential to create more 'empty churches' in parishes where many more people resided than depopulation could have done.¹⁸ Before investigating to what extent this potential to create 'empty churches' was realised by either depopulation or denominational competition, attention needs to turn first to the provision of *religious accommodation*. The provision of accommodation is of central importance; for Gill, empty churches were not (initially) empty because of a downturn in attendance, but because of an increase in the provision of religious accommodation over and above that which could ever have been filled.

For either denominational competition or depopulation to have created empty churches in the manner proposed by Gill, they must first have led to an excess of religious accommodation. It is the ratio of seats to people which is so fundamental to Gill's theory. In particular Gill's thesis rests upon an *excess* of accommodation over and above that which could have ever been filled even by the most religiously active community. The churches and chapels of such communities, barring the systematic 'in-migration' of worshippers, could never have been full, and are henceforth labelled 'unavoidably' empty churches. In contrast, churches empty in parishes with a low provision of religious accommodation would not be used to support Gill's theory, since these are more likely to be a product of a pre-existing religious decline than a cause of future decline.

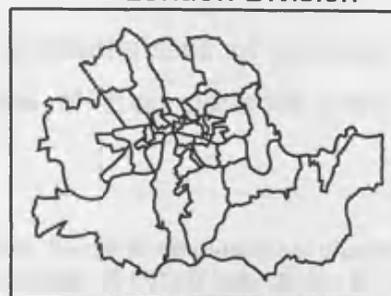
Gill has documented a high frequency of 'unavoidably' empty churches in Northumberland. The question is whether these patterns were repeated across other parts of England and Wales. The most obvious and extreme case of unavoidably empty churches is a situation of more seats than people. Map 12 shows the distribution of registration districts with an excess of seats over people. Only 15 of the 624 districts (2.4%) contained more seats than people. Of these,

¹⁸ Even allowing for the inevitable imprecision in empirical definition of the two processes of denominational competition and depopulation, it seems certain that a much higher proportion of the population resided in parishes experiencing denominational competition than marked out-migration in the nineteenth century; the former tended to be densely populated and the latter sparsely populated.

Map 12



The London Division



Key:

-  Districts with less than one seat per person
-  Districts with one or more seats per person
-  London Division (see inset)

Registration districts in England and Wales containing one or more seats per person (all denominations), 1851

nine were in central and north Wales (Aberystwyth, Rhayader, Machynlleth, Llanfyllin, Bala,¹⁹ Dolgelly, Festiniog, Pwllheli and Conway), two were in Cornwall (Camelford and the Scilly Isles) and the remaining four districts were widely scattered (one each in Leicestershire, the East Riding, Hampshire and Wiltshire).²⁰ Overall, very few districts contained more seats than people.

While the registration-district data provide a useful overview, it is once again the parish-level data which can most sensitively show how frequently communities existed in which religious accommodation clearly exceeded the practical requirements of resident population. Barring the substantial 'in-migration' of worshippers, which the 1851 Census returns show was quite rare,²¹ parishes containing more seats than people could never have contained places of worship that were anywhere near full, however religious the community.²² The regional distribution of parishes with more seats than people is shown in table 29. Excess provision of seating was very common in Anglesey, Caernarvonshire, and Cardiganshire, where between a quarter and a half of parishes contained more seats than people. Of the English counties, Dorset, Leicestershire, Rutland and the East-Riding all contained more than a quarter of parishes with more seats than people. In contrast, less than a tenth of the parishes of Derbyshire, Lancashire and Northumberland contained an excess of seats over people.

The parish and registration-district data reinforce each other well - map 12 had suggested that communities with an excess of seats over people would be most likely to occur (in terms of the 15 study counties) in Cardiganshire, Caernarvonshire and Anglesey, and this was indeed the case.

It is interesting to note the demographic characteristics of parishes with more seats than people. The population densities of such parishes were very

¹⁹ Bala contained Gill's study village of Glan-Lynn.

²⁰ The distinctive regional religious cultures evident in the 'Celtic' fringe are examined in chapter 7.

²¹ As already noted, the two towns in which a systematic crossing of parish boundaries was most evident - Ipswich and Cambridge - were each combined as one record on the database.

²² A substantial in-migration of worshippers can be detected by extremely high levels of church-going. The index of attendants was 100% or more in only 61 of the 1,914 parishes, and 80% or more in only 109 parishes. These frequencies fall well short of the totals of 403 parishes with more seats than people and 751 parishes with more than 0.8 seats per person.

Table 29

The frequency of occurrence and characteristics of parishes with more seats than people: an analysis by county

	Parishes with more seats than people:			All parishes:
	number	as a % of county total	median population per square kilometre	median population per square kilometre
Anglesey (n=58)	18	31.0%	51.7	63.4
Bedfordshire (n=103)	17	16.5%	57.9	73.9
Caernarvonshire (n=51)	21	41.2%	43.3	49.9
Cambridgeshire (n=113)	13	11.5%	50.9	63.8
Cardiganshire (n=73)	21	28.8%	39.0	38.1
Derbyshire (n=86)	6	7.0%	54.8	73.4
Dorset (n=218)	52	23.9%	30.1	47.4
Lancashire (n=64)	3	4.7%	37.2	110.3
Leicestershire (n=205)	74	36.1%	38.5	56.2
Monmouthshire (n=89)	17	19.1%	32.4	40.8
Northumberland (n=71)	6	8.5%	9.4	27.6
Rutland (n=54)	20	37.0%	35.9	49.3
Suffolk (n=386)	75	19.5%	62.3	64.7
Sussex (n=216)	25	11.6%	20.0	52.5
East Riding (n=127)	35	27.6%	35.2	38.0
Whole sample (n = 1,914)	403	21.2%	39.6	54.9

similar to those recorded in parishes experiencing depopulation. Indeed, as can be ascertained from a comparison of tables 28 and 29, in Bedfordshire, Dorset, Lancashire, Leicestershire, Monmouthshire, Northumberland and Sussex, the median population density of parishes with more seats than people was even lower than that of parishes experiencing depopulation.

Although parishes with more seats than people accounted for 21.2% of all the 1,914 parishes, only 4.7% of the population resided in them. An even lower figure is obtained for the registration-district data, where only 0.96% of the population resided in the fifteen districts with more seats than people. Only a very small proportion of the population of England and Wales lived in communities with more seats than people, and it is difficult to see how this could have impacted upon the national trends in church-going.

A more realistic starting point.

A dismissal of the empty church thesis on such criteria would, however, be premature. It is important to recall that parishes with more seats than people were only an *extreme* test case of Gill's thesis. In reality, a much lower level of seating provision could have led to unavoidably empty churches. As was concluded in section 3.1 of this thesis, the *potential congregation* was always substantially lower than the total population. Principally, this was because in any given parish there were substantial numbers of both young children and adults in ill-health or essential employment. Neither group would have been expected to attend Sunday worship (irrespective of their religious beliefs).

As noted in section 3.1, there can be no certainty as to what proportion of the total population could be counted as the 'potential congregation', but if one assumes that a considerable proportion of children under the age of 15²³ would not have attended Sunday worship (though they may well have attended the Sunday school), and adds the effects of infirmity and Sunday employment, then, one could

²³ Wrigley and Schofield estimate an average figure of 36.01% of the population under the age of 15 in England in 1851. E.A. Wrigley and R.S. Schofield, The Population History Of England, 1541-1871: a Reconstruction (London, 1981), Appendix 3, p. 529.

estimate that an average of around 60% of the total population could reasonably have been expected to have attended worship on a given Sunday.²⁴ If one allows for the potential for more than one service a day, then the proportion of the population attendant at any one service becomes even lower. For all these reasons there are strong grounds for arguing that an excess of seating beyond that which could have ever been filled on Census Sunday need not only have occurred where there were literally more seats than people, but is more likely to have occurred beyond a threshold of around 0.6 seats per capita.²⁵ It is therefore instructive to examine the inter-relationships between denominational competition, depopulation, the provision of seating, and the 'emptiness' of churches in greater detail by focusing upon those parishes with 0.6 or more seats per person.

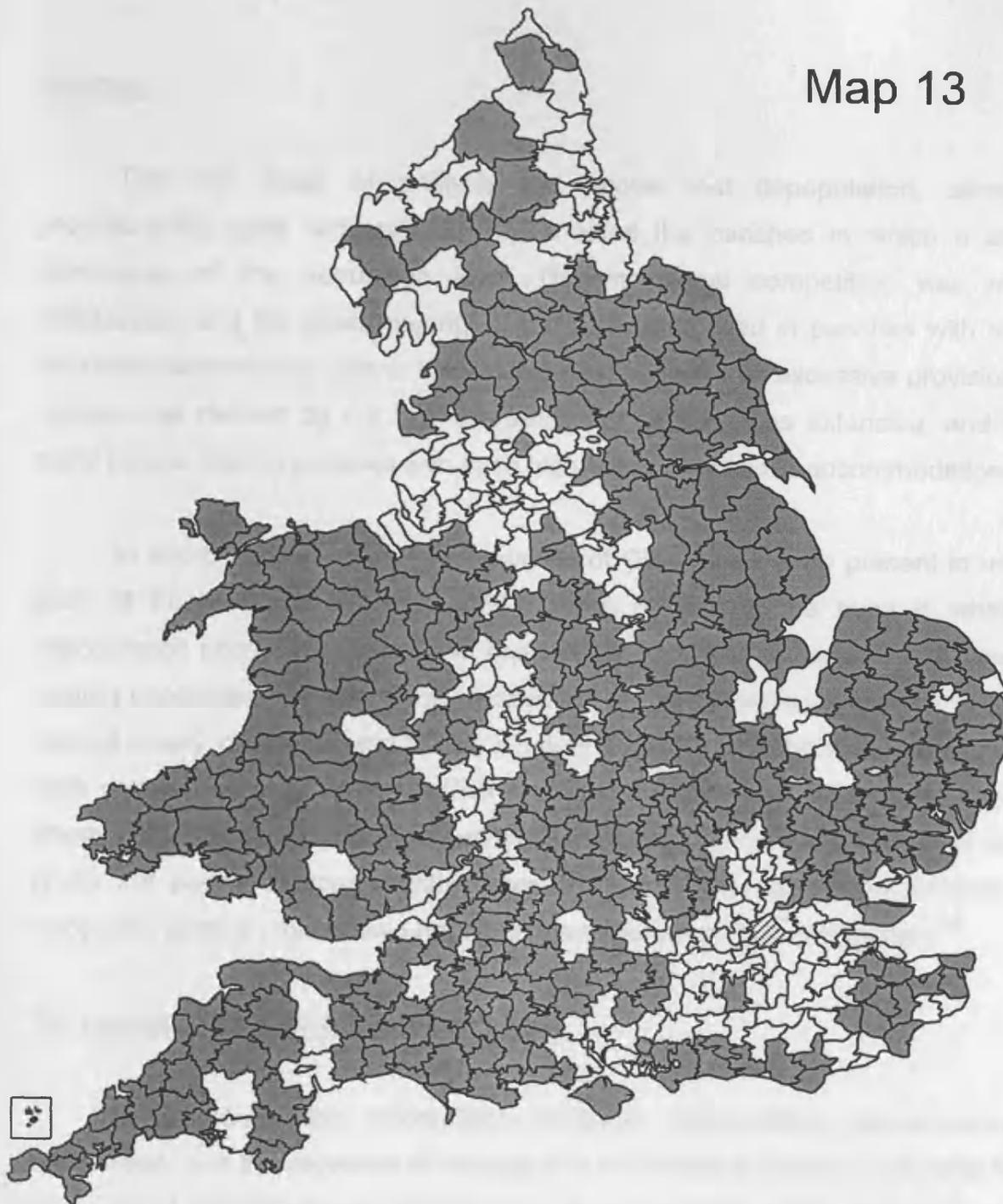
The frequency of occurrence of both parishes and registration districts containing 0.6 or more seats per capita was *far* greater than the occurrence, of more seats than people. Of the 1,913 parishes with suitable data, 1,232 (64.4%) contained 0.6 or more seats per capita. The picture for the whole of England and Wales (at registration-district level) was very similar, with 373 (59.8%) registration districts containing 0.6 or more seats per capita. As shown in map 13, outside the home counties, parts of the western midlands, much of Lancashire, the West Riding and Derbyshire, the Fens, and parts of the far north of England, the vast majority of districts contained 0.6 or more seats per capita.

Furthermore, in contrast to the very small percentage of the population resident in parishes with more seats than people, over a quarter (28.6%) of the total parish population resided in parishes with 0.6 or more seats per capita. Across the whole of England and Wales (at registration-district level) the level was higher still, 41.2% of the population resided in registration districts with 0.6 or more seats per capita.

²⁴ Mann estimated that 70% of the population were able to attend worship and/or Sunday school at some time on Census Sunday, so a figure of 60% able to attend worship (excluding Sunday school) does not seem unreasonable. See Mann, *Sketches*, p.87.

²⁵ Of course, 'excessive' seating capacity should also be defined with respect to marriages and funerals, which may have been more likely than Sunday worship to attract 'immigrants' into the parish church.

Map 13



Key:

-  Districts with less than 0.6 seats per person
-  Districts with 0.6 or more seats per person
-  London Division (see inset)

The London Division



Registration districts in England and Wales containing 0.6 or more seats per person (all denominations), 1851

Summary

This first stage of analysis has shown that depopulation, although geographically quite widespread, only affected the parishes in which a small percentage of the population lived. Denominational competition was more widespread, and the great majority of the population lived in parishes with more than one denomination active. It was also been shown that excessive provision of seating - as defined by 0.6 or more seats per capita - was extensive, and that many people lived in parishes with such high levels of religious accommodation.

In short, the necessary preconditions of Gill's thesis were present in many parts of England and Wales in 1851. What remains to be seen is whether depopulation and/or denominational competition appeared to cause the excessive seating capacities, whether these excessive seating capacities appeared to have caused empty churches, and finally, whether these empty churches appeared to have caused lower rates of religious practice. The following paragraphs explore whether such links can be demonstrated empirically using the parish-level data. While the parish dataset slightly under-represents the national occurrence of 'excessive seating', this should not complicate the search for relationships.²⁶

The causes of 'excessive' seating provision.

To introduce the interactions between depopulation, denominational competition, and the provision of seating, it is instructive to examine precisely how the levels of denominational competition and depopulation varied according to the level of seating provision. The trends, shown in table 30, are most striking. The second column of table 30 shows that the proportion of parishes with denominational competition rose steadily from under a quarter (24.4%) of parishes with less than 0.2 seats per capita, to more than two-thirds (69.3%) of parishes with 0.9 to 1 seats per capita. In the parishes with the most marked level of over-

²⁶ Four of the fifteen counties - Sussex, Lancashire, Derbyshire and Northumberland - comprised the major areas in which the provision of seating was typically less than 0.6 seats per capita, as shown by map 13.

Table 30

How denominational competition, depopulation, and the 'emptiness' of churches varied by the level of provision of seating

Provision of seating:	Denominational competition:	Depopulation:	
seats per capita (all denominations)	percentage of parishes with denominational competition	percentage of parishes with population decline	Number of parishes
up to 0.2	24.4%	19.5%	41
0.2 to 0.3	28.8%	22.0%	59
0.3 to 0.4	37.4%	17.6%	131
0.4 to 0.5	48.1%	20.9%	187
0.5 to 0.6	55.6%	22.2%	261
0.6 to 0.7	60.2%	19.9%	266
0.7 to 0.8	62.8%	24.7%	215
0.8 to 0.9	66.5%	28.9%	197
0.9 to 1	70.2%	29.8%	151
1 and greater	60.5%	44.4%	403

provision of seating - those with more seats than people - the percentage of parishes experiencing denominational competition fell back to 60.8%.

Such links can be further substantiated using correlation analysis. Taking all parishes together, the Spearman correlation between the provision of seating (seats per capita) and denominational competition (diversity measure) showed a moderate, but significant, positive association ($r_s = + 0.16$, $p = 0.000$, $n = 1,911$). However, when only the parishes with 0.6 or more seats per person were examined, the Spearman correlation was *negative*, though far from statistical significance ($r_s = - 0.02$, $p = 0.411$, $n = 1,232$). When the parishes with one or more seats per capita were isolated the correlation remained negative and achieved strong statistical significance ($r_s = - 0.16$, $p = 0.002$, $n = 403$).

Table 30 and the correlations presented show that both the frequency and the intensity of denominational competition appeared to increase as seating provision increased to 0.6 seats per capita, but did not increase beyond this threshold. Once the threshold of one seat per person was crossed, both the frequency and intensity of denominational competition declined. One can conclude that denominational competition did appear related to the provision of seating, but in a complex manner.

Depopulation was also clearly related to the level of provision of seating, as shown in column 3 of table 30. Parishes with up to 0.7 seats per capita showed a fairly constant frequency of occurrence of depopulation, of about one fifth. The frequency of depopulation was progressively slightly higher in parishes with 0.7 to 1 seat per capita, and was more markedly higher in parishes with more than one seat per capita. In this latter group of 403 parishes, over 44% had experienced depopulation.

The correlations between depopulation and the provision of seating suggested that the intensity of depopulation followed the same trend. Taking all parishes together, the Spearman correlation between the mean annual population decline (i.e. the mean annual 'negative growth rate' 1831-1851) and seats per

capita showed a significant positive relationship ($r_s = + 0.24$, $p = 0.000$, $n = 1,908$). Examining just those parishes with more seats than people, the correlation *remained strongly positive* ($r_s = + 0.28$, $p = 0.000$, $n = 400$), in marked contrast to the negative association already noted for denominational competition.

It appears that depopulation and denominational competition tended to lead to different degrees of 'excess' seating capacity. Depopulation appeared most closely associated with the greatest excess of seating capacity - more seats than people - while denominational competition appeared most clearly associated with parishes with a lesser excess of seating capacity of 0.6 to 1 seat per capita.²⁷

Leaving these subtleties aside, the most important question to address is what proportion of the parishes with any excess of seating (i.e. 0.6 or more seats per capita) could have been caused by denominational competition and/or depopulation. Table 31 shows that 776 of the 1,232 parishes (63.0%) with 0.6 or more seats per capita experienced some degree of denominational competition, and 387 (31.4%) some degree of depopulation. This left only 262 (21.2%) of parishes in which neither of these processes was immediately evident.

The two processes of denominational competition and depopulation were relatively unlikely to be found in conjunction. Table 31 shows that of the 387 parishes experiencing depopulation, only 193 experienced denominational competition as well. Since 63% of the entire sample experienced depopulation, random chance alone would have resulted in 244 parishes experiencing both depopulation and denominational competition. The two processes tended to operate in very different types of parish, as might be expected. Table 31 shows that parishes which had experienced depopulation tended to be highly 'rural', as evidenced by low population densities, low percentages of families in trade, and high percentages of families in agriculture. The parishes experiencing denominational competition were much more 'urban' in their characteristics.²⁸

²⁷ The similar demographic characteristics of parishes with more seats than people and parishes experiencing depopulation was demonstrated in tables 28 and 29.

²⁸ The links between industrialisation, urbanisation, and religious diversity were touched upon in chapter 4 and are explored in considerable detail in chapter 7.

Table 31**Some characteristics of parishes containing 0.6 or more seats per person**

Parishes with 0.6 or more seats per capita:	Median population per square kilometre	Median percentage of families in agriculture (1831)	Median percentage of families in trade (1831)
all such parishes (n=1,232)	51.1	68.5	17.9
such parishes with depopulation and no denominational competition (n=194)	30.8	79.4	11.4
such parishes with denominational competition and no depopulation (n=583)	66.6	60.9	21.8
such parishes with denominational competition <i>and</i> depopulation (n=193)	47.0	62.1	20.6
such parishes with <i>neither</i> denominational competition <i>nor</i> depopulation (n=262)	39.1	75.0	12.9

Unsurprisingly, parishes with both processes exhibited intermediate characteristics. The bottom row of table 31 indicates that the characteristics of the remaining 280 parishes were very similar to those experiencing depopulation between 1811 and 1851. A detailed scrutiny of these parishes would reveal that many had experienced depopulation *prior* to the nineteenth century, with eighteenth century (or earlier) de-industrialisation and crisis mortality looming large as causes.²⁹

6.3 The Myth of the Empty Church?

The section of analysis has laid the groundwork for a critical appraisal of the empty church thesis. It has been shown that substantial parts of England and Wales were provided with 'excessive' religious accommodation in 1851. It was shown that there was evidence that both depopulation and denominational competition were causes of these excessive seating capacities, though the two processes tended to operate in very different socio-economic environments. In other words, the introductory analysis gave strong support for the basis of Gill's theory.

The key remaining question is to what extent the potential for churches to be 'empty' in parishes with 'excessive' seating capacities was realised, i.e. were the 'unavoidably' empty churches really that much more empty than places of worship in parishes with no excess of seating? Table 32 shows that the 'emptiness of churches' increased only very marginally with the provision of seating.³⁰ The 'emptiness of churches' was around 30% in parishes with up to 0.3 seats per capita, and lay at around 50% in all other groups. Even where there were one or more seats per person the emptiness of churches was only very slightly higher, at 54.6%.

²⁹ Many of these parishes were very clearly cases of depopulation prior to the nineteenth-century. Of the 262 'unexplained' parishes, 141 had Compton data, and in 16 (11.3%) of these the Compton 'population' figure was higher than the 1811 population. Earlier epidemics would account for many more of these parishes.

³⁰ To recall, the 'emptiness of churches' is defined as the percentage of empty seats during the best attended service for every place of worship (for all denominations) within the parish.

Table 32**The relationship between the provision of seating and the 'emptiness' of churches**

Seats per capita (all denominations)	Percentage empty seats¹ (best attended service, all denominations)	Number of parishes
up to 0.2	32.8% 'empty'	41
0.2 to 0.3	27.1% 'empty'	59
0.3 to 0.4	49.7% 'empty'	131
0.4 to 0.5	53.4% 'empty'	187
0.5 to 0.6	48.8% 'empty'	261
0.6 to 0.7	49.7% 'empty'	266
0.7 to 0.8	51.9% 'empty'	215
0.8 to 0.9	49.1% 'empty'	197
0.9 to 1	50.0% 'empty'	151
1 and greater	54.6% 'empty'	403

¹ The 'percentage empty seats' figures are not average figures, they were calculated from the summed totals for all parishes within each group.

The links between the provision of seating and the emptiness of churches can also be investigated using correlation analysis. The Spearman correlation between the provision of seating and the emptiness of churches showed a significant positive association ($r_s = + 0.20$, $p = 0.000$, $n = 1,911$). Taking just those parishes with more than 0.6 seats per capita, the association declined in strength but remained statistically significant ($r_s = + 0.15$, $p = 0.000$, $n = 1,232$). These correlations reinforce the interpretation of table 32. Both show that there was some degree of relationship between the two variables, but that the relationship was really quite weak. One could certainly not conclude that excessive provision of seating was automatically associated with emptier places of worship.

The weakness of the relationship is explored further in table 33, which compares the emptiness of the places of worship for the parishes containing less than 0.6 seats per capita with the emptiness in parishes containing 0.6 or more seats per capita. The top two rows of table 33 reveal that in both sets of parishes there were, in total, about 50% empty seats during the best attended service. It is important to realise that the very slightly higher 'emptiness' recorded by the parishes with 0.6 or more seats per capita was in spite of the fact that parishes in this group totalled 84.3 seats for every person, compared to the 38.8 seats per capita totalled by parishes with less than 0.6 seats per capita. Thus, although the total provision of religious accommodation in parishes with 0.6 or more seats per capita was over twice as high, the total percentage of empty seats was less than two percent higher.

The third row of table 33 reveals that there was *no* increase in the emptiness of places of worship in parishes with 0.6 or more seats per capita *and* denominational competition, such parishes totalling 50.3% empty seats during the best attended service. In contrast, parishes with 0.6 or more seats per capita *and* depopulation (see row 4 of table 32), were characterised by slightly more empty places of worship, totalling 58.4% empty seats during the best attended service.

Table 33How the 'emptiness' of churches varied according to the provision of seating, denominational competition and depopulation

<u>Emptiness of churches:</u> ¹ (percentage empty seats (all denominations) at best attended service)	
Parishes with less than 0.6 seats per capita (n = 679)	49.6% empty
Parishes with 0.6 or more seats per capita (n = 1,232)	51.3% empty
Parishes with 0.6 or more seats per capita and denominational competition (and no depopulation) (n = 583).	50.3% empty
Parishes with 0.6 or more seats per capita and depopulation (and no denominational competition) (n = 194)	58.4% empty

¹ The 'percentage empty seats' figures are not average figures, they were calculated from the summed totals for all parishes within each group.

It is difficult to see how the very slightly 'emptier' places of worship identified in parishes with 0.6 or more seats per capita could have presented a premature 'signal' of religious decline and thereby been an active causal agent of subsequent religious decline in the manner proposed by Gill. Only in the small number of parishes (194) which contained 0.6 or more seats per capita and had experienced depopulation (but no denominational competition) was the percentage of empty seats visibly higher than the norm of around 50%. Even here, the percentage of empty seats was only 8.1% higher.

One should reserve a note of caution, before concluding this search for 'empty' churches. Table 33 presented 'total' figures of emptiness, and gave little indication of the extreme parishes within the groups. Perhaps a fairer search for empty churches is to return to the unaggregated data. One could argue, a priori, that to be visibly different from the norm of around 50% empty seats during the best attended service, a church or chapel would have to appear around two-thirds empty. It would seem fair to argue that a worshipper would notice the difference in atmosphere between a half-empty church and one two-thirds empty. Parishes with places of worship that averaged two-thirds or more empty are henceforth taken as an arbitrary benchmark of 'significant' emptiness. They are termed 'significant' because it is in such places that empty churches could have become a premature psychological symbol of religious decline in the manner Gill proposed. However, only a few parishes contained such 'significantly' empty places of worship. In total, only 231 parishes (8.3% of the sample) met this criteria of significant emptiness and only 4.2% of the sample population resided in such parishes.

Some limitations of the 'empty church' thesis.

It is important to stress that Gill's 'empty church' thesis does not anticipate the finding that parishes with very high seating provision contained places of worship that were barely more empty than elsewhere. Such a finding raises alarm bells about assigning an active secularising role to churches made empty by the over-provision of seating. However, it is not upon a consideration of the *empirical* weakness of the link between the level of provision of seating and the 'emptiness'

of the church that Gills' arguments can be challenged most forcefully, but upon the circularity of the *logic* in proposing such a link in the first place.

To return to Gill's theory, he proposed five main mechanisms whereby empty churches led to religious decline. These were detailed as:³¹

- i) The gradual closure of unsubsidised (usually dissenting) churches and chapels.
- ii) Financial problems and debt (again largely a problem for dissent).
- iii) Increased sharing of ordained ministers.
- iv) Difficulty in integrating new members.
- v) As a major signal to potential congregations that secularisation had occurred.

Approaching Gill's thesis from the 'Bergerian' perspective (as summarised in figure 5), it is the fifth of these factors which is of greatest interest, since it is this point at which Gill argues *against* secularisation having occurred in nineteenth-century England and Wales. The first four factors do not contradict a 'secularisation' interpretation, and Gill presents much needed research in these areas. It is almost entirely upon this fifth factor that Gill's dismissal of Berger (and the 'pessimist' school of religious social history) rests.

To recall, Gill proposed that empty churches provided a potent *symbol* of religious decline *before* any decline in religious practice set in. They were a potent symbol because empty churches were in fact a major *cause* of secularisation, and not simply a product of it. For instance, Gill stated in conclusion to his Welsh case study:

'While remaining sceptical of claims that the changes in church-going in Glan-Llyn over 140 years are a direct product of secularization, their effect may be to reinforce or encourage secularization.'³²

The causal propositions of Gill's thesis become more transparent if one reduces the arguments to their schematic bones. The three key variables of Gill's

³¹ The list is drawn from Gill, *Empty Church*, pp. 67-70.

³² Gill, *Empty Church*, p.69.

thesis are defined below. Since these are, to use Gill's terms, 'physical' variables, their definition is fairly non-contentious.³³ These variables can be summarised in three simple equations:

1. Provision of seating = $\frac{\text{seats}}{\text{population}}$
2. Emptiness of church = $\frac{(\text{seats} - \text{attendances})}{\text{seats}}$
3. Rate of religious practice = $\frac{\text{attendances}}{\text{population}}$

For Gill, the dominant line of causality between these variables is that increased provision of seating led to emptier churches which in turn led (eventually) to lower levels of religious practice. As can be seen from equation 1, in order for the provision of seating to increase, *either* the number of seats had to increase (the denominational competition mechanism), *or* the population had to fall (the depopulation mechanism). If the number of seats were increased in equation (1) above, then, all things being equal, the emptiness of church (equation (2)) would increase in proportion. More specifically, from equations (1) and (2), one can see that if seats increased (i.e. denominational competition) there would be an increase in the provision of seating (equation (1)) and the emptiness of the churches (equation (2)) so long as the attendance and population figures remained constant. Likewise, if the population were to fall (i.e. depopulation) then the provision of seating would rise (equation (1)) and the emptiness of the church would increase also (equation 2), *unless* the attendance figure did not decline in line with the decline in population.

The point to note is that whether the increased provision of seating was due to denominational competition (i.e. seats increasing) or depopulation (i.e. population decreasing), the end result, all things being equal, would be a direct relationship between the provision of seating and the emptiness of the church

³³ Though as already noted, the rate of religious practice cannot be measured directly from the 1851 Religious Census data.

(equations (1) and (2)). The only two mechanisms which could block this relationship would be, in the case of denominational competition, an increase in attendances proportionate to the increase in seating provision, or, in the case of depopulation, no decline in the attendance figure proportionate to the decline in population. Both these factors equate to an increase in the rate of religious practice (equation (3)). Thus, the extent to which the provision of seating was not perfectly related to the emptiness of churches, is the extent to which the rate of religious practice rose in proportion to the level of the provision of seating. This is equally true whether one is hypothesising denominational competition or depopulation as the principal agent of excessive seating capacity.

This reduction of Gill's thesis to basic algebra serves to allow a powerful empirical examination. If the thesis is correct, and empty churches were indeed a potent cause of subsequent religious decline, two testable propositions arise. Firstly, there should be a near perfect negative correlation between the provision of seating and the emptiness of the church. Secondly, there should be no correlation, or a negative correlation, between the emptiness of the church and the rate of religious practice (the index of attendants). This second proposition has two potential outcomes, since if the empty churches were of recent origin to 1851, one would expect no correlation between the two variables. If they were longer-run one would expect a negative correlation - as the causal efficacy of empty churches as agents of religious decline should have become patent. Since the datasets used for this thesis are not time-series, no assumption is made whether the correlation between the emptiness of churches and the index of attendants would, *a priori*, be expected to be insignificant or negative.

The results of the empirical investigation of these two propositions are shown in table 34.³⁴ The first row of table 34 shows a strong positive association between the provision of seating and the 'emptiness' of the church(es). However, isolating those parishes with at least 0.6 seats per capita produced a much weaker

³⁴ In this table and table 35 the Pearson correlation was used in addition to the Spearman correlation to stress the point that however measured, the index of attendants varied almost exactly in proportion to the provision of seating and thereby negated any strong association between the provision of seating and the emptiness of the churches.

Table 34

The contrast between the expected and the actual associations between the provision of seating, 'emptiness' of churches, and the index of attendants

Pearson (r_p) and Spearman's rank (r_s) correlations

Relationship with provision of seating (seats per capita)		
All Parishes (n = 1,911)	<u>Expected relationship:</u>	<u>Actual correlation:</u>
'Emptiness' of churches percentage of seats empty (best attended service)	Strong positive association	$r_p = + 0.36^{**}$ (p = 0.000) $r_s = + 0.20^{**}$ (p = 0.000)
Index of attendants Attendances per capita (best attended service)	No association or negative association	$r_p = + 0.74^{**}$ (p = 0.000) $r_s = + 0.67^{**}$ (p = 0.000)
Parishes with 0.6 or more seats per capita (n = 1,228-1,232)	<u>Expected relationship:</u>	<u>Actual correlation:</u>
'Emptiness' of churches percentage of seats empty (best attended service)	Strong positive association	$r_p = + 0.08^{**}$ (p = 0.003) $r_s = + 0.15^{**}$ (p = 0.000)
Index of attendants Attendances per capita (best attended service)	No association or negative association	$r_p = + 0.75^{**}$ (p = 0.000) $r_s = + 0.51^{**}$ (p = 0.000)

** Indicates that the correlation coefficient exceeded the 99% confidence level.

* Indicates that the correlation coefficient exceeded the 95% confidence level.

association, as shown in the third row of table 34. Thus, where Gill's thesis predicted an almost perfect relationship, a statistically significant, but really quite weak association was discovered. More importantly, precisely where excess seating should have been most clearly creating empty churches (a level of 0.6 or more seats per capita), there was *no* strong relationship between the provision of seating and the emptiness of the church.

The second proposition was not supported empirically either. The correlations between the provision of seating and the index of attendants were extremely strong, both for the entire dataset, and for just those parishes with 0.6 or more seats per capita (as shown in the second and fourth rows of table 34). Thus, where the logic of the 'empty church' thesis predicted either a weak or negative relationship, a very strong positive association was discovered.

The data contradict Gill's assertion that high provisions of seating led to 'emptier' churches which, in the long run, led to a decline in church-going. This was despite an almost circular tendency for higher provision of seating to be equated with emptier churches. It was only the very close relationship between the provision of seating and the index of attendants which prevented a self-fulfilling prophecy. In simple terms, the correlations indicated that parishes which recorded a higher provision of seating generally also recorded higher indices of attendants. As already argued from first principles, it was precisely because the index of attendants was so closely linked to the provision of seating that there was only a very weak relationship between the provision of seating and the 'emptiness' of the churches.

Empirical proof that it was the variation of the index of attendants which prevented a strong direct relationship between the provision of seating and the emptiness of churches can be made by examining the *partial* correlation between the level of provision of seating and the 'emptiness' of the church(es) controlling for the index of attendances. Taking all parishes together, the partial correlation was very strong and positive ($r_p = + 0.66$, $p = 0.000$, $n = 1,907$). More significantly, taking just the parishes with excess seating capacity (at least 0.6 seats per capita),

the association was extremely strong and positive ($r_p = 0.82$, $p = 0.000$, $n = 1,229$). The magnitude of this partial correlation demonstrates beyond any doubt that the reason parishes with a higher provision of seating contained churches which were barely any emptier than elsewhere was because they also recorded higher levels of church-going.

The question arises: why were high levels of provision of religious accommodation not associated with substantially emptier churches in 1851? To answer this question one needs to return to the two processes which Gill argued caused empty churches - denominational competition and depopulation. To recall, in parishes where denominational competition had led to increased seating, churches would necessarily have been proportionately emptier *unless* the number of attendants was also higher in such parishes. As table 35 reveals, this was indeed the case - denominational competition was *not* associated with emptier places of worship. Indeed, as the lower part of table 35 shows, in parishes with 0.6 or more seats per capita, denominational competition was significantly and *positively* associated with 'fuller' places of worship.

In parishes where depopulation had reduced the number of attendants, churches should also have appeared emptier, all things being equal. As shown in table 35, depopulation was positively associated with the 'emptiness' of places of worship, although the correlation coefficients were quite weak, both for all the parishes (as shown in the upper part of table 35) and just those parishes with 0.6 seats or more per capita (as shown in the lower part of table 35).

Parishes with high levels of depopulation did record slightly 'emptier' churches, but the relationship was not as close as equations (1) to (3) would suggest. To explain this finding it is interesting to note an observation made by Obelkevich in relation to Lincolnshire parishes experiencing depopulation. He noted: 'The population remaining, both male and female, ought to have had a greater propensity for religious practice than the original population.'³⁵

³⁵ J. Obelkevich, Religion and Rural Society: South Lindsey 1825-1875 (Oxford, 1976), p.21.

Table 35

The contrast between the expected and actual associations between denominational competition, depopulation and the 'emptiness' of churches

Pearson (r_p) and Spearman's rank (r_s) correlations

Relationship with the 'emptiness' of churches

(percentage of empty seats during the best attended service)

All parishes (n = 1,908 -1913)	<u>Expected relationship:</u> <u>Actual correlation:</u>	
	Denominational competition (diversity measure)	Strong positive association
Depopulation (mean annual population 'decrease' 1811-51)	Strong positive association	$r_p = + 0.05$ (p = 0.050) $r_s = + 0.15^{**}$ (p = 0.000)

Parishes with 0.6 or more seats per capita (n = 1,228-1232)	<u>Expected relationship:</u> <u>Actual correlation:</u>	
	Denominational competition (diversity measure)	Strong positive association
Depopulation (mean annual population 'decrease' 1811-51)	Strong positive association	$r_p = + 0.10^{**}$ (p = 0.001) $r_s = + 0.15^{**}$ (p = 0.000)

** Indicates that the correlation coefficient exceeded the 99% confidence level.

* Indicates that the correlation coefficient exceeded the 95% confidence level.

One could, *a priori*, suggest that the higher than expected rate of church-going in depopulating parishes might have resulted from both a greater proportion of females and an older age-structure. Higher rates of attendance amongst women and the elderly are well-documented features of contemporary church-going in the United Kingdom, but it remains to be proven whether these are only characteristic of a 'secularised' society, or were also apparent in mid-nineteenth century England and Wales.³⁶ No evidence for a greater percentage of females was discernible in the data.³⁷ The age structure was not investigable using the parish dataset.

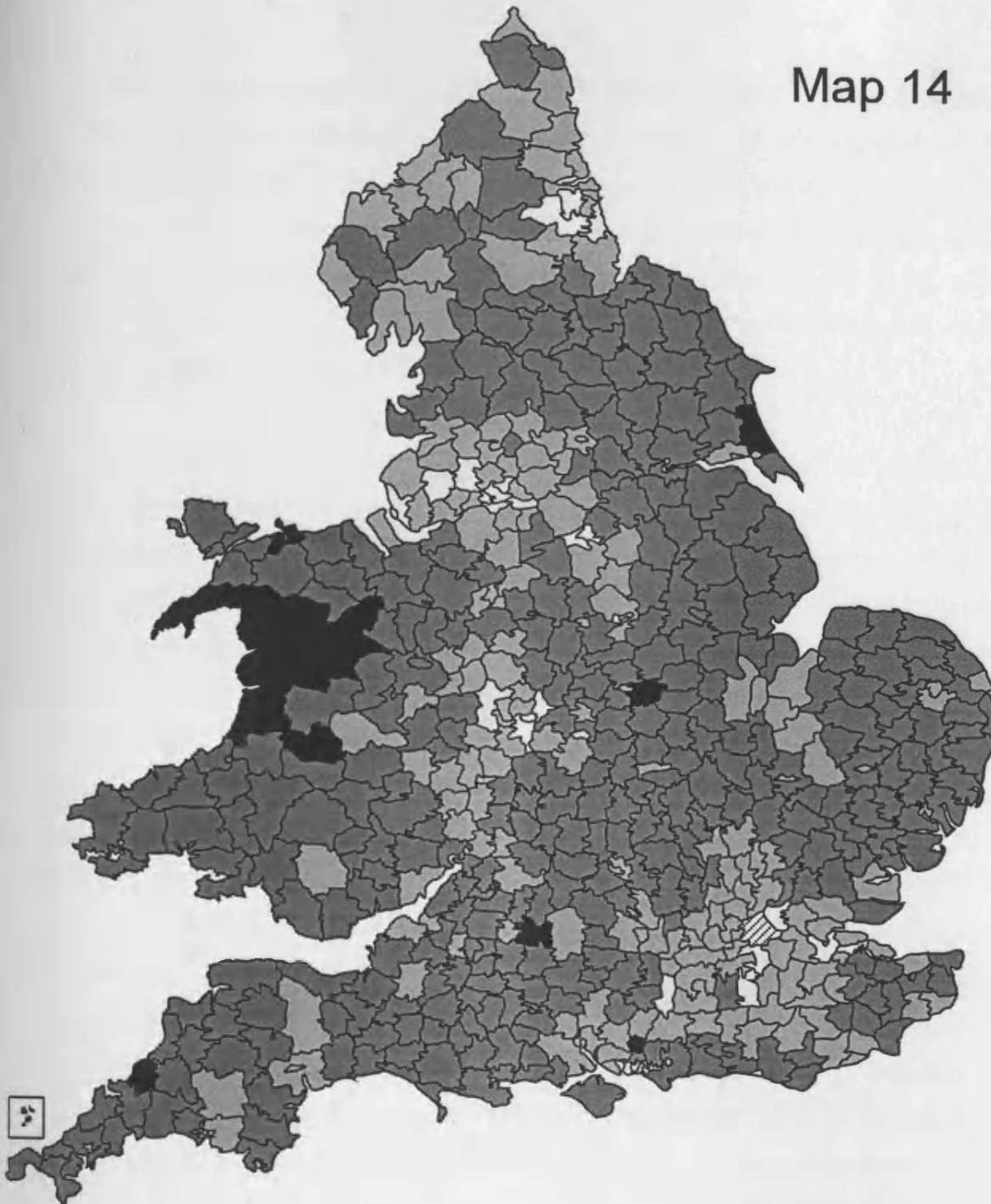
Summary.

Considerable doubts have been raised concerning Gill's core arguments to England and Wales in 1851. Despite the fact that a core proposition of the empty church thesis - that high levels of provision of seating lead to empty churches - is virtually self-fulfilling, this proposed relationship was barely detectable. This was because the variation in the rate of church-going was almost great enough to negate any relationship between the two variables. In short, where the provision of seating was highest, so was the index of attendants. This point can be made visually by mapping both the index of sittings (seats per capita multiplied by 100) and the index of attendances using the same scales. This was carried out in maps 14 and 15 in which both indices were described as 'low' at less than 40%, as 'medium' between 40% and 60%, as 'high' between 60% and 100%, and as very high over 100%. A comparison of maps 14 and 15 shows that in broad, regional terms, the provision of sittings and the index of attendances mirrored each other quite closely. In the language of the rational choice approach, the patterns of religious 'supply' and 'demand' appeared quite well matched in England and Wales in 1851.

³⁶ It remains to be concluded to what extent a greater propensity to attend religious worship by the elderly reflects a lower propensity to attend worship amongst each successive generation, or to what extent there is a life-cycle of increasing religiosity amongst each generation, or, to the extent that these are not exclusive, that both trends exist concurrently. See P.K. Botvar, 'Belonging without believing? The Norwegian religious profile compared with the British one', in P. Repstad (ed.), Religion and Modernity: Modes of Co-Existence (Oslo, 1996), pp. 119-133.

³⁷ A markedly higher percentage of females in the population was certainly not evident in the parishes experiencing depopulation (1811-51 or 1831-51). The median sex ratio ((males/females)*100) in the 528 parishes experiencing depopulation was exactly 100. In the remaining 1,380 parishes, the median sex ratio was 100.6.

Map 14



Index of total sittings:

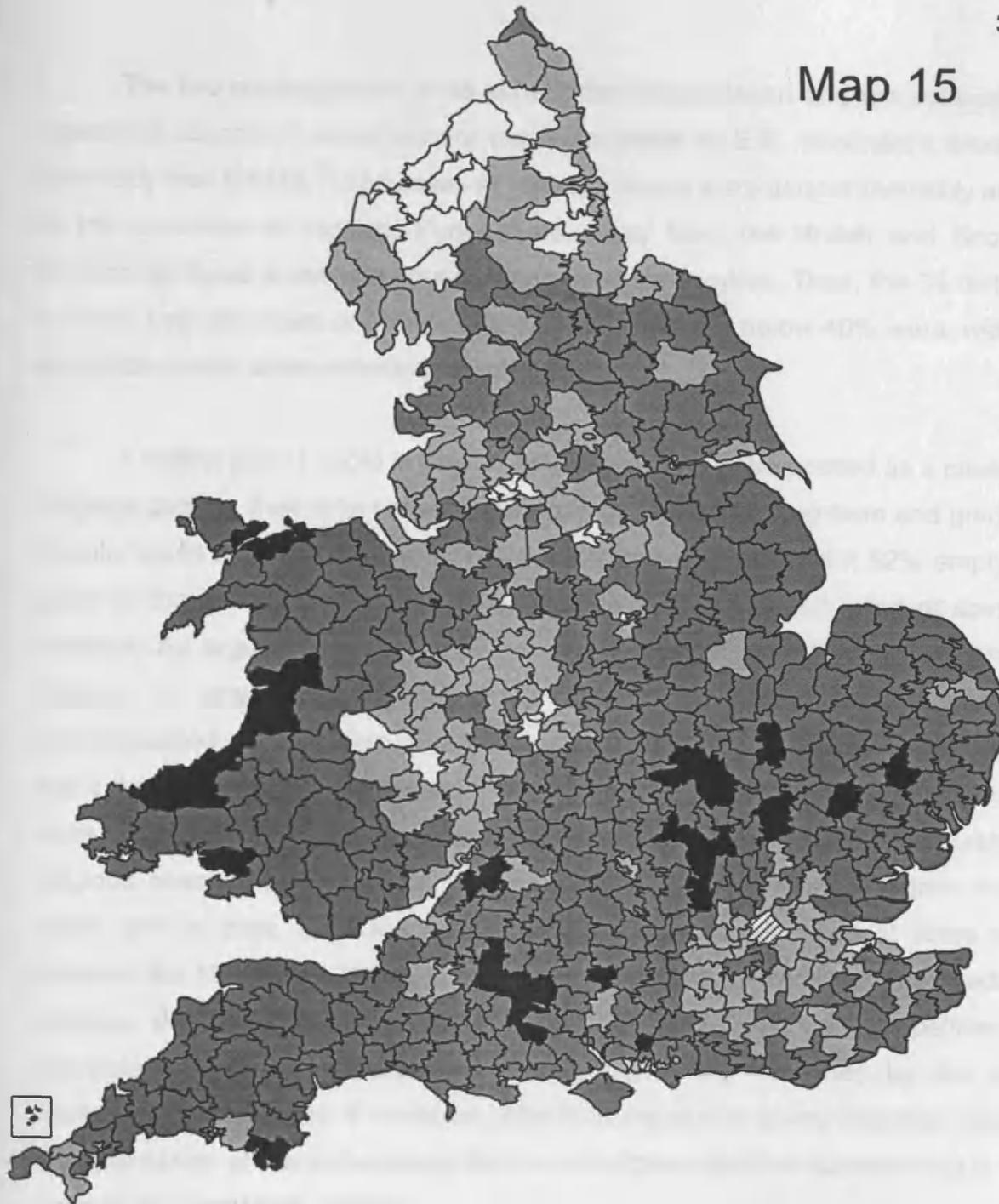
-  Low: 15% to 40%
-  Medium: 40% to 60%
-  High: 60% to 100%
-  Very high: 100% to 130%
-  London Division (see inset)

The London Division



Index of total sittings in England and Wales, 1851

Map 15



Index of total attendances:

-  Low: 15% to 40%
-  Medium: 40% to 60%
-  High: 60% to 100%
-  Very High: 100% to 135%
-  London Division (see inset)

The London Division



Index of total attendances in England
and Wales, 1851

The two maps provide more support for Horace Mann and the subsequent 'pessimist school' of social history (as exemplified by E.R. Wickham's study of Sheffield) than for Gill.³⁸ The areas of low attendance were almost invariably areas of low provision of seating. Furthermore, away from the Welsh and Scottish borders, all these areas were major urban-industrial centres. Thus, the 35 districts in which both the index of sittings and attendances were below 40% were, without exception, major urban-industrial centres.³⁹

A further point to note is that for empty churches to be posited as a cause of religious decline, their effect must realistically be viewed as long-term and gradual. People would not have simply arrived at church one day to find it 52% empty, in place of the habitual 48%, and thereby have perceived a chill wind of spiritual isolation. As argued with respect to the consequences of religious pluralism in chapter 5, any cultural changes in church-going behaviour should be conceptualised as long-term and inter-generational. It is certainly reasonable to argue that a generation of children introduced to worship in churches substantially more empty than their predecessors could, as a direct result, exhibit a lower rate of religious observance as adults. Since almost all British historians agree that a major, and to date, unhalted decline in attendance commenced at some time between the 1880s and 1910s, then it is precisely around 1851 that the seeds of religious decline must have been sown.⁴⁰ If denominational competition or depopulation had not created many markedly empty churches by the mid-nineteenth century, then it would be difficult to argue that empty churches were a principal cause of the subsequent decline in religious practice commencing at the close of the nineteenth century.

³⁸ E. R. Wickham, Church and People in an Industrial City (London, 1957).

³⁹ Of the 35 districts 23 were in London. These were Kensington, Chelsea, St. James (Westminster), Marylebone, St. Giles, The Strand, Holborn Clerkenwell, St. Luke, East London, West London, Shoreditch, Bethnal Green, Whitechapel, St. George-in-the-East, Stepney, Poplar, St. Saviour, Bermondsey, Newington, Lambeth, Camberwell, and Rotherhithe. The twelve non-metropolitan districts were Kings Norton, Birmingham, Aston, Radford, Chorlton, Salford, Manchester, Oldham, Ecclesall Bierlow, Sheffield, Durham and Chester-le-Street.

⁴⁰ The most influential source remains R. Currie, A.D. Gilbert and L. Horsley, Churches and Churchgoers: Patterns of Church Growth in the British Isles Since 1700 (Oxford, 1977). In general they place the outbreak of World War I as the start of outright decline (see, for example, *ibid.*, p. 100.). The decline of support for nonconformity commenced earlier than for the Anglican or Catholic churches, starting in the 1880s (see, for example, *ibid.*, p.72).

The ultimate proposition of the empty church thesis - that emptier churches led to lower levels of practice - cannot be addressed adequately with the 1851 data. Because of its inherent circularity, it would be an extraordinarily hard relationship to prove empirically in any context - since lower levels of practice automatically lead to emptier churches. One would certainly need far better time series data than exists for all but isolated areas of the United Kingdom to separate the chicken from the egg.

6.4 Towards Explanation: Empty Churches and Full Chapels

In the preceding analysis it has become apparent that the single most important feature not anticipated by Gill is that the index of attendants was higher in parishes where the provision of seating was also higher, and thereby such parishes did not tend to have emptier places of worship. It is important to understand why this was so. It was shown in the previous section that denominational competition was one root of this unexpected relationship. Parishes with high levels of denominational competition contained a high provision of seating (as expected), but also, and unexpectedly, they were characterised by fuller places of worship.

To address the issue of denominational competition in greater detail, it is instructive to separate the 'emptiness of church' measure (all denominations) into the 'emptiness' of Church of England *churches* and the 'emptiness' of dissenting *chapels*. This is done in table 36. The second column of table 36 shows that the Church of England churches were increasingly empty the higher the total provision of seating. Above 0.3 seats per capita the Anglican churches become more than half empty, and above 0.9 seats per capita, the total Anglican figure was almost two-thirds empty (66%). Dissenting chapels were nowhere near as empty (as shown in column 3 of table 36). Other than in the group of parishes with less than 0.3 seats per capita, where the total dissenting figure was only 21% empty, the total figure in all other groups was close to 40%. In no group were there more empty dissenting seats than full during the best attended service.

Table 36

The contrasting relationships between the 'emptiness' of Anglican churches, the 'emptiness' of dissenting chapels, and the provision of religious accommodation

Seats per capita (all denominations)	'Emptiness' of churches ¹	'Emptiness' of chapels ²	Index of total attendants	Anglican index of attendants ³	Dissenting index of attendants ⁴	Number of parishes
less than 0.3	35% 'empty'	21% 'empty'	8.0	5.4	2.6	100
0.3 to 0.4	61% 'empty'	39% 'empty'	16.9	6.5	10.4	131
0.4 to 0.5	59% 'empty'	48% 'empty'	20.8	9.3	11.5	187
0.5 to 0.6	56% 'empty'	41% 'empty'	28.2	13.0	15.3	261
0.6 to 0.7	57% 'empty'	42% 'empty'	32.4	14.5	17.8	266
0.7 to 0.8	63% 'empty'	41% 'empty'	36.0	13.3	22.7	215
0.8 to 0.9	58% 'empty'	42% 'empty'	42.9	16.4	26.5	197
0.9 to 1	66% 'empty'	36% 'empty'	47.6	14.8	32.8	151
1 and greater	66% 'empty'	43% 'empty'	59.4	22.0	37.3	403

NB: The 'percentage empty seats' and the various indices of attendants figures are not average figures, they were calculated from the summed total figures for all parishes within each group.

¹ Defined as the percentage of empty seats in Anglican churches during the best attended service.

² Defined as the percentage of empty seats of all non-Anglican places of worship (inc. Catholic Churches) during the best attended service.

³ Defined as Anglican attendances at the best attended service divided by the total population and multiplied by 100.

⁴ Defined as all non-Anglican attendances at the best attended service divided by the total population and multiplied by 100.

Thus, there was no evidence for any widespread or systematic excess provision of dissenting seating in the mid-nineteenth century. Denominational competition may have led to significantly empty *Anglican churches* (defined as more than two-thirds empty), but, by 1851 at least, it had led to very few significantly empty chapels. The fact that parishes with the highest levels of dissenting provision of seating had the emptiest Anglican Churches, while the dissenting chapels themselves remained as full as elsewhere, can be shown by correlation. The association between the emptiness of Church of England churches and the intensity of denominational competition was positive and significant ($r_s = + 0.19$, $p = 0.000$, $n = 1,762$). A more rigorous test is to analyse just those parishes with a dissenting denomination present, in such parishes the association remained highly significant ($r_s = + 0.17$, $p = 0.000$, $n = 1,029$). In contrast, the level of Anglican provision of seating displayed no clear association with the emptiness of dissenting chapels, whether the correlation was calculated for all parishes with a dissenting presence ($r_s = + 0.02$, $p = 0.483$, $n = 1,180$), or just parishes with 0.6 or more seats per capita ($r_s = + 0.02$, $p = 0.561$, $n = 826$).

The interpretation invited by these findings is that by the mid-nineteenth century, as denominational competition had become widespread, support for the Church of England had suffered, while support for dissent had risen in line with the dissenting provision of seating. This Anglican decline was despite the fact that this was a time of a very rapid provision of dissenting seats (i.e. chapel building), but the Church of England had yet to build many new Churches. What Gill stated in relation to his study area in Northumberland can be generalised to much of England and Wales:

‘Although Anglican parishes spent a good deal of money improving parish churches in the nineteenth century, they only slightly increased seating capacities. ... In contrast, the Free Churches might be depicted as a mountain peak: vigorous building until 1900’.⁴¹

In other words, it is tempting to conclude that the dissenting denominations appeared to be competing to the clear disadvantage of the Church of England -

⁴¹ Gill, *Empty Church*, p.49.

and not to their own mutual disadvantage. The dissenting denominations were undertaking the majority of 'seat creation' and appeared to be successfully recruiting support from the Church of England. In the 1851 census data, the Church of England appeared as the over-provider of seating, despite its relative inertia in such provision.

Accepting such an interpretation at face-value would be rather premature. There are many assumptions inherent in translating the cross-sectional differences revealed by the 1851 census into a chronologically ordered causal interpretation. In short, characterising the Church of England as being weak *because* of dissenting competition is only one possible interpretation. While its simplicity is attractive, it remains tentative in the absence of reliable time-series data. An alternative explanation, and one with an established historical pedigree, is that dissent tended to grow strongest where the Church of England was *already* weakest.⁴² In other words, dissent may have been growing in areas where the Church of England, was *already* at its weakest - i.e. Anglican seating provision was lower and Anglican churches were already emptier. Following this interpretation, empty Anglican Churches would have pre-dated the growth of dissent.⁴³ Rather than dissenting strength causing Anglican weakness, Anglican weakness facilitated dissenting strength. If this interpretation is correct then, by and large, dissent fulfilled John Wesley's aim for Methodism: to provide religious support where it was lacking rather than to compete with the Anglican church head-on.

Clearly, these competing interpretations cannot be answered definitively without time-series data. One very tentative avenue of analysis is, however, available using the parish dataset. Since, as already noted, the most vigorous period of Anglican 'seat creation' was to occur after 1851, the dataset can be used to calculate a rough-and-ready indicator of Anglican strength (in terms of seats per

⁴² See, for example, J.D. Gay, *The Geography of Religion in England* (London, 1971); R. Currie, 'A micro-theory of Methodist growth', *Proceedings of the Wesleyan Historical Society*, 36, (1967); A.D. Gilbert, *Religion and Society in Industrial England: Church, Chapel and Social Change 1740-1914* (London, 1976), especially p.115.

⁴³ In some cases this mechanism was very direct and visible; in a few Welsh parishes dissenters took over empty or little used Anglican churches.

capita) for the early nineteenth-century.⁴⁴ The measure of 'Anglican seats per capita' can be calculated using 1851 seating data and the 1811 population figures to produce a very approximate measure of the provision of Anglican accommodation at the very time new dissent was growing strong in many areas (i.e. 1811).

The Spearman correlation between estimated Anglican seating provision in 1811 and the dissenting provision of seating (in 1851) was strongly negative ($r_s = -0.37$, $p = 0.000$, $n = 1,908$). The correlation between estimated Anglican seating provision in 1811 and the dissenting index of attendances (in 1851) was even more strongly negative ($r_s = -0.39$, $p = 0.000$, $n = 1,908$). While one has to stress the many inaccuracies in estimating the Anglican strength in 1811, these correlation results are nevertheless suggestive that dissent did generally grow strongest where the Anglican church was (already) weakest.⁴⁵

Such correlations remain tentative in the absence of a more reliable measure of Anglican strength at the time of the advent of new dissent. That dissent did tend to grow strong where the Anglican Church was weak can be demonstrated at the regional level by the registration district data. To recall, it became clear in section 1.4 that at the geography of Anglican strength and dissenting strength, were in large part polar opposites.⁴⁶ To simplify, dissent was strong to the north-west of the Severn-Wash line and the Church of England to the south-east. The oft-invoked structural weaknesses of the Church of England, both in rapidly growing urban areas, and sparsely populated 'upland' areas, do go a long way towards explaining the geography of dissenting strength, though the patterns are not quite so clear as Gilbert noted.⁴⁷

⁴⁴ Gill, *Empty Church*, p.49.

⁴⁵ These findings are not a product of the calculation of an 'historical' Anglican strength as Anglican seats in 1851 divided by the population of 1811. Using the 1831 or 1851 population to produce a more accurate (though more 'recent') measure of Anglican strength yielded virtually identical correlations.

⁴⁶ See the denominational maps presented in K.D.M. Snell and P.S. Eil, forthcoming, *Victorian Religion and the Cultural Regions of England and Wales*, (Cambridge, 1998/9).

⁴⁷ Such ideas have been most clearly formulated in Gilbert, *Religion and Society*, see especially pp. 94-121.

While it is generally accepted that *new* dissent tended to grow strong in the regions where the established church had been weak, a contrasting view, known as the 'Tillyard thesis' suggested that *old* dissent grew strong where the established church was *strong*.⁴⁸ This view has held considerable influence, but has evaded detailed research.⁴⁹ As already noted, there may a tendency to exaggerate old dissent as a predominately south-eastern phenomenon, which tends to give latent support to such ideas. It has been shown that the original distribution of old dissent in the seventeenth century did not always correspond to the geography of old dissent in 1851.⁵⁰ However, noting this point, it is nonetheless pertinent to note that the correlation between the old dissenting index of attendances and the estimated Anglican provision of seating in 1811 was similarly negative to the total dissenting figure ($r_s = - 0.31$, $p = 0.000$, $n = 1,908$). Even excluding the Presbyterian Church in England, which was strong in the far north of England (an area of notable Anglican weakness), made virtually no difference to the strength of the relationship ($r_s = - 0.29$, $p = 0.000$, $n = 1,908$).

Thus, even though the broad geography of old dissent in 1851 appeared more closely linked to Anglican strength than the geography of new dissent, when the analysis delved beneath the regional patterns to the level of the parish, both old and new dissent generally appeared strongest where the Church of England was already weak. New dissent appears to have 'filled' entire regions of Anglican weakness, and old dissent more localised weak points.

Conclusion.

It has been shown that Gill was correct to stress that 'excessive' seating capacity was a marked phenomenon of nineteenth-century religion. The traditional 'pessimist' focus upon the lack of religious accommodation ignored the vast majority of rural areas, and some urban areas too. Gill himself documented the

⁴⁸ F. Tillyard, 'The distribution of the Free Churches in England', *Sociological Review*, 27:1 (1935), 1-18.

⁴⁹ See Gilbert, *Religion and Society*, p.115.

⁵⁰ See section 4.4 of this thesis (see especially table 22).

rise in 'excess' provision of seating most effectively.⁵¹ Gill was also correct to argue that this over-provision of seating must have been a major burden on both ministers and finances, most especially of the nonconformist denominations. Again, Gill presented detailed evidence of these trends.

Such evidence remains a long way from demonstrating that the over-provision of seating was the dominant mechanism in the production of empty churches, and that these empty churches were a dominant cause of the subsequent decline in church-going. The 1851 data provided little evidence for either of these links, and suggested many opposing trends. In this way it is difficult to reject 'secularisation' on Gill's grounds that:

'On this understanding [i.e. the empty church thesis], cultural factors such as "secularization" are no longer identified as the primary agents of rural churchgoing decline. Physical factors seem to be more dominant, and secularization is instead seen as an end product.'⁵²

It seems somewhat incongruous to attempt to separate the 'physical' variables from the 'cultural' variables, and thereby to argue against secularisation as an explanation of religious decline. Indeed, Gill's work is itself one of the most detailed and best researched accounts of the consequences of religious pluralism - in terms of charting denominational competition, church building and closing, church debt, and the decline in religious practice.

The fundamental disagreement between Gill and secularisation theory is whether empty churches were predominantly a cause of religious decline or a result of it. It has been shown that to concentrate on seats, attendances, and population figures alone is to rest upon an almost self-fulfilling prophecy - there was an inbuilt tendency for the provision of seating to be connected with the emptiness of the church. Most importantly of all, it was shown that *despite* this inbuilt relationship, the actual link between over-provision of seating and emptiness of churches was extremely weak in 1851. This was because the rate of practice

⁵¹ See Gill, *Empty Church*.

⁵² Gill, *Empty Church*, p.73.

tended to be high where the provision of seating was high. Dissenting chapels tended to be just as 'full' in areas of very high total seating provision as in areas of very low seating provision. It was the Anglican churches which were more empty. However, it appeared that dissenting strength was not simply a cause of Anglican weakness in 1851, but was also a product of Anglican weakness prior to 1851.

If one does not accept Gill's central proposition - that the empty church was in itself a cause of subsequent religious decline - but takes the more conventional view that empty church were largely a product of such decline, then one cannot accept Gill's proposition that:

'However, the physical factors [seating provision and empty churches] behind them [the various aspects of religious decline] seem to have been more invisible. By concentrating more carefully upon these physical (and indeed measurable) factors scholars might avoid some of the *less controllable speculations about secularization.*' [My italics].⁵³

Gill's own analysis, has shown how these rather neglected 'physical' variables can be used to chart certain aspects of religious change. However, this should not be seen as a replacement for 'cultural' considerations. One is left still asking what the causes of religious decline were. If the 'physical' variables do not hold the key to understand religious change as Gill proposes, but rather, as argued here, serve only to chart its effects, then perhaps one has to return to what Gill called 'less controllable speculations' for an answer. In any event, it remains to be explained what caused the intense phase of denominational competition in the nineteenth century. Why was there very intensive denominational competition (and over-provision of seating) in some areas and not in others? The following chapter attempts to discover where denominational competition was most intense, and why. In short, the subject returns to where it started - religious pluralism.

⁵³ Gill, Empty church, p.89.

Chapter Seven

The Geography of Religious Pluralism in 1851

7.1 Introduction

This chapter examines the geography of religious pluralism. In so doing this thesis is breaking new ground. While many accounts have referred to the variations of religious pluralism *through time*, the geography of religious pluralism remains a neglected subject. The history of dissent and religious pluralism has been well covered, both in 'traditional' historical detail,¹ and in more sociological language,² but the geography of religious pluralism remains a neglected topic.

By starting from a geographical perspective (as opposed to an historical one), this chapter avoids becoming a 'grand historical sociological narrative', of the type which are (almost inevitably) offered by non-historians attempting to short-cut the painstaking biographical and denominational detail necessary to chart the Reformation and the subsequent Protestant predilection to schism.³ The concern of this thesis is not the precise detail of 'factionalism', 'schism', and denominational history. The focus, as Bruce suggested, is upon the "structural" consequences of the epistemological elements of belief-systems',⁴ in this case religious pluralism as understood from a sociology of knowledge perspective.

This chapter is an attempt to understand the regional and local environments which fostered support for the rapidly increasing number of Christian denominations. It is argued that a geographical understanding of religious pluralism lies at the heart of an effective sociological explanation of religious change. As with the earlier analytical chapters of this thesis, the underlying logic is

¹ The major works here are M.R. Watts, The Dissenters (i): From the Reformation to the French Revolution (Oxford, 1978), and The Dissenters (ii): the Expansion of Evangelical Nonconformity (Oxford, 1995).

² See S. Bruce, A House Divided: Protestantism, Schism and Secularization (London, 1990).

³ In my use of the term 'grand historical sociological narrative', I refer to J.H. Goldthorpe, 'The uses of history in sociology: reflections on some recent tendencies', British Journal of Sociology, 42:2 (1991), 211-230.

⁴ Bruce, House divided, p.39.

that a geographical methodology is a far more powerful way of illuminating certain interconnections of religion and modernity than the 'grand historical sociological narratives' characteristic of secularisation theory or the rather Spartan contextualisation offered by rational choice based research.

The geography of religious pluralism forms the basis of all four subsequent sections of this chapter. Section 7.2 examines the variations in religious pluralism across the whole of England and Wales at the registration-district level. Section 7.3 takes forward the parish-level examination of the strong link between religious diversity and urban/industrial environments. Section 7.4 examines further the parish-level geography of religious pluralism. This section draws upon a fruitful tradition within local history/historical geography and examines the effect of parochial landholding upon religious expression. This serves provide what Phythian-Adams has noted to be one of the major frameworks linking the local to the national.⁵ The importance of parochial landholding serves as a useful conclusion to the analysis both as an effective methodology for stressing the local variations of religious pluralism, and as a final illustration of the importance of parish-level data for the sensitive analysis of religious change.

7.2 Tracing the Contours of Religious Pluralism in England and Wales

A comparison of the geography of dissenting strength (as measured by the total dissenting percentage share of attendances) and religious diversity (as measured by the diversity measure), provides valuable insights into the geography of religious pluralism. The dissenting percentage share and diversity measure variables were mapped for the whole of England and Wales at registration-district level. Both maps were constructed using quintiles (20% of districts in each category) to render the two patterns easily comparable.

⁵ C. Phythian-Adams, Rethinking English Local History (Leicester, 1987), pp. 7-8.

The diversity measure.

Map 16 shows how the diversity measure varied across the registration districts of England and Wales. It can be seen that religious diversity was generally lowest in the south of England: from Kent to eastern Devon, and, moving northwards, along a narrowing front into the north-west midlands. In this area the majority of districts lay in the lowest quintile (a diversity measure of less than 0.49), although considerable pockets of diversity occurred - most notably in Wiltshire, Hampshire, Berkshire and Hertfordshire.

To the north and west of this area diversity was generally higher, the diversity measure being above 0.49 in all these districts except Tregaron in mid-Wales (a notable 'island' of low diversity which is explained subsequently) and the far north of Lancashire and southern Westmorland. The areas of very high diversity (a diversity measure in excess of 0.72) were south and east Wales, east Cornwall, the Wash, much of the Pennine area, and moving coastwards, parts of Northumberland, Durham, and the North Riding. In London, a diversity measure of over 0.72 was recorded in the eastern districts of Shoreditch, Stepney and Poplar, the southern district of St. George (Southwark), and the central district of Clerkenwell. Thus one can see that diversity was generally higher in eastern London.

This opening broad-brush description reveals considerable complexities in the patterns of religious diversity, but certain broad trends are also immediately apparent. One can see that the major industrial towns and coalfields were areas of very high religious diversity. Map 17 makes this clear by showing the population density of the registration districts of England and Wales. One can see that the areas of high diversity in Lancashire, the West Riding, the coalfield to the east of the Pennines, the West Midlands, Newcastle and Tyneside, Hull, and the south Wales 'valleys' all corresponded closely to the major areas of high population density. This relationship did not apply directly to London, where only a small number of districts, largely in the East-End, showed very high levels of diversity, despite the very high levels of population density throughout the capital.

Map 16



Religious diversity measure (quintiles):



 London Division (see inset)

The London Division

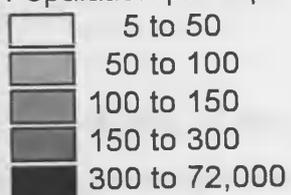


Religious diversity in England
and Wales, 1851

Map 17

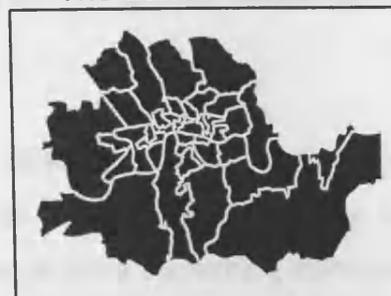


Population per square kilometre:



 London Division (see inset)

The London Division



Population density in England
and Wales, 1851

More widespread exceptions to the equation of high religious diversity and high population density, were the areas in which religious diversity was very high which were not major urban or industrial centres, the most notable being parts of east and south-west Wales, eastern Cornwall, northern Northumberland, and the Fens (the area to the south of the Wash). As will be shown one can begin to explain why religious diversity was high in these areas.

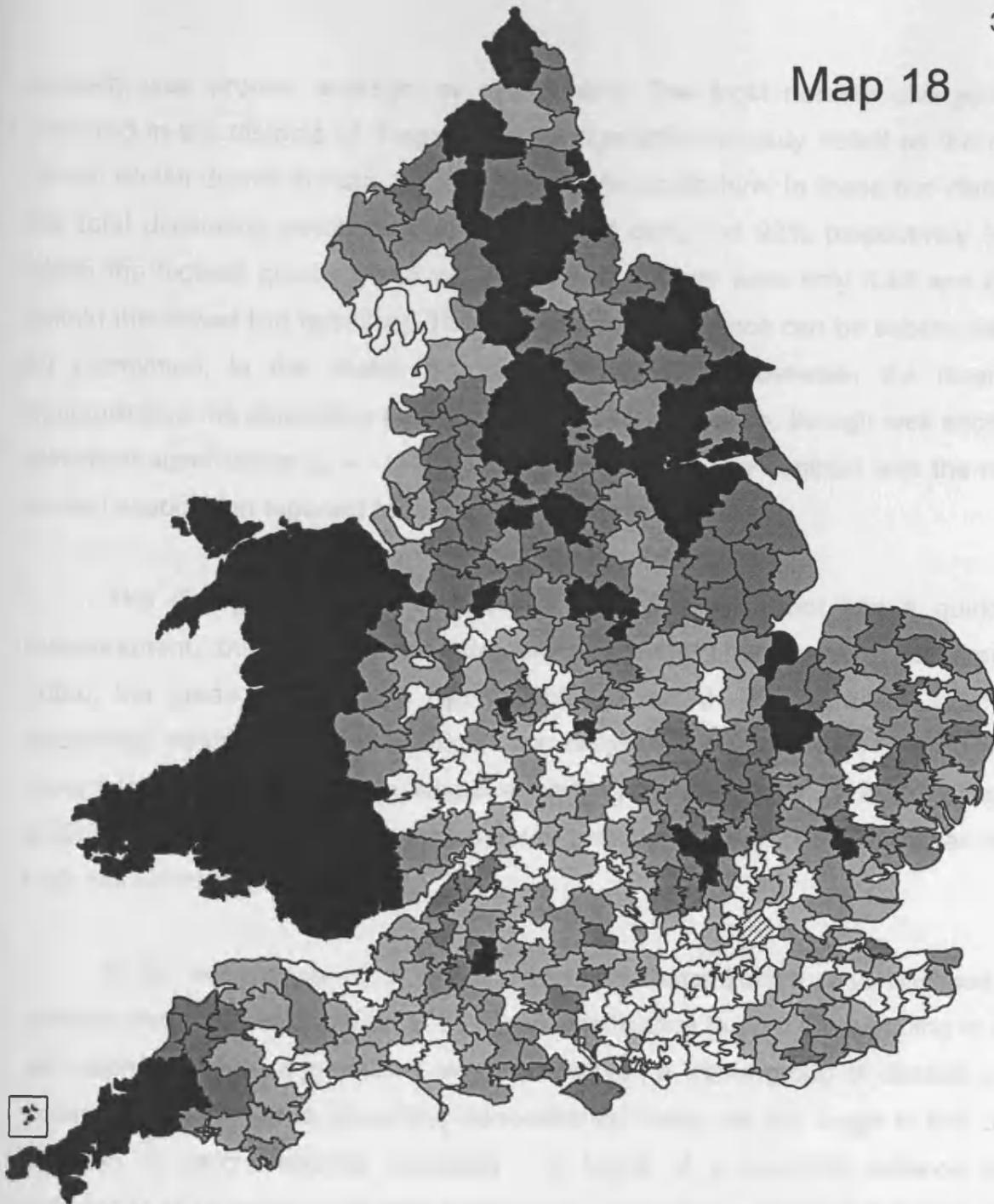
The dissenting percentage share.

The most immediate factor underlying the geography of religious diversity was the geography of dissenting strength. Map 18 shows the distribution of the total dissenting percentage share of attendances. It can be seen that religious diversity generally lay in close proportion to dissenting strength. Thus, in most areas, when one describes the environments which fostered dissenting strength, one is also detailing the geography of religious diversity.

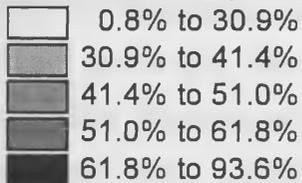
The areas in which dissenting strength did not lie in proportion to the intensity of religious diversity prove extremely interesting. A comparison of maps 16 and 18 reveals that in England, diversity and dissenting strength were almost identical: where dissent was stronger, diversity was higher. One can substantiate the congruity shown between the diversity measure and the dissenting percentage share in England with reference to the almost perfect correlation between the two variables ($r_s = + 0.95$, $p = 0.000$, $n = 576$). Only the west of Cornwall and parts of Lincolnshire and the East Riding showed a marked divergence. In these areas dissent was high in relation to the level of diversity. Redruth was the most notable district in this regard, with a dissenting percentage share of 82.1% (in the highest quintile of map 18), but a diversity score of only 0.65 (in the third lowest quintile of map 16).

In Wales, a more widespread and major difference between diversity and dissenting strength was apparent. In central and northern Wales, there was a marked contrast between the two maps. Over a large area dissenting strength was extremely high (indeed the highest anywhere in England or Wales), and yet,

Map 18



Total dissenting percentatge share (quintiles):



London Division (see inset)

The London Division



Total dissenting percentage share of attendances in England and Wales, 1851

diversity was around average, or even below. The most notable divergences occurred in the districts of Tregaron in Cardiganshire (already noted as the only 'white' Welsh district in map 16) and Bala in Merionethshire. In these two districts the total dissenting percentage share stood at 80% and 92% respectively (well within the highest quintile), and yet the diversity scores were only 0.48 and 0.51 (within the lowest two quintiles). This lack of correspondence can be substantiated by correlation, in the Welsh districts, the association between the diversity measure and the dissenting percentage share was negative, though well short of statistical significance ($r_s = -0.10$, $p = 0.482$, $n = 48$). The contrast with the near perfect association reported for the English districts is marked.

The divergences between the two measures were not just a quirk of measurement, but highlight an extremely important phenomenon. As already noted, the areas in which the two variables diverged were all areas in which dissenting strength was very high, but religious diversity quite low. These circumstances arose when a single dissenting denomination received a large proportion of all attendances - such that the dissenting percentage share was very high, but diversity was quite low.

If the dominance of a single dissenting denomination was confined to isolated districts, this would be of marginal significance to an understanding of the geography of religious pluralism. Where, however, a whole group of districts was dominated by the same dissenting denomination, then one can begin to talk of a situation in which religious pluralism - in terms of a person's salience and experience of competing religious convictions - was genuinely low, but dissent was undoubtedly strong. This phenomenon is henceforth termed the tendency towards 'regional dissenting monopoly'. This term is used to describe a region in which a single dissenting denomination received a large proportion of all attendances (including Anglican attendances). It is argued that where this occurred, religious pluralism would not be intense.

An illustration that the effects of 'regional dissenting monopolies' were visible on the ground can be drawn from Obelkevich's study of South Lindsey

(Lincolnshire), which, as shown subsequently, was an area with a marked Wesleyan Methodist pre-eminence, if not outright dominance. Obelkevich noted: 'The very word "religious", in local parlance, was synonymous with "Methodist"'⁶, and 'if to be "religious" was to be a Methodist, then to be a "Methodist" was to be a Wesleyan.'⁷ Such observations offer a graphic illustration that high dissenting strength did not necessarily translate into intense religious pluralism.

Regional dissenting monopolies have important implications for the utility of the diversity measure as a measure of religious pluralism. The trend for the diversity measure to decline under conditions of regional monopoly is seen as sociologically meaningful - if an entire region was dominated by a single dissenting denomination, then 'religious pluralism' (whether understood in the sociology of knowledge sense or the rational choice sense) would not have been intense.

The tendency towards regional dissenting monopoly can be described in a more systematic manner than the visual comparison of maps 16 and 18. Table 37 shows the 'minimum and 'maximum' diversity scores pertaining to various levels of dissenting strength. To clarify, the 'minimum' diversity limit was tended towards where one dissenting denomination received all the dissenting attendances. The 'maximum' value of the diversity measure (for any given dissenting percentage share) was tended towards where a large number of equally sized dissenting denominations were present. These two extreme values can be calculated by a simple manipulation of the formula of the diversity measure.⁸

⁶ J. Obelkevich, Religion and Rural Society: South Lindsey 1825-1875 (Oxford, 1976), p.183.

⁷ Obelkevich, Religion, pp 183-184.

⁸ To recall from Appendix 4 of this thesis, the general equation of the diversity score is:

$$1 - \left\{ \left(\frac{\text{den1att}}{\text{tatt}} \right)^2 + \left(\frac{\text{den2att}}{\text{tatt}} \right)^2 + \left(\frac{\text{den3att}}{\text{tatt}} \right)^2 + \dots \right\}$$

Where 'den1att', 'den2att', 'den3att', etc. refer to the attendances recorded by each denomination and 'tatt' refers to the total attendances for all denominations.

The '*minimum*' diversity limit was neared when the largest dissenting denomination received virtually all the dissenting attendances. In such circumstances, the diversity measure tends towards:

$$1 - \left\{ \left(\frac{\text{cofeatt}}{\text{tatt}} \right)^2 + \left(\frac{\text{dissdenatt}}{\text{tatt}} \right)^2 \right\}$$

Where 'cofeatt' refers to Church of England attendances and 'dissdenatt' the largest dissenting denomination's attendances.

The '*maximum*' diversity limit was tended towards where the dissenting denominations were numerous and equally strong, thereby having a negligible influence on the diversity measure. In such circumstances, the diversity score tended towards:

$$1 - \left\{ \left(\frac{\text{cofeatt}}{\text{tatt}} \right)^2 \right\}$$

Table 37

How the potential range of the religious diversity measure increased according to the dissenting percentage share of attendances

Dissenting percentage share of attendances	Corresponding minimum possible religious diversity measure ¹	Corresponding maximum possible religious diversity measure ²
zero	zero	zero
10%	0.18	0.19
20%	0.32	0.36
30%	0.42	0.51
40%	0.48	0.64
50%	0.50	0.75
60%	0.48	0.84
70%	0.42	0.91
80%	0.32	0.96
90%	0.18	0.99
100%	zero	1.00

¹ The minimum diversity measure value occurs when only one dissenting denomination is present.

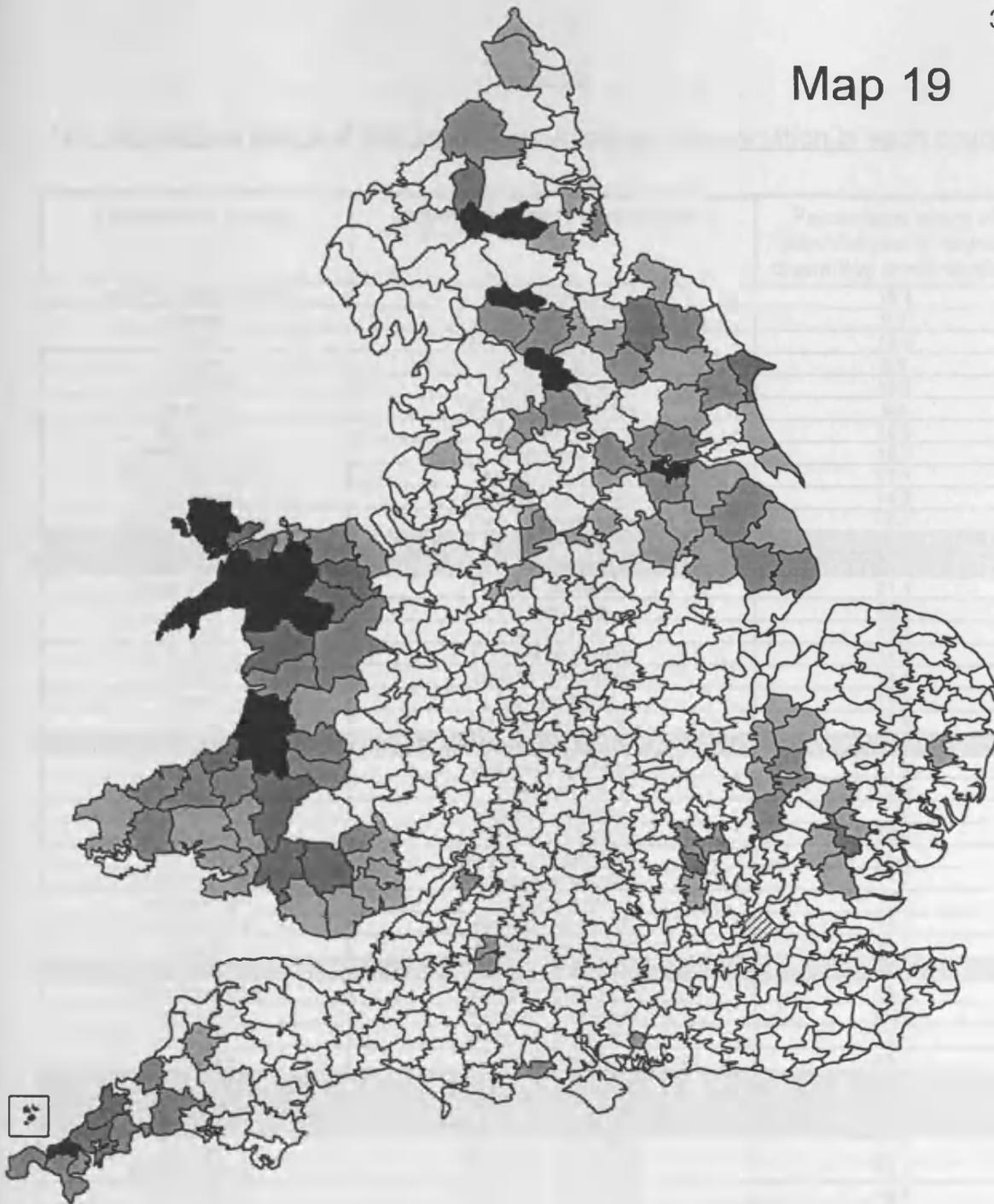
² The maximum diversity measure value is tended towards when there is a large number of equally strong dissenting denominations present.

Table 37 reveals why a comparison of the diversity measure and the dissenting percentage share formed a useful identifier of 'regional dissenting monopolies'; one can see that as the dissenting percentage share increased, so the potential range of the diversity measure increased. The dissenting percentage share of 50% marks a particularly important threshold. At dissenting percentage shares of below 50%, the diversity measure and dissenting percentage share were 'automatically' positively related. Where the dissenting percentage share lay above 50%, the two variables could be unrelated or negatively related (if the diversity measure tended towards the 'minimum possible' value).

Map 19 permits a direct visualisation of the degree to which the actual diversity measure fell short of the 'maximum possible' diversity. This map serves to clarify the subjective comparison of maps 16 and 18, and highlights that it was in Wales (especially west and north-west Wales), Cornwall, and, to a lesser degree, parts of Lincolnshire and Yorkshire, where the actual diversity measure fell well short (less than 70%) of maximum possible diversity. In this way map 19 indicates directly the potential for regional dissenting monopoly.

Before one can speak assuredly of 'regional dissenting monopolies' one must discover to what extent the relatively low level of diversity was due to the same dissenting denomination across the entire region. If the mismatch resulted from a 'patchwork' of several different denominations dominating neighbouring districts, the implications would not be so profound. Table 38 shows the largest denomination and its percentage share of total attendances for all 54 registration counties (and London) in England and Wales. One can see that wherever the largest dissenting denomination received in excess of around 25% of total attendances (the counties shaded lightly in table 38), the diversity measure dropped below about 80% of the maximum possible diversity score (as shown in map 19). Wherever the largest dissenting denomination received over about 40% of total attendances (counties shaded heavily in table 38), the diversity measure fell below about 70% of the maximum possible diversity score. Thus, across all 54 registration counties, it appeared that where dissent was strong and diversity

Map 19



Percentage ratio (actual to maximum diversity):

- over 85%
- 80% to 85%
- 75% to 80%
- 70% to 75%
- 50% to 70%

London Division (see inset)

The London Division



The ratio of the religious diversity measure to the maximum possible religious diversity measure in England and Wales, 1851

Table 38

The percentage share of the largest non-Anglican denomination in each county

Registration county	Largest dissenting denomination	Percentage share of attendances of largest dissenting denomination
London (London Division)	Independents	15.4
Surrey	Independents	9.3
Kent	Wesleyan Methodists	12.8
Sussex	Independents	9.8
Hampshire	Independents	15.5
Berkshire	Wesleyan Methodists	9.3
Middlesex	Independents	16.3
Hertfordshire	Independents	18.7
Buckinghamshire	Baptists (combined)	17.1
Oxfordshire	Wesleyan Methodists	14.2
Northamptonshire	Wesleyan Methodists	15.5
Huntingdonshire	Baptists (combined)	26.6
Bedfordshire	Wesleyan Methodists	26.2
Cambridgeshire	Baptists (combined)	21.1
Essex	Independents	23.1
Suffolk	Independents	16.2
Norfolk	Primitive Methodists	14.9
Wiltshire	Baptists (combined)	14.8
Dorset	Independents	14.9
Devon	Wesleyan Methodists	12.6
Cornwall	Wesleyan Methodists	40.8
Somerset	Wesleyan Methodists	11.9
Gloucestershire	Independents	13.3
Herefordshire	Baptists (combined)	7.0
Shropshire	Primitive Methodists	12.0
Staffordshire	Wesleyan Methodists	20.3
Worcestershire	Wesleyan Methodists	11.2
Warwickshire	Independents	10.5
Leicestershire	Baptists (combined)	16.1
Rutland	Baptists (combined)	13.2
Lincolnshire	Wesleyan Methodists	30.0
Nottinghamshire	Wesleyan Methodists	20.8
Derbyshire	Wesleyan Methodists	20.6
Cheshire	Wesleyan Methodists	18.7
Lancashire	Roman Catholics	15.1
West Riding	Wesleyan Methodists	27.4
East Riding	Wesleyan Methodists	27.4
North Riding	Wesleyan Methodists	33.7
Durham	Wesleyan Methodists	21.8
Northumberland	Wesleyan Methodists	12.6
Cumberland	Wesleyan Methodists	15.8
Westmorland	Wesleyan Methodists	14.1
Monmouthshire	Baptists (combined)	26.6
Glamorganshire	Independents	31.1
Carmarthenshire	Independents	32.8
Pembrokeshire	Baptists (combined)	25.5
Cardiganshire	Welsh Calvinistic Methodists	36.9
Brecknockshire	Independents	30.3
Radnorshire	Baptists (combined)	17.7
Montgomeryshire	Welsh Calvinistic Methodists	26.4
Flintshire	Welsh Calvinistic Methodists	26.9
Denbighshire	Welsh Calvinistic Methodists	35.6
Merionethshire	Welsh Calvinistic Methodists	47.6
Caernarvonshire	Welsh Calvinistic Methodists	49.8
Anglesey	Welsh Calvinistic Methodists	51.3

Key:

Dark shading indicates that the percentage share of attendances of the largest dissenting denomination was over 35%.

Light shading indicates that the percentage share of attendances of the largest dissenting denomination was between 25% and 35%.

relatively low, that this mismatch was a consistent product of the single largest dissenting denomination.

Examining table 38 in greater detail, one can see that in Huntingdonshire and Bedfordshire there was a slight tendency towards dissenting 'monopoly' by the Baptists (Particular, General, and New Connexion) and Wesleyan Methodists respectively. In a second, more extensive, area of Lincolnshire and Yorkshire, the Wesleyan Methodists showed a more pronounced tendency towards regional monopoly, receiving almost a third of all attendances in these two counties. Thirdly, there was an area with a tendency to old dissent dominance in south Wales. In Monmouthshire and Pembrokeshire the Baptists (Particular Baptists) were strong, while in Glamorgan, Carmarthenshire and Brecknockshire, the Independents showed a more marked dominance, receiving almost a third of all attendances.

In addition to these areas there were two areas exhibiting a more pronounced tendency towards regional monopoly, these were Cornwall and central and north Wales. In Cornwall, the Wesleyan Methodists received over 40% of all attendances. In central and north Wales (Cardiganshire, Montgomeryshire, Merionethshire, Caernarvonshire, Anglesey, and Denbighshire), the Welsh Calvinistic Methodists received between 35% and 52% of all attendances. On the western border of this area - in the counties of Flintshire and Montgomeryshire - the Welsh Calvinistic Methodist dominance declined to just over a quarter of all attendances.

Thus both map 19 and table 38 make clear that it was in central and north Wales and Cornwall that regional dissenting monopolies were most clearly developed. In the Welsh counties the Welsh Calvinistic Methodists were pre-eminent. In the case of Cornwall it was the Wesleyan Methodists.

The question raised is why central and north Wales, Cornwall, and to a lesser extent, south Wales, Lincolnshire, the East and North Ridings of Yorkshire, and the Pennine Dales, were all areas of extremely high dissenting strength but

relatively low religious diversity (as highlighted in map 19)? One could conclude that wherever dissent was strong in broadly 'rural' areas - as typified most clearly by the regional dissenting monopolies - that this was often due to a single denomination, whereas in urban areas there was a much higher religious diversity. Such an explanation is only partly persuasive, however. Table 39 shows the 119 (non-metropolitan) districts which recorded the highest 20% of the total dissenting percentage share (a dissenting percentage share of over 61.78%). These districts of very high dissenting strength were divided into two groups: those in which there was proportionately high religious diversity, and those in which there was not.⁹

The districts in which dissent was strong but diversity was relatively low appeared very different from the districts in which both dissenting strength and diversity were high. A difference was apparent in terms of both regional location and demographic characteristics. Table 39 shows the population densities of the districts in each of these two groups. Where dissent was strong but diversity proportionately low, the median population density was only 53 people per square kilometre (compared with the extra-metropolitan median of 76). Only 15 of the 62 districts displayed population densities of over 100 people per square kilometre, and only Redruth, Penzance, Melksham, Keighley, and Saddleworth displayed population densities in excess of 200 people per square kilometre.

In contrast, the districts in which *both* dissent and diversity were high contained many of the major urban-industrial centres, as shown in the right hand columns of table 39. Thus at the bottom of the third column of table 39 one can pick out, Dudley, Wolstanton, Newcastle-under-Lyme, Nottingham, Stockport, Liverpool, Rochdale, Haslingden, Burnley, Todmorden, Halifax, Bradford, Leeds, Dewsbury, Eccleshall Bierlow, Houghton-le-Spring, Sunderland, South Shields, Gateshead, and Tynemouth. In total, 21 of the 57 districts displayed population densities in excess of 200 people per square kilometre. It is also clear that there was a substantial minority of highly rural districts in which both diversity and

⁹ The former were defined as districts in which the diversity measure was over 80% of the maximum possible diversity measure (i.e. the lowest two groups in map 19), the latter as districts in which the diversity score was less than 80% of the maximum possible diversity score (i.e. the highest three groups in map 19).

Table 39

An examination of the religious diversity and population density characteristics of the twenty percent of registration districts with the highest dissenting percentage share of attendances

Districts in which diversity measure was less than 80% of maximum diversity measure	Population density	Districts in which diversity measure was greater than 80% of maximum diversity measure	Population density
Bellingham (Northumberland)	6.87	Brecknock (S. Wales)	22.82
Rhayader (S. Wales)	15.91	Glendale (Northumberland)	24.91
Askrigg (N. Riding)	18.01	Teesdale (Durham)	28.11
Builth (S. Wales)	20.03	Hay (S. Wales)	30.20
Helmsley (N. Riding)	20.45	Newtown (N. Wales)	32.73
Tregaron (S. Wales)	21.06	Pocklington (E. Riding)	36.96
Bala (N. Wales)	21.26	Holbeach (Lincs)	44.06
Haltwhistle (Northumberland)	21.47	Llandilofawr (S. Wales)	45.68
Dolgelly (N. Wales)	22.07	Launceston (Cornwall)	47.16
Reeth (N. Riding)	23.98	Skipton (W. Riding)	47.34
Llandovery (S. Wales)	24.07	Glanford Brigg (Lincs)	50.45
Machynlleth (N. Wales)	25.67	Bridgend (S. Wales)	52.85
Pateley Bridge (W. Riding)	27.61	Bodmin (Cornwall)	56.91
Llanfyllin (N. Wales)	27.90	Haverfordwest (S. Wales)	56.96
Pickering (N. Riding)	28.00	Whitby (N. Riding)	59.04
Festiniog (N. Wales)	28.83	Gainsborough (Lincs)	61.98
Llanrwst (N. Wales)	30.64	North Witchford (Cambs)	67.09
Corwen (N. Wales)	30.77	Ely (Cambs)	70.82
Lampeter (S. Wales)	32.23	Llanely (S. Wales)	79.08
Weardale (Durham)	39.76	Pembroke (S. Wales)	80.73
Camelford (Cornwall)	40.26	Wortley (W. Riding)	92.21
Driffield (E. Riding)	42.94	Newport (S. Wales)	97.43
Narberth (S. Wales)	43.78	Cardiff (S. Wales)	97.52
Newcastle-in-Emlyn (S. Wales)	43.98	Berwick (Northumberland)	102.69
Aberystwyth (S. Wales)	44.27	Swansea (S. Wales)	111.70
Ruthin (N. Wales)	44.85	Holywell (N. Wales)	113.35
Alston (Cumberland)	48.04	Wrexham (N. Wales)	120.29
Howden (E. Riding)	49.37	Auckland (Durham)	125.35
Aberavon (S. Wales)	49.73	Hemel Hempstead (Herts)	127.35
Conway (N. Wales)	50.30	Pontypool (S. Wales)	134.50
Bridlington (E. Riding)	52.06	Durham (Durham)	140.55
Thorne (W. riding)	54.56	Hayfield (Derbs)	150.28
Cardarthen (S. Wales)	54.62	Abergavenny (S. Wales)	165.98
St. Columb (Cornwall)	54.64	Belper (Derbs)	173.93
Pwllheli (N. Wales)	57.69	Basford (Notts)	182.22
Cardigan (S. Wales)	58.35	Newcastle-Under-Lyme (Staffs)	192.50
St. Asaph (N. Wales)	66.52	Foleshill (Warwicks)	207.78
Neath (S. Wales)	70.53	Sculcoates (E. Riding)	245.10
Selby (W. Riding)	70.91	Todmorden (W. Riding)	272.87
Liskeard (Cornwall)	73.68	Burnley (Lancs)	291.58
Anglesey (N. Wales)	76.94	Houghton-le-Spring (Durham)	298.38
Camarvon (N. Wales)	77.06	Tynemouth (Northumberland)	399.53
Bangor (N. Wales)	82.33	Rochdale (Lancs)	444.19
Goole (W. riding)	82.67	Ecclesall Bierlow (W. Riding)	449.12
Otley (W. riding)	91.36	Gateshead (Durham)	457.97
Helston (Cornwall)	96.71	Haslingden (Lancs)	467.00
Crickhowell (S. Wales)	99.86	South Shields (Durham)	571.42
Westbury (Wilts)	100.06	Halifax (W. Riding)	577.19
Leighton Buzzard (Beds)	111.43	Dewsbury (W. Riding)	725.15
Pontefract (W. riding)	111.86	Stockport (Cheshire)	725.87
Braintree (Essex)	112.27	Wolstanton (Staffs)	757.19
Truro (Cornwall)	113.27	Bradford (W. Riding)	1114.79
St. Austell (Cornwall)	137.96	Sunderland (Durham)	1460.12
Easington (Durham)	139.91	Dudley (Staffs)	1463.75
Luton (Beds)	151.80	Nottingham (Notts)	7719.56
Merthyr Tydfil (S. Wales)	168.12	Leeds (W. Riding)	11924.89
Falmouth (Cornwall)	195.27	Liverpool (Lancs)	28743.80
Penzance (Cornwall)	203.16		
Saddleworth (W. riding)	240.60		
Keighley (W. Riding)	246.30		
Meiksham (Wilts)	261.67		
Redruth (Cornwall)	328.79		

dissent were strong. Indeed the right-hand column of table 39 shows a strong polarisation of population densities. Thus, although there were many highly urban districts, 23 districts contained population densities of under 100 people per square kilometre, and in 10 of these the population density was less than 50 people per square kilometre.

Thus, while table 39 elucidates the general tendency that where dissent was very strong in urban areas, it was, almost without exception, the cause of high religious diversity. In contrast, there appeared no hard and fast rule with respect to 'rural' areas.¹⁰ In certain 'rural' areas the assertion that dissenting strength was largely due to a single dissenting denomination appeared valid (those districts listed in the left-hand part of table 39), but in other sparsely populated areas, dissent was associated with religious diversity as intense as in any of the major manufacturing cities (the rural districts in the right-hand part of table 39).

There was a distinctive regional geography to both sets of rural districts. The districts in the left-hand column of table 39 - in which dissent was strong but diversity was low - corresponded closely to the 'regional dissenting monopolies' already defined. Of the 62 such districts, 9 (14.5%) lay in Cornwall; 15 (24.2%) lay in Yorkshire; 5 (8.1%) lay in Durham, Northumberland and Cumberland; 14 (22.6%) lay in South Wales, and 14 (22.6%) lay in North Wales. Only 5 (8.1%) of districts lay outside these regions.

The rural districts in the right-hand column of table 39 also displayed a strong regional pattern.¹¹ Of the 31 such districts; 2 (6.5%) lay in Cornwall; 4 (12.9%) lay in Yorkshire; 5 (16.1%) lay in Northumberland and Durham; 11 (35.5%) lay in South Wales; and 3 (9.7%) in North Wales. Only 6 districts (19.3%) lay outside these areas, and 3 of these lay in the Fens. The following paragraphs argue that the close proximity of these two sets of districts was no accident and interprets them as distinct religious cultural regions and their borders.

¹⁰ I use the term 'rural' very loosely to describe areas of low population density.

¹¹ The rural districts were defined as those with a population density less than 150 people per square kilometre.

Mapping religious cultural regions and their borders.

The geography of religious pluralism is summarised in map 20. This map shows both dissenting strength (and whether this was primarily due to old or new dissent), and religious diversity. The map provides a useful way of visualising the major cultural regions of religious expression in England and Wales, and helps draw together the strands presented thus far. The map was constructed using the method of least squares to calculate the 'ideal type' which the attendance data of each district best approximated.¹²

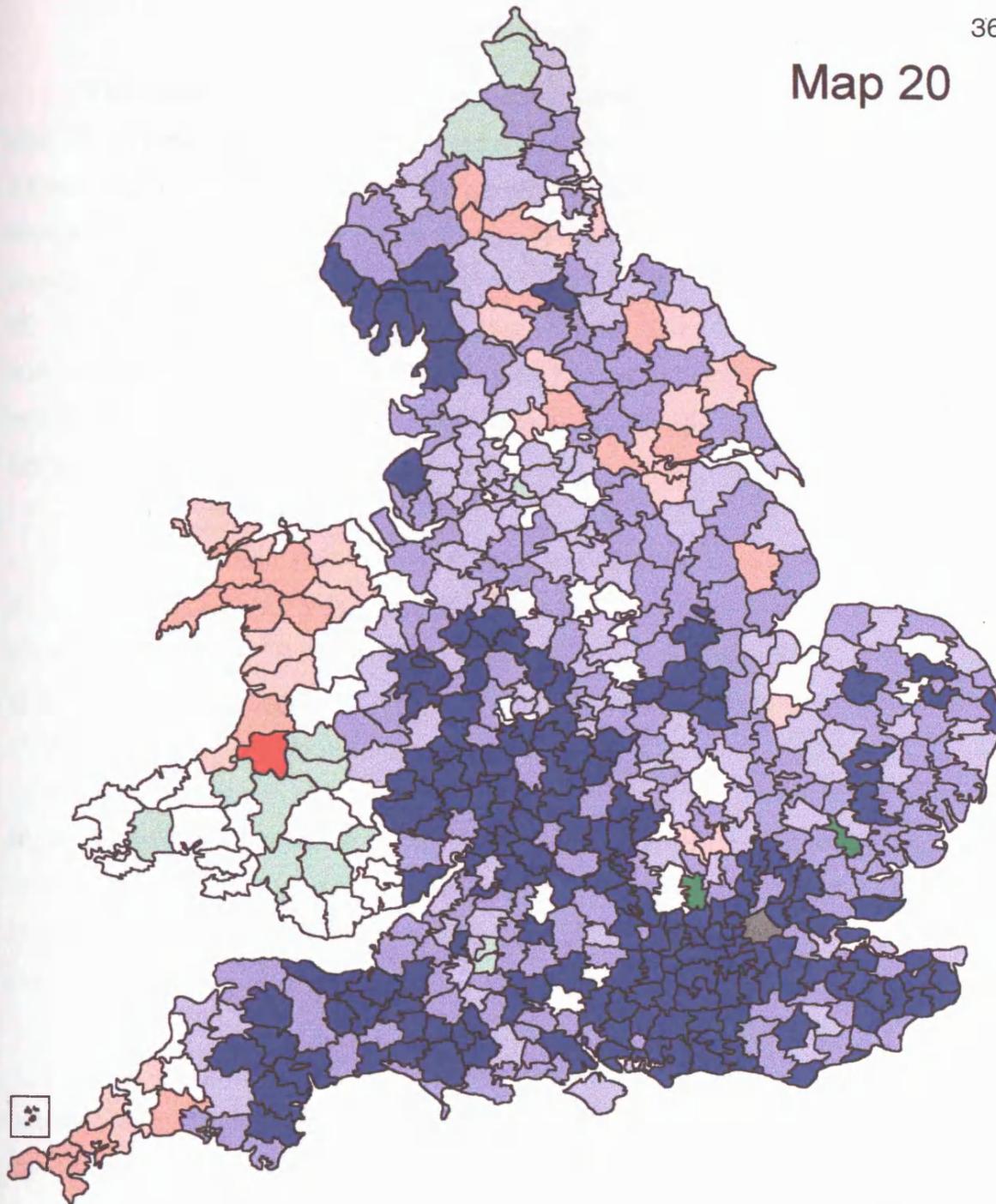
The map can be understood in the following manner. The paler the shading, the higher the level of religious diversity. The darker blue the shading, the greater the tendency towards Anglican pre-eminence; the darker the red, the greater the pre-eminence of a new dissent denomination (almost without exception, the Welsh Calvinistic Methodists in north Wales and the Wesleyan Methodists in England); and the darker the shade of green, the greater the pre-eminence of an old dissent denomination (most typically the Independents and Particular Baptists in Wales, the Presbyterian denominations in Northumberland, and no fixed pattern in south-east England).¹³

Map 20 makes very clear the two major regions of dissenting monopoly - the Welsh Calvinistic Methodist pre-eminence in central and north Wales, and the Wesleyan Methodist pre-eminence in Cornwall. Also made clear is the weaker dominance of old dissent in South Wales and Wesleyan Methodism in parts of north-east England.

¹² The method is outlined in J.T. Coppock, An Agricultural Atlas of England and Wales (London, 1976), Appendix I.

¹³ It should be noted that a 'looser' definition of old dissent was used in this map than elsewhere in this thesis. The United Presbyterian Church and the Church of Scotland were both categorised as old dissent in map 20, though the former was formed in 1847, and the latter, as a national Church, is not strictly 'dissenting'. This 'looser' definition was to highlight the strong Presbyterian influence (which included the Presbyterian Church in England) in the far north of England.

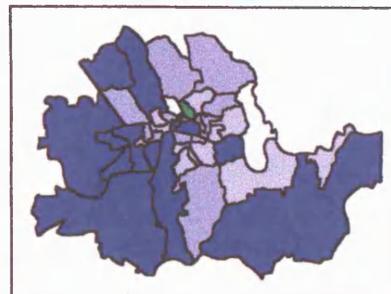
Map 20



Classification (resultant from least squares analysis):

- One denomination - Church of England predominant
- One denomination - Welsh Calvinistic Methodists predominant
- Two denominations - Church of England the largest
- Two denominations - new dissenting denomination the largest
- Two denominations - old dissenting denomination the largest
- Three denominations - Church of England the largest
- Three denominations - new dissenting denomination the largest
- Three denominations - old dissenting denomination the largest
- Four or five denominations - i.e. very high religious diversity
- London Division (see inset)

The London Division



A typology of religious affiliation and diversity
(see main text for a full explanation)

The unshaded areas of the map correspond to the areas of highest religious diversity. These are the districts which most closely approximated four or more equally sized denominations. These districts comprised the major urban-industrial centres, along with parts south and east Wales, east Cornwall and west Devon, much of the Pennine area, and the Fens. In this way the unshaded districts in map 20 approximate closely the districts presented in table 39. The 'urban' districts correspond closely to the districts listed in the lower right-hand part of table 39, and the 'rural' districts equate closely to the districts in the top right-hand column of table 39.

It can be seen that many of the 'rural' districts containing high religious diversity lay along the borders of the dissenting regional monopolies. Thus in North Wales, between the 'red' of Welsh Calvinistic Methodist dominance and the 'blue' of Anglican dominance, lay a zone of districts of very high religious diversity - from Holywell down to Newtown. In south Wales the 'green' of old dissent was surrounded by districts of high diversity, from Hay down to Newport in the east, to Haverfordwest and Pembroke in the west. In Cornwall, the districts between the 'red' of Wesleyan Methodist dominance in Cornwall and the Anglican dominance of Devon - Bodmin, Launceston and Stratton - all showed very high religious diversity.

That the districts of high religious diversity, but relatively low population density, lay predominantly along the edge of the regional dissenting monopolies has not just been made visible by the eye of faith. One can list all other groups of three or more adjoining (or proximate) districts of high religious diversity (the unshaded districts of map 20), and show that all other such groups surrounded the major manufacturing centres. From north to south these were: Durham, Gateshead, South-Shields, Sunderland and Tyneside; Burnley, Todmorden and Rochdale; Nottingham, Derby, Basford and Belper; and Dudley, Stourbridge and Birmingham.

In this way one can see that the borders of the regional dissenting monopolies formed by far the most sizeable areas in which intense religious

pluralism was not patently associated with urban and industrial development. The explanation offered to interpret the complexity of the patterns of religious diversity in these areas rests upon the notion of 'religious cultural regions'. The term 'cultural region' is invoked to describe an area in which the nature of religious expression appeared unique to one particular region.¹⁴

The relevance of viewing regional dissenting monopolies as cultural regions is argued for two reasons. First, the areas of dissenting monopoly were those in which the established church was weakest, and this was in itself strongly indicative of the persistence of a separate regional or national culture. Secondly, the degree to which local people united behind a single dissenting denomination, as opposed to the plurality of denominations which characterised the industrial dissenting regions of England and Wales, is also a valuable indicator of a distinctive cultural region.

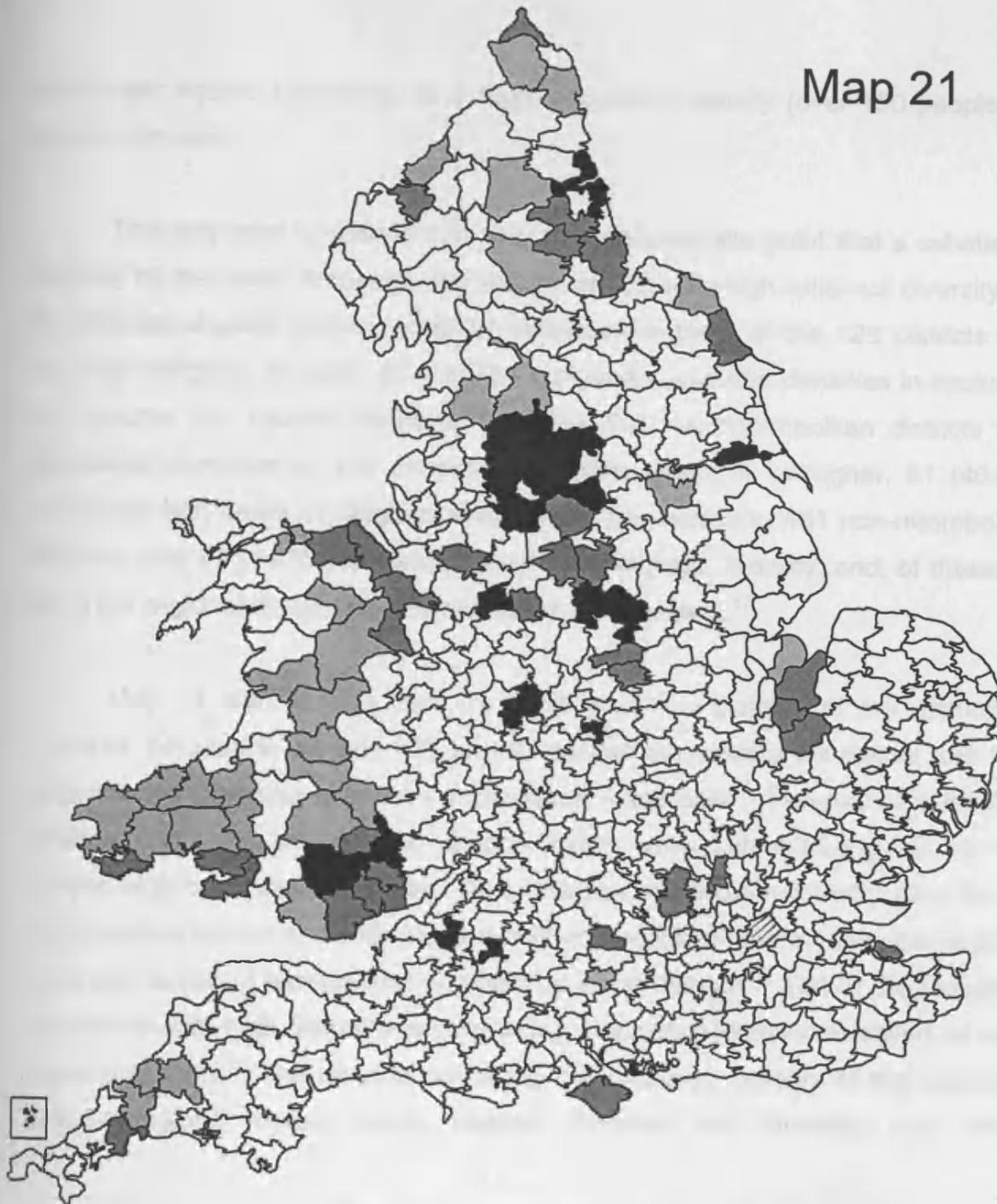
It is argued that it is precisely because these regions represented long-run distinctive cultures that arguments relating to urbanisation, industrialisation and migration could not be used to explain the magnitude of dissenting strength and religious diversity. Also, it is argued that the edges of the distinctive religious cultural regions were areas which contained levels of religious diversity disproportionate to their urban and industrial development, because herein religious diversity reflected the long-term 'ethnic' mixing of the regional religious cultures with the mainstream 'Anglican' religious culture, rather than the division of labour resultant from industrialisation.

These proposed borders of the religious cultural regions require elaboration and delineation. Map 21 shows the districts in which the religious diversity measure lay in the highest quintile (above 0.72).¹⁵ These are grouped according to population density, into three broad categories: 'low' population density (less than 60 people per square kilometre), 'medium' population density (between 60 and 150

¹⁴ This invocation of religious cultural regions has strong parallels with the notion of linguistic cultural regions and their borders. See W.T.R. Pryce, 'Migration and the evolution of culture areas: cultural and Linguistic frontiers in north-east Wales, 1750-1851', Transaction of the Institute of British Geographers 1st ser. 65 (1975), 79-107.

¹⁵ This corresponds to the highest quintile, as shown in map 16.

Map 21



Of districts with a religious diversity measure of over 0.72:

-  Low population density (<60 people per square kilometre)
-  Medium population density (60-150 people per square kilometre)
-  High population density (>60 people per square kilometre)

 London Division (see inset)

The London Division



A typology of registration districts with the highest levels of religious diversity

people per square kilometre), and 'high' population density (over 150 people per square kilometre).

The first point to note is that map 21 reinforces the point that a substantial majority of the major industrial districts contained very high religious diversity, as the districts shaded black in map 21 delineate. Indeed, of the 123 districts with very high religious diversity, 56 (45.5%) exhibited population densities in excess of 150 people per square kilometre.¹⁶ Of the 127 non-metropolitan districts with population densities of 150 people per square kilometre or higher, 51 (40.2%) contained high levels of religious diversity. Of the remaining 461 non-metropolitan districts, only 67 (14.5%) contained very high religious diversity, and, of these, 39 lay in the regional dissenting monopolies or their borders.¹⁷

Map 21 also reveals that the location of the majority of the districts of 'medium' population density (60 to 150 people per square kilometre) and high religious diversity also appeared immediately 'explicable' - in terms of a coalfield location. Typically, these were districts which were industrialising but did not contain high population densities. Thus one can immediately identify 19 of the 34 such districts which lay wholly or partly within a coalfield (and in many cases these were also areas of ferrous and non-ferrous metal mining).¹⁸ Ten of the remaining 15 districts with high diversity and 'middling' population density displayed no clear regional pattern.¹⁹ The districts lay along the proposed borders of the distinctive cultural regions, these being: eastern Cornwall (St. Austell), east Wales

¹⁶ In registration order these were: Clerkenwell, Shoreditch, Stepney, Poplar, St. George (Southwark), Portsea Island, Northampton, Melksham, East Stonehouse, Stoke Damerel, Keysham, Bristol, Newcastle-under-Lyme, Wolstanton, Stoke-upon-Trent, Walsall, West Bromwich, Dudley, Stourbridge, Birmingham, Foleshill, Basford, Radford, Nottingham, Derby, Belper, Hayfield, Stockport, Bury, Chorlton, Manchester, Ashton-under-Lyme, Oldham, Rochdale, Haslingden, Burnley, Keighley, Todmorden, Huddersfield, Halifax, Bradford, Hunslet, Leeds, Dewsbury, Barnsley, Sheffield, Sullcoates, Hull, Houghton-le-Spring, Sunderland, South Shields, Gateshead, Newcastle-upon-Tyne, Tynemouth, Abergavenny, and Merthyr Tydfil.

¹⁷ These being in Cornwall, Wales, Shropshire, Cumberland and Northumberland.

¹⁸ These were: the south Wales coalfield (Swansea, Llanelli, Cardiff, Newport, Chepstow and Monmouth); the north Wales coalfield (Holywell, Wrexham, and Oswestry); the north Staffordshire coalfield (Cheadle); the Leicestershire and south Derbyshire coalfield (Barrow-on-Soar, Loughborough, and Shardlow); the north-eastern coalfield (Mansfield, Chesterfield, and Wortley); and the Durham coalfield (Durham, Auckland, and Stockton).

¹⁹ Five lay in south-east England, one in Cheshire and one in the North Riding. The presence of three Fenland districts was once more suggestive of a distinctive region, and this area is commented upon subsequently.

(Crickhowell, St. Asaph), south-west Wales (Pembroke). The Scottish border was also clearly visible (Carlisle and Berwick).

The proposed borders of the cultural regions comprised almost entirely the districts which displayed high religious diversity and *low* population densities. Map 21 reveals that 22 of these 32 districts lay along the four 'cultural borders', these being: east Cornwall (Launceston, Camelford and Bodmin), east Wales (Bridgend, Brecknock, Hay, Builth, Rhayader, Newtown, Llanfyllin, Corwen), south-west Wales (Narberth, Pembroke, Haverfordwest, Carmarthen, Cardigan, Newcastle-in-Emlyn and Llandofawr), and the Scottish border (Longtown, Glendale, Alnwick and Hexham). The 10 remaining districts exhibited no overall pattern. Three (Conway, Dolgelly and Machynlleth) lay in the proposed north Wales 'regional monopoly'. The remaining seven districts demonstrated no regional pattern.²⁰

In this manner, map 21 shows a proposed typology of reasons for intense religious pluralism. First, and least controversially, the major urban-industrial centres (most especially areas of coal-based industrialisation) stand out clearly as areas of high population density and high religious diversity. Secondly, districts with high religious diversity and 'middling' population density were typically either coalfield districts, or more urban districts located along the 'cultural borders' of eastern Cornwall, east and south Wales, and the Scottish border. Thirdly, it was proposed that the great majority of districts with high religious diversity and low population densities lay along these 'cultural borders'.

These three causes of high religious diversity are not seen as mutually exclusive. Where the south Wales and north Wales coalfields lay close to the English border, the highest diversity in Wales resulted.²¹ It is argued that diversity was so high precisely because the 'background' religious diversity resulting from 'cultural' mixing was augmented by the diversity resulting from industrialisation. Likewise, it is argued that industrial development along Tyneside fostered the

²⁰ One was in County Durham, one in Lancashire, one in the North Riding, two in the West Riding, one in Lincolnshire, and one in Hampshire.

²¹ Newport and Wrexham recorded diversity scores of 0.82.

highest diversity recorded anywhere in England, since it augmented a 'background' diversity resulting from the Scottish Presbyterian presence.²²

One can show more precisely how the mixing of religious cultures - the 'regional dissenting culture' and the mainstream Anglican culture - resulted in high religious diversity along the proposed cultural borders. The clearest two 'cultural borders' are the Wales-England border and the Scotland-England border. Here the separate history of the nations of Wales and Scotland, and the resulting distinctiveness of religious expression characteristic of central and north Wales (Calvinistic Methodism) and Scotland (Presbyterianism) is eminently visible.

In order to map the distinctive religious characteristics of the Scotland-England border, one can merge the attendances for the Church of Scotland, United Presbyterian Synod and Presbyterian Church in England to produce a single measure of the 'Presbyterian' percentage share of attendances. Map 22 shows the Presbyterian percentage share for the registration districts of England and Wales. The religious imprint of Scottish migrants is clearly visible along the border, most especially in Northumberland.²³

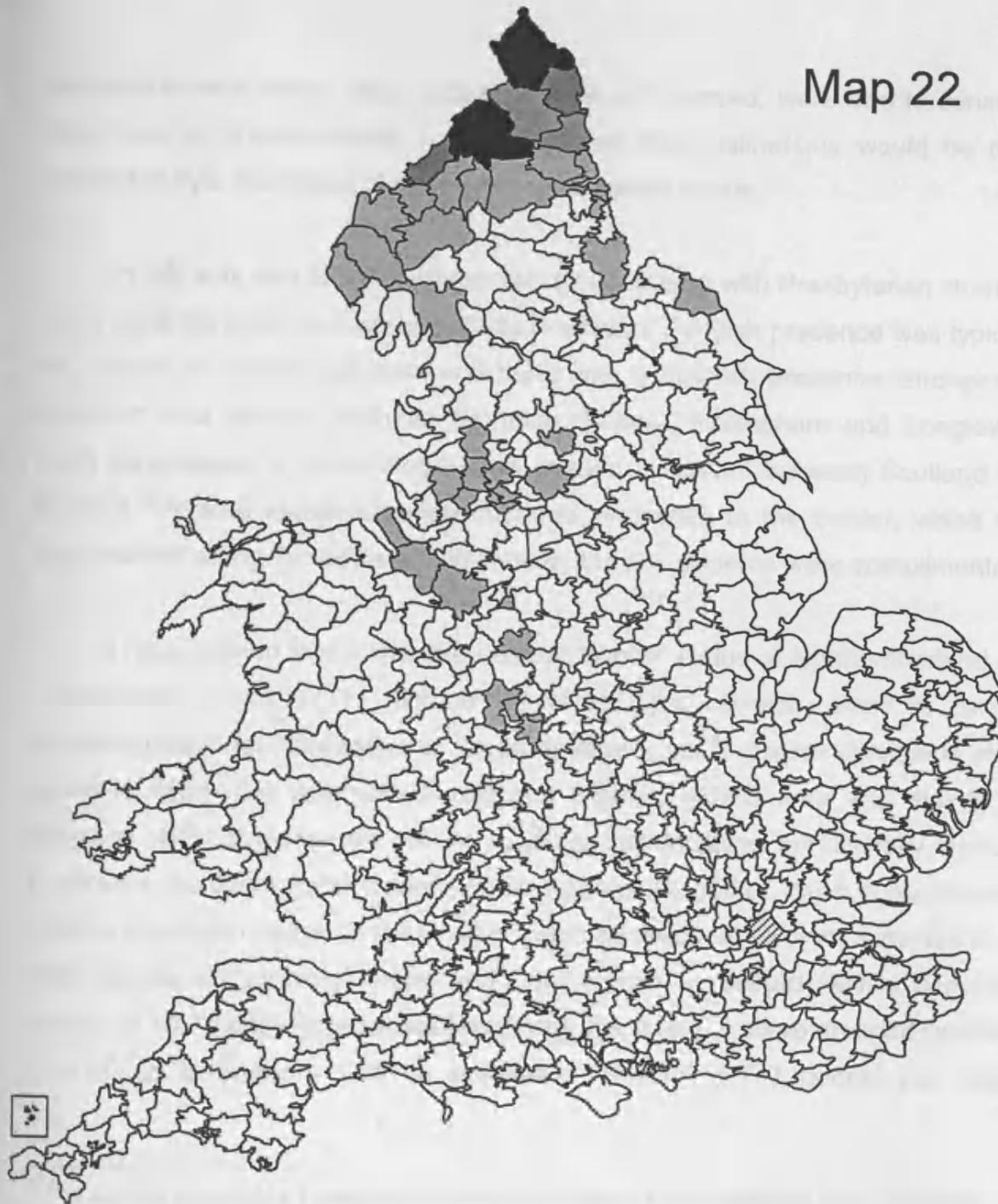
Also visible in map 22 is the imprint of the migration of Scots to the industrialising parts of Yorkshire, Lancashire, Cheshire, the West Midlands, and London.²⁴ Allowing for the possibility of some continuity of 'native' support for the Presbyterian Church in England, one can use the Presbyterian percentage share to chart the destinations of migrant Scots. One can see that, with the exception of Kendal (which could be considered as part of the 'border' area), all these

²² Tynemouth and Sunderland recorded the highest diversity scores of *all* the registration districts in England and Wales, a value of 0.85. South Shields was not far behind (0.83). Such figures are as high as the figures calculated for American cities by Christiano; K.J. Christiano, Religious Diversity and Social Change: American Cities 1890-1906 (Cambridge, 1987).

²³ A Presbyterian percentage share in excess of 30% was recorded in 6 districts, all lay in Northumberland and Cumberland. Three of these, Longtown, Alnwick and Glendale, contained very high diversity and low population density (as visible on map 22), and thereby fitted *par excellence* the characteristics of 'border' diversity. Of the more urban districts with high diversity, Berwick displayed a 'Presbyterian' percentage share of almost 60%, and Carlisle, Newcastle-upon-Tyne and Tynemouth displayed a Presbyterian percentage share of 5% to 10%.

²⁴ The London district of St. Martin-in-the-Fields recorded the highest Presbyterian percentage share (29.4%) outside of Northumberland and Cumberland.

Map 22



Presbyterian percentage share:

-  No Presbyterian attendances
-  up to 15%
-  15% to 30%
-  30% to 45%
-  45% to 60%

 London Division (see inset)

The London Division



'Presbyterian' percentage share of total attendances in England and Wales, 1851

destinations were major urban-industrial centres.²⁵ Indeed, were one to construct some form of gravity model, I would suspect the destinations would be quite predictable by a traditional distance-decay migration model.

In this way one can distinguish two types of area with Presbyterian strength. There were the urban-industrial districts in which a Scottish presence was typically the product of recent migration, and there was a Scottish presence, strongest in the most rural areas - such as Glendale, Belford, Bellingham and Longtown - which represented a much longer-term cultural 'diffusion' between Scotland and England.²⁶ Where industrialisation occurred proximate to the border, which was most marked along Tyneside and Wearside, the two patterns were complimentary.

I have argued that it was the cultural 'border' status of Northumberland and Cumberland which led to high levels of religious diversity even in districts containing little industrialisation or urban development. A graphic illustration of the extent to which the 'anomalous' religious diversity of this area was due to the influence of Presbyterianism can be made by recalculating the diversity measure to exclude the three Presbyterian denominations altogether. Such a recalculation made a dramatic change to the level of 'residual' religious diversity recorded in the rural districts of Northumberland and Cumberland. In Belford (with a population density of 40.7 people per square kilometre), the diversity score dropped from 0.67 to 0.07, in Bellingham (with a population density of 6.9 people per square

²⁵ The districts recording a Presbyterian presence outside of Northumberland and Cumberland were (the Presbyterian index of attendances is shown in parenthesis):

(i) London: Kensington (0.17), Chelsea (1.68), St. George (0.34), St. Martin-in-the-Fields (15.87), St. James (Westminster) (1.79), Marylebone (0.95), Hampstead (1.13), Pancras (1.02), Islington (1.56), Clerkenwell (0.69), East London (0.74), London City (4.84), Stepney (1.26), St. George (Southwark) (0.87), Greenwich (1.75).

(ii) West Midlands: Stafford (1.23), Stoke-upon-Trent (0.66), Wolverhampton (0.07), Dudley (0.65), Kings Norton (0.09), Birmingham (0.43).

(iii) North-west: Nantwich (0.44), Great Boughton (0.23), Wirral (3.07), Liverpool (2.67), Wigan (0.15), Leigh (0.35), Bolton (0.34), Bury (1.13), Chorlton (2.20), Salford (0.38), Manchester (1.51), Blackburn (1.21).

(iv) North-east: Huddersfield (0.16), Bradford (0.38), Hull (0.41), Whitby (2.14), Stockton (1.25), Houghton-le-Spring (1.12), Sunderland (4.80), South-Shields (4.28), Gateshead (1.14), Kendal (0.76).

²⁶ Phythian-Adams has recently stressed the Scottish imprint in Cumbria in C. Phythian-Adams, 'Local history and national history: the quest for the peoples of England', *Rural History: Economy, Society, Culture* 2:1 (1991), 1-23; see especially pp. 16-17.

kilometre) the reduction was from 0.69 to 0.29. Indeed, almost without exception, in the districts of the far north of England highlighted in map 21 as containing the most anomalously high diversity, the recalculated diversity score was much lower.²⁷

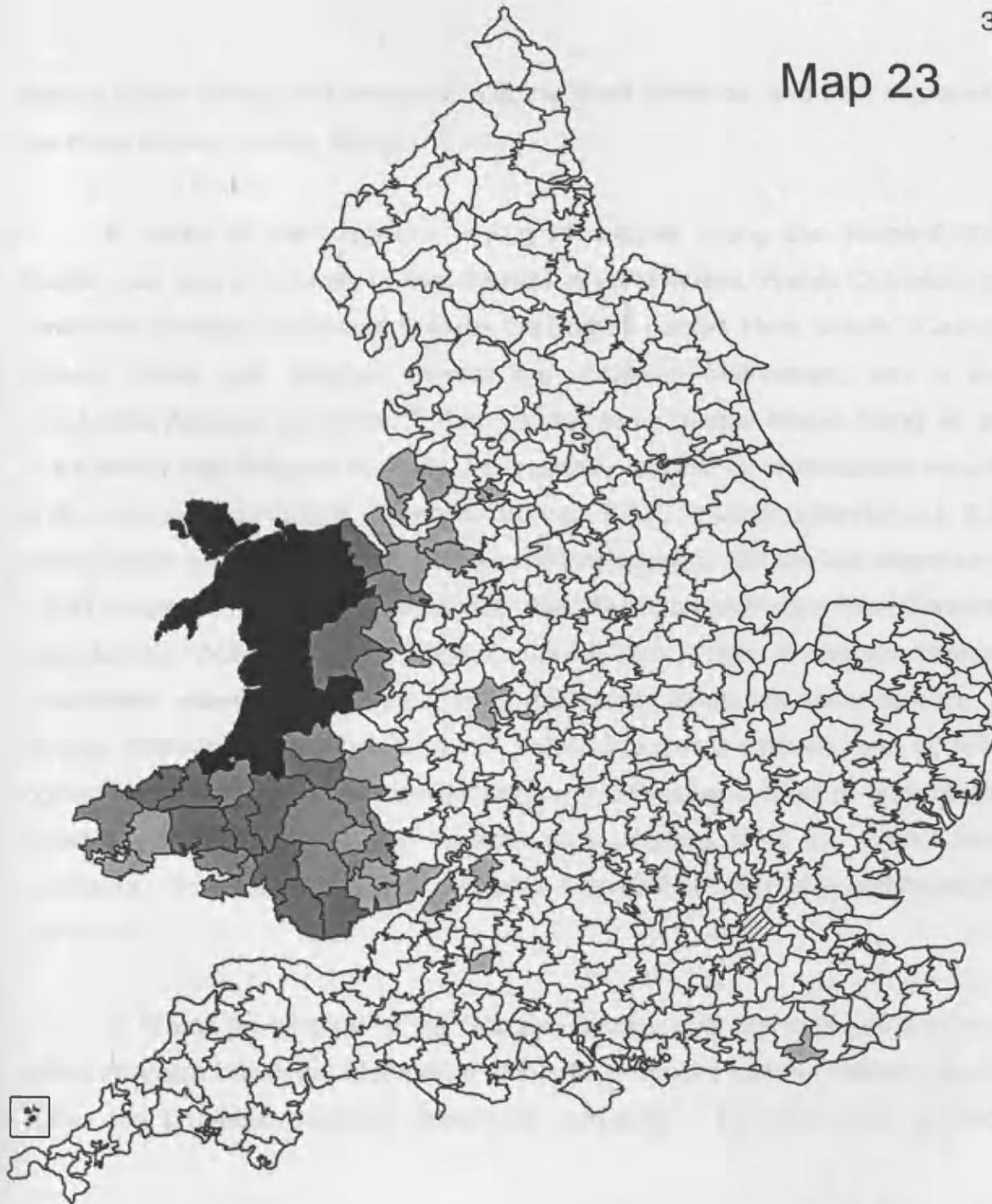
In contrast, in the highly urban districts of the north-east Northumberland (which also contained a strong Presbyterian presence), excluding the Presbyterian attendances made very little difference to the religious diversity score. Newcastle-upon-Tyne, Tyneside, and Sunderland all contained a Presbyterian percentage share (in excess of 10%) comparable with many of the rural districts to the north, but (unlike in these rural districts), the recomputed diversity score was little different. In Newcastle-upon-Tyne, the value fell from 0.74 to 0.68; in Tyneside, it fell from 0.85 to 0.81; and in Sunderland, it fell from 0.85 to 0.82. Thus, it is argued that diversity in these cities reflected the diversity resulting from the division of labour more than the 'cultural' diversity of the rural districts of northern Northumberland and Cumberland.

In a similar manner, one can chart the influence of the Welsh Calvinistic Methodists upon religious diversity in Wales and the English border counties. Map 23 shows that in central and north-west Wales, dissent was very largely Calvinistic Methodist in nature. Religious diversity in this area was quite low, since the Welsh Calvinistic Methodists received a high proportion of all attendances. Other dissenting denominations were not strong in comparison, and the Church of England received very little popular support.

As with Presbyterianism, one can chart the migration destinations of Calvinistic Methodists using the 1851 data. Again one can isolate the long-term mixing of the Welsh and English in the border counties from the migration to seek employment in more distant places. Again, the latter patterns seem predictable from a simple gravity model. Thus one can observe a substantial presence in the

²⁷ In Longtown (with a population density of 52.8 people per square kilometre) the diversity measure fell from 0.74 to 0.52, in Alnwick (with a population density of 52.8 people per square kilometre) the drop was from 0.73 to 0.54, and in Glendale (with a population density of 24.9 people per square kilometre) population density of 6.9 people per square kilometre) the drop was from 0.75 to 0.42.

Map 23



Welsh Calvinistic Methodist percentage share:

- No Welsh Calvinistic Methodist attendances
- up to 10%
- 10% to 20%
- 20% to 30%
- 30% to 70%

London Division (see inset)

The London Division



Welsh Calvinistic Methodist percentage share
of total attendances in England and Wales, 1851

nearby urban districts of Lancashire and the West Midlands, and also migration to the more distant London districts.²⁸

In terms of the long-term mixing of cultures along the Wales-England border, one can see clearly in map 23 how in north Wales, Welsh Calvinistic pre-eminence declined westwards towards the English border. Here 'Welsh' (Calvinist) dissent mixed with 'English' dissent (i.e. Arminian Methodism) and a more substantial Anglican presence.²⁹ This resulted in north-east Wales being an area of extremely high religious diversity. For instance, the district of Wrexham recorded a diversity measure of 0.82. This resulted from 8,376 Anglican attendances, 3,348 Independent attendances, 475 Unitarian attendances 6,326 Baptist attendances, 3,930 Wesleyan Methodist attendances, 894 Wesleyan Methodist New Connexion attendances, 746 Primitive Methodist attendances, 1,105 Wesleyan Methodist Association attendances, 5,695 Welsh Calvinistic Methodist attendances, 360 Roman Catholic attendances, and 111 Latter Day Saints attendances; all from a population of only 42,295. In similar vein, one can trace a band of high religious diversity about two registration districts wide, running from the Welsh border eastwards - from Holywell and St. Asaph in the north to Chepstow and Newport in the south.

In Wales (in contrast to the Scottish border) one can look not only at the effect of Welsh Calvinistic Methodists along the proposed cultural borders, but also within the proposed regional dissenting monopoly - the north-west corner of

²⁸ The English districts recording a Welsh Calvinistic Methodist presence were (the Welsh Calvinistic Methodist index of attendances is shown in parenthesis):

London: Westminster (0.37), Marylebone, (0.08), Strand (0.92), East London (2.25), Shoreditch (0.88), St. Olave (0.83).

Sussex: Hailsham (5.49).

Wiltshire: Westbury (1.04).

Border counties: Bristol (2.17), Thornbury (1.72), Stroud (2.52), Shrewsbury (2.16), Oswestry (1.95) Runcorn (2.81), Northwich, (0.59), Great Boughton (2.74), Wirral (0.90).

West Midlands: Wolverhampton (0.29), Birmingham (0.07)

Lancashire: Liverpool (1.58), West Derby (1.04), Ormskirk, (0.51), Wigan (0.18), Salford (0.29), Manchester (0.13).

²⁹ In the context of the Welsh language W.T.R. Pryce has studied the evolution of cultural regions and their boundaries in north-east Wales in the eighteenth and nineteenth centuries. The cultural regions and boundaries of Welsh religion (Calvinistic Methodism) appear extremely closely related to the Welsh language. See Pryce, 'Culture areas'.

Wales.³⁰ Map 24 shows the ratio between the diversity measure calculated to exclude the Welsh Calvinistic Methodists and the original diversity measure. One can see that outside the regional dissenting monopoly, the recomputed religious diversity was universally lower than the original value. As observed along the Scottish border, the degree of the shortfall was greatest in the least populated districts.³¹

Thus, as was visible in Northumberland and Cumberland, one can see how 'cultural' diversity (i.e. the mixing of the 'Welsh' and 'English') formed a greater percentage of total religious diversity in the most rural 'border' districts. One can show how the anomalously high religious diversity measures recorded in many of the sparsely populated border districts declined markedly if the Welsh Calvinistic Methodist attendances were excluded from the calculation of the diversity measure. For example, in the border district of Montgomery (with a population density of 56.65 people per square kilometre), religious diversity fell from 0.71 to 0.61 when the Welsh Calvinistic Methodists were excluded. In contrast, and again as shown in Northumberland, diversity in the more urban border districts was much less changed by such an exclusion - even where the Welsh Calvinistic Methodist percentage share was just as high as in the rural districts. For example, in Wrexham, which recorded a Welsh Calvinistic Methodist percentage share of 18.2%, the diversity score fell only slightly from 0.82 to 0.79 when the Welsh Calvinistic Methodists were excluded.

³⁰ The regional dissenting monopoly was defined as districts in which the Welsh Calvinistic Methodist percentage share of attendances lay above 30%. This equated to:

Cardiganshire: Aberavon, Aberystwyth, Tregaron.

Montgomeryshire: Machynlleth, Newtown.

Denbighshire: Ruthin, St. Asaph, Llanrwst.

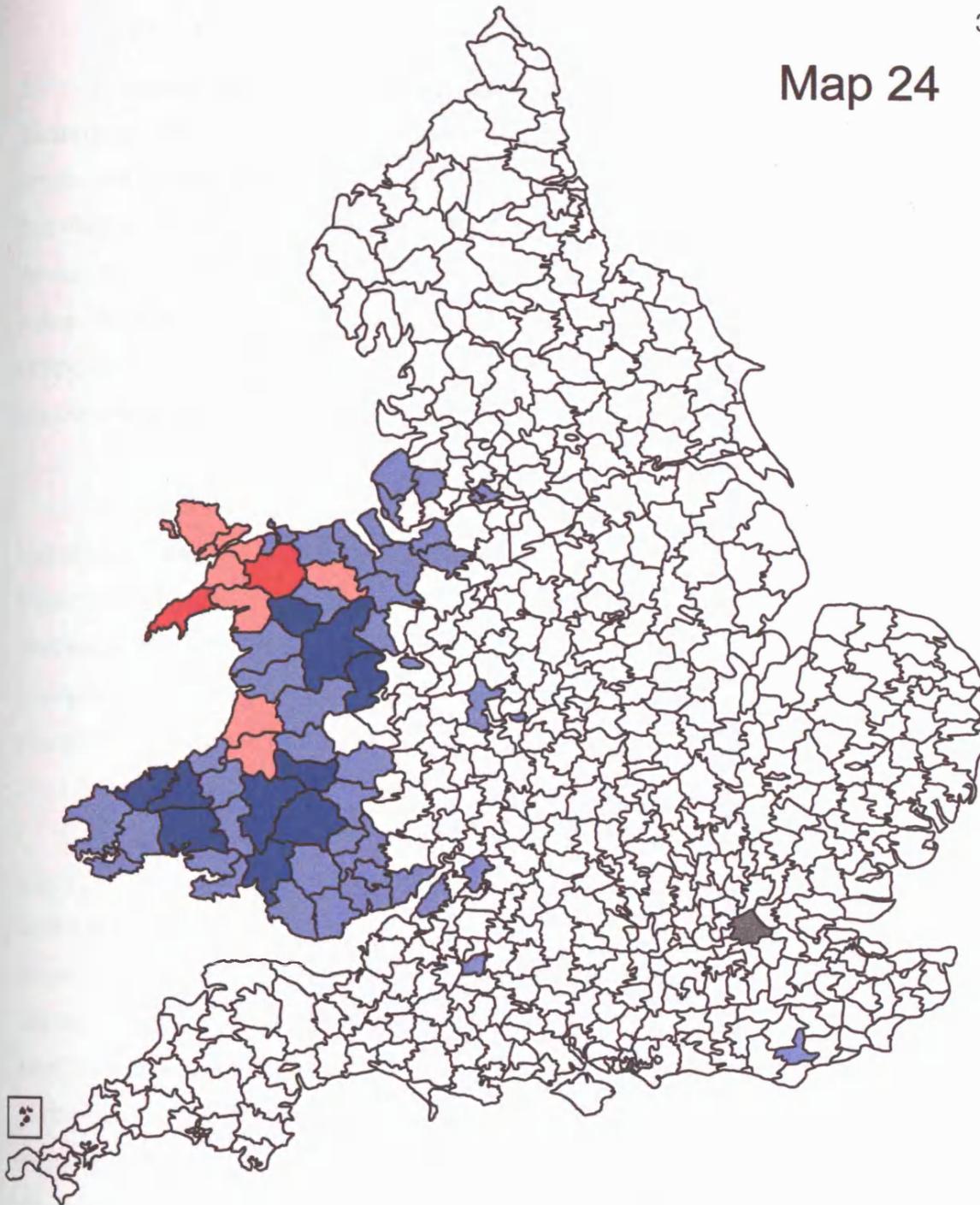
Merionethshire: Corwen, Bala, Dolgelly, Festiniog.

Caernarvonshire: Pwllheli, Carnarvon, Bangor, Conway.

Anglesey: Anglesey.

³¹ In the 31 Welsh districts lying outside the Welsh Calvinistic Methodist 'monopoly', there was a statistically significant negative correlation between the population density and the percentage decline in the recomputed diversity measure relative to the original value ($r_s = -0.39$, $p = 0.031$, $n = 31$).

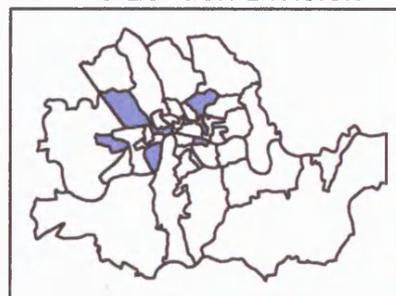
Map 24



Percentage ratio of recomputed diversity to total diversity:

- 80% to 90%
- 90% to 100%
- 100% (i.e. no Welsh Calvinistic Methodist attendances)
- 100% to 110%
- 110% to 120%
- London Division (see inset)

The London Division



The effect of recomputing the religious diversity measure removing the Welsh Calvinistic Methodist attendances

A second interesting characteristic visible in map 24 is that in the regional dissenting monopoly itself, the diversity value was almost unchanged, or actually increased when the Welsh Calvinistic Methodists were excluded from its calculation. The most notable case was Llanrwst, where the diversity score excluding the Welsh Calvinistic Methodists was 0.71, compared with an original value of 0.63. Thus map 24 makes clear the extent to which the Calvinistic Methodists 'suppressed' diversity in the regional monopoly, but were a major contributor to diversity along the southern and eastern borders of this area.

In south Wales, the situation was more complex. As map 20 has highlighted, the characteristic dissent of South Wales was old dissent (largely the Particular Baptists and Independents), though Calvinistic Methodism had a strong presence in all counties except Pembrokeshire. Both old and new dissent were characteristically Calvinist (General and New Connexion Baptists were almost completely absent from Wales in 1851).

As already described, as one moves from west to east - from north Wales across to the north-west English midlands - there was a transition from Calvinistic Methodism to the various forms of Arminian Methodism, old dissent, and Anglicanism, producing very high religious diversity as one approached the English border. In South Wales there were two transitions. To the east - towards the English border - Particular Baptist and Independent support gave way to Arminian Methodist, (mixed) Baptist, and Anglican strength. To the south-west - towards Pembrokeshire - dissenting influence (and most especially Calvinistic dissent) declined and Anglican strength increased. Interestingly, in view of the similar trends noted for the strength of the Welsh language, the south-west of Wales appeared as a cultural 'border', in terms of the heterogeneity of dissenting denominations and a considerable Anglican strength.³² Indeed, the district of Pembroke exhibited a religious profile that appeared more 'English' than 'Welsh'. The largest denomination was the Church of England, which received 36.6% of all

³² The low levels of Welsh speaking in the far-south West of Wales (*Cymru di-Gymraeg*) appears to be a long-run historical feature. See, for example, the maps presented in J. Aitchinson and H. Carter, 'Rural Wales and the Welsh language', *Rural History: Economy, Society, Culture* 2:1 (1991), 61-79.

attendances. In second place lay the Baptists with 19.45% of attendances, and third came the Wesleyan Methodists with 16.6%. The Independents received only 14.75% of attendances and the Welsh Calvinistic Methodists only 9.8%.

Thus in South Wales, as with the linguistic boundary, one can talk about an eastern 'frontier' of eastern Monmouthshire as well as the western 'frontier' of western Carmarthenshire. This is demonstrated in map 25. One can see that to the east of the English border all districts displayed an Anglican percentage share in excess of 35%. This level of Anglican strength was also evident in the Welsh border districts of Montgomery, Knighton, Presteigne, Hay, Brecknock, Monmouth, and Chepstow. Weaker Anglican pockets of strength (a percentage share of 25-35%) occurred in Wrexham and Builth. In the rest of Wales, other than Pembrokeshire, the Anglican percentage share lay below (often well below) 25%. In this context the far south-west of Wales formed a notable 'island' of Anglican strength. In Narberth the Anglican percentage share stood at 27.7%, and in Pembroke it was higher still, at 36.6%.³³

There was also a subtle form of boundary between south and north Wales. Although this appears in sharp focus in map 20, this was a much more gradual boundary, characterised by Calvinistic Methodist pre-eminence from northern Cardiganshire northwards merging with greater old dissent support to the south. One can see from map 23 that from Tregaron and Aberavon northwards, the Calvinistic Methodist percentage share of attendances stood at above 30%, and this is taken to delineate the boundary between the Calvinistic Methodist heartland of central and north Wales, and the old dissent heartland of south Wales.

Lastly, one can trace the distinctiveness of Cornish religious expression in the nineteenth century. Since the dominant denomination in Cornwall - the Wesleyan Methodists - were not territorially defined in the same way as the Presbyterians or Welsh Calvinistic Methodists - one cannot trace migration and pluralism resultant from 'ethnicity' in the same way.

³³ The strong Anglican (and Tory) interests of the landed interests in Carmarthenshire was the central theme of a recent study by M. Cragoe: M. Cragoe, *An Anglican Aristocracy: the Moral Economy of the Landed Estate in Carmarthenshire 1832-1895* (Oxford, 1997).

Map 26

Maps 26 and 27 show the percentage share of new and old dissent respectively in the South Western Registration Division (Division V). One can see that new dissent (chiefly Wesleyan Methodism, but also the Bible Christians) was the dominant religious affiliation west of the Tamar, but was quite weak in west Devon and east Somerset. Particularly striking was the new dissent percentage share of 79.47% recorded in Redruth.³⁴ Map 27 shows that old dissent (and Anglican strength) was much more marked to the east of the Tamar.

This meeting of religious cultures along the border between Devon and Cornwall resulted an area of religious diversity unparalleled in the South Western Registration Division, as shown in map 28.³⁵

To account for the unique religious cultures represented by the Scottish border area, north and south Wales, and Cornwall could clearly fill a thesis in itself. Here the point noted is that the distinct regional and national identities of Wales, Cornwall and the far north of England led to very low levels of popular support for the established church. By 1851 dissent had clearly proved a capable vehicle of regional cultural expression in these areas. In Wales, the later survival of the Welsh language gave a much stronger and more effective focus for both regional identity and dissenting strength. In Cornwall the language had all but disappeared by the time Methodism became established, a decline which previous religious change - the absence of a Cornish translation of the book of Common prayer and the cessation of miracle plays - had itself done much to accelerate.³⁶

New-dissent percentage share:

up to 15%

15% to 30%

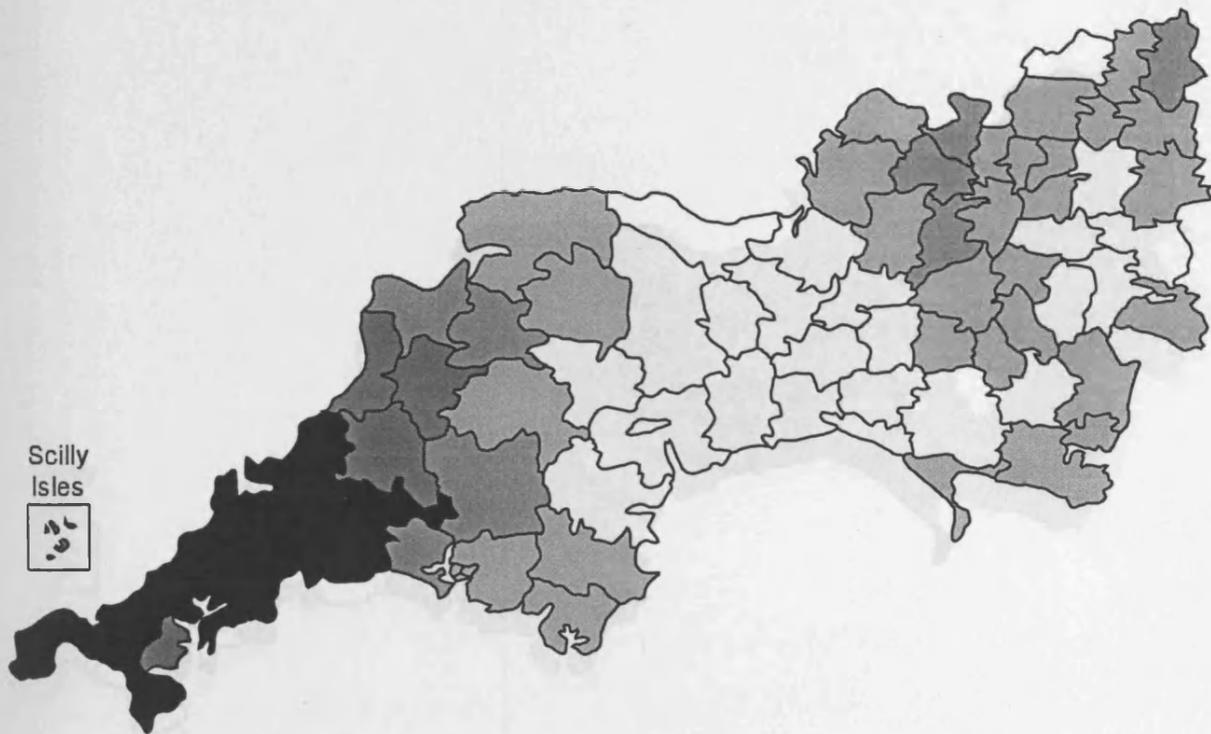
30% to 45%

³⁴ John Wesley regularly preached in Redruth and preached 18 times at the open-air amphitheatre of nearby Gwennap Pit (between 1762 and 1789). Wesley's great personal influence on religion in Cornwall was still clearly visible in the patterns of support in 1851.

³⁵ The districts with the highest levels of religious diversity in Cornwall (a value of over 0.70) were Stratton (0.71), Camelford (0.74), Liskeard (0.71), Launceston (0.76), Bodmin (0.74), and St. Austell (0.74). Thus, with the exception of St. Austell, religious diversity tended to increase eastwards - i.e. towards the Devon border. In Devon the reverse trend was apparent. The Devon districts with the highest levels of religious diversity (over 0.66) were Kingsbridge (0.66), East Stonehouse (0.75), Stoke Demarel (0.73), Tavistock (0.71), Torrington (0.69), Bideford (0.71), and Holsworthy (0.66). These were all districts which directly bordered Cornwall, or themselves bordered a 'border district'.

³⁶ See M.F. Wakelin, *Language and History in Cornwall* (Leicester, 1975); see especially pp. 98-99. It is interesting to speculate on the possibility of a revival of the Cornish language had dissent flourished before the eighteenth century.

'New-dissent' percentage share of total attendances in the South Western Registration Division, 1851



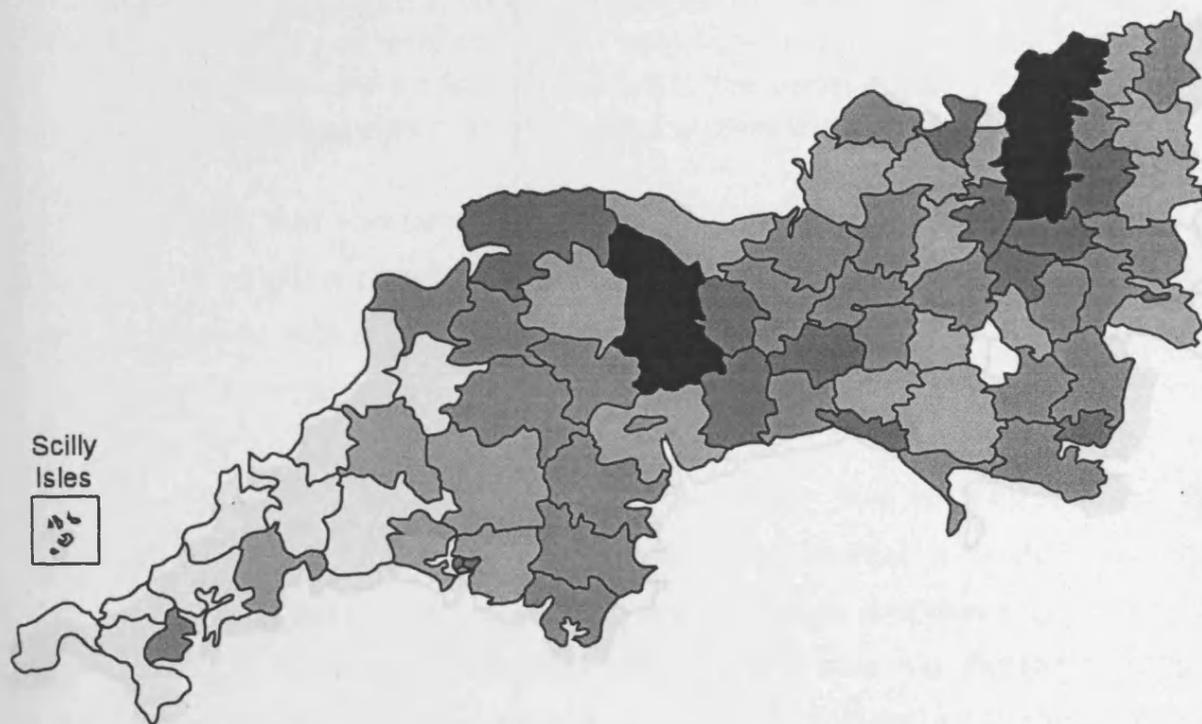
Scilly
Isles

New-dissent percentage share:

-  up to 15%
-  15% to 30%
-  30% to 45%
-  45% to 60%
-  60% to 80%

15% to 22.5%
22.5% to 30%
30% to 65%

'Old-dissent' percentage share of total attendances in the South Western Registration Division, 1851



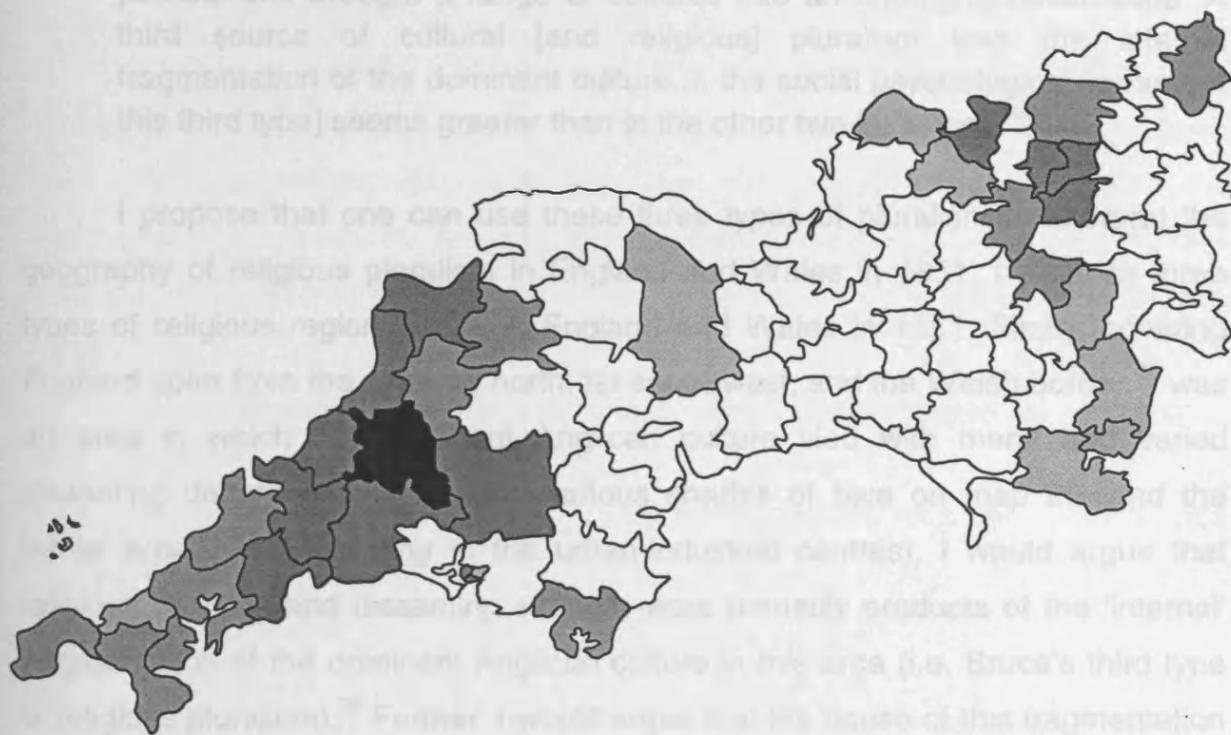
Scilly Isles



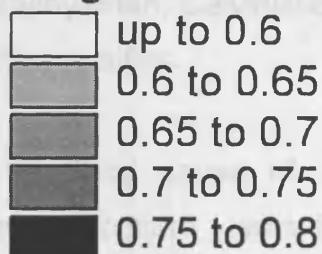
Old-dissent percentage share:

-  up to 7.5%
-  7.5% to 15%
-  15% to 22.5%
-  22.5% to 30%
-  30% to 55%

Religious diversity in the South Western Registration Division, 1851



Religious diversity measure:



1. Bruce, *England in the Middle Ages*, from *Cambridge Medieval History*, 1902, p. 45.
 2. This region includes the western side of England except Cornwall, Devon districts bordering Cornwall, Northumberland, Cumberland, and all districts bordering Wales.
 3. Religious diversity and dissenting strength went hand-in-hand in the region, the correlation between the diversity measure and the dissenting percentage share was almost perfect ($r_s = +0.95$, $p < 0.000$, $n = 626$).

Religious pluralism and cultural pluralism.

At this point it is pertinent to introduce an observation of S. Bruce that one can identify three types of religious pluralism. Bruce noted:

'In some settings diversity was created by migration as peoples with different cultures mingled with one another. In others the expansion of the political unit brought a range of cultures into an emerging nation-state. A third source of cultural [and religious] pluralism was the internal fragmentation of the dominant culture ... the social psychological impact [of this third type] seems greater than in the other two instances.'³⁷

I propose that one can use these three types of pluralism to interpret the geography of religious pluralism in England and Wales in 1851. I propose three types of religious region visible in England and Wales in 1851. Firstly, covering England apart from the extreme north, far south-west, and the Welsh border,³⁸ was an area in which the dominant Anglican culture vied with many and varied dissenting denominations (i.e. the various shades of blue on map 20, and the 'white' areas corresponding to the urban-industrial centres). I would argue that religious diversity and dissenting strength were primarily products of the 'internal' fragmentation of the dominant Anglican culture in this area (i.e. Bruce's third type of religious pluralism).³⁹ Further, I would argue that the cause of this fragmentation was the increasing complexity of the division of labour resulting from widespread industrialisation, though clearly migration and immigration (i.e. Bruce's first type of religious pluralism) tended to follow in the path of urbanisation and industrialisation, as the Presbyterian, Calvinistic Methodist and Catholic presence in the largest towns and cities testifies.

As Bruce noted, the third cause of religious pluralism - the internal fragmentation of the dominant culture - was likely to have the greatest social-

³⁷ S. Bruce, *Religion in the Modern World: from Cathedrals to Cults* (Oxford, 1996), p.45.

³⁸ This 'Anglican' region was defined as all of England except: Cornwall, Devon districts bordering Cornwall, Northumberland, Cumberland, and all districts bordering Wales.

³⁹ Religious diversity and dissenting strength went hand-in-hand in this region, the correlation between the diversity measure and the dissenting percentage share was almost perfect ($r_s = + 0.95$, $p = 0.000$, $n = 526$).

psychological impact, and, it is argued here, the greatest secularising impact. As Bruce argued, 'it becomes less easy to protect beliefs in that way when the challenge is being posed by member's of one's own people who have broken away from the true faith.'⁴⁰ Under these circumstances religion becomes a choice, while under conditions of the other two types of pluralism (especially the second) it is still possible (indeed probable) to remain *entre nous* by attacking competing faiths and stereotyping their adherents.

For these reasons it is proposed that Berger's theory should be most applicable to this 'Anglican' region; in this region religious pluralism should have been most powerfully disconfirming. One can certainly observe that the relationships displayed by the registration district data supported strongly the empirical translation of Berger's theory, as proposed in Chapter 4 of this thesis, these being:

- (i) The strength of religious diversity and dissent tended to increase in proportion with population density.
- (ii) Religious practice tended to be lowest where religious diversity was highest (though this effect was weak).
- (iii) Religious practice tended to be lower the more urban the district.

These points can be substantiated by correlation. The correlation between religious diversity and population density was strong and positive ($r_s = + 0.29$, $p = 0.000$, $n = 526$), the correlation between the dissenting percentage share and the population density was similarly strong and positive ($r_s = + 0.19$, $p = 0.000$, $n = 526$). The correlation between religious diversity and the index of attendances was weak and negative ($r_s = - 0.05$, $p = 0.217$, $n = 526$), and the correlation between population density and the index of attendances was strong and negative ($r_s = - 0.39$, $p = 0.000$, $n = 526$).

As already argued in chapter 5, such cross-sectional analysis cannot be used to support Berger's theory as strongly as the more sensitive parish-level analysis forwarded in chapter 4. However, one can observe that the relationships

⁴⁰ Bruce, Religion in the Modern World, p.46.

visible at registration district level appeared entirely congruent with Berger's theory and did not support the rational choice expectations of a strong positive relationship between pluralism and practice, and higher levels of church-going in the towns and cities.

The second region comprises the borders of the religious cultural regions, as proposed earlier in this section, these being: east Cornwall and west Devon, the Wales-England border, the far south-west of Wales, and the English side of the Scotland-England border.⁴¹ These have been identified as areas in which the levels of religious diversity were, from a 'Bergerian' perspective, disproportionately high in relation to the degree of urban and industrial development. To return to Bruce's three types of religious pluralism, it is proposed that religious pluralism in these areas reflected the long-term results of 'migration as peoples with different cultures mingled with one another'. It has been shown how high diversity near the Scottish, Welsh and (less clearly) Cornish borders, resulted from the mixing of these regional and national cultures with the mainstream Anglican culture. For this reason it is argued that religious diversity in these areas was not so much a product of the 'internal fragmentation' caused by the increasing division of labour, but more a result of local migration.

As already noted, one would expect the pluralism resultant from 'migration' to be most clearly distinguished from pluralism resultant from 'internal fragmentation', in the lack of its disconfirming power. There was strong evidence for such a proposition. Unlike in the Anglican 'region', religious diversity appeared to exert a vitalising, rather than a secularising, impulse. The correlation between religious diversity and the index of attendances was strongly positive ($r_s = + 0.41$, $p = 0.003$, $n = 49$). Also distinctive was the strong *positive* correlation between the index of attendances and the population density ($r_s = + 0.42$, $p = 0.002$, $n = 49$).

⁴¹ 'Border' districts were defined as all Welsh districts bordering England (except Newtown, which barely touched the English border), all three Pembrokeshire districts, all English districts bordering the Welsh border, all Cornish districts bordering the Devon border, all Devon districts bordering the Cornish border, and all districts in Northumberland and Cumberland.

These two trends visible (only) in these 'border' districts do not conform to Berger's theory of secularisation. The apparently vitalising impact of religious pluralism and the higher levels of church-going by 'urbanites' are both core propositions of the rational choice theorisation of religious diversity. However, I would argue that one needs to interpret these phenomena in the context of the cultural distinctiveness of these areas, and not as evidence of the general outcome of the principles of neo-classical economics. In short, to argue that the religious vitality brought to Cornwall and Wales by Methodism, after many years of growing religious indifference and alienation (most especially after the Reformation), resulted from the logic of the religious market, would be to 'explain away' the cultural distinctiveness of these areas. Although beyond the scope of this thesis (I return to this point in the concluding chapter), I would argue that one would need to look at how religious identity reinforced the cultural and regional identity, and how this acted to *increase* religious adherence in these areas.

The third proposed region comprises the three regional dissenting monopolies - north Wales, south Wales and Cornwall.⁴² It is proposed that the patterns of religious affiliation in these areas represented Bruce's second type of pluralism - the expansion of the political unit bringing a range of cultures into an emerging nation-state (i.e. England). For this reason it is proposed that one would not expect religious pluralism to be the secularising force it was in the 'Anglican' region. In these areas dissent lay at the heart of regional, national and linguistic identity. It is for this reason that support for dissent was far stronger and more unified than anywhere else in England and Wales.

Again, the data demonstrate the lack of any secularising impulse of religious pluralism in these areas. There was a negative, but statistically insignificant association between religious diversity and the index of attendances ($r_s = - 0.08$, $n = 49$, $p = 0.589$), a weak negative relationship between the index of attendances and population density ($r_s = - 0.24$, $n = 49$, $p = 0.099$), and an even weaker

⁴² This areas comprised the 49 districts covering north and south Wales (except those bordering England and the three Pembrokeshire districts), and Cornwall (except those bordering Devon).

association between diversity and population density ($r_s = + 0.03$, $p = 0.843$, $n = 49$).

The distinctiveness of the Welsh Calvinistic heartland of central and north Wales forms a theme in the following sections of the parish-level analysis. The parish data for Anglesey, Caemaronshire and Cardiganshire allowed a more detailed investigation of this area than is possible with registration district data.

To invoke this threefold division of England and Wales has been to concentrate on one criterion of division (though I would argue it is the most important) - the distinctive nature of religious pluralism - and to ignore many other distinctive geographical patterns. I have concentrated on a 'cultural' explanation where a more 'economic' axis of explanation could also be advanced. In particular, I have only commented in passing upon the link between dissent, religious diversity and quarrying and mining. One can see many of the same features that I have described for the Welsh and Cornish borders - high religious diversity and low population density - were also present in the lead mining areas of the Peak District, and the Yorkshire and north Pennine Dales.⁴³ Furthermore, these are the districts which most clearly stood outside the threefold typology of 'Anglican', 'border', and 'dissenting monopoly' regions (see, for example, maps 20 and 21).

The limitations of the registration-district data have led me to rely on urbanisation as a proxy for industrialisation. Mining (especially for non-ferrous metals) was perhaps the most notable case of industrial development concentrated in sparsely populated areas. However, if one is to explain high religious diversity in these areas in relation to extractive industry, one must also note that in many instances the mining areas corresponded with the areas which I have argued to be *culturally* distinctive 'borders' - the Tamar valley and the Welsh border (the Stiperstones and parts of Flintshire and Denbighshire).

⁴³ For instance, Teesdale recorded a diversity score of 0.79. For an introductory geography of lead mining, see R. Burt, The British Lead Mining Industry (Redruth, 1984), pp. 18-25.

I would argue that these 'cultural' and 'economic' facets are complimentary and not contradictory. While Burt noted that similarities of custom, habit, and attitude of mining communities appeared to arise independently in the separate mining areas (given the low levels of migration of miners between these districts prior to the nineteenth century),⁴⁴ he noted many differences between what he labelled the 'Celtic' (i.e. Cornwall and Wales) and 'Teutonic' (i.e. Derbyshire, Yorkshire, Durham and Northumberland) lead mining areas. In particular, he noted a range of distinctively 'Cornish' features, from diet through to the classlessness and non-vocational nature of the educational system.⁴⁵ Also, in no other lead mining area was Wesleyan Methodism as powerful as in Cornwall; it has been estimated over 90% of Cornish miners were adherents.⁴⁶ Thus I would argue that the co-incidence of border areas and mining acted to augment the religious diversity which each factor alone would have produced.

Another facet I have not remarked upon, though clearly visible in many of the maps, is the relatively high religious diversity and dissenting strength of many coastal areas. I have not the expertise to comment on the reasons for this, though it is known that fisher-folk were extremely likely to be dissenters, and often supporters of the less widespread denominations.

One area of England which does not obviously fit the status of a mining area and/or cultural border is the Fenland area. It was not unusual for dissent to be very strong in much of agricultural eastern and north-eastern England (to recall from map 18), but, as documented in detail by Obelkevich for South Lindsey, over much of the area dissenting strength was largely a product of Wesleyan Methodism (and in some areas the Primitives). Thus, much of north-east England conformed to the proposition that where dissent grew strong in 'rural' areas, this was largely due to one or two denominations, and so diversity was not especially high.

⁴⁴ Burt, Lead Mining, p. 182.

⁴⁵ Burt, Lead Mining, p. 123.

⁴⁶ This observation is made in Burt, Lead Mining, p. 183.

The Fenland area appears particularly distinctive in terms of their very high religious diversity. To recall from map 16, the area of highest religious diversity comprised the districts of Holbeach, Wisbeach (Wisbech), North Witchford and Ely. For example, Holbeach, with a population of just 19,134 (and a population density of only 44 people per square kilometre), recorded 4,937 Anglican attendances, 644 Independent attendances, 2,418 Baptist attendances, 3,314 Wesleyan Methodist attendances, 1,403 Primitive Methodist attendances, 760 Wesleyan Reformer attendances, and 40 Quaker attendances. These figures yielded a dissenting percentage share of 63.5% and a diversity score of 0.76. In similar vein one could catalogue the great diversity of religious affiliation which resulted in a diversity score of 0.74 in Wisbeach (Wisbech), 0.76 in North Witchford and 0.74 in Ely.

In this way the Fenland area appeared uniquely religiously diverse for an area which was neither an obvious distinctive cultural 'border', nor a major industrial-urban centre. Studies of the historical geography of the religious cultures of the Fens could thereby prove to be of considerable interest.

7.3 Socio-Economic Contexts of Religious Pluralism

While the registration-district data prove extremely useful for delineating the regional geography of religious pluralism, the parish-level data form a more effective basis from which to investigate the causal *links* between religious pluralism and the socio-economic environment. This section furthers the consideration of the three distinctive regions - the 'Anglican' region and the 'regional dissenting monopolies' and their 'borders' - with reference to the parish-level data.

(i) Religious pluralism and the socio-economic environment.

It was demonstrated in chapter 4 that religious pluralism was closely and consistently related to the socio-economic environment within each of the fifteen

study counties. The associations between religious diversity and the socio-economic environment are summarised in table 40, which shows the Spearman correlations between selected socio-economic variables and religious diversity. It can be seen that in every county a high percentage of families in agriculture was associated with low religious diversity. In all counties except Anglesey the correlation achieved strong statistical significance. In similar vein, it is apparent that high religious diversity was associated with: a high percentage of families in trade (a strong correlation in all counties), a high percentage of families in retail/handicraft (a strong correlation in all counties except Cardiganshire), high population density (a strong correlation in all counties except Cardiganshire), and high population growth rates (a strong correlation in all counties except Cardiganshire and Suffolk).

Taking the correlations of all five socio-economic variables together, at least one correlation coefficient in excess of 0.5 was obtained in eight of the fifteen counties, and a coefficient in excess of 0.35 was obtained in every county. One can conclude that across all fifteen counties, there was a marked uniformity in the way in which religious diversity was higher in parishes which were: more densely populated, contained a faster growing population, greater industrial and commercial activity, and less agricultural activity.

To return to the three regions proposed in the previous section, one can see some distinctiveness in the third 'region' - the Welsh Calvinistic Methodist heartland of central and north Wales. In both Cardiganshire and Anglesey the correlations between religious diversity and the socio-economic environment were generally weaker than elsewhere, though no discernible difference was visible in Caernarvonshire. These lower correlations would be expected, given the weaker correlation already observed within the proposed 'regional dissenting monopolies' at registration-district level. To recall, it was argued that religious pluralism in this area resulted from, to paraphrase Bruce, the expansion of the political unit bringing the Welsh culture into the emerging English nation-state. As already argued, one would not, therefore, have expected religious diversity to have reflected the nature of economic activity as closely as elsewhere.

Table 40

The associations between religious diversity and parochial socio-economic conditions: an analysis by county

Spearman's rank correlations (r_s)

County (number of parishes)	Spearman correlation between religious diversity measure and:				
	percentage of families in agriculture in 1831	percentage of families in trade in 1831	percentage of the population employed in retail / hand-craft in 1831	population density in 1851	mean annual population growth rate 1811-51
Bedfordshire (n = 115 to 120)	$r_s = -0.29^{**}$ (p = 0.001)	$r_s = +0.45^{**}$ (p = 0.000)	$r_s = +0.48^{**}$ (p = 0.000)	$r_s = +0.53^{**}$ (p = 0.000)	$r_s = +0.32^{**}$ (p = 0.000)
Cambridgeshire (n = 138 to 143)	$r_s = -0.30^{**}$ (p = 0.000)	$r_s = +0.40^{**}$ (p = 0.000)	$r_s = +0.33^{**}$ (p = 0.000)	$r_s = +0.37^{**}$ (p = 0.000)	$r_s = +0.35^{**}$ (p = 0.001)
Derbyshire (n = 99 to 104)	$r_s = -0.51^{**}$ (p = 0.000)	$r_s = +0.46^{**}$ (p = 0.000)	$r_s = +0.33^{**}$ (p = 0.001)	$r_s = +0.60^{**}$ (p = 0.000)	$r_s = +0.51^{**}$ (p = 0.000)
Dorset (n = 254 to 257)	$r_s = -0.44^{**}$ (p = 0.000)	$r_s = +0.39^{**}$ (p = 0.000)	$r_s = +0.39^{**}$ (p = 0.000)	$r_s = +0.48^{**}$ (p = 0.000)	$r_s = +0.23^{**}$ (p = 0.000)
Lancashire (n = 75 to 76)	$r_s = -0.60^{**}$ (p = 0.000)	$r_s = +0.61^{**}$ (p = 0.000)	$r_s = +0.20$ (p = 0.090)	$r_s = +0.57^{**}$ (p = 0.000)	$r_s = +0.38^{**}$ (p = 0.001)
Leicestershire (n = 213 to 219)	$r_s = -0.51^{**}$ (p = 0.000)	$r_s = +0.55^{**}$ (p = 0.000)	$r_s = +0.36^{**}$ (p = 0.000)	$r_s = +0.62^{**}$ (p = 0.000)	$r_s = +0.28^{**}$ (p = 0.000)
Rutland (n = 55)	$r_s = -0.62^{**}$ (p = 0.000)	$r_s = +0.60^{**}$ (p = 0.000)	$r_s = +0.68^{**}$ (p = 0.000)	$r_s = +0.55^{**}$ (p = 0.000)	$r_s = +0.47^{**}$ (p = 0.000)
Suffolk (n = 436 to 441)	$r_s = -0.36^{**}$ (p = 0.000)	$r_s = +0.42^{**}$ (p = 0.000)	$r_s = +0.38^{**}$ (p = 0.000)	$r_s = +0.41^{**}$ (p = 0.000)	$r_s = +0.10^*$ (p = 0.028)
Sussex (n = 266 to 277)	$r_s = -0.32^{**}$ (p = 0.000)	$r_s = +0.35^{**}$ (p = 0.000)	$r_s = +0.32^{**}$ (p = 0.000)	$r_s = +0.46^{**}$ (p = 0.000)	$r_s = +0.24^{**}$ (p = 0.000)
East Riding (n = 162 to 164)	$r_s = -0.22^{**}$ (p = 0.005)	$r_s = +0.29^{**}$ (p = 0.000)	$r_s = +0.25^{**}$ (p = 0.001)	$r_s = +0.36^{**}$ (p = 0.000)	$r_s = +0.21^{**}$ (p = 0.008)

*Border' counties:

Monmouthshire (n = 107)	$r_s = -0.50^{**}$ (p = 0.000)	$r_s = +0.43^{**}$ (p = 0.000)	$r_s = +0.25^{**}$ (p = 0.008)	$r_s = +0.47^{**}$ (p = 0.000)	$r_s = +0.41^{**}$ (p = 0.000)
Northumberland (n = 88)	$r_s = -0.73^{**}$ (p = 0.000)	$r_s = +0.51^{**}$ (p = 0.000)	$r_s = +0.42^{**}$ (p = 0.000)	$r_s = +0.64^{**}$ (p = 0.000)	$r_s = +0.46^{**}$ (p = 0.000)

Regional dissenting monopoly counties:

Anglesey (n = 59 to 63)	$r_s = -0.18$ (p = 0.160)	$r_s = +0.34^{**}$ (p = 0.008)	$r_s = +0.38^{**}$ (p = 0.003)	$r_s = +0.45^{**}$ (p = 0.000)	$r_s = +0.41^{**}$ (p = 0.001)
Caernarvonshire (n = 57)	$r_s = -0.52^{**}$ (p = 0.000)	$r_s = +0.45^{**}$ (p = 0.000)	$r_s = +0.44^{**}$ (p = 0.000)	$r_s = +0.45^{**}$ (p = 0.000)	$r_s = +0.46^{**}$ (p = 0.000)
Cardiganshire (n = 90)	$r_s = -0.38^{**}$ (p = 0.000)	$r_s = +0.28^{**}$ (p = 0.007)	$r_s = +0.18$ (p = 0.094)	$r_s = +0.11$ (p = 0.294)	$r_s = +0.24^*$ (p = 0.025)

** Indicates that the correlation coefficient exceeded the 99% confidence level.

* Indicates that the correlation coefficient exceeded the 95% confidence level.

The closeness of these relationships between religious diversity and socio-economic conditions in the 'Anglican' and 'border' regions can be visualised through cartography. A series of maps was produced to compare the parochial variations of the religious diversity measure with various of the five key socio-economic variables shown in table 40. As a rule of thumb, one can state that where a correlation coefficient exceeded a value of 0.5, when one compares maps of the two variables concerned, there is a pronounced similarity.

As table 40 revealed, correlation coefficients between religious diversity and at least one socio-economic variable exceeded 0.5 in six of the twelve counties for which parish boundaries had been digitised. These counties were: Derbyshire, Lancashire, Leicestershire, Monmouthshire, Northumberland and Rutland.⁴⁷ For five of these six counties maps were produced to help visualise the closeness of the link between religious diversity and socio-economic characteristics.⁴⁸ The series of maps (maps 29-33) allows a visual comparison of the local geographies of religious diversity and the most closely correlated socio-economic variable in these five counties. In Lancashire, Monmouthshire and Northumberland, religious diversity was compared with the percentage of families in agriculture.⁴⁹ In Derbyshire and Leicestershire, religious diversity was compared with the population density.

The maps for Lancashire, Monmouthshire and Northumberland were all plotted using the same scale for both the religious diversity measure and the percentage of families in agriculture.⁵⁰ This was to stress the point that certain thresholds of both measures were evident across all three counties. Using scales

⁴⁷ Although a correlation coefficient exceeded 0.5 in Caernarvonshire, the county was always mapped with Anglesey. No correlation coefficients exceeded 0.5 when the parishes of the two counties were analysed together.

⁴⁸ The maps for Rutland are not presented because of the extremely small size and relative homogeneity of the county, which makes the maps rather uninteresting.

⁴⁹ In Lancashire, the percentage of families in trade was slightly more closely associated with religious diversity than the percentage of families in agriculture. However, the latter measure was used in the map to maintain consistency with the maps for Monmouthshire and Northumberland.

⁵⁰ The boundaries of the non-linear scale of the diversity measure represented a two denominational (0.5), three denominational (0.66), and four denominational (0.75) 'ideal type' (i.e. n equally sized denominations). The scaling for the percentage of families in agriculture was decided upon as that which most closely approximated to the religious diversity patterns. This was not seen as an excessive capitalisation on chance because the same scales were used in all three counties.

tailored to optimise the correspondence of the two patterns in each county would have produced patterns even more similar, but (rightly) raised concerns about the methodological integrity of the maps.

As would be expected from the strong correlations reported in table 40, all three maps (maps 29-31) showed a very close correspondence between the percentage of families in agriculture and religious diversity: the lower the percentage of families in agriculture, the more intense the religious diversity.

One can trace quite a detailed correspondence between certain thresholds of the percentage of families in agriculture and the level of religious diversity. Across all three maps, parishes with more than 65% of families in agriculture were extremely unlikely to contain any religious diversity. In both Monmouthshire and Northumberland there was a reasonable number of parishes with over 65% of families in agriculture, and, correspondingly, there were many parishes with no religious diversity (largely the very same parishes). Of the 91 parishes in all three counties with no religious diversity, 81 (89%) contained more than 45% of families in agriculture, and 55 (60.4%) contained more than 65% of families in agriculture.

This tendency was not just a feature of these three counties; across all fifteen counties, of the 928 parishes with no religious diversity, 668 (72%) contained more than 65% of families in agriculture. The contrast with the parishes *with* religious diversity was marked, of these 1,327 parishes, only 524 (39.5%) contained more than 65% of families in agriculture.

At the other extreme, there was a close correspondence between very high religious diversity - a diversity measure in excess of 0.75 - and less than 12.5% of families in agriculture. In Lancashire, Monmouthshire and Northumberland, there were 29 parishes which displayed a diversity measure of over 0.75. In 22 (75.9%) of these parishes there were less than 12.5% of families in agriculture. Of the remaining 242 parishes, only 23 (9.5%) contained such a low proportion of families in agriculture.

Map 29

A comparison of religious diversity and the percentage of families in agriculture (in 1831) in Lancashire

Religious diversity in 1851

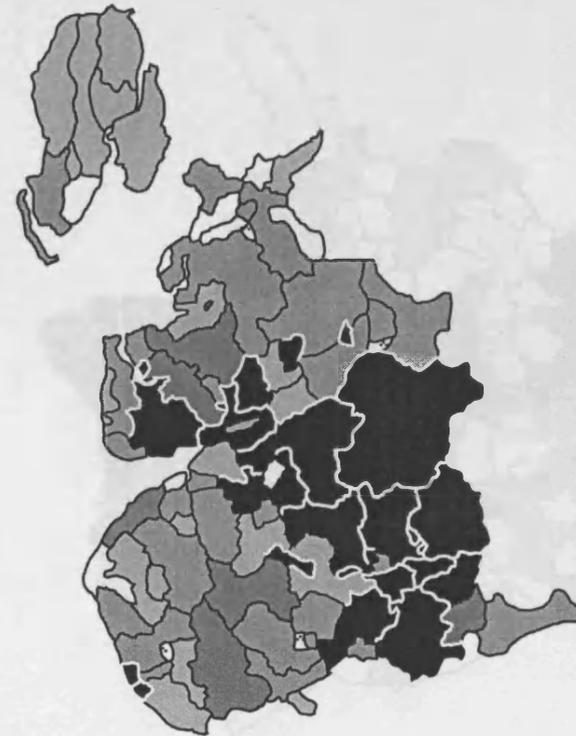


Religious diversity measure:

- zero
- up to 0.5
- 0.5 to 0.67
- 0.67 to 0.75
- 0.75 to 0.86

no data

Percentage of families in agriculture in 1831



Percentage of families in agriculture:

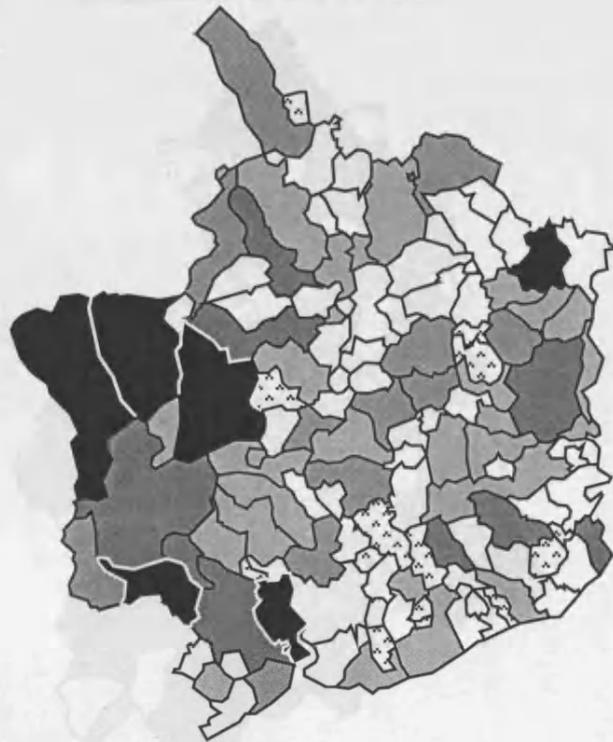
- up to 12.5%
- 12.5% to 25%
- 25% to 45%
- 45% to 65%
- 65% to 79%

no data

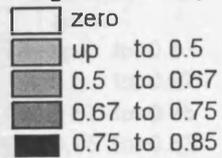
Map 30

A comparison of religious diversity and the percentage of families in agriculture (in 1831) in Monmouthshire

Religious diversity in 1851

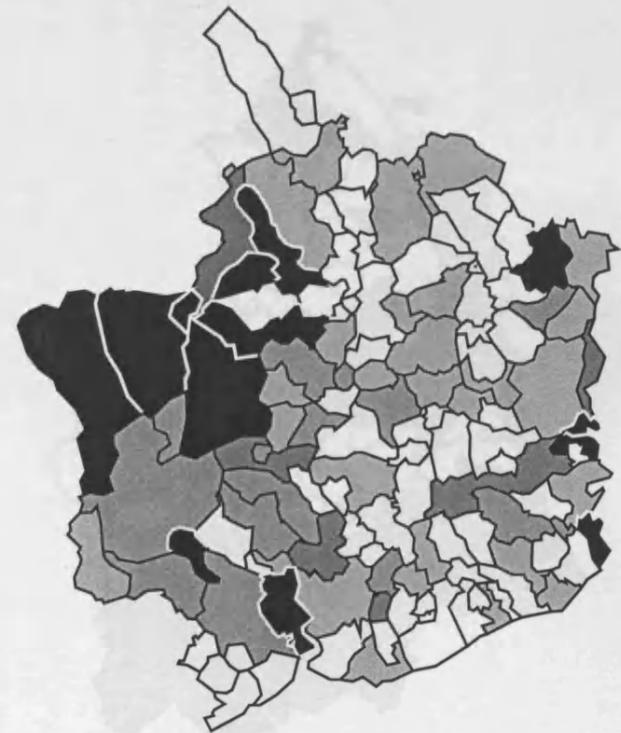


Religious diversity:

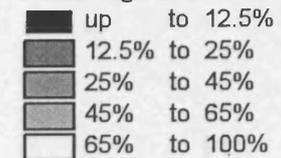


▣ no data

Percentage of families in agriculture in 1831



Percentage of families in agriculture:

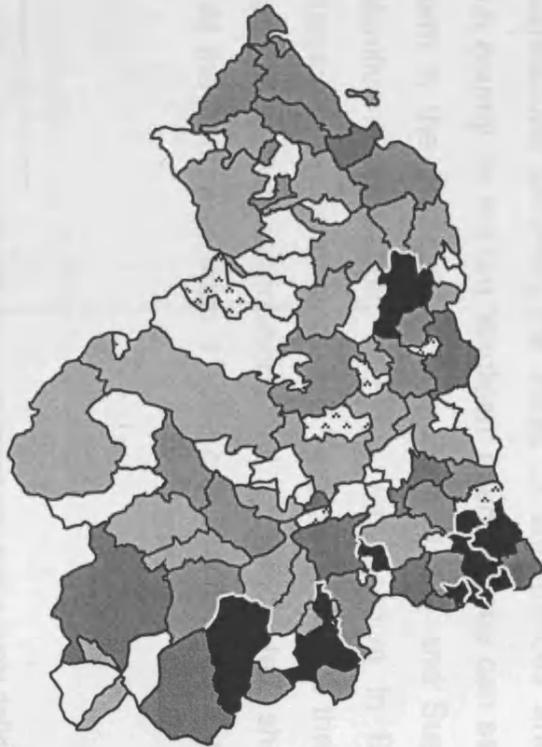


▣ no data

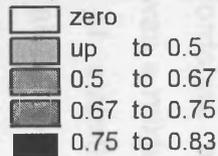
Map 31

A comparison of religious diversity and the percentage of families in agriculture (in 1831) in Northumberland

Religious diversity in 1851

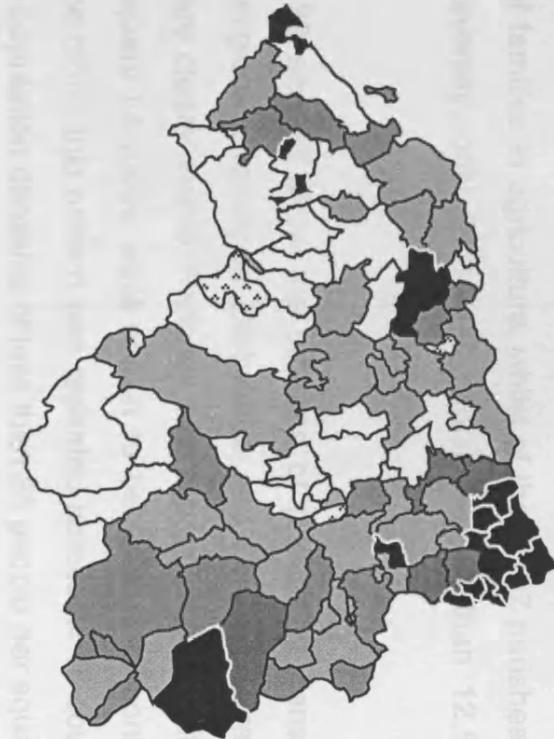


Religious diversity:

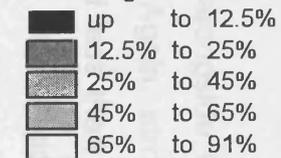


⊠ no data

Percentage of families in agriculture in 1831



Percentage of families in agriculture:



⊠ no data

Again, the trend was replicated across all fifteen counties. Of the 68 parishes with a religious diversity measure of over 0.75, 33 (48.5%) contained less than 12.5% of families in agriculture, whilst of the 2,187 parishes with lower levels of religious diversity, only 83 (4.3%) contained less than 12.5% of families in agriculture.

Maps 32 and 33 show the patterns of population density alongside the patterns of religious diversity in Derbyshire and Leicestershire.⁵¹ Again, strong similarities were clearly visible. Parishes with a population density of less than 35 people per square kilometre were shown to be unlikely to contain any religious diversity. Once more, this pattern was repeated across all 15 counties. Of the 528 parishes with population densities of less than 35 people per square kilometre, 341 (64.6%) contained no religious diversity, and 450 (85.2%) recorded a diversity measure of less than 0.5.

(ii) Religious practice and the socio-economic environment.

The registration-district analysis suggested that in the 'Anglican' region the index of attendances tended to be lower in the more urban districts, but was higher in the more urban 'border' districts. In the 'regional dissenting monopolies, the index of attendances appeared unrelated to population density.

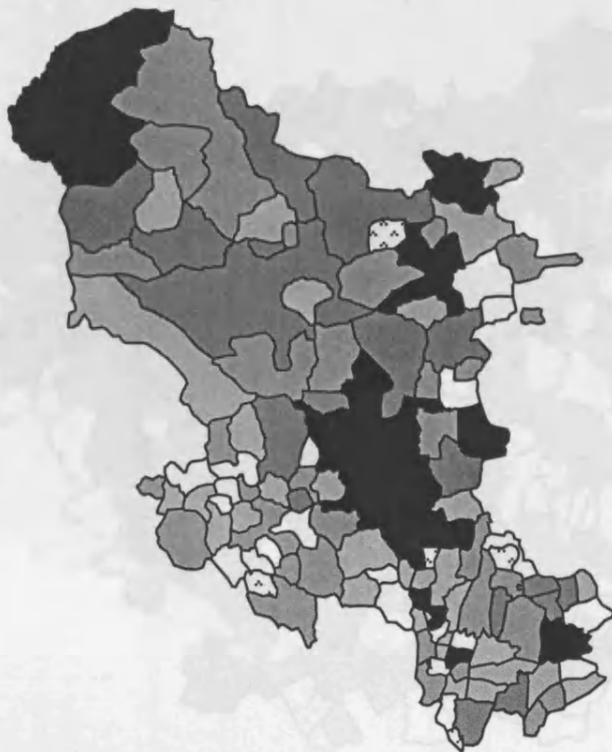
These observations were partly replicated at the parish level. Table 41 shows the correlations between the index of attendances and the population density in each county. In the ten 'Anglican' counties, one can see that there was no clear pattern in the association. Only Bedfordshire and Sussex displayed a statistically significant correlation, and this was positive in Bedfordshire and negative in Sussex. In the remaining eight 'Anglican' counties there was a mixture of positive and negative associations, all of which fell short of statistical significance. At the bottom of table 41 one can see that there was also no clear

⁵¹ The divisions of the population density were non-linear and subjectively defined. However, as was argued with respect to the percentage of families in agriculture, the fact that the same scale was used in both counties lessens the risk of extreme capitalisation on chance.

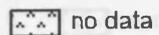
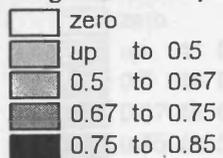
Map 32

A comparison of religious diversity and population density in Derbyshire

Religious diversity in 1851



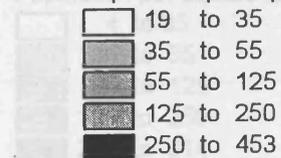
Religious diversity measure:



Population density in 1851



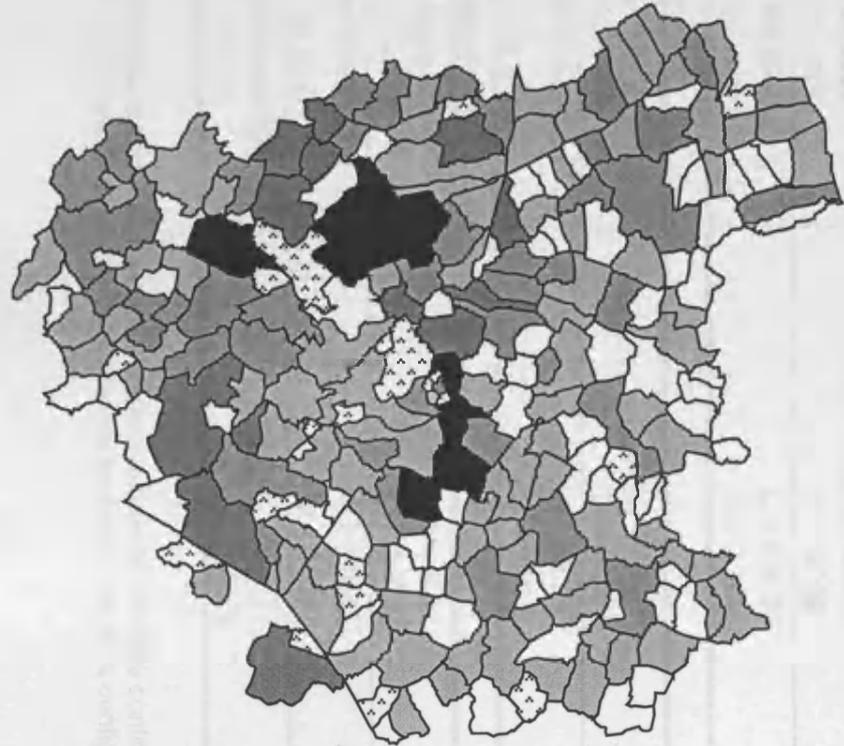
Population per square kilometre:



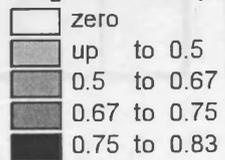
Map 33

A comparison of religious diversity and population density in Leicestershire

Religious diversity in 1851

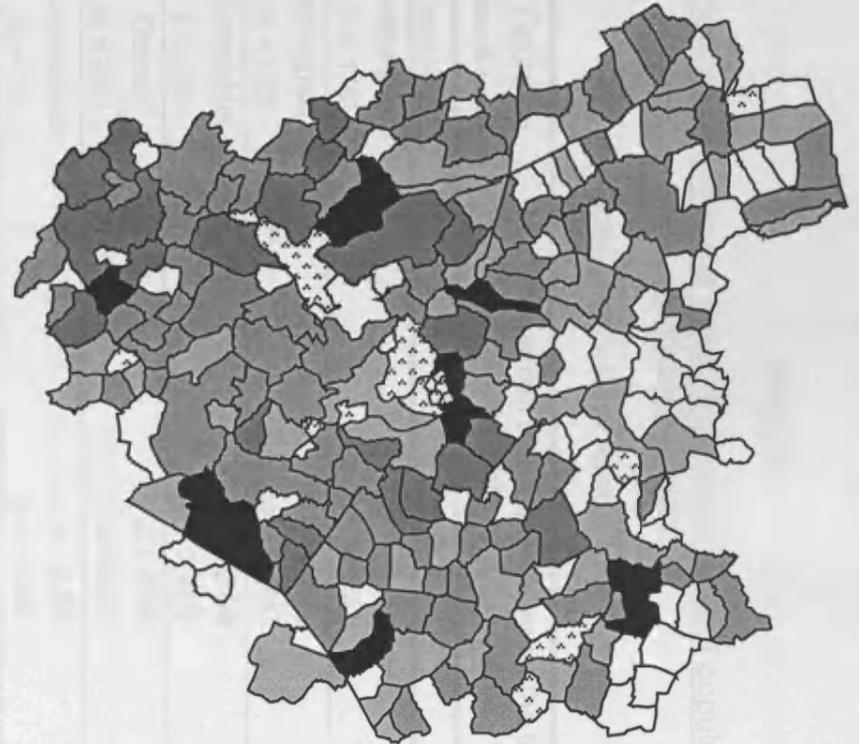


Religious diversity measure:

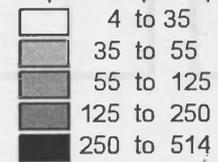


⊠ no data

Population density in 1851



Population per square kilometre:



⊠ no data

Table 41

The associations between the index of attendances and population density: an analysis by county

Spearman's rank correlations (r_s)

County (number of parishes)	Spearman correlation between the index of attendances and population density in 1851
--------------------------------	--

'Anglican' counties:

Bedfordshire (n = 115)	$r_s = + 0.20^*$ (p = 0.035)
Cambridgeshire (n = 138)	$r_s = + 0.06$ (p = 0.474)
Derbyshire (n = 99)	$r_s = + 0.09$ (p = 0.393)
Dorset (n = 251)	$r_s = + 0.01$ (p = 0.820)
Lancashire (n = 75)	$r_s = - 0.22$ (p = 0.063)
Leicestershire (n = 213)	$r_s = - 0.07$ (p = 0.320)
Rutland (n = 55)	$r_s = - 0.17$ (p = 0.217)
Suffolk (n = 436)	$r_s = + 0.06$ (p = 0.211)
Sussex (n = 266)	$r_s = - 0.17^{**}$ (p = 0.006)
East Riding (n = 162)	$r_s = + 0.08$ (p = 0.291)

'Border' counties:

Monmouthshire (n = 107)	$r_s = + 0.21^*$ (p = 0.027)
Northumberland (n = 87)	$r_s = + 0.29^{**}$ (p = 0.006)

Regional dissenting monopoly counties:

Anglesey (n = 63)	$r_s = + 0.11$ (p = 0.373)
Caernarvonshire (n = 57)	$r_s = - 0.02$ (p = 0.902)
Cardiganshire (n = 90)	$r_s = + 0.17$ (p = 0.112)

** Indicates that the correlation coefficient exceeded the 99% confidence level.

* Indicates that the correlation coefficient exceeded the 95% confidence level.

association between the index of attendances and the population density in the three Welsh 'dissenting monopoly' counties. In contrast, in the two 'border' counties of Monmouthshire and Northumberland, there was a strong positive association between the index of attendances and the population density.

(iii) Religious diversity and dissenting strength.

In the previous section it was argued that in 'regional dissenting monopolies', dissenting strength did not lie hand-in-hand with religious pluralism, as it did in the 'Anglican' and 'border' areas. In the 'regional dissenting monopolies' dissent was very strong, but pluralism rarely so. The parish-level data can be used to show how this mismatch between dissenting strength and religious diversity resulted in a distinctive relationship between dissenting strength and the socio-economic environment in the 'regional dissenting monopolies'.

The left-hand side of table 42 shows the correlations between the diversity measure and the percentage of families in agriculture and trade. As noted previously, apart from the percentage of families in agriculture in Anglesey, both variables were strongly correlated with the religious diversity measure in each and every county. Where religious diversity was high the percentage of families in agriculture always tended to be *lower* and the percentage of families in trade always tended to be *higher*.

The two right-hand columns of table 42 repeat the correlations using the dissenting percentage share measure in place of the diversity measure. It can be seen that in the three Welsh counties comprising part of the Welsh Calvinistic Methodist 'regional dissenting monopoly', there was *no* clear relationship between dissenting strength and the two socio-economic variables. In Anglesey and Caernarvonshire - the heartland of Welsh Calvinistic Methodist dominance - not only did the correlations not achieve statistical significance, but the direction of the associations was reversed. Thus, there was a weak tendency for dissenting strength to be greater the higher the percentage of families in agriculture and the lower the percentage of families in trade.

Table 42

The effect of 'regional dissenting monopolies' on the relationship between dissenting strength and socio-economic conditions: an analysis by county

Spearman's rank correlations (r_s)

County (number of parishes)	Spearman correlation between the religious diversity measure and:		Spearman correlation between the dissenting percentage share and:	
	percentage of families in agriculture in 1831	percentage of families in trade in 1831	percentage of families in agriculture in 1831	percentage of families in trade in 1831
Bedfordshire (n = 120)	$r_s = - 0.29^{**}$ (p = 0.001)	$r_s = + 0.45^{**}$ (p = 0.000)	$r_s = - 0.23^*$ (p = 0.013)	$r_s = + 0.39^{**}$ (p = 0.000)
Cambridgeshire (n = 143)	$r_s = - 0.30^{**}$ (p = 0.000)	$r_s = + 0.40^{**}$ (p = 0.000)	$r_s = - 0.28^{**}$ (p = 0.001)	$r_s = + 0.32^{**}$ (p = 0.000)
Derbyshire (n = 104)	$r_s = - 0.51^{**}$ (p = 0.000)	$r_s = + 0.46^{**}$ (p = 0.000)	$r_s = - 0.41^{**}$ (p = 0.000)	$r_s = + 0.34^{**}$ (p = 0.000)
Dorset (n = 254)	$r_s = - 0.44^{**}$ (p = 0.000)	$r_s = + 0.39^{**}$ (p = 0.000)	$r_s = - 0.43^{**}$ (p = 0.000)	$r_s = + 0.39^{**}$ (p = 0.000)
Lancashire (n = 76)	$r_s = - 0.60^{**}$ (p = 0.000)	$r_s = + 0.61^{**}$ (p = 0.000)	$r_s = - 0.46^{**}$ (p = 0.000)	$r_s = + 0.53^{**}$ (p = 0.000)
Leicestershire (n = 218)	$r_s = - 0.51^{**}$ (p = 0.000)	$r_s = + 0.55^{**}$ (p = 0.000)	$r_s = - 0.41^{**}$ (p = 0.000)	$r_s = + 0.46^{**}$ (p = 0.000)
Rutland (n = 55)	$r_s = - 0.62^{**}$ (p = 0.000)	$r_s = + 0.60^{**}$ (p = 0.000)	$r_s = - 0.66^{**}$ (p = 0.000)	$r_s = + 0.67^{**}$ (p = 0.000)
Suffolk (n = 441)	$r_s = - 0.36^{**}$ (p = 0.000)	$r_s = + 0.42^{**}$ (p = 0.000)	$r_s = - 0.34^{**}$ (p = 0.000)	$r_s = + 0.42^{**}$ (p = 0.000)
Sussex (n = 277)	$r_s = - 0.32^{**}$ (p = 0.000)	$r_s = + 0.35^{**}$ (p = 0.000)	$r_s = - 0.37^{**}$ (p = 0.000)	$r_s = + 0.38^{**}$ (p = 0.000)
East Riding (n = 164)	$r_s = - 0.22^{**}$ (p = 0.005)	$r_s = + 0.29^{**}$ (p = 0.000)	$r_s = - 0.18^*$ (p = 0.018)	$r_s = + 0.28^{**}$ (p = 0.000)

'Border' counties:

Monmouthshire (n = 107)	$r_s = - 0.50^{**}$ (p = 0.000)	$r_s = + 0.43^{**}$ (p = 0.000)	$r_s = - 0.35^{**}$ (p = 0.000)	$r_s = + 0.36^{**}$ (p = 0.000)
Northumberland (n = 88)	$r_s = - 0.73^{**}$ (p = 0.000)	$r_s = + 0.51^{**}$ (p = 0.000)	$r_s = - 0.52^{**}$ (p = 0.000)	$r_s = + 0.31^{**}$ (p = 0.004)

Regional dissenting monopoly counties:

Anglesey (n = 61)	$r_s = - 0.18$ (p = 0.160)	$r_s = + 0.34^{**}$ (p = 0.008)	$r_s = + 0.14$ (p = 0.286)	$r_s = - 0.01$ (p = 0.933)
Caernarvonshire (n = 57)	$r_s = - 0.52^{**}$ (p = 0.000)	$r_s = + 0.45^{**}$ (p = 0.000)	$r_s = + 0.23$ (p = 0.079)	$r_s = - 0.10$ (p = 0.478)
Cardiganshire (n = 90)	$r_s = - 0.38^{**}$ (p = 0.000)	$r_s = + 0.28^{**}$ (p = 0.007)	$r_s = - 0.10$ (p = 0.371)	$r_s = + 0.03$ (p = 0.764)

** Indicates that the correlation coefficient exceeded the 99% confidence level.

* Indicates that the correlation coefficient exceeded the 95% confidence level.

In all other counties the correlations between dissenting strength and the two socio-economic variables were identical in direction and similar in magnitude to those obtained with the diversity measure. It is interesting to note that the only two correlations which fell short of strong statistical significance were in Bedfordshire and the East Riding, and these were the only two English counties (for which parish level data were compiled) to have displayed a tendency towards regional dissenting monopoly (see table 38).

In this manner table 42 provides a graphic illustration that dissenting strength and religious pluralism cannot (as elsewhere) be equated under conditions of regional dissenting monopoly. Where dissenting regional monopolies were most strongly developed (Anglesey and Caernarvonshire), not only did the dominant dissenting denomination achieve a level of support comparable with the Church of England in its heartlands, but, most intriguingly, the parishes in which dissent was strongest were more strongly rural/agricultural than elsewhere - a characteristic common to the vast majority of the parishes in which the Anglican church lay least challenged in 1851. This point can be elaborated further. Table 43 shows that in Anglesey, Caernarvonshire and Cardiganshire, the Anglican index of attendances tended to be higher the *greater* the percentage of families in trade and the *lower* the percentage of families in agriculture. Such associations were in marked contrast to the situation in the eleven English counties and Monmouthshire, which as table 42 shows, conformed to the conventional historical interpretation - that the Church of England did best in broadly rural, agricultural areas.

Table 44 shows how the strength of the dominant dissenting denomination - the Welsh Calvinistic Methodists - was related to the key socio-economic variables in Anglesey, Caernarvonshire and Cardiganshire. Welsh Calvinistic strength was divided into two groups - a percentage share of less than 50% and a dissenting percentage share of 50% or more. In the first group Calvinistic Methodist strength was closely and significantly related to the degree of urban-industrial development. Thus, there were strong positive correlations between the Welsh Calvinistic Methodist percentage share and: the percentage of families in trade, the

Table 43**The distinctive geography of Anglican support in central and north Wales**Spearman's rank correlations (r_s)

Counties (number of parishes)	Spearman correlation between the Anglican index of attendances and:	
	percentage of families in trade	percentage of families in agriculture
Anglesey, Caernarvonshire and Cardiganshire (n = 208)	$r_s = + 0.25^{**}$ (p = 0.000)	$r_s = - 0.17^*$ (p = 0.017)
The eleven English counties and Monmouthshire (n = 2,046)	$r_s = - 0.25^{**}$ (p = 0.000)	$r_s = + 0.24^{**}$ (p = 0.000)

** Indicates that the correlation coefficient exceeded the 99% confidence level.

* Indicates that the correlation coefficient exceeded the 95% confidence level.

Table 44

How the associations between socio-economic conditions and the strength of Welsh Calvinistic Methodism varied according to that strength: an analysis of the parishes of Anglesey, Caemravnshire and Cardiganshire

Spearman's rank correlations (r_s)

Spearman correlation between Welsh Calvinistic Methodist percentage share of attendances and:				
	percentage of families in agriculture in 1831	percentage of families in trade in 1831	population density in 1851	mean annual population growth rate 1811-51
Parishes with a Welsh Calvinistic Methodist percentage share of less than 50% (n = 123)	$r_s = - 0.35^{**}$ (p = 0.000)	$r_s = + 0.16$ (p = 0.072)	$r_s = + 0.38^{**}$ (p = 0.000)	$r_s = + 0.38^{**}$ (p = 0.000)
Parishes with a Welsh Calvinistic Methodist percentage share of 50% or more (n = 85)	$r_s = + 0.31^{**}$ (p = 0.004)	$r_s = - 0.28^*$ (p = 0.010)	$r_s = - 0.30^{**}$ (p = 0.006)	$r_s = - 0.34^{**}$ (p = 0.002)

** Indicates that the correlation coefficient exceeded the 99% confidence level.

* Indicates that the correlation coefficient exceeded the 95% confidence level.

population density, and the population growth rate (1811-51), and there was a negative correlation with the percentage of families in agriculture. Most significantly, these relationships were entirely reversed in the second group of parishes - those with the highest Calvinistic Methodist strength. In this latter group of 85 parishes, a higher Welsh Calvinistic Methodist percentage share was associated with: lower percentages of the families in trade, lower population densities, lower population growth rates (1811-51), and higher percentages of families in agriculture.

Thus, there was not an absence of any relationship between Calvinistic Methodist strength and parochial socio-economic conditions, but evidence for a rather complex relationship. Up to moderate levels of Calvinistic Methodist support, the relationships conformed to the conventional wisdom - that dissenting support increased in line with urban/industrial development. Beyond a certain level - in the parishes in which the Calvinistic Methodists were pre-eminent - these expected relationships were reversed. Parishes with the highest levels of Welsh Calvinistic support tended to be more sparsely populated and highly agricultural. For example, in the 24 parishes in which the Welsh Calvinistic Methodists received 90% or more of all attendances, the median population density was only 51 people per square kilometre, there was an average of 69.3% of families in agriculture and only 14.3% families in trade. The median mean annual population growth rate was 0.39% (1811-51). In the remaining 184 parishes which recorded a lower Calvinistic Methodist percentage share, the corresponding averages were considerably more 'urban' - a population density of 74 people per square kilometre, 60.9% of families in agriculture, 19.7% of families in trade, and a mean annual population growth rate of 0.85% (1811-51). The reasons why this should have been so are examined in the following section.

7.4 Parochial Landownership

The nature of parochial landholding, as an historically quite stable phenomenon, exerted not only a great influence on the socio-economic characteristics of individual parishes (over a considerable time period) but also had a direct influence on religion.

Landholding has long fascinated historical geographers and local historians because it permits general and long-term classificatory models of cultural development. For instance Obelkevich stated:

'This contrast between large and small property may be reformulated at the parish level as the distinction between concentrated and divided ownership, which in turn forms the basis for the familiar distinction between "close" and "open" parishes. By linking patterns in landownership with many aspects of economic, social, and political, and religious life, it is an indispensable tool in the analysis of nineteenth century rural society.'⁵²

The notion of 'open' and 'close' parishes, a dichotomy originally associated with the poor law, has been a persistent explanatory dualism. At the risk of simplification, the classic 'close' or 'estate' parish can be described as one in which a single landholder dominated almost all aspects of the local society - in terms of landholding, agricultural production, housing (and thereby 'in-migration'), and magistracy. Perhaps most important was the landlord's control of housing within the parish (which was typically very tight), to avoid uncontrolled in-migration and thereby the threat of paying higher poor rates. As a result, 'close' parishes typically needed to 'import' labour, especially during times of peak agricultural demand. In contrast, 'open' parishes were those where there was a marked plurality of landownership with no individual control over the exploitation of resources (agricultural or otherwise). With no individual control over in-migration and settlement, the population in such parishes often rose far more rapidly than in 'close' parishes. Labour surplus, cottage industry and handicraft production were all characteristic of open parishes. Numerous local histories and historical

⁵² Obelkevich, Religion, p.10.

geographies have found a landholding typology an invaluable descriptive and explanatory framework.⁵³ In similar vein, the dualisms of 'hamlet and champion', 'landlord and peasant' or the notions of a 'dependency system' or 'estate villages', have been used to describe similar phenomena.⁵⁴

The terms 'open' and 'close' are used in this thesis. This does not restrict the categorisation to the field of poor-law administration. As Mills noted:

'Poor rates did not always correlate with the number of owners in a parish. ... Nevertheless the [open:close] model is a useful one because, although based initially on poor law administration, it highlights a common distinction between villages belonging to the estate system and those which were part of the peasant system. It sums up differences over a wide range of economic, demographic, social, religious and political data.'⁵⁵

The emphasis given to landholding brings this thesis into line with the traditions of the 'Leicester School' of local history (and historical geography). In particular, Everitt's work on the geography of nonconformity remains pertinent. Everitt asked:

'in what types of rural community did dissent find a foothold and flourish? Was there any relationship between the differing species of local society and the proliferation of Dissent in certain well-defined areas, or its relative absence in certain others.'⁵⁶

In similar vein Gay had observed that:

'Where the village was of the closed integrated type, the squire and parson would yield a patriarchal influence ensuring the stranglehold of the Church of England ... In those "miniature welfare states" there was little possibility of

⁵³ The most comprehensive work in the field remains D.R. Mills, Lord and Peasant in Nineteenth Century Britain (London, 1980). Landholding has been a central explanatory framework in many local history and historical geography studies of religion, perhaps most notably: A.M. Everitt, The Pattern of Rural Dissent: the Nineteenth Century (Leicester, 1972); A.M. Urdank, Religion and Society in a Cotswold Vale: Nailsworth, Gloucestershire 1780-1865 (Berkeley, 1990).

⁵⁴ A useful summary of the 'open:closed' and 'hamlet:champion' dichotomies is offered in Mills Lord and Peasant, p.117. Mills himself uses the dualism of 'landlord and peasant'. The notion of 'dependency' was used by Gilbert in Religion and Society.

⁵⁵ Mills, Lord and Peasant, p.24.

⁵⁶ Everitt, Rural Dissent, p. 8.

chapel life developing. If the village was one of the open type with no dominant landlord, independent thought and action was more possible and chapels could easily be established. ... In general an arable economy, with its nucleated settlements favoured the Church of England, while a pastoral economy with its scattered settlement favoured Nonconformists.⁵⁷

To state that 'open' parishes favoured dissent and 'close' parishes favoured the established church is clearly not a new proposition. Indeed, this is a central proposition on the most comprehensive body of research upon nineteenth-century landholding.⁵⁸ The work of Everitt, Obelkevich, and Snell are impressive attempts to describe and account for the local and regional geographies of *dissent*. However, questions relating the geography of *religious pluralism* (as opposed to dissenting strength) to landholding remain unanswered, and, as was shown in the previous section, one cannot always equate dissenting strength with religious diversity. Since landholding is often proposed to have influenced the patterns of migration, and the complexity of the division of labour, one would expect it to be a major influence on religious pluralism.

Defining a landholding framework.

Before commencing analysis of the influence of landholding on religious pluralism, it is important to examine the nature of the landholding data. Since the data do not come from the decennial census they require greater scrutiny than the other socio-economic data used in this thesis. The data on landholding were taken from the Imperial Gazetteer⁵⁹ which recorded four categories to describe the division of land, these being: 'amongst a few', 'in one hand', 'subdivided' and 'much subdivided'. For the fifteen county parish dataset the data were available for 1,524 parishes, just under two thirds of the total. An inspection of the data revealed that a substantial proportion of the parishes that were not classified in the Imperial Gazetteer were clearly quite urban, and, therefore, almost certainly 'much subdivided'. Indeed, it may well have been the obvious status of certain urban parishes which led to the omission of any classification. Table 45 shows how the

⁵⁷ J.D. Gay, The Geography of Religion in England (London, 1971), p.111.

⁵⁸ I refer here to the work of Dennis Mills, in particular Lord and Peasant.

⁵⁹ J.M. Wilson, The Imperial Gazetteer of England and Wales six vols (Edinburgh, n.d. 1866-1874).

population and population densities of the unclassified parishes were strongly suggestive that a considerable majority of the unclassified parishes were 'much subdivided'. A further point indicative of such a bias in the non-classification of parishes is that of the 126 parishes with population densities in excess of 250 people per square kilometre, the Imperial Gazetteer reported landholding data for only 41 (32.5%), less than half the rate of classification of the remaining 2,254 parishes, of which 1,476 (65.5%) were classified.

Despite the fact that a high proportion of the parishes with no landholding data were likely to have been 'much subdivided', unclassified parishes were consistently excluded from the following analysis.⁶⁰ To use only the 1,524 parishes with landholding data is probably to augment the proportion of parishes with concentrated landownership. However, since the following analysis looks for *differences* between landholding groups, and does not attempt to describe the frequency or spatial coverage of any one group, this exclusion is not unduly problematic. The 'much subdivided' category was the second largest, and thereby in no need of augmentation for the purpose of comparison. The uncertainty to note is that in the following comparisons, the characteristics of the 'much subdivided' parishes may appear 'diluted' by the omission of a disproportionate number of the most urban parishes.

A more fundamental issue to address is the accuracy with which this fourfold classification actually described the division of property in the mid-nineteenth century. The categories 'in one hand', 'amongst a few', 'subdivided', and 'much subdivided' are not defined within the Imperial Gazetteer itself, and so it was important to check the accuracy of the classification against an independent and reliable source. A detailed analysis of landholding in nineteenth-century Leicestershire has been conducted by Dennis Mills, and subsequently by Keith

⁶⁰ One might also have expected that the landholding data would be more patchy for northern England, because of the way in which parish data had to be accumulated from township data. There was no strong evidence for this, however. The percentage of parishes for which no landholding classification appeared in the Imperial Gazetteer was as low, or even lower, in several southern counties - Cambridgeshire (47%), Rutland (59%), Suffolk (40%) and Sussex (42%) - as in the two northern counties of Lancashire (46%) and Northumberland (38%).

Table 45

The demographic characteristics of parishes with landholding classified and unclassified by the *Imperial Gazetteer*

N = 2,430

Landholding according to the <i>Imperial Gazetteer</i>.					
	'In one hand'	'amongst a few'	'subdivided'	'much subdivided'	not classified
Mean population in 1851	280 (n = 88)	663 (n = 816)	924 (n = 271)	2,913 (n = 349)	3,105 (n = 906)
Mean population density in 1851	39.1 (n = 88)	57.2 (n = 814)	73.0 (n = 271)	262.2 (n = 344)	201.8 (n = 863)

Snell.⁶¹ These data were based upon the 1832 land tax returns in that county. Snell has computerised the land tax data and compared it with the Imperial Gazetteer classification. There appeared to be a very close correspondence between the two sources.⁶²

The major deficiency of the Imperial Gazetteer data is the lack of information concerning whether the landlord of parishes held 'in one hand' was continually resident, partially resident, or wholly absentee, a feature believed to have a great influence on the religious character of the parish.⁶³

In addition to questions concerning the sources and classification of landholding data, considerable conceptual problems have been associated with the use of landholding typologies. Indeed, there is a considerable literature within local history and historical geography concerning the utility of parochial landholding as a conceptual framework allowing one to generalise from the local.⁶⁴ A key question was whether to use a simple dichotomy of 'open' and 'close', or whether to use the fourfold classification of the Imperial Gazetteer.⁶⁵

To examine whether the divisions presented in the Imperial Gazetteer provided a sociologically 'visible' typology, one can investigate to what extent the most important socio-economic characteristics appeared different in the four groups. Tables 46 to 48 examine how three key socio-economic variables - the percentage of families in agriculture, the percentage of the population employed as agricultural labourers, and the population density - varied according to the nature of the landholding in the eleven English counties and Monmouthshire. The top row

⁶¹ The Leicestershire analysis is described in greater detail in an appendix to Snell and Ell, Victorian Religion.

⁶² See Snell and Ell, Victorian Religion.

⁶³ See, for example, the comments of Obelkevich, Religion, pp. 29-46.

⁶⁴ See Phythian-Adams, English Local History, especially pp. 7-8. See also S. Banks, 'Nineteenth-century scandal or twentieth-century model? A new look at "open" and "close" parishes', Economic History Review, 2nd ser., XLI:1 (1988), 51-73.

⁶⁵ It is interesting to note that many of the criticisms of the various landholding 'frameworks' concern the many exceptions which defy the precise labelling that a categorical variable requires. As an aside, if one were to calculate the diversity of landholding using a Herfindahl-Hirschman index of landholding 'concentration' one could create an interval (or ratio) variable which would escape this difficulty. To do this one would need to know the acreage owned by each landholder, which is not given in the Imperial Gazetteer.

of each of the three parts of tables 46, 47 and 48 shows the mean of each variable in each landholding group. It is apparent that the percentage of families in trade increased in line with the division of landholding: from 12.5% in parishes held 'in one hand' to 19.2% in parishes held 'amongst a few', to 23.4% in 'subdivided' parishes, to 27.3% in 'much subdivided' parishes. In contrast, the percentage of agricultural labourers fell progressively: from 15.9% in parishes held 'in one hand', through 13.4% in parishes held 'amongst a few', to 12.2% in 'subdivided' parishes, to 10.8% in 'much subdivided' parishes. The mean population density increased: from 40.2 in parishes held 'in one hand', through 57.5 and 70.1, to 294.6 in 'much subdivided' parishes.

Thus, a visual comparison of the data suggested that each of the three variables varied considerably between all four landholding groups. In each case a Mann-Whitney 'U' test (essentially a non-parametric 'T' test) was carried out to formally test the hypothesis that the average level (mean rank) of each of these socio-economic variables was significantly different for each landholding group. From the bottom row of each of the three parts of tables 46, 47 and 48, it can be seen that in all cases the mean rank of these three variables was significantly different in each of the landholding groups. The statistical magnitude of the difference between each landholding group and the subsequent classification was fairly equal with all three variables. As would be expected, the percentage of families in trade and population density showed a progressive increase as landholding became more dispersed, whilst the percentage of agricultural labourers showed a progressive decline.

Table 49 shows a parallel investigation of the three socio-economic variables in the regional dissenting monopoly region - Anglesey, Caernarvonshire and Cardiganshire. For these counties the data necessitated a simpler twofold model - there were only three parishes held 'in one hand' and only 18 'subdivided' parishes. For this reason the parishes held 'in one hand' were combined with parishes held 'amongst a few', and, likewise, the 'subdivided' and 'much subdivided' parishes were also combined into one group.

Table 46

Mann-Whitney tests for differences in the percentage of families in trade by landholding type: an analysis of the eleven English counties and Monmouthshire

a) Parishes 'in one hand' compared with parishes held 'amongst a few':

	Group 1 parishes held 'in one hand' (n = 67)	Group 2 parishes held 'amongst a few' (n = 666)
Mean percentage families in trade	12.5%	19.2%
Mean rank percentage families in trade	256.5	378.1

Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 4.5** (p = 0.0000)
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b) Parishes held 'amongst a few' compared with 'subdivided' parishes:

	Group 2 parishes held 'amongst a few' (n = 666)	Group 3 'subdivided' parishes (n = 245)
Mean percentage families in trade	19.2%	23.4%
Mean rank percentage families in trade	438.0	505.0

Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 3.4** (p = 0.0007)
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c) 'Subdivided' parishes compared with 'much subdivided' parishes:

	Group 3 'subdivided' parishes (n = 245)	Group 4 'much subdivided' parishes (n = 296)
Mean percentage families in trade	23.4%	27.3%
Mean rank percentage families in trade	247.3	290.6

Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 3.2** (p = 0.0013)
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Key:

** Indicates that the 'Z' statistic exceeded the 99% confidence level.

Table 47**Mann-Whitney tests for differences in the percentage of agricultural labourers by landholding type: an analysis of the eleven English counties and Monmouthshire****a) Parishes 'in one hand' compared with parishes held 'amongst a few':**

	Group 1 parishes held 'in one hand' (n = 67)	Group 2 parishes held 'amongst a few' (n = 664)
Mean percentage agricultural labourers	15.9%	13.4%
Mean rank percentage agricultural labourers	452.3	357.3
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 3.5** (p = 0.0004)	

b) Parishes held 'amongst a few' compared with 'subdivided' parishes:

	Group 2 parishes held 'amongst a few' (n = 664)	Group 3 'subdivided' parishes (n = 245)
Mean percentage agricultural labourers	13.4%	12.2%
Mean rank percentage agricultural labourers	473.0	406.3
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 3.4** (p = 0.0007)	

c) 'Subdivided' parishes compared with 'much subdivided' parishes:

	Group 3 'subdivided' parishes (n = 245)	Group 4 'much subdivided' parishes (n = 296)
Mean percentage agricultural labourers	12.2%	10.8%
Mean rank percentage agricultural labourers	295.7	250.5
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 3.3** (p = 0.0008)	

Key:

** Indicates that the 'Z' statistic exceeded the 99% confidence level.

Table 48**Mann-Whitney tests for differences in the population density by landholding type:
an analysis of the eleven English counties and Monmouthshire****a) Parishes 'in one hand' compared with parishes held 'amongst a few':**

	Group 1 parishes held 'in one hand' (n = 67)	Group 2 parishes held 'amongst a few' (n = 666)
Mean population density	40.1	57.5
Mean rank population density	247.8	379.0

Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 4.8** (p = 0.0000)
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b) Parishes held 'amongst a few' compared with 'subdivided' parishes:

	Group 2 parishes held 'amongst a few' (n = 666)	Group 3 'subdivided' parishes (n = 246)
Mean population density	57.5	70.1
Mean rank population density	431.3	524.7

Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 4.8** (p = 0.0000)
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c) 'Subdivided' parishes compared with 'much subdivided' parishes:

	Group 3 'subdivided' parishes (n = 246)	Group 4 'much subdivided' parishes (n = 296)
Mean population density	70.1	294.6
Mean rank population density	237.0	296.9

Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 4.4** (p = 0.0000)
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Key:

** Indicates that the 'Z' statistic exceeded the 99% confidence level.

Table 49

Mann-Whitney tests for differences in the percentage of families in trade, the percentage of agricultural labourers and the population density by landholding type: an analysis of the three Welsh counties

a) Percentage of families in trade:

	Group 1 parishes held 'in one hand' and 'amongst a few' (n = 100)	Group 2 'subdivided' and 'much subdivided' parishes (n = 59)
Mean percentage families in trade	19.0	18.9
Mean rank percentage families in trade	80.4	79.4
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 0.1 (p = 0.8956)	

b) Percentage of agricultural labourers:

	Group 1 parishes held 'in one hand' and 'amongst a few' (n = 100)	Group 2 'subdivided' and 'much subdivided' parishes (n = 58)
Mean percentage agricultural labourers	8.4%	8.9%
Mean rank percentage agricultural labourers	76.5	84.7
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 1.1 (p = 0.2744)	

c) Population density:

	Group 1 parishes held 'in one hand' and 'amongst a few' (n = 101)	Group 2 'subdivided' and 'much subdivided' parishes (n = 60)
Mean population density	60.8	82.7
Mean rank population density	77.7	86.5
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 1.1 (p = 0.2500)	

In the three Welsh counties, the mean level of all three variables appeared very similar in the two landholding groups. As shown in the bottom rows of the three parts of table 49, the mean rank of the three variables did not vary significantly between the landholding groups. One might have expected the Welsh results to have been less strong than the English ones (given the more simple typology and fewer parishes), but the complete absence of any statistical significance goes far beyond such factors. Indeed, none of the fifteen other key socio-economic indicators (as listed in Appendix 1 of this thesis) showed *any* strong statistically significant difference according to the nature of landholding in the three Welsh counties.⁶⁶

It is concluded that in England a fourfold typology of parochial landholding provides an extremely suitable and powerful discriminator of socio-economic conditions. Put very simply, the less concentrated the landholding the more 'urban' and 'industrial' the parish. In Wales, the simplified twofold model of landholding showed no clear influence over parochial socio-economic or demographic characteristics.

Landholding and religious pluralism.

Having examined the socio-economic impact of landholding, one can now consider the impact upon religious expression. Table 50 shows the differences in the average levels of religious diversity by landholding group in England. It can be seen that the mean level of religious diversity increased from 0.05 in parishes held 'in one hand', to 0.23 in parishes held 'amongst a few', to 0.33 in 'subdivided' parishes and to 0.40 in 'much subdivided' parishes. To formally test the statistical significance of these differences, a series of Mann-Whitney 'U' tests were carried out (as for the three socio-economic variables). It can be seen that religious diversity in parishes held 'in one hand' was significantly lower, in terms of mean rank, than religious diversity in parishes held 'amongst a few'. Similarly, religious

⁶⁶ Part of the reason for no clear trend in these three Welsh counties may have been the presence of extractive industry in the heart of otherwise 'rural' parishes, and the exploitation of mineral resources by the landed interests. For example, 19.2% of families were classified as 'other' (which typically covered miners and quarrymen who were themselves smallholders) in the 100 more 'close' parishes, a rate slightly higher than that recorded by the more 'open' parishes (17.6%).

Table 50

Mann-Whitney tests for differences in religious diversity by landholding type: an analysis of the eleven English counties and Monmouthshire

a) Parishes 'in one hand' compared with parishes held 'amongst a few':

	Group 1 parishes held 'in one hand' (n = 67)	Group 2 parishes held 'amongst a few' (n = 668)
Mean religious diversity	0.05	0.23
Mean rank religious diversity	239.1	380.9
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 5.7** (p = 0.0000)	

b) Parishes held 'amongst a few' compared with 'subdivided' parishes:

	Group 2 parishes held 'amongst a few' (n = 668)	Group 3 'subdivided' parishes (n = 246)
Mean religious diversity	0.23	0.33
Mean rank religious diversity	432.6	525.1
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 4.9** (p = 0.0000)	

c) 'Subdivided' parishes compared with 'much subdivided' parishes:

	Group 3 'subdivided' parishes (n = 246)	Group 4 'much subdivided' parishes (n = 296)
Mean religious diversity	0.33	0.40
Mean rank religious diversity	247.0	291.9
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 3.4** (p = 0.0008)	

Key:

** Indicates that the 'Z' statistic exceeded the 99% confidence level.

diversity in parishes held 'amongst a few' was found to be significantly lower than diversity in 'subdivided' parishes. Lastly, religious diversity in 'subdivided' parishes was shown to be significantly lower than in 'much subdivided' parishes.

Table 51 repeats the analysis for the English parishes, but this time dissenting strength (the dissenting percentage share) is examined in place of religious diversity. The mean dissenting percentage share increased markedly as landholding became less concentrated: from 10.2% in parishes held 'in one hand', to 29.4% in parishes held 'amongst a few', to 42% in 'subdivided' parishes, to 45.7% in 'much subdivided' parishes'. The difference in the mean rank of the dissenting percentage share was statistically significant at each stage as one moved from parishes held 'in one hand' to 'subdivided' parishes (as shown by the Mann-Whitney 'Z' statistic in the bottom row of each part of table 51). Only the difference between 'subdivided' and 'much subdivided' parishes fell short of strong statistical significance.

As the previous analysis of this chapter has indicated, across most of England and the border areas of Wales (i.e. the Anglican and 'border' regions), religious diversity and dissenting strength went hand-in-hand. Tables 50 and 51 have demonstrated that diversity and dissenting strength also displayed very similar relationships with landholding.

A parallel investigation was carried out investigating how the religious diversity and the dissenting percentage share measure varied by landholding in the 'regional dissenting monopoly of Anglesey, Caernarvonshire and Cardiganshire. The results (using the simplified twofold grouping) are shown in tables 52 and 53. The mean religious diversity measure in the more 'closed' group was 0.35 whilst in the more 'open' group the mean was 0.43. The Mann-Whitney test on differences in the mean rank showed that religious diversity was significantly lower in the group of parishes held 'in one hand' or 'amongst a few'. The result was notably less strong than the English results.⁶⁷

⁶⁷ The 'Z' statistic exceeded the 95% confidence level, but not the 99% level.

Table 51

Mann-Whitney tests for differences in the dissenting percentage share of attendances by landholding type: an analysis of the eleven English counties and Monmouthshire

a) Parishes 'in one hand' compared with parishes held 'amongst a few':

	Group 1 parishes held 'in one hand' (n = 67)	Group 2 parishes held 'amongst a few' (n = 668)
Mean dissenting percentage share	10.2%	29.4%
Mean rank dissenting percentage share	246.6	380.2
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 5.3** (p = 0.0000)	

b) Parishes held 'amongst a few' compared with 'subdivided' parishes:

	Group 2 parishes held 'amongst a few' (n = 668)	Group 3 'subdivided' parishes (n = 246)
Mean dissenting percentage share	29.4%	42.0%
Mean rank dissenting percentage share	430.7	530.3
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 5.3** (p = 0.0000)	

c) 'Subdivided' parishes compared with 'much subdivided' parishes:

	Group 3 'subdivided' parishes (n = 246)	Group 4 'much subdivided' parishes (n = 296)
Mean dissenting percentage share	42.0%	45.7%
Mean rank dissenting percentage share	260.8	280.4
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 1.5 (p = 0.1438)	

Key:

** Indicates that the Mann-Whitney test statistic exceeded the 99% confidence level.

Table 52

**Mann-Whitney tests for differences in religious diversity by landholding type:
an analysis of the three Welsh counties**

	Group 1 parishes held 'in one hand' and 'amongst a few' (n = 101)	Group 2 'subdivided' and 'much subdivided' parishes (n = 60)
Mean religious diversity	0.35	0.43
Mean rank religious diversity	74.7	91.6
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 2.2* (p = 0.0259)	

Key

* Indicates that the Mann-Whitney test statistic exceeded the 95% confidence level.

Table 53**Mann-Whitney tests for differences in the dissenting percentage share by landholding type: an analysis of the three Welsh counties**

	Group 1 parishes held 'in one hand' and 'amongst a few' (n = 101)	Group 2 'subdivided' and 'much subdivided' parishes (n = 60)
Mean dissenting percentage share	78.3	73.2
Mean rank dissenting percentage share	84.9	74.4
Mann-Whitney test for significance of difference of mean rank	Z (corrected for ties) = - 1.4 (p = 0.1668)	

The relationship between dissenting strength and landholding diverged more markedly from the English situation. As table 53 shows, the mean dissenting percentage share in the more closed parishes lay at 78.3%, which was slightly *higher* than the 73.2% averaged in the more open parishes. The mean rank followed a similar trend, though the difference was not statistically significant (as indicated by the Mann-Whitney test in the bottom row of table 53). A further statistic corroborating the interpretation that dissenting strength declined slightly as landownership became *less* concentrated is that the percentage of parishes with an above average (median) dissenting percentage share, was 53.4% in the more 'closed' group, but was over 10% *lower*, at 43.3%, in the more 'open' group.

Thus once again, the counties of Welsh Calvinistic Methodist pre-eminence yielded very different results from the 'Anglican' and 'border' counties. In the 'Anglican' and 'border' parishes, landholding appeared to exert a clear and highly visible influence on the patterns of socio-economic development, religious diversity and dissenting strength. In short, the more divided the landholding, the more 'urban' and 'industrial' the socio-economic characteristics and the greater dissenting strength and religious pluralism. In Wales, using the simplified twofold division of landholding, the only statistically significant difference discovered in common with the English findings was that religious diversity was higher where landholding was less concentrated. There was no clear influence of landholding upon the patterns of socio-economic development or dissenting strength.

It has been shown how the nature of parochial landholding exerted a major influence on the socio-economic, demographic and religious characteristics of parishes in the 'Anglican' and 'border' regions.⁶⁸ The three Welsh counties invite further investigation.

⁶⁸ Those who have used landholding as an explanatory framework have noted the uncertainty concerning the nature of the effects of landholding on the religious characteristics of the parish (see Obelkevich, *Religion*, p.155). One can separate two sets of effects. The first is the well demonstrated ability of concentrated landownership to restrict housing (and thereby population density, population growth, cottage industry, manufacturing and extractive industry) - in short, to produce parishes of low population density and a strongly agricultural nature. One can also propose that landholding exerted a more 'immediate' influence on religion, an influence resulting from the direct control of landowners upon the building and licensing of dissenting places of worship, and also the moral authority landholders could exert upon the religious affiliation of their staff. If the former set of effects was dominant, then landholding does not become unimportant, but rather serves as an indirect, 'summary' cause. If the latter set of effects was dominant, then landholding plays a more 'direct' role in the explanation of the parochial geography of religious pluralism. There are two ways

Landholding in central and north Wales.

Of the 101 more 'closed' parishes in Anglesey, Caernarvonshire and Cardiganshire (those held 'in one hand' or 'amongst a few'), 35 (34.7%) recorded no Welsh Calvinistic Methodist attendances, but 46 (45.5%) recorded a Welsh Calvinistic Methodist percentage share of 50% or more, and 10 (9.9%) recorded a Welsh Calvinistic percentage share of 100%. In contrast, of the 60 more 'open' parishes (those 'subdivided' or 'much subdivided'), 22 (36.7%) recorded no Welsh Calvinistic Methodist attendances, and only 20 (33.3%) recorded a Welsh Calvinistic Methodist percentage share of 50% or more. Perhaps most revealingly of all, none of these more open parishes recorded a Welsh Calvinistic percentage share of 100%.

It has already been shown that the Welsh Calvinistic Methods appeared most strongly entrenched in highly rural/agricultural parishes. This examination of landholding suggests that they could also be strongest in the more 'close' parishes, a situation which would very seldom arise in England. The question remains as to why Welsh Calvinistic Methodism was strongest where the interests of the landowner were also presumably strongest. It is interesting to note the observations of A.M. Urdank with relation to Gloucestershire:

'the region was dominated by large landowners and in this respect did not conform to the standard model of a district likely to foster Dissent. In fact, local Whig landowners were sympathetic to Nonconformity, partly on the grounds that it offset the weakness of the established church in the region. ... The present study does not suggest, however, that Nailsworth's Dissenters were completely *subordinated* to established authority. On the contrary, it argues that the particular form tenurial relations assumed in this neighbourhood served to encourage relatively independent attitudes even

in which this research question could be investigated with quantitative methods. One could either code each of the landholding categories as a dummy variable and include these variables in a regression analysis with religious diversity as the dependent variable and the key socio-economic variables as predictor variables. An alternative method is to carry out a general factorial analysis of variance to compare and contrast the effects of landholding on religious diversity (analysis of variance) with the net effects of the key socio-economic variables (linear regression). Both methods show a strong influence of landholding over and above the undoubted influence of landholding upon the differentials in socio-economic characteristics.

among the dependent, and that this circumstance was crucial for the growth of the Calvinist churches of the vale.' [His italics].⁶⁹

Could similar arguments be applied to central and north Wales? It is interesting to note that the Welsh situation was not only distinctive from the point of view of dissent, it was also observed in the previous section that the Anglican Church attracted a greater rate of adherence in the more industrial and urban parishes. It can also be observed that Anglican support displayed a contrasting relationship with landholding in the three Welsh counties.⁷⁰ Of the 101 more 'close' parishes 22 (21.8%) reported no Anglican attendances, only 14 (13.8%) reported an Anglican percentage share of 50% or more, and 13 (12.8%) reported an Anglican monopoly of attendances. In contrast, of the 60 more 'open' parishes, only 9 (15%) recorded no Anglican attendances, and 11 (18.3%) reported an Anglican percentage share of 50% or more, and 9 (15%) recorded an Anglican 'monopoly'.

To understand the relationship between landholding and religion in north Wales, it is useful to look back to the arguments presented at the Welsh Land Commission of the late nineteenth century.⁷¹ A Royal Commission examining the landholding issue in Wales was established after several decades of lobbying, most notably from the North Wales Property Defence Association. The nature of much of the protest revealed the importance of religion as a vehicle for focusing protest over land - in terms of calls for disestablishment and tithe protest.

A detailed (if rather one-sided) contemporary account of the workings of the commission was offered by J.E. Vincent.⁷² In an attempt to anticipate the findings of the Welsh Land Commission he stated that:

⁶⁹ Urdank, *Religion and Society*, p.309.

⁷⁰ One can deduce from table 53 that the Anglican percentage share (the reciprocal of the total dissenting percentage share) was higher the more subdivided the landownership.

⁷¹ The North Wales Property Defence Association asked for a Royal Commission examining landownership in Wales in 1892. The Welsh Land Commission came into being in 1893. The Commission was made up of nine Commissioners and was chaired by Lord Carrington.

⁷² J.E. Vincent, *The Land Question in North Wales* (London, 1896).

'Industry has never been thwarted. On the contrary, it had been encouraged by the great landowners. Lord Penrhyn and Mr. Assheton Smith do but follow the traditions of their predecessors in employing armies of men at the famous quarries. Sir Watkin Williams Wynn and other great landowners have spared no effort to develop the mineral resources'.⁷³

Nevertheless, allegations abounded of landlords favouring Anglican tenants, and such claims were not so entirely without foundation as Vincent implied. Indeed, letters such as that printed in the Conservative North Wales Chronicle tended to fuel such allegations:

'It is rumoured that the desirable farm called Hafod (200 acres) in this parish is now vacant. It is hoped that Sir Richard Bulkeley will this time give the preference to a Conservative and a thorough Churchman should one apply for the farm, otherwise the Church in the place will suffer considerably'.⁷⁴

To examine the Welsh landholding situation would require much more attention and expertise than can be afforded in this thesis. However, one conclusion can be drawn without expertise in the Welsh landholding issue. Even if the landowners of north Wales were not quite the saintly figures portrayed by Vincent, if they did not lack the desire to exclude dissenting chapels and tenants, they must have frequently lacked the power. What lies beyond question is the very high level of dissenting adherence and the huge number of dissenting chapels constructed in the nineteenth century. Thus, in the 1880s, the Penrhyn estate recorded leases for 31 dissenting chapels belonging to four separate denominations, the Gwydyr estate recorded 14 Chapels (and the fact that no case for the site of a chapel had been refused), the Vaynol estate recorded twelve chapels, and the estates of Sir Watkin Williams Wynn recorded 36 Chapels.⁷⁵

The evidence of the 1851 Religious Census suggests that there can have been little effective prejudice in the selection of tenant farmers. The very strength

⁷³ Vincent, Land Question, p.6.

⁷⁴ Vincent, Land Question, p.180.

⁷⁵ These figures are taken from, evidence to Welsh Land Commission as reported in Appendix III of Vincent, Land Question, pp. 314-315.

of dissent in the rural areas of north Wales suggests that effective discrimination in the selection of tenants must have been the exception.

The more common presence of dissent and greater levels of dissenting support (not to mention the weakness of the Anglican church) in parishes with more concentrated landholding is suggestive that some landlords took few, if any, steps to discourage dissent. Indeed, there is evidence that a considerable number of landlords, and amongst them the most influential, gave dissenting chapels favourable leases. The parish of Llandegai, almost entirely in the hands of the Pennant family (the Penrhyn estate) serves as a useful illustration. Although the Pennant family had paid for the restoration of the parish church, and in 1861 built the Church for St. Anne's Chapelry, the 1851 Religious Census revealed that the parish church and the Bethesda Chapelry recorded a total of only 477 attendances. The two independent chapels recorded 567 attendances, the two Wesleyan Methodist Chapels recorded 1,271 attendances, the two Welsh Calvinistic Methodist Chapels recorded 643 attendances, and the 'other isolated congregation' recorded 390 attendances. As a result, the Anglican index of attendances stood at only 14% whilst the dissenting index of attendances stood at 84.5%.

The evidence submitted to the Welsh Landholding Commission in the early 1890s reveals that the Penrhyn estate cannot have been effective in any hostility to dissent. Thus the Wesleyan Methodist Chapels at Tregarth, Sling, Llandegai Mountain; the Calvinistic Methodist chapels at Penygroes; and the Congregational chapels at Sling, all had their rents paid by Lord Penrhyn.⁷⁶ Many other chapel sites had been bought by Lord Penrhyn, and he had paid £300 towards the Calvinistic Methodist Chapel at Llandegia mountain. In total, of the 32 chapels on the estate, the denomination concerned were only paying ground rent in 14 cases.

In similar vein one could quote the example of Bardsey Isle (extra-parochial), owned by Lord Newborough, which was notable for a Welsh Calvinistic

⁷⁶ Evidence to Welsh Land Commission. Published in Appendix III of Vincent, Land Question, pp. 314-315.

percentage share of 100%. Also notable was the parish of Bodvean, held by only two landowners, and the seat of Lord Newborough. It contained just 418 people; 80% of families were employed in agriculture, less than 13% of families were employed in trade, and the living was a Rectory. These are the sorts of conditions which, in England, would have been strongly suggestive of Anglican dominance, yet the Church of England recorded no attendances on Census Sunday.⁷⁷ One could quote other examples of strongly agricultural parishes held 'amongst a few' which, nevertheless, displayed very marked Anglican weakness and Welsh Calvinistic Methodist strength.⁷⁸

Whether these signs of toleration stemmed from a genuine sympathy with dissent or reflected a pragmatic and grudging acceptance cannot be gauged from such data. Thus it remains to be seen whether, as Urdank noted in Gloucestershire, dissent was encouraged because it filled a gap in support for the established church. It may be that some landowners tolerated a single dissenting denomination rather than encouraged all dissenting denominations. This would account for the finding that religious diversity tended to be lower in the more 'close' parishes while dissenting strength tended to be higher. What is certain is that these three counties of north and west Wales differed from the English counties and Monmouthshire in the scale of dissenting strength in 'close', agricultural parishes.

⁷⁷ It seems unlikely that many residents attended Anglican worship outside the parish, since the Welsh Calvinistic Methodists attracted 214 worshippers (at both afternoon and evening service), and 102 Sunday scholars (in the morning).

⁷⁸ The following parishes contained an Anglican percentage share of less than 12%, a Welsh Calvinistic Methodist percentage share of over 70%, and more than 80% of families in agriculture:

Anglesey: Llanfigael, Llangwyllog, Llaniestyn.

Caernarvonshire: Aberdaron, Bardsey Isle, Bodvean, Llangwnadle, Penrhos.

Chapter 8

Conclusion

The aims of this thesis were twofold: to test Berger's theory against the best available empirical evidence, and to use Berger's theory to help explain religious change in England and Wales between 1676 and 1851. To simplify very broadly, the first part of the analysis (Chapters 4 and 5) related principally to debates within sociology, and the second (Chapters 6 and 7) to debates within social history and historical geography (though the two parts were often intertwined). In this brief conclusion I wish to draw out the threads connecting these two parts of the thesis.

A re-interpretation of religious change.

This thesis has attempted a reworking of the 'pessimist' school of social history. I reject the 'pessimist' explanation of religious decline being a simple and direct response to urbanisation and industrialisation. However, I also argue that historians should not deny or leave unaddressed the theme of religious decline. In the context of England and Wales, the overall trend of religious decline in the last hundred years has not proved local, temporary or reversible.

I have sought to provide an explanation for the onset of this decline, and in so doing I have addressed the reasons underpinning the rise of religious pluralism and the growth of religious vitality which preceded this decline. Rather than arguing that religious practice would be lower in proportion to the degree of urban-industrial development (the interpretation usually equated with 'secularisation'), I have suggested that religious pluralism would be higher in proportion to the degree of urban-industrial development (Hypothesis (i)). I have demonstrated that considerable empirical evidence exists to support this hypothesis in 1851, and I have proposed (but not substantiated) that the intensity of religious pluralism should have matched the changing patterns of industrial activity throughout the seventeenth and eighteenth centuries. This latter proposition remains in need of

substantiation. One could piece together parochial religious and socio-economic characteristics from earlier sources to attempt this.

The second core proposition - that religious pluralism, in the long-term, was a disconfirming influence on religious belief and practice - also invites further research. This thesis investigated this 'disconfirming' effect between 1676 and 1851 (Hypothesis (ii)), but it was noted that the analysis was blind to any changes in the geography of religious pluralism after 1676. If Berger's theory is correct, one would expect that the disconfirming strength of religious pluralism would have lain not only in proportion to the intensity of religious pluralism at any one point in time, but also in relation to the time-period during which this intensity of religious pluralism existed. In the context of this thesis, the Evans List of 1715, when combined with other sources, has the potential to piece together the parochial geography of religious pluralism some 39 years after the Compton Census. Such information would allow a more refined analysis of the effects of both the *intensity* and the *duration* of religious pluralism upon the subsequent patterns of religious practice.

In defence of secularisation theory.

This thesis was written at a time of an apparent paradigm-shift within the sociology of religion. The 'old' (secularisation) paradigm has sustained a continued, and largely unanswered, barrage of criticism from American sociologists, who have advocated a 'new' rational choice paradigm for the sociology of religion. This thesis has addressed some of the sloppy scholarship characteristic of much of the recent dismissal of the secularisation 'paradigm'. However, it is important to stress that in so-doing I do not seek to defend all aspects of secularisation theory.

In this thesis I have attempted to show that Berger's theory of religious pluralism appeared strongly supported by the empirical evidence of religious change in England and Wales between 1676 and 1851. Also, I have attempted to show that of all the competing historical and sociological explanations (including

the rational choice perspective), Berger's appears by far the most congruent with the empirical evidence. However, I am not proposing that Berger's can be viewed as a universal theory of religious change. I would argue that Berger's theory is both historically and geographically limited in its application.⁷⁹

The geographical limitations to Berger's theory stem from his view of the nature and effects of religious pluralism. In chapter 7 I drew upon the observation of S. Bruce that:

'In some settings diversity was created by migration as peoples with different cultures mingled with one another. In others the expansion of the political unit brought a range of cultures into an emerging nation-state. A third source of cultural [and religious] pluralism was the internal fragmentation of the dominant culture ... the social psychological impact [of this third type] seems greater than in the other two instances.'⁸⁰

My interpretation is that Berger's theory is very much a theory of religious pluralism as an expression of the 'internal fragmentation' of the dominant culture (in response to modernity). For this reason his theory is far more applicable to much of Europe than to the United States. Not only was the United States constitutionally born into religious toleration and pluralism, but this pluralism itself resulted from colonial expansion and subsequent multinational immigration (rather than the 'internal fragmentation' of the dominant culture). This is not to say that Berger's theory loses all relevance, since, if he is correct, the descendants of immigrants who had been socialised under a single religious 'sacred canopy' should tend to lose faith in a religiously plural host country. However, the United States is a context in which it is extraordinarily difficult to unpack the three types of pluralism; the histories and geographies of colonisation, immigration and industrialisation are intertwined at almost every point.

⁷⁹ The historical limits of Berger's theory lie beyond the realm of this thesis. Very broadly, I would argue that while the rise of religious pluralism may have been the most sociologically meaningful religious change between 1676 and 1851, I would argue that the most meaningful process in the more recent history of the United Kingdom is the *privatisation* of religion.

⁸⁰ S. Bruce, Religion in the Modern World: from Cathedrals to Cults (Oxford, 1996), p.45.

In England and Wales, the greatest period of growth in religious pluralism - the rise of new dissent - was contemporary and co-spatial with urbanisation and industrialisation. Under these circumstances religious pluralism reflected the growing complexity of the division of labour, the cultural and ethnic diversity resultant from migration and immigration, as well as the longer-run presence of sub-cultures subsumed by the expanding nation-state. In other words, all three types of religious pluralism proposed by Bruce were visible, but I would argue that they were not so inter-twined to prevent their distinctive effects being visible in empirical data.

Towards a geography of religious pluralism.

As already noted, it is under conditions of the 'internal fragmentation' of the dominant culture that one would expect the disconfirming power of religious pluralism to be at its highest, since religious choices were much more likely to confront each and every individual. In Berger's language, it becomes increasingly difficult for the adherents of any one religious group to remain '*entre nous*'. It was argued that conditions of internal fragmentation pertained to much of England (i.e. the 'Anglican' region) in 1851, and that certain relationships appear entirely explicable as a result. In this 'Anglican' region religious pluralism and dissenting strength were extremely closely related. Both increased in proportion to the degree of urban and industrial development. Religious pluralism appeared negatively related to the index of attendances, and the index of attendances appeared negatively related to population density. As has been made clear, all these observations are entirely congruent with Berger's theory of secularisation, and most are discordant with competing interpretations of religious change.

When religious pluralism was strongly connected with ethnicity, for example the immigration of Irish Catholics, this could, as Bruce noted, act to reinforce the identity and unity of the dominant religious culture. Under these circumstances, religious pluralism could appear vitalising. It was argued that the most visible form of these conditions pertained along the 'cultural borders' between Wales and England, Cornwall and Devon, and the English border with Scotland. In these

areas diversity appeared uniquely high relative to the degree of urban and industrial development. Also, religious pluralism and religious practice appeared positively related, and religious practice tended to increase in proportion to population density. In other words, the patterns of religious behaviour did not fit well Berger's theory. It is argued that this is because Berger's theory is not as applicable to the nature of religious pluralism in these regions.

Lastly, religious pluralism could reflect the presence of a distinctive sub-culture, one resulting from the expansion of the nation-state. It was argued that the growth of religious toleration and dissent allowed such sub-cultures to find a distinctive dissenting voice. Under these conditions dissent was very strong, but diversity quite low, since the sub-culture tended to be unified through support of a single dissenting denomination. It is argued that a form of these conditions pertained in Cornwall, south Wales, and, most visibly of all, north Wales. In these areas, as in the cultural borders, religious pluralism was not disconfirming, since it provided an integral part of regional and national identity within the United Kingdom.

Two factors require greater attention to strengthen the arguments presented in this thesis: the role of migration, and the division of labour. While the registration-district data were sufficient to show that the relationships between religious pluralism and religious practice and the socio-economic environment, were distinctive (from the 'Anglican' region) in the regional dissenting monopolies and their borders, it remains to be proven that the essence of religious pluralism was itself distinctive in the manner I have proposed.

Crucially, it has been argued that religious pluralism in the Anglican 'region' was typified by the developing industrial division of labour, such that both the emerging sectors of the economy, and, more importantly, the increasing specialisation of employment within each sector, were associated with a growing diversity of religious affiliation. It is necessary to show that religious pluralism in the 'Anglican' region did reflect the greater division of labour in the more urban and industrial areas and not simply the greater presence of religiously 'exotic' migrants

and immigrants in these areas. To do this one needs to expand upon the existing research of Margaret Spufford, Michael Watts, and others, and to piece together the occupational basis of religious affiliation. One also needs to examine the role of migration and immigration in the production of religious diversity, especially in industries which were more likely to attract long-distance migrants (such as mining).

In the regional dissenting monopolies, I have argued that religious diversity was more a product of the longer term presence of a distinctive regional sub-culture, a sub-culture for which dissent provided a religious focus for cultural and regional identity. In these areas one needs to ascertain that religious affiliation was caught up with regional and cultural identity (and, in the case of Wales, national identity), and was not simply the product of regionally distinct employment (which, for example, could be argued with respect to mining in Cornwall). Research on Wales has demonstrated a strong link between dissent and the Welsh Language. The case needs to be proven for a direct link between Wesleyan Methodism and the Cornish sense of identity.

In the borders of these regional dissenting monopolies, I have argued that religious pluralism marked the long-term mixing of the dominant culture with the religiously distinctive regional sub-culture; local migration across both sides of the 'border' served to produce a band of very high religious diversity - a diversity above and beyond any diversity resulting from occupational heterogeneity.

In short, I have attempted to lay the groundwork for a resurrection of secularisation theory in the face of its rumoured demise. In so doing I have proposed certain insights into the religious history of England and Wales. It is clear that to take both these aspects of the work further requires considerable additional research. As I have indicated, one needs first to piece together more completely the geography of religious pluralism in-between 1676 and 1851. Secondly, one needs to conduct further research into the links between occupational status and religious affiliation, in order to attempt to separate religious pluralism which reflected the division of labour from religious pluralism which reflected migration

and/or distinctive regional sub-cultures. Only once this has been done can one conclude more certainly whether Berger's theory of secularisation does appear to pertain to certain types of religious pluralism.

A theory such as Berger's is never going to be easy to 'prove' (or 'disprove') with empirical evidence. However, I would argue that this is not a reason for ducking the challenge. It would be a pity if the selection of theory in the social sciences was to be based solely on the ease of empirical verification. Such a route leads to little being explained and much being explained away.

Appendix 1

The Computerised Dataset and Geographical Information System: Sources of Data and Description of Variables

Section 1: Sources

(a) Sources of religious data:

(i) The Religious Census of 1851.

In addition to other information, the Religious Census of 1851 aimed to provide comprehensive returns of the following: attendance at religious worship and Sunday school (for morning, noon and evening services), sittings (free and appropriated), and standing room.¹ These returns aimed to cover all Christian denominations (and Jews) for every place of worship in England and Wales.

This information was compiled from the Religious Census returns onto a parish-level computerised database for fifteen selected registration counties. In the counties of Dorset, Lancashire, Leicestershire, Northumberland, Rutland, Suffolk and the East Riding of Yorkshire the microfilms of the original returns were transcribed and computerised.² For the four Welsh counties, the published returns

¹ All the data contained in the original returns of the 1851 Religious Census were computerised *except* the following:

- i. The date when churches or chapels were consecrated, licensed or constructed.
- ii. How Anglican Churches were endowed (Pew rents, fees, dues, etc.).
- iii. The average number of attendants (Anglican returns only).

These three parts of the returns were not used because of the low rate and partial nature of their completion and, with respect to point (iii) above, the data were not seen as useful, as commented upon subsequently.

² The Home Office records are as follows:

Cambridgeshire: HO 129, 185 - 193.

Dorset: HO 129, 268 - 278.

Lancashire: HO 129, 461 - 486.

Leicestershire: HO 129, 408-418.

Northumberland: HO 129, 552 - 563.

Rutland: HO 129, 419-420.

Suffolk: HO 129, 211-227.

East Riding: HO 129, 515 - 524.

were used.³ In Derbyshire the returns compiled, and subsequently published, by M. Tranter were used.⁴ In Sussex and Bedfordshire the published returns were used.⁵

A second database was constructed at the registration-district level using the published Census data.⁶ This database covered all 624 registration districts of England and Wales. The contents of both the parish and registration-district databases are detailed in section 3 of this appendix.

(ii) The Compton Census of 1676.

The Compton Census was a head-count of the estimated number of resident 'conformists', 'dissenters', and 'Papists' by parish. The returns do not survive for the whole of England and Wales. Wherever available, the data from the published returns of the Compton Census were added to the parish-level dataset covering the 15 registration counties already listed.⁷ The problems associated with the Compton data are discussed in Appendix 3 of this thesis.

(b) Sources of socio-economic data:

(i) The 1831 decennial census.

The 1831 Census was seen as preferable to the 1851 Census in its recording of occupational data and therefore forms the backbone of the parish-level socio-economic data. The 1831 Census recorded occupational data under very simple headings, these being principally based on the number of 'families' (in 'trade', 'agriculture', or the 'other' category), and the percentage of the male

³ I.G. Jones and D. Williams, A Calendar of Returns Relating to Wales, Volume I, South Wales (Cardiff, 1976); I.G. Jones, A Calendar of Returns Relating to Wales, Volume II, North Wales (Cardiff, 1981).

⁴ M. Tranter (ed.), The Derbyshire Returns to the 1851 Religious Census (Chesterfield, 1995).

⁵ J.A. Vickers (ed.), The Religious Census of Sussex, 1851 (Lewes, 1989); J. Burg (ed.), The Ecclesiastical Census, March 1851, Bedfordshire (Ampthill, 1975).

⁶ The 1851 Census of Religious Worship was reprinted in the Irish University Press series of British Parliamentary Papers, Population, Vol. 10 (Shannon, 1970).

⁷ The Compton returns were published in A. Whiteman (ed.), The Compton Census of 1676: a Critical Edition (Oxford, 1986).

population over twenty years of age engaged in certain major categories of occupation ('retail/handicraft', 'manufacturing', 'capitalist', 'agricultural labourer', etc.). In 1841 these classificatory systems were abandoned in favour of a more encyclopaedic typology of occupational status. As Armstrong has noted, the 877 occupations recorded were 'presented in alphabetical order, with very little attempt at further arrangement.'⁸ Even though the system was refined somewhat in 1851, there remained 17 classes and 91 sub-classes of occupational groups. Such groups and sub-groups were a mixture of status and employment type. Not until 1911 was personal occupation separated from industrial role, and not until 1948 was the Standardised Industrial Classification developed.

None of the nineteenth-century census data is ideal, but with all due caution, the 1831 data can allow a simplistic, but broadly accurate, description of parochial employment characteristics.⁹ Although undoubtedly flawed and simplistic this data was seen as providing the most clearly interpretable and acceptable descriptors of parochial occupational profiles.¹⁰ The 1831 data used in this thesis is described in section 2 of this appendix.

(ii) The 1851 decennial census.

The 1851 census was used to measure the number of people and houses and parish areas. Figures concerning the number of men and women were also taken for 1811 and 1831 from the 1851 census.¹¹ From such data, key variables relating to population density, population growth rates, sex ratios, and household sizes were compiled, as outlined in section 2 of this appendix.

⁸ W.A. Armstrong, 'The use of information about occupation', in E.A. Wrigley (ed.), Nineteenth-Century Society: Essays in the Use of Quantitative Methods for the Study of Social Data (Cambridge, 1972), pp. 191-310, p. 193.

⁹ For an introduction to the classification of occupational data in the decennial censuses of the nineteenth century, see Armstrong, 'Information about occupation'.

¹⁰ To use the 1841 or 1851 data would have required many thousands of extra 'input hours' for data entry. To transform the data into comprehensible and useful descriptors of parochial occupational characteristics would have involved a considerable simplification of the data, and any such simplification would have hinged upon value judgements, and thereby invited criticism.

¹¹ The 1801 demographic data were felt to be too inaccurate.

(iii) The Imperial Gazetteer.¹²

In common with the numerous gazetteers of the nineteenth century, the Imperial Gazetteer provided a description of the natural and social characteristics of all but the smallest settlements of places in England and Wales. The Imperial Gazetteer was used to record several variables in the parish dataset: the value of real property, the value of the living, the type of living (perpetual curacy, vicarage, or rectory), and whether accommodation was provided with the living. The nature of parochial landholding was also recorded (this was recorded in the gazetteer as 'in one hand', 'amongst a few', 'subdivided', and 'much subdivided').¹³

(iv) The Poor Law returns of 1832-4.

The value of poor relief for each parish was computerised. The figures were taken from the published poor law returns of 1835-1837, covering the final years of the old poor law administration.¹⁴

(v) Sources for the G.I.S..

The digitised parish boundaries were based upon early twentieth-century Ordnance Survey County maps (which were printed at the scale of half a mile to the inch). These were traced to form base maps. The Phillimore Atlas and Index of Parish Registers was used to clarify remote parts of parishes, chapelries, and extra-parochial areas.¹⁵ The accuracy and date to which the Phillimore maps apply to vary by county. In general, the Phillimore maps appear to be most accurate for the end of the nineteenth century.¹⁶ In this way it is clear that the county-level parish maps produced for this project are not absolutely accurate for either 1676 or

¹² J.M. Wilson, The Imperial Gazetteer of England and Wales, (Edinburgh, n.d. 1866-1874).

¹³ The nature of parochial landholding is the focus of section 7.4 of this thesis.

¹⁴ Annual Reports of the Poor Law Commissioners, (First, Second and Third, 1835-37).

¹⁵ C.R. Humphery-Smith (ed.), The Phillimore Atlas and Index of Parish Registers (Chichester, 1984).

¹⁶ This is the opinion of the cartographic expert, Dr R. Oliver, presented at a workshop in the historical application of G.I.S. held at the offices of the Joint Research Council, Covent Garden, September 1996.

1851, but it is doubtful whether the slight errors involved affect interpretation in any way.

The registration district boundaries were digitised from the maps published in the abstracts of the 1851 decennial census.¹⁷ Again, the digitised maps are not of absolute accuracy, but at the scale of printing any inaccuracies are all but undetectable.

Section 2: The Dataset and G.I.S. Described

(a) The parish dataset and G.I.S.:

(i) Spatial coverage of the dataset.

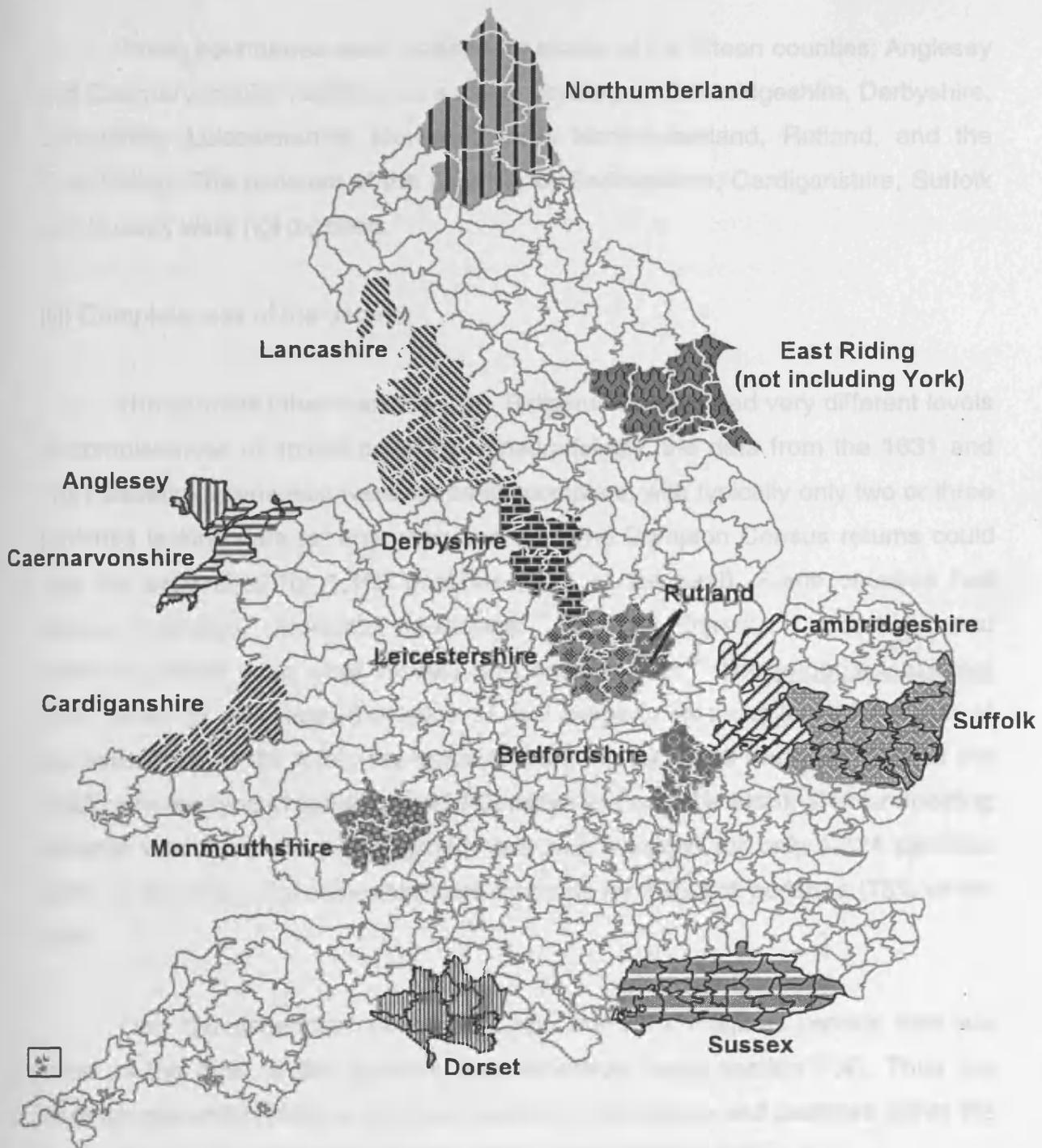
The dataset was initially constructed from the 1851 Religious Census, which, being a rigorously implemented survey, yielded an almost complete coverage of the parishes of the 15 selected registration counties. The parish-level data amassed from the other sources was then added to this dataset. In two cases - Cambridge and Ipswich - a plethora of small urban parishes were amalgamated into total figures for the whole town.¹⁸ Also, the many parishes of the York registration district were completely excluded from the registration county of the East Riding. Other than these three exceptions, the dataset represented, as fully as possible, the exact parochial coverage of the 15 counties, which combined contained some 2,432 parishes and extra-parochial places.¹⁹ The registration districts for which parish-level data were gathered are shown in map 1.

¹⁷ The 1851 Decennial Census was reprinted in the Irish University Press series of British Parliamentary Papers, Population, Vols. 6 and 7 (Shannon, 1970).

¹⁸ The rationale behind this amalgamation of small urban parishes is given in section 3.1 of this thesis. The Cambridge parishes were also amalgamated, and the York parishes excluded, in the analysis presented in the related publication, K.D.M. Snell and P.S. Ell, forthcoming, Victorian Religion and the Cultural Regions of England and Wales, (Cambridge, 1988/9).

¹⁹ The original dataset referred to 2,443 parishes. The total of 2,432 refers to the number of cases after the amalgamation of the Ipswich parishes. Extra-parochial places were not always computerised; the decision to include or exclude them depending on the utility of the available data.

Map 1



The registration districts for which parish-level data were compiled

In the case of Lancashire, a few parishes did have Compton data available, but these were not included because no county-level analysis would have been possible with so few parishes.

(ii) Spatial coverage of the G.I.S..

Parish boundaries were digitised for eleven of the fifteen counties: Anglesey and Caernarvonshire (digitised as a single coverage), Cambridgeshire, Derbyshire, Lancashire, Leicestershire, Monmouthshire, Northumberland, Rutland, and the East Riding. The parishes of the counties of Bedfordshire, Cardiganshire, Suffolk and Sussex were not digitised.

(iii) Completeness of the dataset.

The sources other than the 1851 Religious Census had very different levels of completeness of spatial coverage. Unsurprisingly, the data from the 1831 and 1851 decennial censuses were extremely complete, with typically only two or three parishes lacking data for any given variable. The Compton Census returns could only be assembled for 1,463 parishes (60% of the total). Some counties had almost complete Compton coverage, but for Dorset, Lancashire and Northumberland there were virtually no Compton data.²⁰ The Imperial Gazetteer data varied in coverage, the value of real property was available for 2,300 of parishes (95% of the total), the value of the living for 2,118 parishes (87% of the total), and the type of living for 2,284 parishes (94% of the total). The landholding variable was more scantily recorded, and was available for only 1,524 parishes (63% of the total). Poor-law data were available for 1,893 of parishes (78% of the total).

Only the decennial census data and the 1851 religious census data are used in the bulk of the analysis (the exception being section 7.4). Thus the analysis generally refers to the vast majority of the people and parishes within the total 'sampling frame' of the parishes of the 15 registration counties.

²⁰ In the case of Lancashire, a few parishes did have Compton data available, but these were not computerised because no county-level analysis would have been sensible with so few parishes.

(b) The Registration-district dataset and G.I.S.:

(i) Coverage of the dataset and G.I.S..

The registration-district dataset was complete for all 624 registration districts (1851 districts) in England and Wales. The registration-district dataset consists almost entirely of 1851 Religious Census data. The only additional data were the district populations and areas, as taken from the 1851 decennial census.

The registration-district G.I.S. was likewise complete for the whole of England and Wales, including offshore islands where relevant. Map 2 shows the registration-district coverage for England and Wales. The map highlights the registration divisions into which the districts were grouped in the 1851 census.

(c) Problems with 'zero' data:

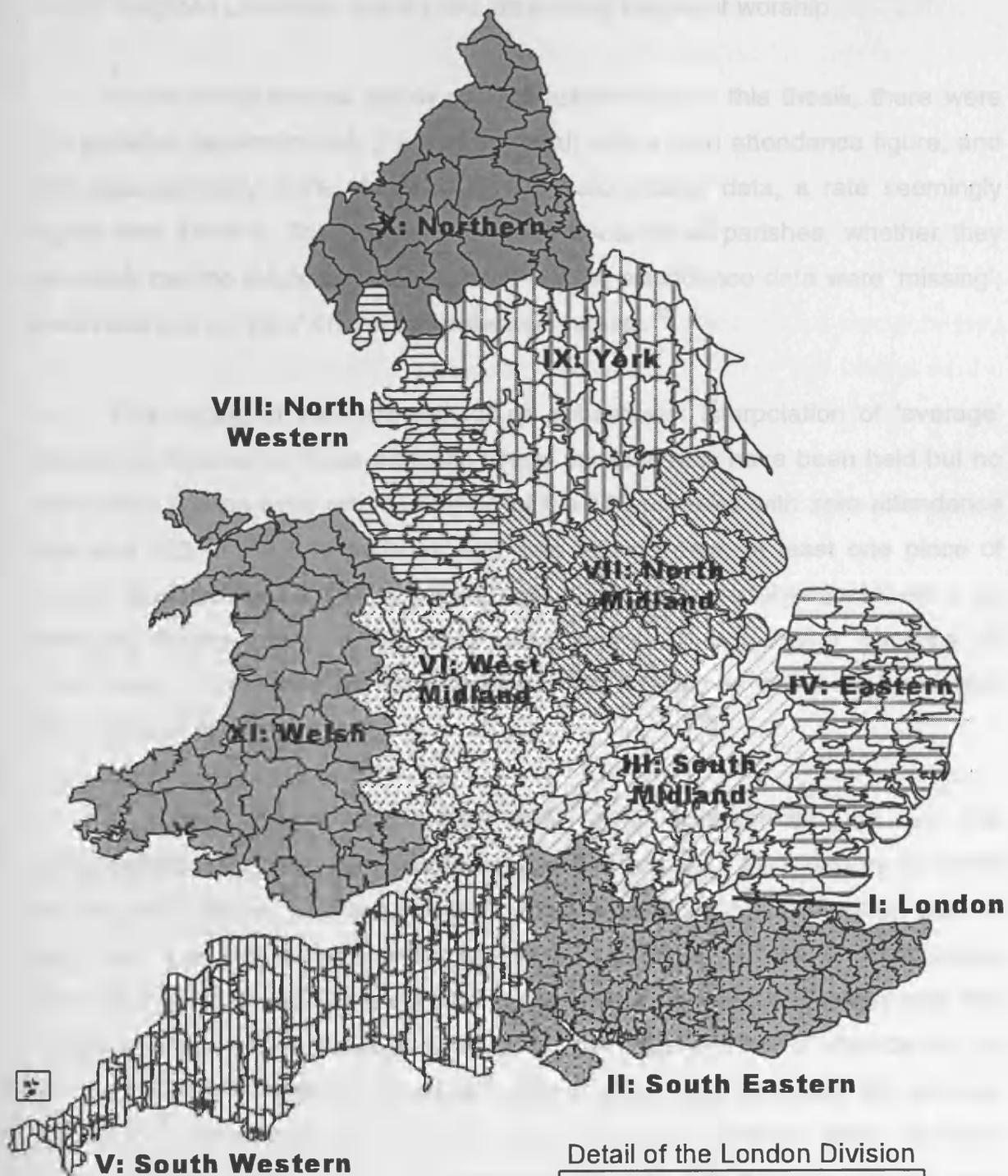
(i) The parish dataset.

A major ambiguity present in the 1851 Religious Census returns and the way they were computerised is the issue of 'zero' data, most importantly, 'zero' attendance data. In the bulk of the analysis reported in this thesis, parishes were excluded in which there existed *some* Religious Census data, but *no* attendance data.

Parishes with 'zero' attendance data presented a problem for the following reasons. First, in some of these parishes, the 'zero' attendance data were no doubt correct, i.e. there were no active places of worship in that parish on Census Sunday. There was, however, a second category of parishes, noted by Mann, in which those making the returns had refused to give attendance data, or it was illegible or absent for some other reason. Mann stated that there were 1,004 known cases for which information could not be attained for attendances and 390 known cases for which neither attendances nor sittings were specified.²¹ To set

²¹ H. Mann, Sketches of The Religious Denominations of the Present Day (London, 1854), p. viii.

Map 2



Detail of the London Division



The registration districts of England and Wales,
by registration division

these figures in context, 1,004 cases represents about 4% of the total returns of 14,077 Anglican Churches and 20,390 'dissenting' places of worship.

In the computerised parish dataset assembled for this thesis, there were 170 parishes (approximately 7.6% of the total) with a zero attendance figure, and 208 (approximately 8.5% of the total) with zero sittings data, a rate seemingly higher than Mann's. This higher rate arose because *all* parishes, whether they genuinely had no religious services, or where the attendance data were 'missing', were recorded as 'zero' on the computerised dataset.²²

This coding of zero allowed for no subsequent interpolation of 'average' attendance figures for those parishes where services may have been held but no attendance figures were returned. In 95 of the 170 parishes with zero attendance data and 133 of the 208 parishes with zero sittings data, at least one place of worship was recorded in the Census returns. It is in these parishes that there is an ambiguity about whether the 'zero' data refers to a genuine absence of attendances (or, more rarely, sittings), or whether it indicates that the returns were incomplete or illegible.

A third category of parishes with 'zero' attendance data (on the computerised database) complicates matters yet further. This category is where the (Anglican) return recorded no attendance figures for Census Sunday, but did record an 'average' attendance figure - as was permitted on the Anglican return form. No such distinction was possible for dissenters (other than Quakers who had a separate return) who were simply asked for 'the usual number of attendances on the Sabbath'. For Anglican churches, returns which only specified the average number of attendances accounted for some of the 95 parishes which recorded 'zero' attendance data on the computerised dataset. The 'average' figures were *deliberately* not recorded on the computerised dataset because it was felt that attendants could be double-counted as a result of services held in 'alternate'

²² This was done to facilitate the creation of derived variables in the Minitab statistical software package prior to the use of the SPSS software package.

parishes.²³ Also, considerable inflation of congregation sizes was likely in such cases,²⁴ as *The Times* commented at the time 'there is no concealment without a motive.'²⁵ In some cases the incumbent only gave the 'average' figure even when a service had been held. In these circumstances one has to wonder if the incumbent was embarrassed by the small size of the congregation upon that day.

As a result of the many ambiguities relating to the 'zero' attendance data - both in the original returns and on the computerised dataset - it was felt most consistent to exclude all 170 parishes with zero attendance on the computerised dataset from the subsequent analysis altogether. The decision was based on the principle that there was less bias inherent in excluding a 'genuine' data record than in including a 'false' record. In short, the parish dataset was essentially recorded as in the enumerators' returns, and no corrections whatsoever were made for missing data.

(ii) Registration-district data.

In the registration-district data, 'zero' attendance data was less of a problem. Where the published Religious Census recorded a place of worship but reported missing attendance/sittings/Sunday scholar data, the corresponding average (mean) figure for the other places of worship of that denomination in that district was interpolated. Where the missing data referred to the only place of worship for that denomination in that registration district, no interpolation was made, because there was no 'average' figure.²⁶

²³ On this point see M.R. Watts, Religion in Victorian Nottinghamshire: The Religious Census of 1851 Vol I (Nottingham, 1988), p. x.

²⁴ A consideration of the high frequency of 'round' figures in the returns is given in R.G.M. Crockett and A. Crockett, 'A method for estimating the degree of "rounding" of returns in historical sources', History and Computing, (forthcoming).

²⁵ This quotation from *The Times* was reported in M. Drake, 'The Census, 1801-1891' in E.A. Wrigley (ed.), Nineteenth-Century Society: Essays in the Use of Quantitative Studies for the Study of Social Data (Cambridge, 1972), pp. 7-46, p.16.

²⁶ This method of interpolation was devised in P.S. Ell, 'An atlas of religious worship in England and Wales: an analysis of the 1851 Census of Religious Worship', unpublished University of Birmingham Ph.D. thesis (1992).

Section 3: The Key Variables in the Datasets

(a) The parish dataset:

In total, many thousands of derived variables were created on the computerised database. Relatively few of these are used in the bulk of the analysis presented in the main thesis. Those used routinely are defined in the following paragraphs.

(i) Religious variables.

Certain minor Christian denominations and the Jews, which were recorded in the 1851 Religious Census, were not recorded in the parish dataset.²⁷ The Jewish data were recorded at registration-district level as outlined subsequently. The Christian denominations not recorded at parish level are listed below. The figure in parenthesis is the total number of congregations recorded in England and Wales in the Religious Census;²⁸ it can be seen just how minor a presence all these denominations had in England and Wales.

Reformed Irish Presbyterians (1)
 Seventh Day Baptists (2)
 Scotch Baptists (15)
 Glassites (6)
 Lutherans (6)
 French Protestants (3)
 Reformed Church of the Netherlands (1)
 German Protestant Reformers (1)
 Greek Church (3)
 German Catholics (1)
 Italian Reformers(1)
 Jews (42)

²⁷ The 'other' category of the Census - 'other isolated congregations' - was recorded on the computerised dataset.

²⁸ See H. Mann, Sketches of the Religious Denominations of the Present Day (London, 1854), Table A, pp. 106-107.

Below are listed all the religious variables which are routinely used in the main body of analysis. Very infrequently other religious variables are used, but these are always defined and described at the relevant point of the main text. The terms 'raw' and 'derived' refer to whether the variable was transcribed directly from the source or calculated through subsequent transformations using the SPSS statistical package. In *all* the following descriptions relating to the parish data, the term attendance(s) refers only to the main act of worship and does not include Sunday scholars.

Key religious variables in the parish dataset:

<u>Name</u>	<u>Description</u>	<u>Source(s)</u>
Raw	Morning attendances for each denomination i.e. 27 separate variables	1851 Religious Census
Raw	Afternoon attendances for each denomination i.e. 27 separate variables	1851 Religious Census
Raw	Evening attendances for each denomination i.e. 27 separate variables	1851 Religious Census
Raw	Unspecified attendances for each denomination i.e. 27 separate variables	1851 Religious Census
Derived	Total attendances (attendances for all denominations at all services listed above)	1851 Religious Census
Derived	Index of total attendances in 1851 ((Total attendances / total population) * 100)	1851 Religious Census
Derived	New dissent index of attendances in 1851 ((all new dissent attendances ²⁹ / total population) *100)	1851 Religious Census

²⁹ The denominations classed as 'new' dissent were *all* the Methodist denominations (including the Bible Christians), and certain non-Methodist movements originating in the eighteenth and nineteenth centuries: the Moravians, Latter Day Saints (Mormons), New Church, and the Catholic and Apostolic Church.

Derived	Old dissent index of attendances in 1851 ((all old dissent attendances ³⁰ / total population) *100)	1851 Religious Census
Derived	index of attendants ³¹ ((attendance at best attended service / total population) * 100)	1851 Religious Census
Derived	Denominations per capita	1851 Religious Census
Derived	Dissenting (all non-Anglican) denominations per capita	1851 Religious Census
Derived	Anglican percentage share of attendances in 1851 ((Church of England attendances / total attendances) * 100)	1851 Religious Census
Derived	Total dissenting percentage share in 1851 ((all non-Anglican attendances / total attendances) * 100)	1851 Religious Census
Derived	New dissent percentage share in 1851 ((all new dissent attendances / total attendances) *100)	1851 Religious Census
Derived	Old dissent percentage share in 1851 ((all old dissent attendances / total attendances) *100)	1851 Religious Census
Derived	Religious diversity measure for 1851 (for a definition see Appendix 4)	1851 Religious Census
Derived	Provision of seating in 1851 (Total seating capacity (all denominations) / total population in 1851)	1851 Religious Census
Derived	Anglican provision of seating in 1851 (Total Anglican seating capacity / total population in 1851)	1851 Religious Census
Derived	Dissenting provision of seating in 1851 (Total non-Anglican seating capacity / total population in 1851)	1851 Religious Census

³⁰ The denominations classed as 'old dissent' were: the Presbyterian Church in England, Independents, Particular Baptists, General Baptists, Baptists unspecified in the 1851 Religious Census (this category also includes a small proportion of General Baptist New Connexion congregations), Quakers and Unitarians.

³¹ This variable could not be calculated entirely accurately in all parishes. Attendance data were combined on the computerised dataset when more than one place of worship existed for a given denomination. However, in the sample of 2,262 parishes used for this analysis, the best attended service figure was entirely accurate for 1,736 parishes (i.e. 77%). As a precaution, the analysis using this variable was carried out using just this sub-sample of 1,736 parishes, but no significant differences were evident.

Derived	Emptiness of 'churches' ³² ((total 'empty seats' (all denominations) at best attended service / total seating capacity) *100)	1851 Religious Census
Derived	Emptiness of Anglican Churches ³³ ((total 'empty Anglican seats' at best attended service / total Anglican seating capacity) * 100)	1851 Religious Census
Derived	Emptiness of 'dissenting chapels' ³⁴ ((total 'empty non-Anglican seats' at best attended service / total non-Anglican seating capacity) * 100)	1851 Religious Census
Derived	Dissenters as a percentage of 'inhabitants' in 1676 ³⁵	Compton Census
Derived	Papists as a percentage of 'inhabitants' in 1676	Compton Census
Derived	Conformists as a percentage of 'inhabitants' in 1676	Compton Census
Derived	Religious Diversity measure in 1676 (for a definition, see Appendix 4)	Compton Census

(ii) Socio-Economic variables.

The socio-economic variables are listed below. Those marked with an asterisk (*) comprise what are labelled as the 18 'core' socio-economic variables referred to in the main thesis.

Key socio-economic variables in the parish dataset:

<u>Type</u>	<u>Description</u>	<u>Source(s)</u>
Raw	Total population in 1811	1851 Census
Raw	Total population in 1831	1851 Census
Raw	Total population in 1851	1851 Census
Raw	Parish area in 1851	1851 Census

³² This variable was not entirely accurate for the reasons outlined with respect to the 'index of attendants'.

³³ This variable was not entirely accurate for the reasons outlined with respect to the 'index of attendants'.

³⁴ This variable was not entirely accurate for the reasons outlined with respect to the 'index of attendants'.

³⁵ Appendix 3 details the corrective procedures applied to the Compton data in this thesis.

Raw	Type of landholding	<u>Imperial Gazetteer</u>
Derived*	Mean annual population growth rate 1811-1831	1851 Census
Derived*	Mean annual population growth rate 1831-1851	1851 Census
Derived	Mean annual population growth rate 1811-1851	1851 Census
Derived*	Percentage of families in agriculture in 1831	1831 Census
Derived*	Percentage of families in trade manufactures or handicraft in 1831	1831 Census
Derived	Percentage of 'other' families in 1831	1831 Census
Derived*	Mean household size in 1851 ((population (1851) / inhabited houses (1851))	1851 Census
Derived*	Number of males per hundred females in 1811 (i.e. sex ratio in 1811)	1851 Census
Derived*	Number of males per hundred females in 1851 (i.e. sex ratio in 1851)	1851 Census
Derived	Estimated mean annual population growth rate 1676 to 1811	Compton / 1851 Census
Derived*	Population density in 1851 (population per square kilometre)	1851 Census
Derived*	Capitalists, bankers, professional and other educated men as a percentage of the total population in 1831	1831 Census
Derived*	Agricultural labourers as a percentage of the total population in 1831	1831 Census
Derived*	Non-agricultural labourers as a percentage of the total population in 1831	1831 Census
Derived*	Percentage of the population employed in manufacture or manufacturing machinery in 1831	1831 Census
Derived*	Percentage of the population engaged in retail trade or handicraft as masters or workmen in 1831	1831 Census
Derived*	Total servants as a percentage of the total population in 1831	1831 Census
Derived*	Ratio of male to female servants in 1831	1831 Census
Derived*	Occupiers not employing labourers as a percentage of all occupiers in 1831	1831 Census
Derived*	Occupiers employing labourers as a percentage of the total population	1831 Census
Derived*	Total occupied population as a percentage of the total population in 1831	1831 Census

(b) The registration-district dataset:

The registration-district dataset consisted almost entirely of the published results for the 1851 Religious Census. The only socio-economic data was the 1851 population and area (to allow calculation of the population density).

(i) Religious variables.

The registration-district religious data differs from the parish-level data in three important ways. Firstly, the attendance data were published with attendances at worship and Sunday school combined. Secondly, the attendance data were published with all Baptist data aggregated under the heading of 'total Baptists'. Thirdly, certain of the very small denominations were excluded from the computerised dataset. In *addition* to the denominations excluded from the parish-level dataset (as listed previously),³⁶ the denominations listed below were excluded from the registration-district dataset. Again, the figure in parenthesis is the total number of congregations recorded for that denomination in England and Wales in the Religious Census of 1851.³⁷

Moravians (32)

Isolated congregations (539)

Catholic and Apostolic Church (32)

It can be seen that with the exception of the 'isolated congregations' these denominations were again very small. The isolated congregations were not recorded because it was 'other' category of the Religious Census. Since one could not satisfactorily classify an unknown denomination (as Protestant or Catholic, old dissent or new dissent, etc.), this category was not recorded on the computerised dataset.³⁸

³⁶ The Jews *were* recorded at registration-district level.

³⁷ The figures are taken from H. Mann, Sketches of the Religious Denominations of the Present Day (London, 1854), Table A, pp. 106-107.

³⁸ The primary role of the registration-district data was to help describe and visualise the broad geography of religion in 1851, which the recording of 'isolated congregations' would have done little to clarify. The explanation of this geography is always based upon a parish-level analysis which included these 'isolated congregations'.

The religious variables contained in the registration-district dataset are listed below.

Key religious variables in the registration-district dataset:

<u>Type</u>	<u>Description</u>	<u>Source(s)</u>
Raw	Total attendances for each denomination i.e. 22 separate variables	1851 Religious Census
Derived	Total attendances (attendances for all denominations combined)	1851 Religious Census
Derived	Index of total attendances in 1851 ((Total attendances / total population) * 100)	1851 Religious Census
Derived	Anglican index of attendances in 1851 ((Anglican attendances / total population) * 100)	1851 Religious Census
Derived	Total dissenting index of attendances in 1851 ((all non-Anglican and non-Jewish attendances / total attendances) * 100)	1851 Religious Census
Derived	New dissent index of attendances in 1851 ((all new dissent attendances ³⁹ / total population) *100)	1851 Religious Census
Derived	Old dissent index of attendances in 1851 ((all old dissent attendances ⁴⁰ / total population) *100)	1851 Religious Census
Derived	Denominations per capita	1851 Religious Census
Derived	Dissenting (all non-Anglican and non-Jewish) denominations per capita	1851 Religious Census
Derived	Anglican percentage share of attendances in 1851 ((Church of England attendances / total attendances) * 100)	1851 Religious Census
Derived	Total dissenting percentage share in 1851 ((all non-Anglican and non-Jewish attendances / total attendances) * 100)	1851 Religious Census
Derived	New dissent percentage share in 1851 ((all new dissent attendances / total attendances) *100)	1851 Religious Census

³⁹ The denominations classed as 'new' dissent were *all* Methodist denominations (including the Bible Christians), the New Church (Swedenborgians), and the Latter Day Saints (Mormons).

⁴⁰ The denominations classed as 'old' dissent were the Independents, total Baptists (which included the General Baptist New Connexion), Quakers, Unitarians, and the Presbyterian Church in England.

Derived	Old dissent percentage share in 1851 ((all new dissent attendances / total attendances) *100)	1851 Religious Census
Derived	Religious diversity measure for 1851 (for a definition see Appendix 4)	1851 Religious Census
Derived	Provision of seating in 1851 (Total seating capacity (all denominations) / total population in 1851)	1851 Religious Census

(ii) Socio-Economic variables.

As already stated, the registration-district dataset was almost entirely comprised of religious data. The three additional socio-economic variables are listed below.

Key socio-economic variables in the registration-district dataset:

<u>Type</u>	<u>Description</u>	<u>Source(s)</u>
Raw	population in 1851	1851 Census
Raw	area in 1851	1851 Census
Derived	Population density in 1851 (population per square kilometre)	1851 Census

Appendix 2

An Examination of the Accuracy of the Parish-Level Religious Dataset and an Investigation of the Accuracy of the 1851 Religious Census Attendance Data

The accuracy and meaning of the 1851 religious data are clearly central to much of this thesis, and chapter 3 examines many of the issues raised by the data. This appendix is concerned with the accuracy of the 1851 Religious Census data in general, and of the parish dataset in particular. The first section tests the completeness of the parish-level dataset by comparing it with the registration-district data. The second section compares the 1851 returns in Leicestershire with an earlier source - the 1829 Religious Returns. The third section is a technical consideration of the possible margins of inflation of the actual congregation sizes revealed by the high incidence of 'round' numbers in the returned congregation estimates.

Section 1: The Accuracy of the Parish-Level Dataset: a Comparison with the Registration-District Dataset

While the parish data were compiled from the original returns of the 1851 Religious Census, the registration-district data were compiled from the published census (see Appendix 1 for details of the two datasets). A comparison of the total figures obtained for the parish-level data with the corresponding 147 registration districts forms an extremely useful indicator of any systematic inconsistencies between the published census results and the original returns.

A moderate shortfall in the parish-level attendance and sittings totals (compared with the corresponding registration-district totals) was expected. This is because no methods of interpolation were carried out with the parish data. For the registration-district dataset, when the published Religious Census recorded a place of worship, but the corresponding attendances and/or sittings data were missing, the average figures for that denomination in that district were interpolated as described in Appendix 1. The parish-level dataset was deliberately set up to be an

accurate record of exactly what was recorded in the original returns, and so there was no interpolation of any 'missing' figures.

Table 1 compares the parish and registration district totals of some of the key variables. One can see that the total attendance and sittings figures of the parish dataset were between 91% and 92% of the corresponding registration-district totals. Moving down the table, one can observe that the Anglican shortfall was greater than the non-Anglican shortfall - in both sittings and attendances. The greatest shortfall of all was in Anglican attendances, for which the parish-level total was only 87.1% of the registration-district total. Part of the reason for this shortfall is probably because the 'average' attendance figures requested (only) on the Anglican returns were not transcribed to the parish-level database (this was for a good reason, as outlined in Appendix 1). However, the fact that the Anglican sittings figures were also proportionately lower suggests that a greater degree of interpolation of the Anglican data was evident in the registration-district dataset, and, thus, that Anglican sittings and attendance data were more likely to have been 'missing' from the original returns. A higher rate of 'missing' Anglican data may demonstrate the generally greater resistance to the Religious Census amongst Anglican clergy.

If one examines the bottom three rows of table 1, which show variables unaffected by interpolation, one can see that compared with the registration district data, the parish-level data recorded 96.4% of the Anglican churches, 96.8% of the non-Anglican places of worship, and 99.4% of the population.¹ The correspondence of the two population totals was particularly impressive. The two totals, of over 4.5 million people, lay only 29,520 apart. Such consistency is suggestive of a considerable accuracy in the both the Religious Census, and the computerised databases. It appears that almost no settlements recorded in the decennial census (from which the registration-district population figure was taken) were excluded from the computerised parish dataset.

¹ Thus the greater shortfall in Anglican attendances and sittings was not a product of a greater shortfall in the recording of Anglican places of worship.

Table 1**The parish dataset and registration-district dataset compared**

Variables affected by interpolation:	Parish data n = 2,432	Corresponding registration- district data n =147	Parish total as % of registration- district total
Total attendances (inc. Sunday Scholars) ²	2,620,609	2,870,013	91.3%
Total sittings ³	2,273,860	2,483,117	91.6%
Total Anglican attendances (inc. Sunday scholars)	1,144,524	1,313,806	87.1%
Total non Anglican attendances ⁴	1,476,085	1,556,207	94.9%
Total Anglican sittings	1,139,264	1,288,706	88.4%
Total non-Anglican sittings ⁵	1,134,596	1,194,411	95.0%
Variables unaffected by interpolation:			
Total Anglican churches	3,265	3,386	96.4%
Total non-Anglican churches and chapels ⁶	4,658	4,813	96.8%
Total population in 1851	4,645,702	4,675,222	99.4%

² This figure excluded Jewish data from the registration-district totals, and Moravian, 'other isolated congregation', and Catholic and Apostolic Church data from the parish totals. These exclusions were to make the two sources strictly comparable.

³ In addition to the exclusions already noted for the attendance data, Quaker 'sittings' data were excluded from both datasets to ensure consistency.

⁴ See note 2 above.

⁵ See note 3 above.

⁶ See note 2 above.

There are a number of reasons why around 3.5% of places of worship appear not to have been recorded from the microfilms of the original returns. Firstly, there were a number of places which were recorded in the returns for *extra-parochial* places. These were computerised in some cases, but where no socio-economic data were available, such extra-parochial places were generally not recorded. Secondly, it is probable that not all the data in the published Religious Census had been assembled from the original census returns. It is known that for several years after the census itself was conducted, letters were being sent seeking further information regarding omissions and the like. It seems likely that some of this information was included in the published census results without having been part of the original returns to the census.

Section 2: The Accuracy of the Parish-Level Dataset: a Comparison with the 1829 Returns

The previous section tested the accuracy of the parish level dataset in relation to the registration-district data. Irrespective of the accuracy of the computerised database, certain problems remain in analysing the data. These problems stem from the fact that the 1851 Religious Census measured attendances rather than attendants.

Central to the accuracy of much of the analysis of the 1851 Religious Census data presented here (and elsewhere), is the proposition that attendances were fairly consistently proportionate to attendants. The precise ratio between the two matters little. What is important is that this ratio was relatively stable in different places and between denominations. This issue is particularly important for this research, which is centred upon parish-level attendance data. At this spatial scale of investigation, there is a greater potential inconsistency of the ratio than at registration district or county level. This is due to the phenomena of multiple attendance and attendance outside of the 'home' parish. These issues were described in considerable detail in the main body of the thesis (section 3.1).

This section examines the 1829 Religious Returns: a source which allows a limited examination of the likely rates of multiple attendance recorded in the 1851 Religious Census.⁷ These returns were gathered in response to a House of Commons resolution of 19th June 1829 which called for 'a Return of the number of Places of Worship, not of the Church of *England*, in each parish; distinguishing, as far as possible, of what sect or persuasion, and the total number of each sect in *England and Wales*.' [His italics].⁸ Only the Lancashire returns were published and the other returns were all destroyed by fire in 1834.⁹ However, in several counties (to my knowledge, Derbyshire, Leicestershire and Lincolnshire) a clerk had made a copy of the original returns, and these survive to the present day.

It appears that the 1829 returns measured an inconsistent combination of *attendants* (mainly nonconformists) in their parish of residence and *congregations* in the parish of worship. The 1829 Returns were not, therefore, a consistent indicator of attendants by parish of residence, and so cannot be used to illuminate the extent of 'migration' between parishes on Census Sunday. However, the 1829 Returns are free of the further complication (to the 1851 data) of multiple attendance. In other words, although it is clear that the 1829 returns were not a consistent count of non-Anglicans in their parish of residence (which would be the most useful comparison for the 1851 Census data), they did always count people rather than attendances.

As already noted, the 1829 Returns only survive in a few counties. Since Leicestershire was one of the few, proximity to the county record office, as well as the strong presence of both old and new dissent in the county, made this the obvious 'test' county for which to computerise the 1829 Returns.¹⁰

⁷ For an introduction to the source see R.W. Ambler, 'A lost source? The 1829 returns of non-Anglican places of worship', *The Local Historian* 17 (1987), 483-489; see also M. Tranter, "Many and diverse dissenters" - the 1829 religious returns for Derbyshire', *The Local Historian*, 18:4 (1988), 162-167.

⁸ R.W. Ambler, 'Religious life in Kesteven - a return of the number of places of worship not of the Church of England, 1829', *Lincolnshire History and Archaeology*, 20 (1985), 59-64, p.59.

⁹ Ambler, 'Religious life in Kesteven', p.59.

¹⁰ The 1829 returns may be found in the Leics. C.R.O., QS 95/2/2. Additional documentation survives in QS 95/2/3/4/2, and QS 95/2/3/1-2.

Comparing the 1829 Returns and the 1851 Returns for Leicestershire

Before the sources are compared, three points should be noted. First, the 1829 Returns were not complete for the whole county of Leicestershire. Secondly, the computerised 1851 Religious Census data were compiled for the registration county, so the two datasets were not entirely coterminous. There were, nevertheless, 144 parishes with complete data for both 1829 and 1851.¹¹ Lastly, in comparing data from the two dates, one must, of course, expect some genuine discontinuities to have arisen over the intervening 22 years; a period which witnessed the rapid growth of Primitive Methodism, for example.

The 1829 figures for Leicestershire were compared with the 1851 attendance data. Several of the denominations recorded in 1851 did not exist in 1829. It seemed logical to include some and exclude others from the comparison. The Methodist offshoots - chiefly the Primitives - were included, since, in many cases they inherited part of the membership of the pre-existing Methodist denominations from which they had separated. However, there were good reasons for excluding the Mormons, Roman Catholics, and other 'isolated congregations' from the comparison.¹² Excluding these denominations, a total nonconformist figure was calculated for 1829 and a total nonconformist attendance figure was computed for 1851.

The total nonconformist figure for 1829 was extremely closely associated with the total nonconformist attendance figure for 1851. Both the Spearman and Pearson correlation were extremely high ($r_p = + 0.88$, $r_s = + 0.82$, $n=144$). An adjustment can be made to make the figures more comparable. Since there had been significant population change between these two dates, each 1829 figure was adjusted by the ratio of the 1851 parish population to the 1831 parish population.¹³ To make this adjustment is to assume that had all things being equal,

¹¹ There were 146 parishes with 1829 data.

¹² In the case of the Catholics this was because of the known increase in Irish immigration to Leicestershire in this period. The Mormons were excluded since they represented an 'exotic' faith not present in 1829. In the case of the 'isolated congregations', their denominational identity was not clear, so they were also excluded from both the 1829 and the 1851 figures.

¹³ These population figures were taken from the decennial census (see Appendix 1 of this thesis).

the followers of a given denomination would have increased or decreased in line with the parochial population. The resulting correlations between the 1851 figure and the adjusted 1829 figure were even higher, most visibly in the case of the Pearson correlation, which showed an almost perfect association ($r_p = + 0.94$, $r_s = + 0.82$, $n=144$). Thus, it appears that multiple attendance in 1851 did little to dilute the almost perfect correlation between the adjusted 1829 data and the 1851 data.

The 1829 Returns can be used to investigate the issue of multiple attendance more closely. One can remove the effects of multiple attendances from the 1851 data altogether by measuring the attendance at the best attended service in place of the total nonconformist attendance figure.¹⁴ To the extent to which any inter-parochial differentials in multiple attendance behaviour 'distorted' the 1851 data, one would expect to discover an even closer association between the 1829 figures and the best attended nonconformist service figure in 1851 than that between the 1829 figures and the total nonconformist attendance figure in 1851. In fact, the correlations between the 1829 figure and the best attended nonconformist service in 1851 were less strong than those obtained with the total nonconformist attendance figure in 1851.¹⁵

Thus the 1829 Returns suggest, in Leicestershire at least, that the total attendances figure for 1851 was a more consistent and accurate reflector of religious affiliation than the alternative figure - attendances at the best attended service. It is for this reason that the index of total attendances was the preferred measure of religious practice in this thesis (see also section 3.1 and Appendix 4).

To complete this consideration of the 1829 Returns, the closeness of fit between the two sources was demonstrated graphically. This served to exhibit the

¹⁴ An accurate calculation of the attendance at the best service was only possible in parishes which did not contain more than one place of worship for any of the nonconformist denominations, since in the computerised dataset, the attendance data for two or more places of worship of the same denomination had been combined as one record. As a result, the correlations were calculated on the basis of 120 parishes (for which the best attended service was known) as opposed to the 144 cases reported previously.

¹⁵ The correlations between the adjusted 1829 nonconformist figure and the total nonconformist attendance figure in 1851 was $r_p = + 0.75$ ($n = 120$); $r_s = + 0.76$ ($n = 120$). The corresponding correlations using the best attended nonconformist service figure in 1851 were both *lower*, $r_p = + 0.70$ ($n = 120$); $r_s = + 0.75$ ($n = 120$).

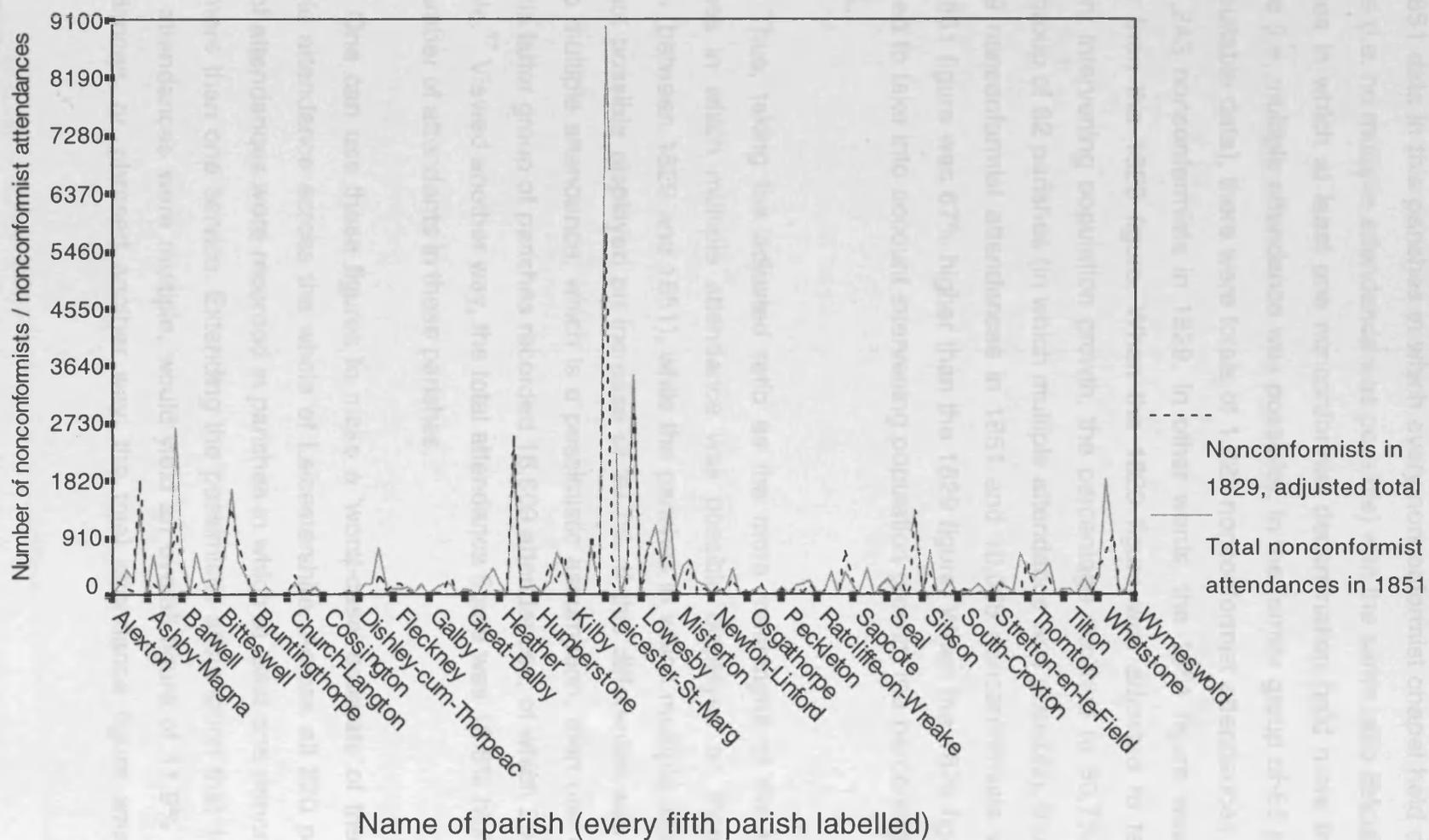
closeness of the correspondence for the less technical reader or those rightly suspicious of what correlation coefficients can hide. Figure 1 shows an alphabetical 'cross-section' of the Leicestershire parishes. The figure shows the 1829 data (adjusted for subsequent population change) compared with the total nonconformist attendance figure in 1851. The 'topography' resultant from the alphabetical 'cross-section' of the county is impressively similar at the two dates.

The main point to emerge from figure 1 is that the 1851 figure generally lay a good deal higher than the 1829 figure. The nonconformist total attendance figure for the 144 parishes in 1851 was 49,002. The total (unadjusted) number of nonconformists recorded in the same parishes in 1829 was 30,696. Thus, the 1851 figure exceeded the 1829 figure by nearly 60%. Even after adjusting the 1829 figure for intervening population growth in that parish (which is the comparison shown in figure 1), the 1851 total remained 38% higher than the adjusted 1829 figure.

The consistently higher values resulting from the 1851 religious Census stem in part from multiple attendance, and in part from the known rapid growth of nonconformist membership and attendances over the period 1829-1851. The most authoritative set of membership estimates shows that over England, Wales and Scotland, nonconformist membership rose by over 70% in this period - from 600,000 in 1830 to 1021,000 in 1850.¹⁶ Viewed in this context, the fact that the 1851 figure exceeded the 1829 figure by around 60% appears to be more a reflection of the growth in support for nonconformity than evidence of very high rates of multiple attendance recorded in the 1851 Religious Census.

¹⁶ I refer here to R. Currie, A. Gilbert, and L. Horsley, Churches and Churchgoers: Patterns of Church Growth in the British Isles since 1700 (Oxford, 1977), Table 2.3, p. 25.

Figure 1.



' The adjusted nonconformist figure for 1829 refers to the 1829 total nonconformist figure multiplied by the parish-specific ratio of the 1851 population to the 1831 population.

One can substantiate this point by comparing the ratio between the 1829 and 1851 data in this parishes in which every nonconformist chapel held only one service (i.e. no multiple attendance was possible) with the same ratio calculated for parishes in which at least one nonconformist denomination held more than one service (i.e. multiple attendance was possible). In the former group of 58 parishes (with suitable data), there were totals of 1,822 nonconformist attendances in 1851 and 1,243 nonconformists in 1829. In other words, the 1851 figure was 46.6% higher than the 1829 figure. When the 1829 figure was adjusted to take into account intervening population growth, the percentage declined to 30.7%. In the latter group of 62 parishes (in which multiple attendance was possible), there were 16,809 nonconformist attendances in 1851 and 10,065 nonconformists in 1829. The 1851 figure was 67% higher than the 1829 figure. When the 1829 figure was adjusted to take into account intervening population growth, the percentage fell to 48.8%.

Thus, taking the adjusted ratio as the more meaningful of the two, the parishes in which multiple attendance was possible displayed an increase of 48.8% (between 1829 and 1851), while the parishes in which multiple attendance was not possible displayed an increase of 30.7%. If this differential was entirely due to multiple attendance, which is a pessimistic assumption, then one can say that this latter group of parishes recorded 16,809 attendances, of which 2041 were multiple.¹⁷ Viewed another way, the total attendance figure was 13.8% higher than the number of attendants in these parishes.

One can use these figures to make a 'worst-case' estimate of the rate of multiple attendance across the whole of Leicestershire. Across all 220 parishes, 98% of attendances were recorded in parishes in which at least one denomination held more than one service. Extending the pessimistic assumption that 13.8% of these attendances were multiple, would yield an overall figure of 11.9% multiple attendances, or, phrased another way, the total attendance figure was 13.5%

¹⁷ It is a pessimistic assumption because it is possible that parishes in which one or more nonconformist denominations held more than one service were the parishes in which nonconformity was genuinely increasing most rapidly.

higher than the number of attendants. This figure tallies well with the other estimates of multiple attendance advanced in section 3.1 of this thesis.

Section 3: an Examination of the 'Rounding' of Returns

One of the major unresolved issues surrounding the Religious Census of 1851 is the accuracy and honesty with which the returns were themselves gathered. Certain contemporary commentators, most notably Samuel Wilberforce (the Bishop of Oxford), raised doubts about the honesty and numeracy of the dissenting returns. Among other practices, Wilberforce alleged that some dissenters had deliberately inflated their congregation sizes to compare more favourably with the Church of England. Conversely, he supposed that the established church had greatly underestimated its flock on Census Sunday. In characteristic 'soapy' style he observed that:

'He had no complaint whatever to make of the Office of the Register General; the gentlemen employed therein showed no want of care on their part in making the returns; but the fault was to be traced back to the returns which were given to them as the data on which the public returns were to be founded by those who furnished the subject-matter of the reports - namely, the clergy of the Established Church and the ministers of the different dissenting bodies.'¹⁸

For Wilberforce, the returns of the Church of England were under-estimates, while dissenting returns were over-estimates. He concluded that the former were under-estimates because:

'With respect to the Clergy, many of them refused to send in any returns; and the consequence was, that applications were obliged to be made to the churchwardens, or any other person who could assist in the matter, or take any trouble about it. For this reason the numbers given in the official documents as purporting to belong to the Church of England were

¹⁸ Hansard's Parliamentary Debates, Third Series, Vol. CXXXV, 11th July to 12th August 1854, p. 24.

oftentimes very loosely put together, and considerably less than the numbers really were.'¹⁹

It is difficult to see how the latter observation arose with any inevitability from the former. Presumably, the churchwardens, or other observers drafted in to give figures (where the incumbent had refused), were themselves worshippers at that place of worship, and thus capable of producing a reasonable estimate of the congregation size. Any resultant 'looseness' in the figures would most probably have been the rounding *upwards* of the congregation size. In any case, in most parts of the country the clergy did make their own returns.

These points aside, the bulk of Wilberforce's arguments centred upon the returns of the dissenting denominations. According to Wilberforce the greatest problems with the census figures stemmed:

'not from our [i.e. Anglican] numbers being lessened, but from the numbers of the Dissenters of nearly all denominations being greatly exaggerated and set forth. He hoped that their Lordships would acquit him, in dealing with this subject, of any desire to speak uncharitably or in a spirit of undue disparagement of those connected with the great Dissenting bodies ... he was by no means surprised that such errors should have been committed. Many of their ministers were not often of the same rank of life as the clergy of the Established Church.'²⁰

In particular, he drew attention to the 'very little places - to all the licensed rooms in remote villages - to men who were not the objects of general view and observation; and with regard to these he had no hesitation in saying that there was continually a misrepresentation in point of fact as to the relative numbers of the Established Church and of the Dissenters.'²¹

More recently, a number of commentators have noted the possibility of exaggeration of congregation sizes in the returns, both for dissenting

¹⁹ Hansard's Parliamentary Debates, Third Series, Vol. CXXXV, 11th July to 12th August 1854, p. 24.

²⁰ Hansard's Parliamentary Debates, Third Series, Vol. CXXXV, 11th July to 12th August 1854, p. 25.

²¹ Hansard's Parliamentary Debates, Third Series, Vol. CXXXV, 11th July to 12th August 1854, pp. 25-26.

congregations and (in contrast to Wilberforce) for the established church as well.²² For those who have worked with the returns, the high frequency of round numbers in the declared congregation sizes is very soon noticeable. Obelkevich observed that 'Some of the returns (considering now those of the Church of England) are clearly estimates - rounded figures - and clearly too high.'²³

To be certain that the returns were inflated, and to judge by what margin, requires expertise of a particular locality and the presence of independent sources. Without such information a high proportion of round numbers returned for the congregation size is not, by itself, proof of exaggeration (although it is suggestive). To clarify this point it is instructive to distinguish three main types of behaviour which those making the returns could have engaged in:

1 There would have been those who provided an entirely accurate head-count. This would result in no clear excess of round numbers among the congregation sizes - i.e. there would be a level of round numbers proportional to random chance alone.

2. There would have been those who produced an 'honest' estimate of their congregation size. Such estimates of congregation sizes are highly likely to have been rounded figures. However, because these were 'honest' estimates, the rounding would have been to quite a low number, perhaps the nearest 5 or 10 being typical. As a result of this 'low level' of rounding, such congregation sizes would *not* be greatly exaggerated, but they would probably have been slightly exaggerated, since human nature probably inclines to round up rather than down (in the absence of any specific desire to miscount).

3. There would have been those who returned a 'dishonest' estimate - a deliberately 'inflated' congregation size. They may have either performed a systematic count of the congregation and deliberately inflated this number, or they may have produced a deliberately exaggerated estimate of the congregation size. Either way, the resultant figures would show a high degree of rounding, and probably rounding to 'higher levels', perhaps the nearest twenty, fifty or one hundred; depending on the desire to exaggerate. Such returns would thereby be a considerable over-estimate of the actual congregation sizes. It seems likely that the vast majority of 'dishonest'

²² Indeed, it has been argued that the Anglican returns appeared more inflated and less accurate than their dissenting counterparts: see M.R. Watts Religion in Victorian Nottinghamshire: The Religious Census of 1851 vol. 1 (Nottingham, 1988); see especially pp. ix - x.

²³ J. Obelkevich, Religion and Rural Society: South Lindsey 1825-1875 (Oxford, 1976), p.153.

counts were over-estimates, since, in most cases, the desire would have been to appear better supported.

It is impossible to detect whether a high proportion of round numbers in the returns was the relatively innocuous product of 'honest' estimation (i.e. the second category described previously), or the more considered inflation of congregation sizes which Watts and Obelkevich have reported (i.e. the third category described previously). However, by conducting a quantitative analysis of the computerised returns, it is possible to make some comments about the probable degree of exaggeration inherent in the returns, and whether the Church of England differed from the dissenting denominations in this regard.

The unanswerable uncertainty facing any quantitative analysis of 'rounding behaviour' is that behaviour of the second and third type produce indistinguishable results. This is because it is likely that the propensity to return an 'honest' estimate (i.e. type 2 behaviour) was probably greater in proportion to the actual congregation size (and the nearer that size to a large round figure). This is to say that it was more likely that a congregation of 497 was returned as 500 (given the difficulty of a head-count, and the 'attractiveness' of such a nearby 'landmark' figure), than a congregation of 37 was returned as 40. Thus, a large number of returns rounded to a high multiple, such as 50 or 100, need not demonstrate a high incidence of substantial exaggeration (i.e. type 3 behaviour), but rather a greater propensity to type 2 behaviour by those counting larger congregations.

A quantitative examination of 'rounded' returns.

One can examine the percentage of congregations which were multiples of 2, 5, 10, 12, 20, 25, 50 and 100; these being the various numbers people would have most likely to have 'rounded' to. Table 2 shows the percentage of congregations which were multiples of each of these numbers.²⁴ The table shows the results for the Church of England, dissent, and the Roman Catholic church.

²⁴ The number twelve was used in case counting was performed using dozens.

Table 2The excess of 'round' numbers in the returned attendance figures²⁵

Percentage of congregations multiples of each level: ²⁶			
Level	Church of England n = 2,978	Dissenting denominations ²⁷ n = 4,365	Roman Catholic Church n = 154
Two	69.14%	70.88%	76.62%
Five	56.78%	59.38%	72.08%
Ten	45.47%	48.61%	61.04%
Twelve	12.63%	12.74%	18.18%
Twenty	25.52%	28.18%	41.56%
Twenty five	20.25%	18.24%	33.77%
Fifty	17.83%	15.88%	28.57%
One Hundred	9.34%	7.88%	18.83%

²⁵ The attendance figures used in this table (and the following tables) refer to the morning, afternoon, and evening (but not unspecified) returned congregation sizes.

²⁶ All numbers refer to parishes in which only one church or chapel was recorded for that denomination. Parishes with more than one place of worship for a given denomination were excluded because the congregation sizes had been aggregated on the computerised dataset and it was thereby impossible to tell whether the individual congregation sizes were rounded or not.

²⁷ Dissenting denominations refer to all denominations except the Anglican and Roman Catholic churches.

It can be seen that the frequencies of round numbers in the Anglican and dissenting figures were very close. Dissenting congregations showed a slightly higher frequency of multiples of the lower numbers (2 to 20), while Anglican congregations showed a higher frequency of rounding to the higher numbers (25 to 100). Catholic congregations showed a much higher percentage of multiples at all levels. This may well be because the Catholic returns involved two stages of possible 'rounding behaviour'. The timing of Catholic masses did not fall into the 'morning, afternoon, and evening' pattern measured by the Religious Census. The returned morning figure, in particular, was likely to be the combined total of several services, and was thereby more likely to be a round figure.²⁸ Indeed, of the 79 Catholic morning attendance figures, only 6 (7.6%) were not multiples of two or five, and this very small proportion probably reflected the 'double opportunity' to round.²⁹

Table 2 cannot, in itself, be used to document the degree of exaggeration inherent in the returns. At first sight, the high degree of rounding to the nearest fifty or one hundred appears to confirm suspicions of considerable exaggeration. However, it must be realised that by random chance alone, a certain proportion of the congregations would appear rounded (i.e. as multiples of two, five, ten, twenty, etc.). Also, if a high proportion of figures was comprised of multiples of two and five, one would automatically obtain a higher than expected proportion of multiples of 50 and 100 (without this entailing any specific rounding to these higher numbers). What table 2 does reveal is that, there is strong evidence that some form of rounding of congregation sizes was extremely common.

Table 3 sheds further light on some of the visible characteristics of rounding behaviour. In this table, I have deliberately separated the main category of rounded figures (the multiples of five) from the multiples of other numbers. The top

²⁸ The morning figure of 4,500 Catholic attendances returned for Toxteth Park is the most clear example. The Catholic church contained 900 free sittings, 800 other sittings, and standing room for 556. The figure is therefore likely to be the (rounded) sum of two or more morning masses, which may or may not have themselves been rounded estimates prior to their summation.

²⁹ By this I mean that there would have been a count/estimate of the two or more masses, followed by a further opportunity to round in the summation of these figures into the single morning attendance figure requested by the Census return.

Table 3

An analysis of the characteristics of rounding

Multiples of:	Observed n	Expected n ³⁰	Approximate probability of observed vs. expected (binomial test) ³¹	Mean
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For the 3,103 non-multiples of 5:

(Grand mean = 103.8)

2 (but not 5)	1,701	1,552	0.0000	100.09
3 (but not 5)	1,061	1,034	0.1595	105.52
4 (but not 5)	867	776	0.0001	99.36
6 (but not 5)	598	517	0.0001	98.83
7 (but not 5)	452	443	0.3367	105.98
8 (but not 5)	425	388	0.0234	102.85
9 (but not 5)	379	345	0.0270	98.91
11 (but not 5)	238	282	0.0032	114.58
12 (but not 5)	326	259	0.0000	94.05
13 (but not 5)	250	239	0.2333	94.02
14 (but not 5)	241	222	0.0943	102.82
16 (but not 5)	207	194	0.1758	98.35
17 (but not 5)	182	183	0.4991	103.03
18 (but not 5)	214	172	0.0006	93.79
19 (but not 5)	195	163	0.0061	112.34

For all 7,497 congregations:

(Grand mean = 116.6)

All multiples of 5	4,394	1,499	0.0000	125.68
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For the 4,394 congregations which were multiples of 5:

(Grand mean = 125.7)

5 (but not 10 or 25)	641	1,758	0.0000	86.56
10 (but not 20 or 25)	899	879	0.2287	102.79
20 (but not 25)	1,403	879	0.0000	97.86
25 (but not 50)	183	439	0.0000	92.21
50	1,268	439	0.0000	197.28

³⁰ Expected probabilities assumed a uniform probability distribution, and were calculated as follows:For multiples of x (but not 5), expected $n = 1/x * 3,103$.For all multiples of five, expected $n = 1/5 * 7,497$.For multiples of 5 (but not 10 or 25), expected $n = 4,394 * 0.4$. For multiples of 10 (but not 20 or 25), expected $n = 4,394 * 0.2$. For multiples of 20 (but not 25), expected $n = 4,394 * 0.2$. For multiples of 25 (but not 50), expected $n = 4,394 * 0.1$. For multiples of 50, expected $n = 4,394 * 0.1$.³¹ The probabilities used to calculate this test were based on a uniform frequency distribution, whereas the congregations approximated a log-normal distribution. However, the differences in the probabilities were quite small.

part of the table shows the number of congregations which were multiples of the numbers one to nineteen, but, in every case, *not* multiples of five. The multiples of five were isolated because these were very clearly commonly rounded to, as table 2 has indicated. The aim of the upper part of table 3 is to see whether multiples of other numbers were commonly used in counting behaviour.

The left-hand side of the upper part of table 3 compares the number of returned congregation sizes that were a multiple of each number (but not of five) with the numbers expected by chance alone. One can see that the observed and expected numbers were generally quite close. There was only a clear excess of multiples of two, four, six, twelve and eighteen.³² More detailed analysis can be conducted to substantiate the fact that there was a slight tendency to round to multiples of two and twelve (and half-dozens).³³

The right-hand side of the upper part of table 3 shows the mean of each subset of 'multiples'. It can be seen that wherever there was an apparent excess of congregation sizes (multiples of 2, 4, 6, 12 and 18), these subsets showed a lower mean than the mean of all non-multiples of five (which was 103.8). This is because multiples of these numbers were typically rounded to at smaller congregation sizes (this point is demonstrated graphically in figure 2).

The middle part of table 3 examines the numbers of all multiples of five. Of the 7,497 returned congregation sizes, 4,394 (58.6%) were multiples of five, compared with the 20% expected by random chance alone. As the third column of table 3 shows, this excess was clearly statistically significant. The mean of all these multiples of five was 125.7, much higher than the overall mean of 116.6 of all 7,497 congregations. The figure is also higher than any of the subsets of the non-multiples of five considered in the upper part of table 3. Thus the evidence is

³² These subsets are not mutually exclusive (especially in the upper half of the table), so that an excess/deficiency of multiples of one number will impact upon the apparent excess/shortfall of multiples of another number. In other words, these test should not be interpreted as definitive statements of the degree of rounding to each set of multiples, but rather, as a broad guideline. One can calculate the excesses/shortfall present for the multiples of each number using the method presented in R.G.M. Crockett and A. Crockett, 'A method for estimating the degree of "rounding" of returns in historical sources', *History and Computing* (forthcoming).

³³ Such evidence is presented in Crockett and Crockett, "Rounding" of returns'.

overwhelming that rounding (of whatever sort) was overwhelmingly to multiples of five. Also, as the higher mean size of the multiples of five indicates, rounding to multiples of five must have been relatively common among the higher (returned) congregation sizes.

The lower part of the table shows these 4,394 multiples of five divided into various mutually exclusive categories, these being: multiples of five itself which were not multiples of 10 or 25, multiples of 10 which were not multiples of 20 or 25, multiples of 20 which were not multiples of 25, multiples of 25 which were not multiples of 50, and multiples of 50. One already knows that there was a clear excess of multiples of five, this lower part of the table tests the hypothesis that this excess was made up of each of these exclusive categories in the proportions expected by random chance alone. For example, one would expect 40% of the multiples of five to be multiples of five and not multiples of 10 or 25 (i.e. 5, 15, 30, 45, etc.), and 20% to be multiples of 10 and not multiples of 20 or 25 (i.e. 10, 30, 70, 90).

As table 3 makes clear, the distribution was far from that expected by random chance alone. There was a major shortfall of observed multiples of five (and not 10 or 25) and 25 (and not 50).³⁴ The means of these subsets were also extremely low, suggesting that multiples of these numbers were extremely uncommon among the larger returned congregation sizes. The multiples of 10 (and not 20 or 25) were about as numerous as would be expected by chance alone. It was overwhelmingly the multiples of 20 (and not 25) and 50 which displayed a clear excess. One would have expected 10% of all the multiples of five to also be multiples of 50, but the figure was 28.9%. Also, the mean of the multiples of 50 (at 197.28) was much higher than any other group. It was entirely due to the high mean of the multiples of 50 that the mean of all 4,394 returned congregations which were a multiple of five (which stood at 125.7) was markedly higher than the mean of 103.8 recorded by the remaining 3,103 returns.

³⁴ Again, one should note that I am not attempting a count of congregations actively rounded to each category of multiples of 5. To attempt this one would have to take into account the interactions between the probabilities of these subsets using the methods presented in Crockett and Crockett, "Rounding" of returns'.

Table 3 has made clear that the subsets thought to contain the 'rounded' congregations could display lower as well as higher means than the overall mean (even if the rounding was always upwards) owing to the fact that the propensity to round to different levels was itself a function of congregation size. This is to say, for example, that if a congregation of 37 was 'rounded', it was likely to be returned as 38 (a multiple of 2) or 40 (a multiple of 5/10/20). In contrast, a congregation of 377 would probably not be returned as 378 or even 380, but as 400 (a multiple of 50). Also, it appears that it was much more likely for a congregation of 378 to be returned as 380 or 400 than a congregation of 37 to be returned as 38 or 40.

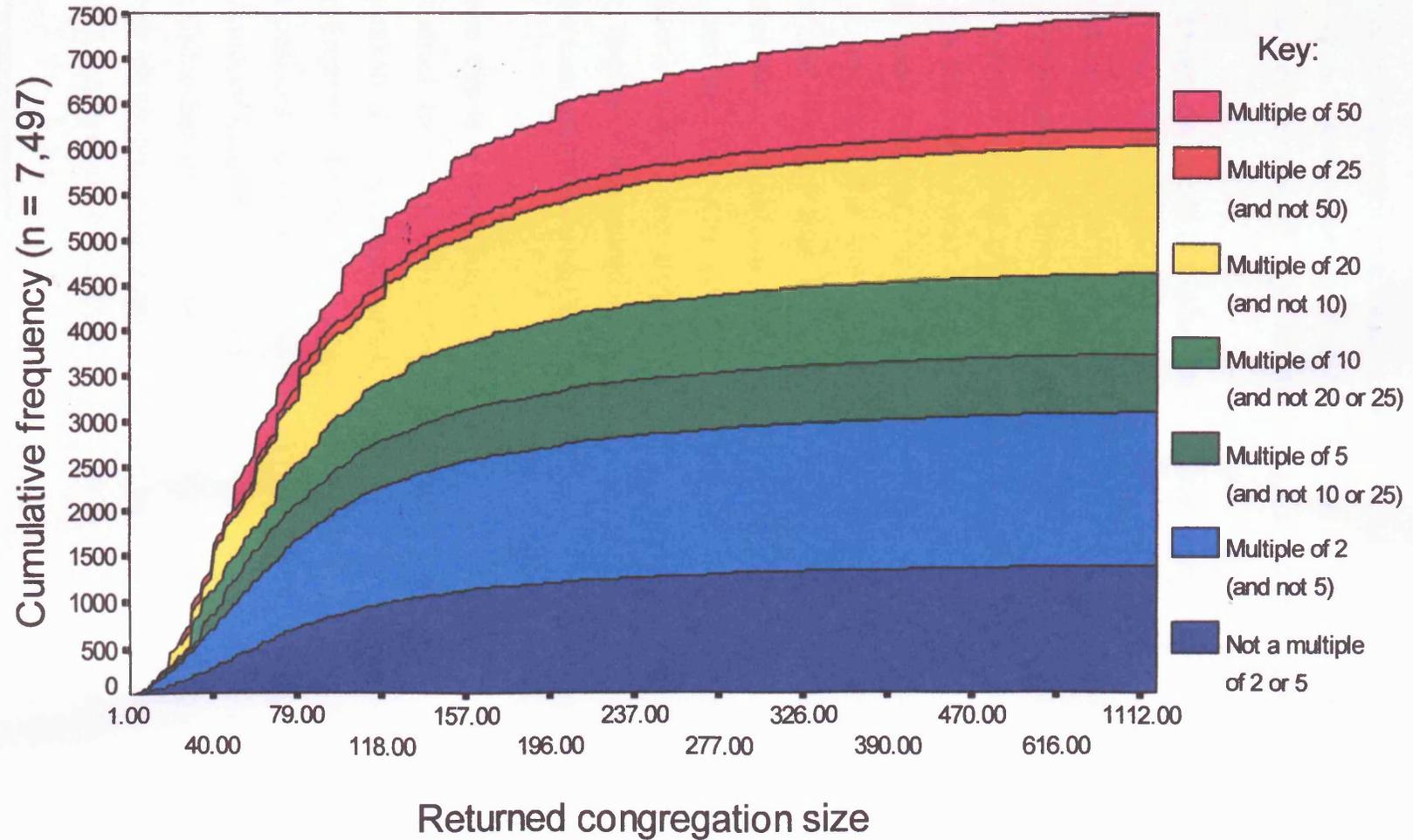
Figure 2 demonstrates graphically how the propensity to round increased with congregation size, and how the level of the rounding itself appeared to increase with (returned) congregation size. One can see that beyond a congregation size of about 150, very few congregations were not multiples of two or five, or, indeed, multiples of five lower than 20 (as indicated by the constant width of these bands above this congregation size). The width of the multiples of 20 band increased noticeably in returned congregation sizes of up to about 200. In contrast, the width of the multiples of 50 band increased substantially as the returned congregation size exceeded 200. Indeed, the majority of all congregation sizes returned as 300 or more were returned as multiples of 50.

To estimate more precisely the exact frequency of rounding to the various multiples of five raises complex issues, and I explore these elsewhere.³⁵ The major point noted here is that rounding was only clearly evident to multiples of two and five (which seems intuitively correct). Multiples of five were by far the most common form of rounding, since they were part of the basis upon which most people counted (i.e. the decimal system), though table 3 also shows evidence of an older system: counting in dozens.

³⁵ Crockett and Crockett, "rounding" of returns', History and Computing (forthcoming).

Figure 2

The cumulative frequency distribution of 'unrounded' and 'rounded' returns



As I have already observed, no matter how elegant one's maths, one is faced by the ultimate uncertainty of whether the rounding to higher levels, such as 50, represented the extent of a wilful and substantial exaggeration of congregation sizes (i.e. type 3 behaviour), or simply a greater tendency to type 2 behaviour ('honest' estimation) around large 'landmark' figures (i.e. multiples of 50).

What one can do is to produce a 'worst-case' estimate of the likely inflation inherent in the 1851 returns. One can take all congregations which were *not* multiples of two or five as an 'unrounded' control with which to compare the 'rounded' congregations. One can compare the mean returned congregation size of this 'unrounded' control group to calculate a 'corrected' attendance total. For example, the 582 'unrounded' Anglican congregations totalled 62,704 attendances, yielding a mean figure of 107.7. One can multiply this figure by 2,978 (the total number of 'rounded and 'unrounded' Anglican congregations) to produce an estimated 'real' Anglican attendance total of 320,846. From this estimate one can observe that the actual returned Anglican attendance figure of 350,563 exceeded the estimated 'real' figure by 9.3%. Table 4 repeats this method for the dissenting denominations and all congregations taken together. One can see that the dissenting degree of exaggeration (5.6%) appeared lower than the Anglican level. Overall, the total attendance figure was 7.6% higher than the returned figure.

Since this is a 'worst-case' estimate based on a clearly false premise, I would not attach too much faith to the exact figures, other than to note the degree of exaggeration is reassuringly small.³⁶ However, the comparison between the Church of England and dissent is an interesting one. It is particularly interesting to relate the possible higher level of exaggeration in the Anglican returns, to the fact that the Anglican incumbents were asked for the 'Estimated number of persons attending Divine Service on Sunday, March 30th, 1851' - a quite specific instruction - while their dissenting counterparts (Quakers aside) were asked for the 'Usual number of Attendants on the Sabbath' - a much looser instruction. In this context,

³⁶ The method assumes that the 'unrounded' congregations form an independent control, which is clearly not true. As already noted, the propensity to round increased with congregation size, so the mean of the 'unrounded' group is almost certainly lower than the mean of the actual congregation sizes on Census Sunday.

the fact that the dissenting returns appeared less exaggerated than their Anglican equivalents suggests considerable integrity among the dissenting ministers.

Table 4

Correcting for 'rounded' returns: a worst-case scenario

The percentage of congregations <i>actively</i> 'rounded' to each level:			
	Sum of congregation sizes	'Corrected' sum of congregation sizes	Estimated percentage 'exaggeration' in the returns
Church of England n = 2,978	350,563	320,846	9.3%
Dissent ³⁷ n = 4,365	489,163	463,214	5.6%
All congregations n = 7,497	874,422	812,532	7.6%

Note:

This method is based on the assumption that the propensity to 'round' a return to any multiple of two or five was *independent* of the actual congregation size, so that the mean size of the 'unrounded' returns equalled the actual mean congregation size on Census Sunday. This is clearly a false assumption, as table 3 and figure 2 have already shown. Therefore, this method will over-estimate the degree of exaggeration in proportion to the degree to which those with the largest congregations (and, most especially, congregations near a clear 'landmark' size) were more likely to give a 'rounded' return. For this reason, I would consider these to be 'worst-case' estimates.

³⁷ Dissent is defined as all denominations except the Anglican and Roman Catholic churches.

If dissenters were both less educated and less honest - as Bishop Wilberforce implied - one thing is certain, they would not have had the guile to inflate their congregations to a reassuringly 'odd' number. Whether the benefits of an Oxbridge education facilitated any such subtle exaggeration by Anglican incumbents is unknown.

Appendix 3

Using and Adjusting the Compton Census Data

The Compton Census of 1676 can be used to produce an estimate of the numbers of 'conformists', 'dissenters', and 'Papists' for many of the parishes of England and Wales. An account of the historiography of the Compton Census has been outlined elsewhere.¹ Three key issues dominate the use of the Compton Census in this thesis. Firstly, there is the decision of whether to use the data as 'absolute' figures or ratio figures. Secondly, there are the potential pitfalls in comparing data from 1676 with those from 1851. Thirdly, there is the decision of whether to adjust the data to take account of the fact that in some dioceses 'inhabitants' were recorded whilst in others 'conformists' were recorded. These issues are dealt with in turn in the following paragraphs.

(i) Ratio methods for the Compton Census

Ratio methods were seen as the best way of handling the Compton data. It is uncertain whether the returns were made for all adults, adult males, or men, women and children. It has been suggested that 'multipliers' could be used to adjust the return, making them consistent to one of these categories.² However, where contemporary sources fail to illuminate which mode of return was made, the proposed methodology rests upon a rather speculative method of back projection, whereby any Compton return which appeared rather low in relation to the population back-projected from the decennial censuses of the nineteenth century, was assumed to have comprised just adult males or household heads. Such a method may well prove correct more times than not, but does not allow for places which, for whatever reason, did not follow the regional demographic trends predicted for them.

¹ See A. Crockett and K.D.M. Snell, 'From the 1676 Compton Census to the 1851 Census of Religious Worship: Religious Continuity or Discontinuity?', Rural History: Economy, Society, Culture 8:1 (1997), 55-89.

² These methods were proposed in A. Whiteman (ed.), The Compton Census: a Critical Edition (Oxford, 1986).

What is more certain is that each incumbent would have applied the same criteria across the three categories or 'conformists', 'dissenters' and 'Papists' he was returning figures for. In other words, the ratios between each figure (within each parish) are likely to be very reliable as an indication of the relative levels of conformity, dissent and Papism. For example, if in one parish ten percent of the total parish figure was Papist, this would, in principle, enable a realistic comparison with another parish for which the figure was one percent - even though the data in the first parish might refer to total population, while in the second they might have referred to adult males only. In this manner, comparisons between parishes and counties become possible, without raising the uncertainties inherent in any multiplier-dependent method that aimed for standardised *total* parish figures for each religious grouping.

Whiteman's published Compton data for each parish was computerised and internal ratios and percentages were calculated on a 'parish-by-parish' basis from those data. One can usefully compare the various Compton 'ratios' with the corresponding 1851 'ratios', as forms a major part of Chapter 4 of the thesis. The remaining problems concerning comparing Compton data with the 1851 Religious Census are outlined below.

(ii) Comparing Compton data with 1851 data

Over time, there was considerable continuity of parish spatial areas, and it is doubtful that significant parochial discontinuities after 1676 affected more than about 5 percent of the total parishes as used in this thesis. The parishes where discontinuities would most obtrude are in Lancashire and Northumberland. However, Compton data were not computerised for these counties because of its paucity. In some cases local data were amalgamated from 1676 to build up to the areas of parishes in 1851, thus facilitating comparison between the two dates. In some urbanising areas, forming a separate parish in 1676, but subdivided into disconnected parishes by 1851, the data are less readily comparable across time. There was no way one could divide settlement-specific 1676 data to deal with this

kind of change, and it was necessary to standardise the data to 1851 parish units. However, this is not a problem which need cause too much concern because of the use of ratio methods. If a settlement in 1676 had a certain proportion Papist, or Nonconformist, it seems historically reasonable to relate this figure to data for the same general locality in 1851, even though the locality may not be strictly coterminous.

There was also a problem with comparing the data in 1676 - which related to 'inhabitants' - to the data from 1851 - which related to attendances. This difference, all things being equal, reduced the utility of parish-on-parish comparisons. In general, such comparisons tended to spatially 'concentrate' the 1851 data, since attendances could refer to the residents of several parishes attending worship in one parish on Census Sunday (see section 3.1 of this thesis for further details of this point). A priori, it can be argued that the effect of any widespread crossing of parish boundaries to attend worship in 1851 was especially important for dissenters. Even though journeys to church or chapel were seldom more than 3 or 4 miles, this could mean the difference between dissenters being recorded in, say, 4 parishes in 1676, but only one (and at a higher proportion) in 1851. This produces the effect here labelled as 'spatial concentration'. It is because of this effect that reservations arise when comparisons of the Compton and 1851 data are used to argue for low levels of religious continuity.³

(iii) Adjusting the Compton Census

The main difficulty facing the interpretation of the Compton data has been whether the first column of the Salt manuscript represented 'conformists' or 'inhabitants'. Anne Whiteman, devised some tests to examine and help resolve this question for different dioceses and archdeaconries; tests which were based on the frequency of figures 'rounded' to the nearest ten in the first column, published under

³ Low levels of continuity between 1676 and 1851 were proposed in Crockett and Snell, 'Religious continuity or discontinuity?'. This article dwelt at some length upon the possible influences of the sources and methodology upon the findings.

the heading 'conformists'.⁴ To correct the published data where necessary, this method has been followed, with a further elaboration of the procedure - the addition of chi-square tests to establish the probability of the frequency of figures rounded to 10.⁵

These tests were conducted on parishes in the 1851 registration counties into which the parish-level data were arranged. All the counties fell into distinctive dioceses with slight exceptions at certain boundaries, like that between Leicestershire and Warwickshire. The few cases of boundary mismatch between diocese, historical county and registration county were completely insignificant for these particular calculations, important though they could well be for more detailed and localised studies.

The tests were based upon the same premises as Whiteman's, namely that:

- i) in general, inhabitants (whether they be all adults, males, or whatever) were originally recorded by the incumbents, rather than 'conformists'.
- ii) high levels of rounding in column 1 indicated that the figures were not subsequently corrected, and therefore that column 1 may be taken to represent inhabitants.
- iii) That high levels of rounding for all three columns (conformists, dissenters and Papists) added together is indicative of subsequent correction having taken place, and therefore that one should be inclined to believe that column 1 represents 'conformists'.

For each county, the percentage of 'rounding' in column 1 was calculated using all parishes with Compton data. This is shown in the third column of table 1. A parallel calculation was performed on the summed total of columns 1, 2 and 3, as shown in the fifth column of table 1. A chi-square test is reported to indicate how significantly the observed number of rounded returns differed to the expected

⁴ Whiteman, Compton Census, Appendix B.

⁵ Additional tests were also carried out to check for rounding based on multiples of 12. The results were all very close to the 8.3% expected by chance alone, confirming Whiteman's view that estimation was not based upon the dozen.

number (which would be about 10% from random chance alone).⁶ The results of the two series of chi-squares are shown in columns four and six of table 1.

The results suggested that inhabitants were recorded for Anglesey, Caernarvonshire, Cambridgeshire, Cardiganshire, Leicestershire, Rutland, Suffolk and the East Riding; and that conformists were recorded for Derbyshire and Sussex. No clear result was apparent for Bedfordshire and Monmouthshire. In almost all cases these conclusions reinforced Whiteman's own conclusions. Such tests certainly cannot be relied upon in their entirety however, and after careful deliberation with Whiteman, in which she raised issues relating to the ambiguous returns for some of the Welsh counties, and definite documentary evidence for Leicestershire suggesting alternative conclusions from those of table 1, column 1 of the Compton Census was taken as representing 'conformists' in the counties of Bedfordshire, Derbyshire, Leicestershire and Sussex, and 'inhabitants' in the remaining eight counties. The computerised data were then adjusted accordingly prior to the analysis presented in this thesis.

⁶ The actual probability will not be 10% precisely because the probability distribution of the figures in the three columns was not uniform. One could use the methods outlined in R. Crockett and A. Crockett, 'A method for estimating the degree of "rounding" of returns in historical sources', *History and Computing* (forthcoming), to produce an exact calculation of the probability. However, this would lie very close to ten percent and the main purpose of the chi-square test was not to give an exact measure of statistical significance, but rather to contrast the likelihood of the two possible options.

Table 1

Levels of Rounding to the nearest ten as an indicator of whether 'inhabitants' or 'conformists' were recorded in the Compton Census

1851 Registration County	Arch-deaconry	<i>Inhabitants recorded?</i>		<i>Conformists recorded?</i>	
		% of figures rounded for 'conformist' figure (i.e. column 1)	Chi Square (χ^2) ⁷ results for observed against expected frequency of rounded figures for column 1.	% of figures rounded for conformists plus dissenters plus Papists (i.e. total of columns 1+2+3).	Chi Square (χ^2) results for observed against expected frequency of rounded figures for total of columns 1+2+3.
Anglesey	Bangor	27.9% (n ¹ =61)	$\chi^2=21.6$ (p=0.0000)	16.7% (n ² =6)	No χ^2 result, less than 5 cases in some cells
Caernarvonshire	Bangor	26.4% (n ¹ =53)	$\chi^2=15.9$ (p=0.0001)	18.2% (n ² =22)	No χ^2 result, less than 5 cases in some cells
Bedfordshire	Lincoln	14.2% (n ¹ =120)	$\chi^2=2.3$ (p=0.1281)	12.7% (n ² =102)	$\chi^2=0.85$ (p=0.355)
Cambridgeshire	Ely	33.6% (n ¹ =134)	$\chi^2=82.8$ (p=0.0000)	6.7% (n ² =90)	$\chi^2=1.1$ (p=0.2918)
Cardiganshire	St David's	58.7% (n ¹ =75)	$\chi^2=197.4$ (p=0.0000)	14.7% (n ² =34)	$\chi^2=0.84$ (p=0.3604)
Derbyshire	Lichfield (Derby)	19.5% (n ¹ =87)	$\chi^2=8.8$ (p=0.0030)	57.6% (n ² =59)	$\chi^2=148.7$ (p=0.0000)
Leicestershire	Lincoln	24.4% (n ¹ =213)	$\chi^2=49.2$ (p=0.0000)	7.8% (n ² =153)	$\chi^2=0.8$ (p=0.378)
Monmouthshire	LLandaff	15.9% (n ¹ =82)	$\chi^2=3.1$ (p=0.0772)	20.8% (n ² =77)	$\chi^2=9.9$ (p=0.0016)
Rutland	Peterborough	59.2% (n ¹ =49)	$\chi^2=131.7$ (p=0.0000)	14.7% (n ² =34)	$\chi^2=0.84$ (p=0.3604)
Suffolk	Norwich	21.8% (n ¹ =197)	$\chi^2=30.6$ (p=0.0000)	18.7% (n ² =123)	$\chi^2=10.3$ (p=0.0013)
Sussex	Chichester	22.0% (n ¹ =287)	$\chi^2=45.5$ (p=0.0000)	49.2% (n ² =189)	$\chi^2=322.8$ (p=0.0000)
East Riding	York	68.6% (n ¹ =105)	$\chi^2=400.2$ (p=0.0000)	16.3% (n ² =86)	$\chi^2=3.7$ (p=0.0523)

Shading indicates whether inhabitants or conformists suggested by the tests. No shading indicates no firm indication either way.

Notes

¹ Valid numbers here represent all parishes in which Compton data was present.

² Valid numbers here represent all parishes in which Compton records dissenters and / or Papists (i.e. where 'conformists' not equal to conformists+dissenters+Papists).

⁷ One could more easily (and identically) test for statistical significance using the binomial test, but I have presented the results as χ^2 test because many readers are familiar with this statistic.

Appendix 4

Measuring the Religious Variables

Three religious variables are central to this thesis: the index of attendances, the dissenting percentage share (of attendances), and the religious diversity measure. The index of attendances was used as a measure of religious practice (i.e. the rate of church/chapel-going). The dissenting percentage share and the religious diversity measure were used as measures of religious pluralism. The conceptual and methodological difficulties involved in quantifying religious behaviour were outlined in chapter 3 of this thesis. The purpose of this appendix is to elaborate how the variables were calculated from the sources and to display their frequency distributions.

1. Measures of religious practice:

(i) The index of (total) attendances.

The index of attendances is used as the principal measure of religious practice in 1851. Since the 1851 Religious Census measured attendances rather than attendants, it is not possible to measure exactly the rate of church/chapel-going. To use the index of attendances is to follow a long tradition, dating back to Mann himself, in the interpretation of the census data. There are, however, several methods of calculating the index of attendances. The index used in the parish-level analysis of this thesis can be most accurately described as the 'index of total attendances'. The form of the index is defined below:

Index of total attendances = (Total attendances (morning, afternoon, evening, and unspecified) / total population in 1851) × 100.

The most important point to note is that the index of attendances calculated from the parish-level data does *not* include Sunday scholars. This was due to the high levels of multiple attendance among Sunday Scholars (see section 3.1 of the thesis). Where the index of attendances is calculated using the registration-district data, the figure does (unavoidably) include Sunday scholars, since no distinction was made between attendances at worship and Sunday scholars in the published

Religious Census data. The same distinction applies to all other variables which incorporate attendance data: they all exclude Sunday scholars (unless otherwise specified) in the parish analysis, and include Sunday scholars in the registration-district analysis.

The frequency distribution of the index of attendances in the parish dataset is shown in figure 1. In addition to the cases shown in the figures, there were a further 10 parishes (0.4% of the total sample) with indices of attendances greater than 300. As outlined in Appendix 1, parishes with a total attendance figure of 'zero' were systematically excluded from the analysis. There were 170 parishes (7% of the total sample) with a zero attendance figure. The frequency distribution of the index of attendances excluding these 170 cases is shown in figure 2. It is clear that the index of attendances displayed a pronounced positive skew and leptokurtosis. Such a graph is highly suggestive of a log-normal distribution. Indeed, figure 3 demonstrates that the distribution of the logarithm of the index of attendances closely approximated the normal distribution.¹

The implication of the log-normal distribution of the index of attendances is that for the majority of *parametric* statistics, which require univariate or multivariate normality, the log of the index of attendances would be a more suitable variable to use. A similar logic applies to many other variables broadly associated with human 'settlement hierarchies'; most notably, religious accommodation and parochial populations or population densities. In the thesis no transformation (logarithmic or otherwise) was routinely carried out. This was for two reasons. Firstly, as outlined in Appendix 5, *non-parametric* statistical techniques were used wherever possible. Such techniques make no assumption of normality. Secondly, the aim has been to produce analysis which was comprehensible to the non-technical reader. Logarithmic transformation was seen as one method of alienating such a readership.

¹ The distribution of the untransformed index of attendances yielded a markedly non-normal kurtosis coefficient of 155.6 and a skewness of 8.82. The transformed variable (natural log) displayed a kurtosis of 2.31 (very close to the value of 3 of a perfect normal distribution) and a very low skewness coefficient of - 0.57.

Figure 1

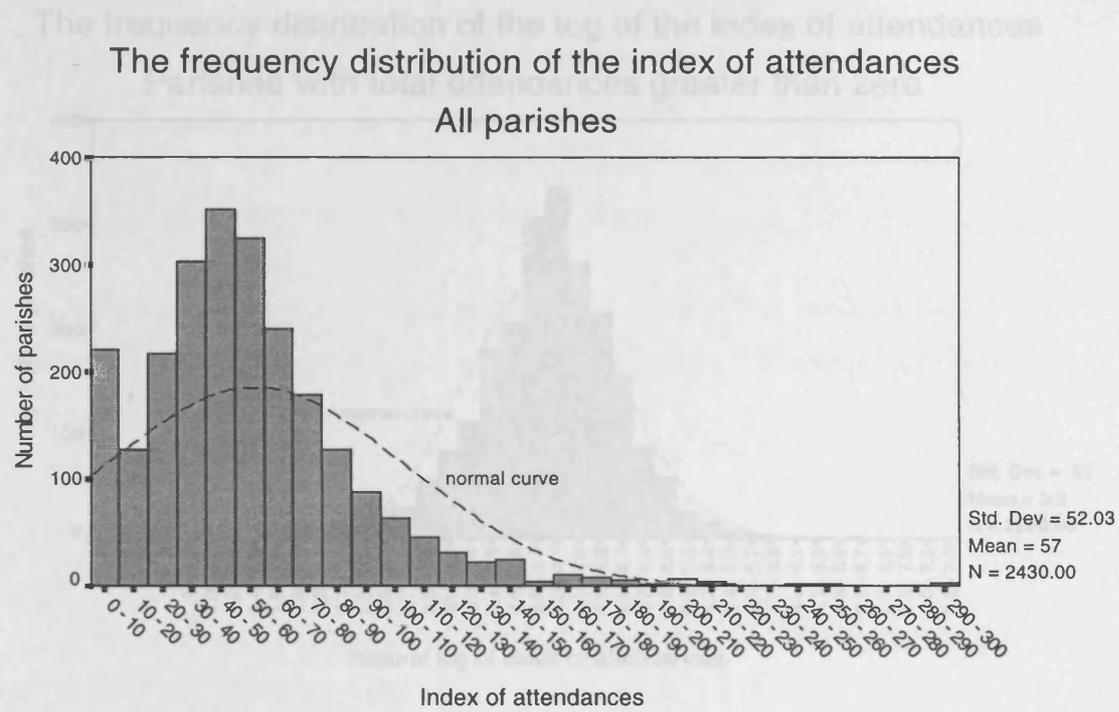


Figure 2

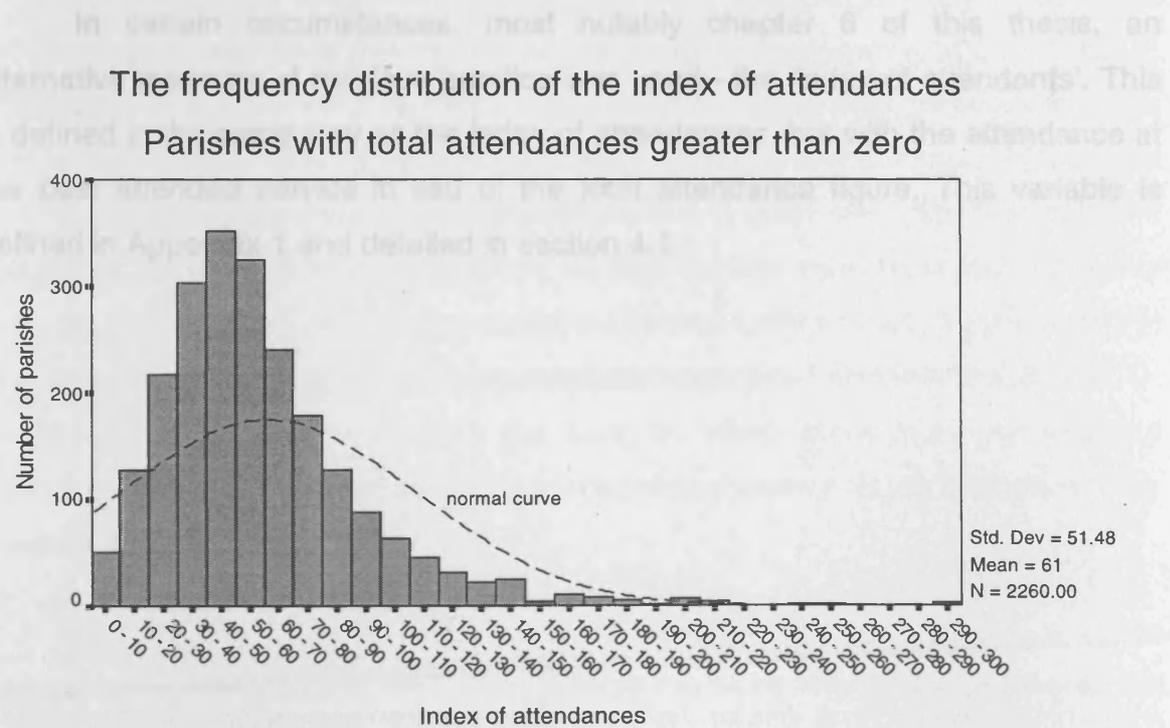
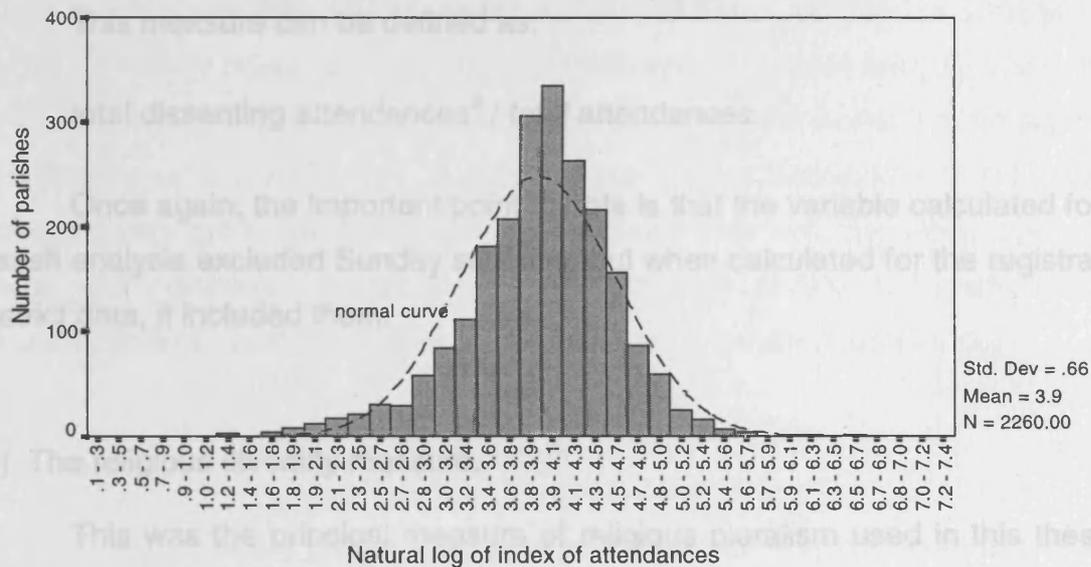


Figure 3

The frequency distribution of the log of the index of attendances
Parishes with total attendances greater than zero



(ii) The (minimum possible) index of attendants.

In certain circumstances, most notably chapter 6 of this thesis, an alternative measure of religious practice was used - the 'index of attendants'. This is defined in the same way as the index of attendances, but with the attendance at the *best attended service* in lieu of the total attendance figure. This variable is defined in Appendix 1 and detailed in section 4.1.

³ In this context, total dissenting attendances were defined as all non-Anglican attendances, and thereby including Catholic and Mormon attendances (in addition to Protestant nonconformist attendances). Where the numerator was calculated using the registration-district data (which included Jewish attendance data), Jewish attendances were not included in the calculation.

⁴ The figures show only the parishes with a total attendance figure of greater than zero.

2. Measures of religious pluralism:

(i) The dissenting percentage share of total attendances.

This measure can be defined as:

$$\text{total dissenting attendances}^2 / \text{total attendances}$$

Once again, the important point to note is that the variable calculated for the parish analysis excluded Sunday scholars, but when calculated for the registration-district data, it included them.

(ii) The religious diversity measure.

This was the principal measure of religious pluralism used in this thesis. It can be defined by the formula:

$$1 - \sum_{x=1}^{x=n} (xa/ta)^2$$

Where ta = total attendances, xa = attendances recorded for denomination x , and n = the number of denominations present.

The frequency distributions of the dissenting percentage share variable and the religious diversity variable (for the parish dataset) are shown in figures 4 and 5. The most immediate point to note is that both the dissenting percentage share measure and the diversity measure recorded a large number of zeros.³ In the case of the dissenting percentage share these zeros represented the 826 parishes (36.5% of the total) in which only Anglican attendances were recorded. As visible in figure 5, even more parishes recorded a diversity score of zero. These were the 826 parishes, already noted, with an Anglican 'monopoly' of attendances, and an additional 104 parishes (4.6% of the total) in which there were *no* Anglican attendances and a *single* dissenting denomination received all the attendances on Census Sunday.

² In this context, total dissenting attendances were defined as all non-Anglican attendances, and thereby included Catholic and Mormon attendances (in addition to Protestant nonconformist attendances). Where the measure was calculated using the registration-district data (which included Jewish attendance data), Jewish attendances were not included in the calculation.

³ The figures show only the parishes with a total attendance figure of greater than zero.

It is clear from figures 4 and 5 that the two measures of religious pluralism did not approximate the normal distribution; the most visible reason being the large number of parishes in which the dissenting percentage share and/or the diversity measure was zero. The frequency distributions of the dissenting percentage share and the diversity measure in the parishes with scores greater than zero are shown in figures 6 and 7. The distributions remain markedly non-normal, most especially in the case of the dissenting percentage share. The distribution of the diversity measure was more peaked around a mid-point than the dissenting percentage share, which displayed a relatively uniform distribution except for a marked peak at its upper limit of 100% (i.e. parishes recording no Anglican attendances).

(iii) Measuring 'religious pluralism' in 1676.

This thesis also attempted the measurement of religious pluralism in 1676. Since the Compton Census data were much more limited than the 1851 data, the diversity measure could not be calculated in nearly so refined a manner as for 1851. The Compton Census yielded the following data:

Total conformists in 1676.

Protestant dissenters in 1676.

Papists (Catholics) in 1676.

Total Compton 'population' in 1676 (see also Appendix 3).

From these four variables, one can easily obtain the percentage Papists, percentage dissenters, and percentage dissenters and Papists. These measures can be seen as closely analogous to the percentage share measures calculated from the 1851 data; both sets of measures indicate support for a particular religious affiliation (or group of affiliations) as a proportion of support for all other religious affiliations. As outlined in section 3.2 of this thesis, there is conceptual complexity surrounding the measurement of religious pluralism in 1676, so three measures were used alongside each other: the percentage Papists, the percentage dissenters, and the combined percentage of Papists and dissenters.

Figure 4

The frequency distribution of the dissenting percentage share

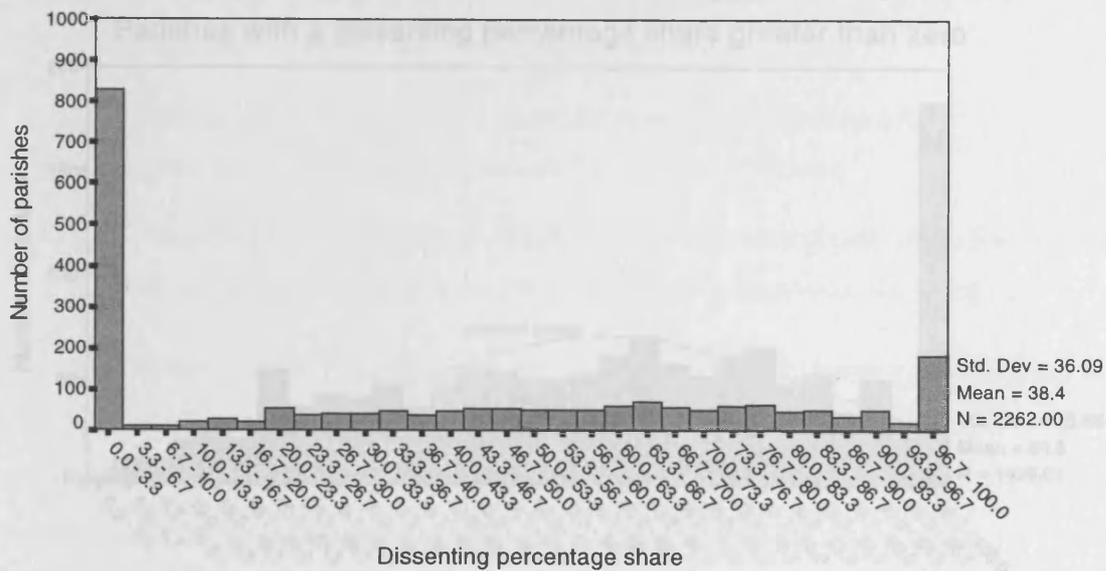


Figure 5

The frequency distribution of the diversity measure

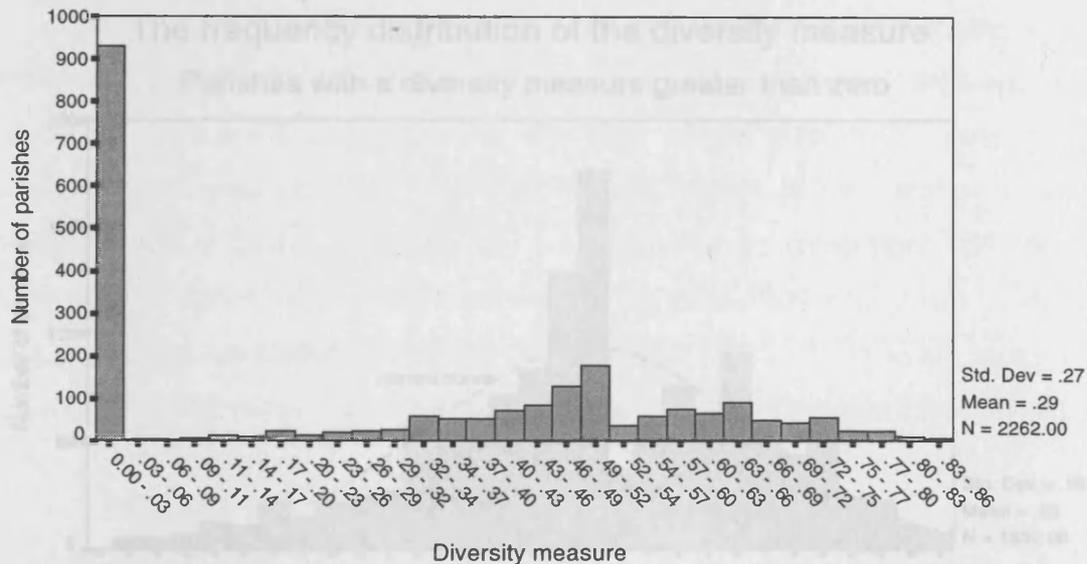


Figure 6

The frequency distribution of the dissenting percentage share

Parishes with a dissenting percentage share greater than zero

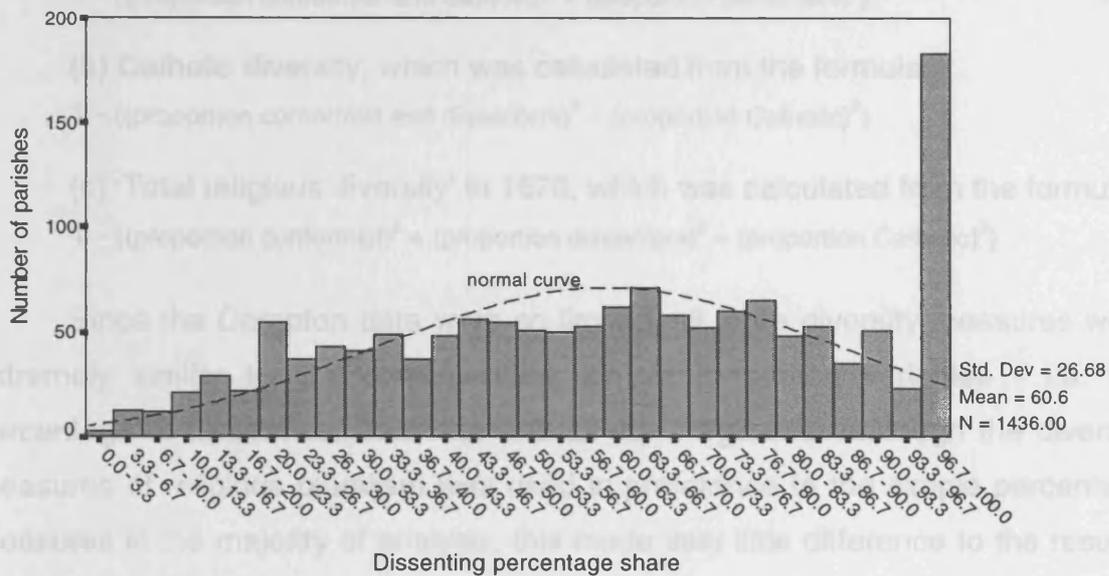
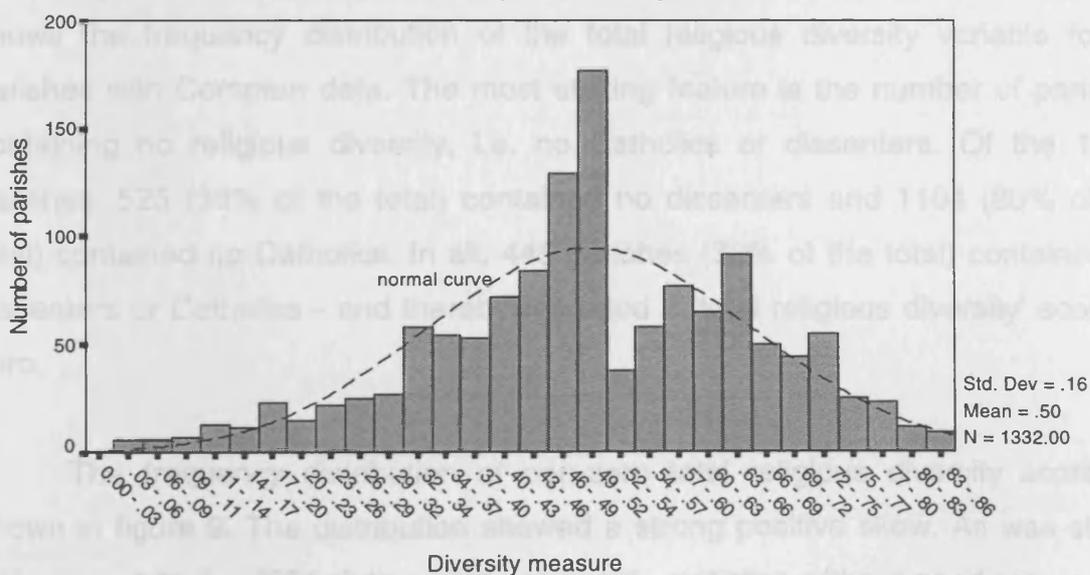


Figure 7

The frequency distribution of the diversity measure

Parishes with a diversity measure greater than zero



In similar fashion, the Compton data were also used to create three measures of religious diversity. These three measures were:

(a) Protestant diversity, which was calculated from the formula:

$$1 - \{(\text{proportion conformist and Catholic})^2 + (\text{proportion dissenters})^2\}$$

(b) Catholic diversity, which was calculated from the formula:

$$1 - \{(\text{proportion conformist and dissenters})^2 + (\text{proportion Catholic})^2\}$$

(c) 'Total religious diversity' in 1676, which was calculated from the formula:

$$1 - \{(\text{proportion conformist})^2 + (\text{proportion dissenters})^2 + (\text{proportion Catholic})^2\}$$

Since the Compton data were so limited, all three diversity measures were extremely similar to the corresponding simple proportion variables - i.e. the percentage of dissenters, Catholics and all non Anglicans. Although the diversity measures of religious pluralism was used in preference to the simple percentage measures in the majority of analysis, this made very little difference to the results. For instance, the Spearman correlation between each of the three 'diversity' measures and the respective percentage measures were all unity. The Pearson (parametric) correlations were also extremely strong (ranging from $r_p = 0.96$ to $r_p = 0.99$).

To avoid unnecessary repetition of graphs and commentary, only the frequency distribution of the 'total religious diversity' measure is defined. Figure 8 shows the frequency distribution of the total religious diversity variable for all parishes with Compton data. The most striking feature is the number of parishes containing no religious diversity, i.e. no Catholics or dissenters. Of the 1,383 parishes, 525 (38% of the total) contained no dissenters and 1104 (80% of the total) contained no Catholics. In all, 445 parishes (32% of the total) contained no dissenters or Catholics - and thereby recorded a 'total religious diversity' score of zero.

The frequency distribution of non-zero total religious diversity scores is shown in figure 9. The distribution showed a strong positive skew. As was stated with respect to the 1851 data, using parametric statistics without good reason and statistical knowledge would be unwise given such a frequency distribution.

Figure 8

The frequency distribution of total religious diversity in 1676

All parishes with Compton data

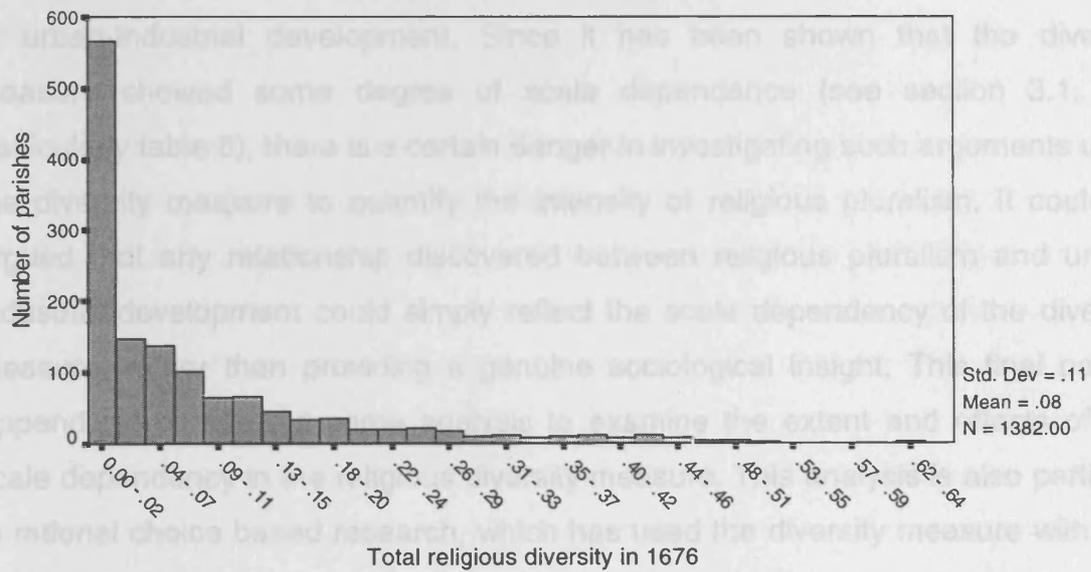
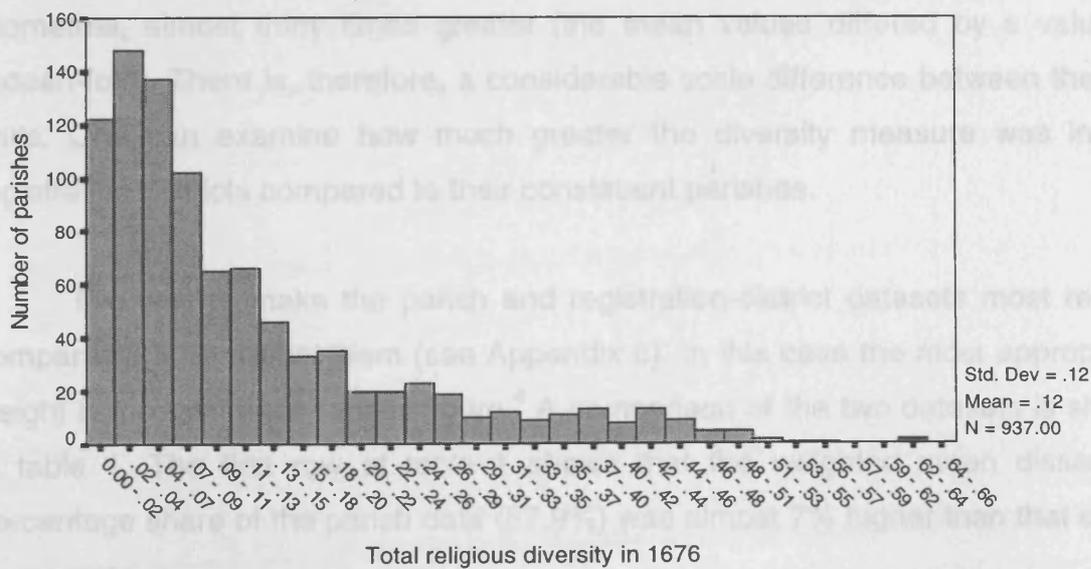


Figure 9

The frequency distribution of total religious diversity in 1676

Parishes with religious diversity in 1676 greater than zero



(iv) Investigating the scale-dependency of the religious diversity measure.

A fundamental argument of this thesis is that the intensity of religious pluralism was, as predicted by Berger, very closely and directly linked to the level of urban-industrial development. Since it has been shown that the diversity measure showed some degree of scale dependence (see section 3.1, and particularly table 6), there is a certain danger in investigating such arguments using the diversity measure to quantify the intensity of religious pluralism. It could be argued that any relationship discovered between religious pluralism and urban-industrial development could simply reflect the scale dependency of the diversity measure, rather than providing a genuine sociological insight. This final part of Appendix 4 carries out some analysis to examine the extent and effects of any scale dependency in the religious diversity measure. This analysis is also pertinent to rational choice based research, which has used the diversity measure with little regard for the potential complications of scale dependence.

The computerisation of the 1851 Religious Census data at both parish and registration-district level provided a tailor-made opportunity to investigate the way in which the scale of measurement affects the diversity measure. The median area of the parishes in the parish-level database was 8.7 square kilometres, whereas the median area of the corresponding 147 registration districts was 256.9 square kilometres, almost thirty times greater (the mean values differed by a value of sixteen-fold). There is, therefore, a considerable scale difference between the two units. One can examine how much greater the diversity measure was in the registration districts compared to their constituent parishes.

The way to make the parish and registration-district datasets most readily comparable is to *weight* them (see Appendix 6). In this case the most appropriate weight is the total attendances figure.⁴ A comparison of the two datasets is shown in table 1. The first row of table 1 shows that the weighted mean dissenting percentage share of the parish data (57.9%) was almost 7% higher than that of the

⁴ In the following analysis the 'religious pluralism' variables for the parish-level dataset were computed to include Sunday scholars to make the data strictly comparable with the registration-district data.

registration-district data (54.2%). In theory, there should have been an exact match, but there are several reasons why no complete correspondence was discovered.⁵ As would be expected, the dissenting percentage share value of all 15 counties together remained identical to the weighted mean of the registration-district data.

As shown in the second row of table 1, the weighted mean religious diversity measure of the parish data (0.60), was some 10% lower than that of the registration-district data (0.66). The diversity measure for the fifteen counties combined was higher still (0.75), almost 14% higher than the registration-district figure, and 25% higher than the parish figure.

At this point it is instructive to introduce a further measure of religious pluralism - the percentage share of the largest denomination. For want of a shorter name, this measure is henceforth labelled the 'relative' percentage share, since, like the diversity measure, it makes no distinction between 'dissenting' and 'official' denominations (as the dissenting percentage share does). The relative percentage share is simply the percentage share of whichever denomination attracted the largest number of attendances in a given spatial unit. This measure is something of a 'halfway house' between the dissenting percentage share and the diversity measure. In particular, it allows one to examine the effects of one of the major characteristics of the diversity measure - treating the Church of England the same as any other denomination - in isolation from the effects of the complex algebra of the diversity measure.

⁵ Where no data were given for a known place of worship, 'average' attendances for that denomination were allotted in the registration-district data. The 'average' figure was the mean attendance figure for other places of worship of the same denomination in that district. Where no other place of worship existed in that district for that denomination, no figure was interpolated. This method of interpolation was devised in P.S. Ell, 'An atlas of religious worship in England and Wales: an analysis of the 1851 Census of Religious Worship', unpublished University of Birmingham Ph.D. thesis (1992). A further factor reducing complete correspondence between the two datasets was that the registration-district dataset used in this thesis three denominations which were included in the parish dataset: the Moravians, the Catholic and Apostolic Church and other isolated congregations (see Appendix 1 for further details).

Table 1**A description of the effect of the spatial scale of measurement upon the religious diversity measure**

	Weighted parish data⁶ n = 2,269	Weighted registration-district data⁷ n = 147	All 15 counties combined⁸ n = 1	Percentage ratio of registration-district value to parish value	Percentage ratio of the entire 15 counties value to the parish value
Mean dissenting percentage share	57.9%	54.2%	54.2%	94	94
Mean diversity measure	0.60	0.66	0.75	110	125
Mean 'relative' percentage share	47.6%	50.8%	54.2%	107	114

The bottom row of table 1 reveals that the 'relative' percentage share measure increased by 7% from the parish figure (47.6%) to the registration-district figure (50.8%). Taking all 15 counties together, the 'relative' percentage share measure was nearly 7% higher than for the registration-district data and 14% higher than for the parish data.⁹

One can conclude from table 1 that there was a clearly visible scale dependence in the diversity measure. The fact that this dependence was greater than that shown by the 'relative' percentage share suggests that the algebra of the

⁶ The parish data were weighted by the total attendances (inc. Sunday scholars).

⁷ The registration district data were weighted by the total attendances (inc. Sunday scholars).

⁸ 'All 15 counties combined' refers to the summed data of all 147 registration districts combined. The figures given in this column are not means but the actual values of these religious variables for the 15 counties combined.

⁹ At this scale of measurement the 'relative' percentage share is simply the Anglican percentage share.

diversity formula caused a scale dependence over and above the effect of the equal consideration of all denominations.

In the context of this thesis, it is not so much the consistency of the diversity measure between the scale of parish, registration district, and all fifteen counties, but rather the consistency of the diversity measure *within* the parish-level dataset which is of importance (since the parish data underpin so much of the analysis). However, the comparison of the parish and registration-district data remains pertinent, since the increase in scale from the 'average' parish to the 'average' registration district is about the same as the increase in scale from the smallest parishes to the largest parishes.¹⁰ Thus, the fact that the increase in the diversity measure between the parish and the registration datasets was, on average, a quite modest 10% is therefore quite reassuring.

However, to recall, a central proposition of this thesis is that the intensity of religious pluralism should be strongly related to the degree of urban and industrial development. Using the diversity measure to indicate the intensity of religious pluralism could make this proposition a self-fulfilling prophecy; the diversity measure is automatically likely to be (slightly) higher in the well-populated urban/industrial parishes. If it can be shown that the dissenting and 'relative' percentage share measures were also closely related to measures of urban and industrial development, then fears of a self-fulfilling prophecy can be assuaged.

Table 2 shows the non-parametric correlations between the diversity measure, the dissenting percentage share, the 'relative' percentage share, and fourteen key socio-economic variables. The associations were very similar, the difference being that the diversity measure displayed *closer* associations with all but one of the socio-economic variables than the relative percentage share,¹¹

¹⁰ To illustrate, the mean parish population was 1,912 ($n = 2,430$), and the mean population of the corresponding registration districts was 31,084 ($n = 147$). Twenty parishes (less than one per cent of the total) contained populations in excess of the mean registration-district population, and 82 parishes (less than 4% of the dataset) contained populations greater than the smallest registration district (which contained 6,553 inhabitants).

¹¹ This being the mean household size in 1851.

which, in turn, displayed closer associations than the dissenting percentage share with all but two of the socio-economic variables.¹²

Thus, the evidence is overwhelming that the diversity measure of religious pluralism was more closely associated with the socio-economic variables than either the relative percentage share or the dissenting percentage share. The uncertainty remains as to whether these stronger correlations were simply a product of the scale dependence of the diversity measure, or resulted from its ability to better measure religious pluralism. To address this key issue, the correlations were repeated, but this time as *partial correlations* controlling for the effects of the total population in 1851. If the correlations obtained using the diversity measure remained stronger than those obtained using the two percentage share measures, then one could not attribute this to scale dependency. The results of the partial correlations are shown in table 3.

The diversity measure again produced stronger correlations than the relative percentage share for all but two of the socio-economic variables.¹³ Likewise, the relative dissenting percentage share was again more closely associated than the dissenting percentage share with the all but two of the socio-economic variables.¹⁴ Not only does this correlation analysis anticipate one of the major findings of this thesis - the very close relationship between religious pluralism (however measured) and the socio-economic environment, but, more importantly, it provides strong evidence that the diversity measure was more closely related to the socio-economic environment than either of the percentage share measures, and that this was not primarily due to any scale dependency. The analysis has confirmed beyond reasonable doubt the utility of the diversity measure for the research presented in this thesis.

¹² These being the sex ratio in 1851 and the mean household size in 1851.

¹³ These being population density and the percentage of the population employed in manufacturing.

¹⁴ These being 'occupiers not employing labourers as a percentage of all employers' and the mean household size in 1851.

Table 2

The associations between the measures of religious pluralism and selected socio-economic variables

Spearman's rank correlations (r_s)

Description of socio-economic variables	Dissenting percentage share	'Relative' percentage share	Diversity measure
correlation results (n= 2,213 - 2,260)			

Agricultural

Percentage of families in agriculture (1831)	$r_s = - 0.32^{**}$ (p = 0.000)	$r_s = - 0.40^{**}$ (p = 0.000)	$r_s = - 0.43^{**}$ (p = 0.000)
Labourers in agriculture as a percentage of the population (1831)	$r_s = - 0.36^{**}$ (p = 0.000)	$r_s = - 0.40^{**}$ (p = 0.000)	$r_s = - 0.42^{**}$ (p = 0.000)
Labourers (not agricultural) as a percentage of the population (1831)	$r_s = + 0.18^{**}$ (p = 0.000)	$r_s = + 0.25^{**}$ (p = 0.000)	$r_s = + 0.27^{**}$ (p = 0.000)
Occupiers not employing labourers as a percentage of all occupiers (1831)	$r_s = + 0.29^{**}$ (p = 0.000)	$r_s = + 0.29^{**}$ (p = 0.000)	$r_s = + 0.30^{**}$ (p = 0.000)

Demographic / urbanisation

Population density in 1851	$r_s = + 0.30^{**}$ (p = 0.000)	+ 0.38** (p = 0.000)	$r_s = + 0.40^{**}$ (p = 0.000)
Mean annual population growth rate 1811-31	$r_s = + 0.14^{**}$ (p = 0.000)	+ 0.17** (p = 0.000)	$r_s = + 0.18^{**}$ (p = 0.000)
Mean annual population growth rate 1831-51	$r_s = + 0.13^{**}$ (p = 0.000)	+ 0.18** (p = 0.000)	$r_s = + 0.19^{**}$ (p = 0.000)
Sex ratio: males to females (1851)	$r_s = - 0.10^{**}$ (p = 0.000)	- 0.09** (p = 0.000)	$r_s = - 0.10^{**}$ (p = 0.000)
Mean household size in 1851	$r_s = - 0.19^{**}$ (p = 0.000)	- 0.16** (p = 0.000)	$r_s = - 0.15^{**}$ (p = 0.000)

Industrialisation / local economic structure

Percentage of families in trade (1831)	$r_s = + 0.32^{**}$ (p = 0.000)	$r_s = + 0.41^{**}$ (p = 0.000)	$r_s = + 0.43^{**}$ (p = 0.000)
Percentage of the population employed in manufacturing (1831)	$r_s = + 0.31^{**}$ (p = 0.000)	$r_s = + 0.36^{**}$ (p = 0.000)	$r_s = + 0.38^{**}$ (p = 0.000)
Percentage of the population employed in retail / handicraft (1831)	$r_s = + 0.26^{**}$ (p = 0.000)	$r_s = + 0.33^{**}$ (p = 0.000)	$r_s = + 0.35^{**}$ (p = 0.000)
'Capitalists' as a percentage of the population (1831)	$r_s = + 0.04$ (p = 0.046)	$r_s = + 0.11^{**}$ (p = 0.000)	$r_s = + 0.12^{**}$ (p = 0.000)

Other

Total servants as a percentage of the population (1831)	$r_s = - 0.10^{**}$ (p = 0.000)	$r_s = - 0.14^{**}$ (p = 0.000)	$r_s = - 0.14^{**}$ (p = 0.000)
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** indicates that the correlation coefficient exceeded the 99% confidence level.

Table 3

The associations between the measures of religious pluralism and selected socio-economic variables - controlling for scale dependency

Partial Pearson correlations (r_p), controlling for the population in 1851

Description of socio-economic variables	Dissenting percentage share	'Relative' percentage share	Diversity measure
partial correlation results (n= 2,179)			

Agricultural

Percentage of families in agriculture (1831)	$r_p = - 0.31^{**}$ (p = 0.000)	- 0.41** (p = 0.000)	- 0.43** (p = 0.000)
Labourers in agriculture as a percentage of the population (1831)	- 0.34** (p = 0.000)	- 0.38** (p = 0.000)	- 0.41** (p = 0.000)
Labourers (not agricultural) as a percentage of the population (1831)	+ 0.17** (p = 0.000)	+ 0.20** (p = 0.000)	+ 0.22** (p = 0.000)
Occupiers not employing labourers as a percentage of all occupiers (1831)	+ 0.27** (p = 0.000)	+ 0.26** (p = 0.000)	+ 0.28** (p = 0.000)

Demographic / urbanisation

Population density in 1851	+ 0.02 (p = 0.437)	+ 0.05 (p = 0.031)	+ 0.04 (p = 0.040)
Mean annual population growth rate 1811-31	+ 0.12** (p = 0.000)	+ 0.14** (p = 0.000)	+ 0.15** (p = 0.000)
Mean annual population growth rate 1831-51	+ 0.12** (p = 0.000)	+ 0.15** (p = 0.000)	+ 0.16** (p = 0.000)
Sex ratio: males to females (1851)	- 0.00 (p = 0.742)	- 0.01 (p=0.523)	- 0.01 (p=0.605)
Mean household size in 1851	- 0.17** (p = 0.000)	- 0.15** (p = 0.000)	- 0.16** (p = 0.000)

Industrialisation / local economic structure

Percentage of families in trade (1831)	+ 0.29** (p = 0.000)	+ 0.40** (p = 0.000)	+ 0.41** (p = 0.000)
Percentage of the population employed in manufacturing (1831)	+ 0.14** (p = 0.000)	+ 0.22** (p = 0.000)	+ 0.21** (p = 0.000)
Percentage of the population employed in retail / handicraft (1831)	+ 0.23** (p = 0.000)	+ 0.30** (p = 0.000)	+ 0.33** (p = 0.000)
'Capitalists' as a percentage of the population (1831)	- 0.03 (p = 0.214)	+ 0.04 (p = 0.084)	+ 0.04 (p = 0.036)

Other

Total servants as a percentage of the population (1831)	- 0.12** (p = 0.000)	- 0.16** (p = 0.000)	- 0.16** (p = 0.000)
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** Indicates that the correlation coefficient exceeded the 99% confidence level.

Appendix 5

An Outline of the Statistical Methodology of this Thesis

This appendix was written to introduce and justify the statistical techniques used in this thesis. It also draws attention to the influence statistical techniques can have on the findings and interpretations that ensue. These points are not written purely for the statistically knowledgeable. In too many areas of the social sciences there is a gulf between those interested in quantitative methods and those happy to ignore them. To simplify into stereotypes, those interested in quantitative methods often become engrossed in such techniques and view them as an end in themselves. Research contexts become secondary, and are seen as arenas in which to innovate statistical techniques. For those uninterested in quantitative methods, there is often an expert knowledge of a variety of 'real-world' research contexts, but little interest in how quantitative methods could enhance such knowledge. This appendix forms a minor platform from which to demonstrate the need for appropriate quantification: too much work is either driven almost entirely by quantitative methods or carried out almost entirely in isolation from them.

(i) Introductory Points.

Large sample size.

A major asset of this research project is that the 'sample' size (i.e. the number of cases used for description or analysis) is almost always very large. The total parish dataset contained 2,262 parishes with suitable data from the Religious Census of 1851 and 1,383 parishes with Compton Census data.¹ These two samples form the basis of much of the analysis. Even where county-level analysis was carried out the number of parishes with suitable data typically lay in the hundreds. The registration-district dataset, since it covered the whole of England and Wales, also contained a large number of cases - all 624 districts. The large

¹ These totals exclude the 170 parishes with 'zero' attendance data in 1851 (see Appendix 1).

number of cases in almost all the analysis means that the results presented are more likely to be 'genuine', whether from the viewpoint of the geographer, the historian, or the statistician. From a geographical viewpoint, the data represent a large proportion of England and Wales. Indeed, the registration-district data cover the entire countries. Wherever possible the registration-district data were used to set the scene, whilst the parish-level data were used for the detailed analysis. In this manner, the subject under investigation could be described accurately for the whole of England and Wales, and then examined with the sensitivity that only small-area (i.e. parish-level) statistics can afford. To the historian, all too aware of the shortcomings of the sources from which the data have arisen, the large number of cases is reassuring because random errors in the data (whether originating in the original returns, their published/collated form, or the computerised database) will tend to have less impact as the sample size increases.

From the point of view of the statistician, a large sample size is also extremely reassuring. One should rarely accept the descriptors of 'confidence' or 'significance' levels quoted for statistical tests at face value, one has to realise exactly what the typical null hypothesis constitutes. Statistical significance habitually refers to the probability of rejecting the null hypothesis when it is true (known as type I error), but is seldom applied to the probability of accepting the null hypothesis when it is false (type II error).

For example, imagine correlating a set of ten religious variables with 16 socio-economic variables. It might appear that setting a criterion of the probability of a type I error of 5% ($\alpha = 0.05$) would be quite rigorous. Yet, by pure chance alone, and irrespective of the sample size, eight of the 150 resulting correlations would exceed this confidence level (i.e. the null hypothesis would be falsely rejected and a type I error committed).² To the unaware researcher such correlations could then form an entirely spurious basis from which to interpret the research problem.

² These figures refer to Pearson correlations between normally distributed variables.

A large sample size helps one avoid such pitfalls. In technical language, a large sample size means that very high confidence levels of statistical significance can be used (for incorrectly rejecting the null hypothesis and making a type I error) without inflating the risk of type II error (i.e. incorrectly accepting the null hypothesis). To return to the example of 150 correlations, if one set the confidence level at 99.9% (i.e. the probability of a type I error (α) = 0.001), then the probability of even one correlation exceeding this limit by random chance alone lies at less than one in six. With a small sample size, such a stringent test for type I error would result in a rapid increase in the probability of a type II error (i.e. the probability of incorrectly accepting the null hypothesis), so the researcher could still not be sure of his or her results. With a large sample size there is not such a direct pay-off between type I and type II error, and therefore a stringent test of type I error can allow a genuine confidence of the results. The power efficiency (a measure of type II error) of non-parametric tests is likewise high given a large sample. For example, the Kruskal-Wallis test displays a power efficiency of around 95% for large samples.³

For this thesis the 99% confidence level was taken as the choice indicator of statistical significance. In this way the chances of both Type I and Type II error were both acceptably low. In the main text of this thesis 'strong statistical significance' refers to the test statistic exceeding the 99% confidence level ($\alpha < 0.01$) which is indicated in tables of results by two consecutive asterisks. When unqualified (by the adjective strong), the term 'statistical significance' (also sometimes reported as weak statistical significance) refers to the test statistic passing the 95% confidence level ($0.01 < \alpha < 0.05$). In tables this is indicated in the results by a solitary asterisk. For the purposes of clarity, all probabilities are two-tailed measures (even though the theoretical basis of the work usually leads to an expected direction in the relationship). If one halves this value, one has the one-tailed probability

The exact probability of type I error is given to indicate just how greatly many of the statistical tests exceeded the 99% confidence limits. SPSS gives the

³ See H.M. Blalock, Social Statistics 2nd edition (New York, 1972), p.349.

probability to three decimal cases. In numerous results the probability of type I error was zero to three decimal places (i.e. $p = 0.000$) this means that the probability of a type I error lay at less than 1 in 2,000.⁴

Theoretical basis to the analysis.

A second major point used to support the methodology of this study is the strong conceptual and theoretical framework. There was a strong rationale behind all the analysis carried out. In this way any 'data-trawling', taking the form correlating or cross-tabulating all variables with each other (the concealed starting point of many a piece of research) was consciously avoided. This again minimises the risks the type I and type II error, since there was not a host of 'failed' tests and hypotheses hidden behind every significant statistic presented in the thesis.

Reporting statistical significance for correlation results.

A specific point is necessary to explain the reporting of statistical significance with the correlation analyses. For most statistical tests statistical significance (in terms of the probability of type I error) appears reasonably well-understood. In contrast, one could easily be confused by the treatment of the statistical significance of the correlation coefficient (whether Spearman or Pearson) in standard statistical guidebooks. For example, D. Ebdon defined the statistical significance of the correlation coefficient as 'how probable it is that the sample correlation coefficient is an accurate estimate of the *population correlation coefficient*.' [His italics].⁵ Such standard statistical texts (and some published research) go further, stating that if analysis is carried out on the entire population, or a non-random sample, no reporting of any statistical significance whatsoever is possible. For example, Floud stated that 'Tests of significance are invaluable when sample problems are being considered ... However, they can easily be misused. They are, firstly, appropriate when, and only when, the data are gathered by the use of a method of probability sampling. ... If the sample is not a probability

⁴ Throughout the thesis 'p' is used to denote the probability of type I error (i.e. α).

⁵ D. Ebdon, Statistics in Geography, (Oxford, 1977) 1985 edn, p.94.

sample, then to conduct tests of significance on it is theoretically meaningless, and may lead to misleading results ... There can be no argument that the tests [of significance] should not be applied to samples that are not probability samples.⁶ Likewise the geographer D. Ebdon categorically denied the wisdom of significance testing correlations calculated for whole populations or non-random samples.⁷

With standard statistical textbooks promoting confusion (if not outright misinformation), it is not surprising that researchers still sometimes appear uncertain whether to significance test statistics calculated from non-random samples or total populations.⁸

The confusion arises from a confusion (if not outright misunderstanding) of the standard null hypothesis. One could test how likely one's sample population reflected the total population (in terms of the mean, correlation coefficient, or some other statistic), but the application of this form of sampling theory is quite unusual for historical work; one almost never has a random sample of anything (unless one takes a random sample of one's own dataset, which would be pointless given current computing power).

Geographers and historians know their samples aren't random. The null hypothesis that they usually want to test with respect to correlation is a form of the 'standard' null hypothesis, which can be stated along the lines of: there is no difference between the observed correlation and a correlation of zero.⁹ One can significance test in this way by normalising the correlation coefficient (r) with Fishers z -transformation. In this way one can apply the usual confidence intervals using a one or two tailed test for type I error (which is what all standard computer software packages do).

⁶ R. Floud, An Introduction to Quantitative Methods for Historians (London, 1973), 1979 edn, pp. 183-184.

⁷ Ebdon, Statistics in Geography, p.99.

⁸ See, for example, E.M. Hamberg and T. Pettersson, 'The religious market: denominational competition and religious participation in contemporary Sweden', Journal for the Scientific Study of Religion 33:3 (1994), 205-216, p. 212.

⁹ For the commonly understood method of significance testing of correlation coefficients see G. Shaw and D. Wheeler, Statistical Techniques in Geographical Analysis (Chichester, 1985), pp. 154-155.

The misunderstandings associated with the (non) reporting of statistical significance with correlation coefficients are potentially quite confusing, especially for historians, who are not generally noted for their knowledge of statistics. It is important to note that high correlation coefficients, for instance in excess of ± 0.5 , can quite easily be obtained with a small number of cases - without this signalling anything but pure chance. In contrast, a value this high obtained with hundreds or thousands of cases would very seldom arise by chance alone.

An example can help demonstrate this point more clearly than words. I used a random number generator to create two normally distributed variables. I generated two series of these two random numbers, one for ten cases, the other for one hundred cases. I repeated this procedure nineteen times and correlated the two variables each time. The results are shown below.

Run	<u>Value of 'r' (Pearson correlation)</u>	
	n = 10	n = 100
1	0.51	0.02
2	-0.41	0.06
3	-0.22	-0.01
4	0.12	-0.08
5	-0.58	-0.07
6	-0.13	-0.05
7	-0.28	-0.23
8	-0.17	0.04
9	-0.10	0.16
10	0.03	0.07
11	0.24	0.22
12	0.01	0.05
13	-0.61	-0.12
14	0.57	0.04
15	-0.15	0.07
16	-0.27	0.17
17	0.09	0.05
18	-0.61	-0.17
19	0.45	-0.03
20	0.06	0.18

This is a long enough run of results to get the point across. When the variables were created for 10 cases, the correlation coefficient ranged between -0.61 and +0.58 (and five of the correlation coefficients exceeded ± 0.5). Coefficients of this order of magnitude would habitually be interpreted as meaningful associations by social scientists, and most especially those who calculate these values from non-random samples, and thereby deem any test of

statistical significance to be inappropriate.¹⁰ When the variables were calculated for 100 cases, the range of coefficients obtained was much more modest, from - 0.23 to + 0.17. These are the sorts of values social scientists would be much more cautious in using to support their arguments, and yet the probability of their occurrence is identical to the higher coefficient generated for the smaller sample of 10 cases.

In short, one cannot use the exact value of the coefficient as one's sole judge of the degree of association in the manner Floud and others have suggested.¹¹ The value of 'r' needed to reject the null hypothesis that the correlation coefficient was zero at the 95% confidence level is +/- 0.63 for 10 cases, but only +/- 0.20 for 100 cases, and for 1,000 cases the figure falls to +/- 0.06.¹² Many of the correlation coefficients obtained in this thesis are quite low, owing to the large number of cases (frequently over 2,000). If I was to quote just the correlation coefficient and the number of cases, the non-specialist reader would be unlikely to be impressed with the results. Yet if I was to carry out the same analysis on, say, a two percent random sample of the data, the same reader would presumably be extremely impressed by the magnitude of the correlation coefficients.

In short, I use the statistical significance of the correlation coefficient not to represent the probability that a correlation coefficient obtained from a random sample pertains to the 'entire population', but to represent the probability with

¹⁰ For example, Cox reported regression analyses calculated from only 5 to 10 observations (these pertaining to the parishes of the four sub-districts of Lambeth) to test for any relationship between the parochial population and the level of church-going. He stated: 'An R^2 of .5 or more is significant for historical data'; J. Cox, *The English Churches in a Secular Society: Lambeth, 1870-1930* (Oxford, 1982), p.286. In fact, even the highest R^2 that Cox recorded (0.6372 in Norwood), would have occurred more than one time in ten by chance alone (there were only five observations in Norwood). Also, since neither variable was normally distributed, the actual probability of the null hypothesis being correct was much greater. If one logarithmically transforms both variables to normalise them (both the population and the index of attendances tended towards a log-normal distribution), the correlation between them (r_p) falls to just - 0.49 (i.e. $R^2 = 0.24$), a result which would be expected four times out of ten by random chance alone. The only saving grace for Cox's data analysis is that he barely refers to it in the rest of his book.

¹¹ Floud, *Quantitative Methods*, pp. 138-145.

¹² One can see how the critical value of value of r at the 95% confidence level for 10 cases (0.63) was very close to the maximum value of 0.61 appearing in the 10 case sample, and the critical value of r for 100 cases (0.20) was very close to the maximum value of 0.23 obtained in the 100 case sample. This is no coincidence, since the 95% confidence level equates to a 1 in 20 chance of a result occurring by random chance - and the table shows 20 randomly created results.

which two normally distributed variables would achieve the same correlation coefficient by random chance alone.¹³

(ii) A note in favour of non-parametric statistics.

If a large sample size and a strong theoretical basis were the foundations of a sound statistical methodology, the methodology was itself based upon non-parametric statistics. Wherever possible non-parametric statistics were used because very few of the variables, whether religious or socio-economic, approximated the normal distribution. Many of the variables contained large numbers of zeros or some 'extreme values' (i.e. statistical 'outliers'), many were percentage variables and were thus bounded at both ends of their frequency distribution. Such pronounced non-normality can have a great influence on parametric statistics.

Imagine that one was interested in tracing the degree of geographical continuity of Catholic support between 1676 and 1851. Short of carrying out some complex geographical manipulation of the data, correlation, as a test of association, is well suited to addressing this research question. Parametric (Pearson) correlation is almost always used by historians, but, in many contexts, the non-parametric (Spearman) correlation is preferable. Table 1 shows the correlations obtained for comparing the geography of Catholic support in Leicestershire between 1676 and 1851. The table shows the correlations obtained with and without the parish of Eastwell. Eastwell is an historically extremely interesting locality being one of the few parishes with a very strong Catholic continuity right through the eighteenth century.¹⁴ However, mathematically speaking, Eastwell was an 'outlier', containing very high levels of Catholic support in both 1676 and 1851. The 1851 Roman Catholic percentage share of attendances was 87.8%, almost five times higher than the 17.94% recorded by the next highest parish of St. Mary, Leicester.

¹³ With non-parametric correlation one need not assume a normal distribution.

¹⁴ See A. Crockett and K.D.M. Snell, 'From the 1676 Compton Census to the 1851 Census of Religious Worship: Religious Continuity or Discontinuity?', Rural History: Economy, Society, Culture 8:1 (1997), 55-89.

As an 'outlier', Eastwell has a massive impact upon the parametric (Pearson) correlation coefficient. Table 1 reveals that the Pearson correlation coefficient obtained using the 208 Leicestershire parishes, *including Eastwell*, stood at 0.73 (a value far in excess of the 99% confidence limit). A correlation of this order of magnitude could be taken to suggest a very high degree of continuity of Catholic support in Leicestershire between 1676 and 1851. However, removing the one parish of Eastwell (which reduces the sample size by less than 0.5%) has a massive effect on the Pearson correlation. The coefficient drops to just 0.1, a value well short of any conventional measure of statistical significance ($p = > 0.1$). The question then arises, should Eastwell be excluded? It was after all, one of only three parishes in which a continued presence of Catholic support between 1676 and 1851 lies beyond doubt,¹⁵ and yet in statistical language it was an outlier.

Table 1

Assessing the parish-level continuity of Catholic support in Leicestershire between 1676 and 1851

Correlation between the percentage Papist in 1676 and the Roman Catholic percentage share of attendances in 1851	Including Eastwell n = 207	Excluding Eastwell n = 206
Pearson correlation	$r_p = + 0.73^{**}$	$r_p = + 0.10$
Spearman correlation	$r_s = + 0.30^{**}$	$r_s = + 0.26^{**}$

** indicates that the correlation coefficient exceeded the 99% confidence level.

¹⁵ A. Crockett, 'Religious continuity and change in England and Wales 1676-1851'. Unpublished paper presented at the Royal Geographical Society and Institute of British Geographers Annual Conference, University of Exeter, January 1997 (Available from author).

No such dilemmas about what to do with 'outliers' arise if one uses non-parametric (Spearman's rank) correlation. As shown in table 1, the Spearman correlation coefficient, though smaller than its Pearsonian counterpart, shows strong statistical significance ($r_s = 0.30$). When Eastwell is removed the coefficient drops slightly, as one would expect ($r_s = 0.26$). If one maps the data, a subjective visual comparison of the two patterns confirms that the much more moderate Spearman correlation is a far more realistic measure of association than the Pearson correlation (see maps 7 and 8 presented in section 4.4 of this thesis).

Non-parametric correlation does not simply present the advantage of being less sensitive to 'outliers'. Unlike its parametric counterpart it is not strictly a test of linear association, though few statistical text books make this point. It is actually a test of monotonic association, i.e. whether the value of one variable rises or falls as the value of another variable rises or falls. Such associations are more often what the researcher in the social sciences seeks to discover.

A second example from the thesis illustrates this point *par excellence*. To recall from section 3.2, the number of dissenting denominations per capita appeared to be a useful measure of religious diversity. However, an examination of the relationship between parochial populations and the number of dissenting denominations per capita demonstrated the scale dependence of the measure. Figure 1 shows the relationship between the population and dissenting denominations per capita in the 1,436 parishes with a dissenting presence. One can see that there was a close, but highly non-linear, relationship. In mathematical language, it approximates an exponential relationship. The (linear) regression results indicate that almost no linear relationship was detectable ($R^2 = 0.02$, or, taking the (negative) square root, one can observe that the Pearson correlation coefficient (r_p) = - 0.15).

Physical scientists have long-since known that a fail-safe way of seeking out relationships is to logarithmically transform the variables; almost any relationship will thereby appear linear. Figure 2 shows a halfway stage - the total population is displayed logarithmically, and the dissenting denominations per capita are

Figure 1

Dissenting denominations per capita against total population in 1851

Parishes with populations over 50,000 not shown

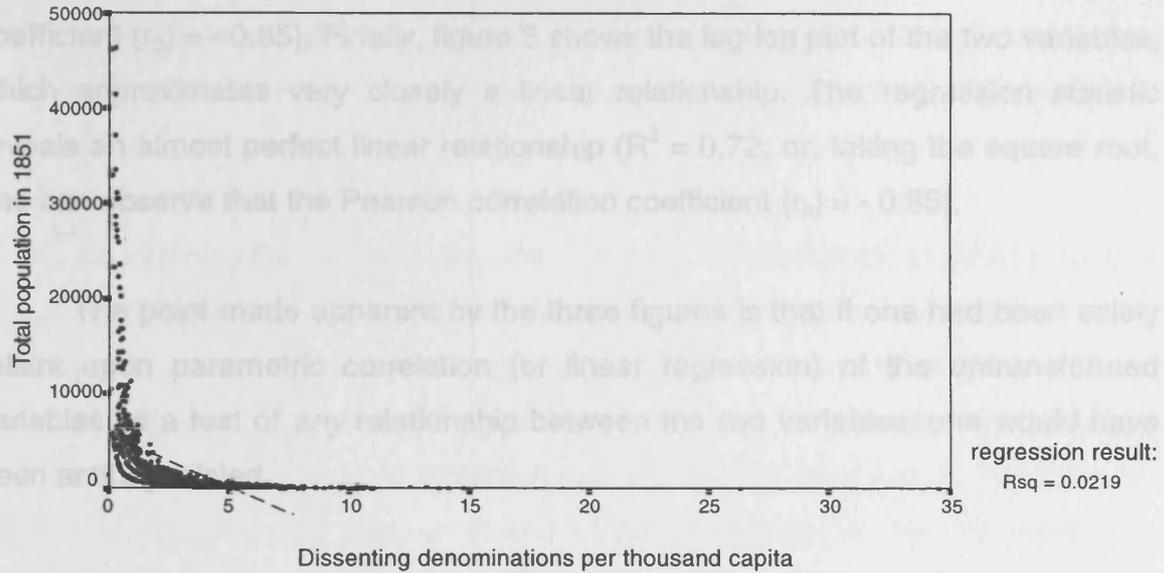
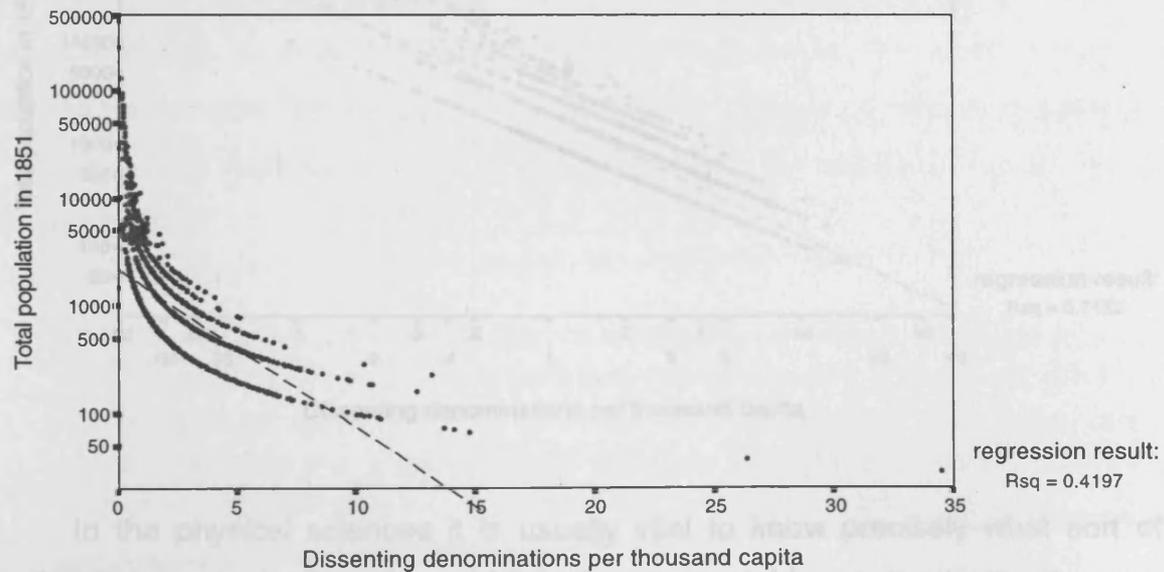


Figure 2

Dissenting denominations per capita against total population in 1851

Total population displayed logarithmically

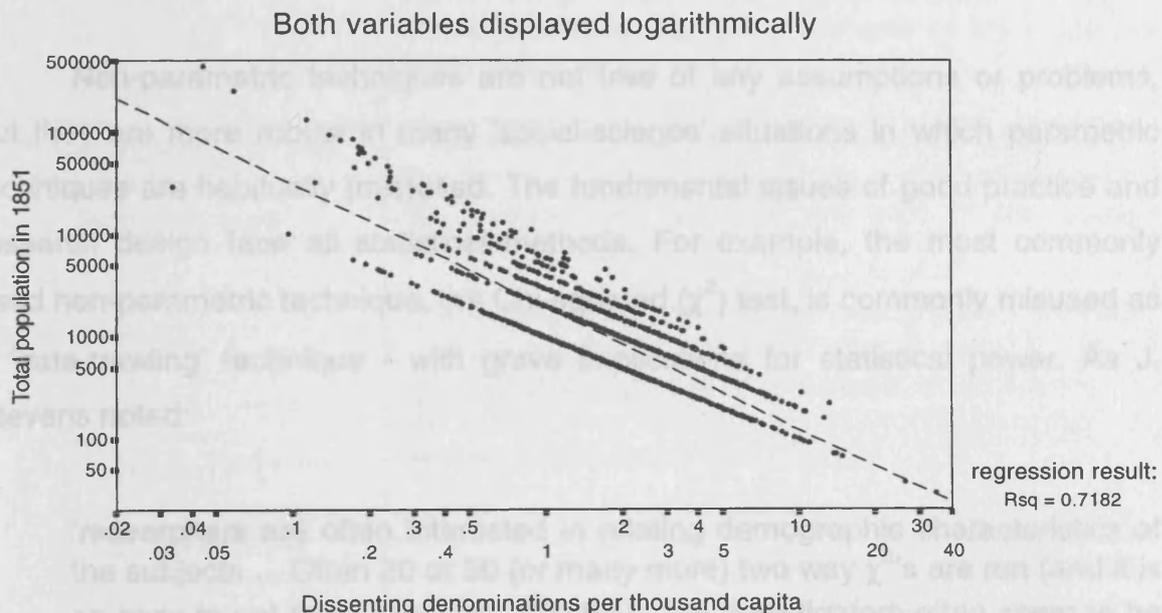


displayed untransformed. The relationship has now been 'decompressed' somewhat to approximate a quadratic curve. The regression statistic is now considerably higher, showing a greater degree of linear relationship ($R^2 = 0.42$, or, taking the (negative) square root, one can observe that the Pearson correlation coefficient (r_p) = - 0.65). Finally, figure 3 shows the log-log plot of the two variables, which approximates very closely a linear relationship. The regression statistic reveals an almost perfect linear relationship ($R^2 = 0.72$, or, taking the square root, one can observe that the Pearson correlation coefficient (r_p) = - 0.85).

The point made apparent by the three figures is that if one had been solely reliant upon parametric correlation (or linear regression) of the untransformed variables as a test of *any* relationship between the two variables, one would have been entirely misled.

Figure 3

Dissenting denominations per capita against total population in 1851



In the physical sciences it is usually vital to know precisely what sort of relationship one is dealing with, and transforming variables and/or testing for non-linear relationships is common practice. In the social sciences (economics apart)

such a need is rare. As in the example considered, the discovery of a non-linear relationship is usually an artefact of the method of measurement, and seldom a fundamental insight into the workings of society. The social scientist is more typically interested in 'generic' relationships. By this I mean that what one generally wants to know is the degree to which one variable increases (or decreases) as another variable increases, or, put more technically the strength of any monotonic relationship.

As revealed by this example, one can have no confidence in stating whether or not there appears to be a monotonic relationship between two variables using parametric correlation or linear regression (which are often the sole tools of investigation).¹⁶ In contrast, non-parametric correlation is perfectly placed to provide a robust test of all monotonic associations. For example, to return to the relationship between the population and dissenting denominations per capita, one can note that the Spearman correlation is unambiguously strong ($r_s = -0.81$, $n = 1,436$), and that the coefficient is unchanged whether one logarithmically transforms one, or both, variables.

Non-parametric techniques are not free of any assumptions or problems, but they are more robust in many 'social-science' situations in which parametric techniques are habitually (mis)used. The fundamental issues of good practice and research design face all statistical methods. For example, the most commonly used non-parametric technique, the Chi-squared (χ^2) test, is commonly misused as a 'data-trawling' technique - with grave implications for statistical power. As J. Stevens noted:

'researchers are often interested in relating demographic characteristics of the subjects ... Often 20 or 30 (or many more) two way χ^2 's are run (and it is so easy to get them to run on SPSSX). The investigators often seem to be able to explain the frequent small numbers of significant results perfectly, although seldom have the significant results been predicted a priori.'¹⁷

¹⁶ Analysis of variance can, of course, be used to measure extremely effectively the applicability of a linear model, but such procedures may lie beyond the knowledge of many researchers in the social sciences.

¹⁷ J. Stevens, Applied Multivariate Statistics For the Social Sciences 2nd Edition (New Jersey, 1992), p.9; notation in original.

Of course, all quantitative researchers misuse statistics at some stage. The problem is that too many are either oblivious or unrepentant of such practices.

(iii) The non-parametric statistics used in this thesis.

The non-parametric tests used in this thesis are outlined in table 2. The table is provided to introduce these tests to those with little knowledge of non-parametric techniques, and to indicate what their parametric 'counterparts' are, if they exist. The main point to note is that they do not require the assumption of a normal distribution.

Table 2
Non-parametric statistical tests used in this thesis

Name	Description
Spearman's rank correlation	<p>A measure of monotonic association between two variables.</p> <p>It is calculated using the same formula as the conventional parametric (Pearsonian) product moment formula, but using the rank of the value in place of the actual value.</p>
Mann-Whitney 'U' test (also known as the Wilcoxon test)	<p>A measure of differences between two samples of the mean rank of a variables to test whether these two independent samples are part of the same continuous population.</p> <p>The Mann-Whitney test is, essentially, a non-parametric version of the better known 'T' test. Instead of testing the significance of difference in the mean of a variable, the Mann-Whitney test is for differences in the mean rank.</p>
Kruskal-Wallis test	<p>A measure of differences between two or more samples of the sums of rank of a variable to test whether these two or more samples are part of the same continuous population.</p> <p>It is, essentially, a non-parametric form of one-way analysis of variance.</p>
Chi-Squared (χ^2) test	A test of probability of the frequency of an observed phenomenon against an expected phenomenon.

(iv) The parametric statistics used in this thesis.

Parametric methods were also used for two sets of reasons. Firstly, in some cases there was no non-parametric way of investigating a certain hypothesis, or, if mathematically possible, the facility did not exist on SPSS. In other circumstances, parametric statistics were seen as desirable because they presented the results in a more useful and interpretable way. The reasons for using parametric statistics and a summary of the methods used and precautions taken are outlined below.

Problems with no suitable non-parametric method of investigation.

The first circumstance under which parametric statistical methods were used was partial correlation. Although non-parametric partial (first order) correlation techniques exist, these are less-well developed and hardly ever used.¹⁸ Also, no procedure for first-order non-parametric correlation existed on the version of SPSS used for the analysis. For these reasons all first order correlations quoted in the analysis are parametric Pearson coefficients.

The second area in which there was no suitable alternative to parametric statistics were the 'post-hoc' procedures of oneway analysis of variance. Whilst, as already noted, the Kruskal-Wallis test is a non-parametric form of oneway analysis of variance, it could not be used to distinguish precisely which groups were significantly different from each other in the same way as the numerous 'post hoc' procedures developed for oneway analysis of variance that are available on SPSS (Scheffé, Tukey, Bonferroni, etc.). Where the specification of which groups were different from each other was deemed to be of importance, the oneway analysis of variance procedure was used in preference to the Kruskal-Wallis test.

A third circumstance arose in which non-parametric statistics were seen as less appropriate. This was when correlations were calculated using the weighted dataset. The Spearman's rank correlation produces a 'virtual' rank, which leads to the loss of an exact number of cases. As the actual sample size decreases, the

¹⁸ See Blalock, Social Statistics, p. 440.

Spearman correlation using the weighted data displays a greater margin of variability (each time one runs the test one gets a different answer!). As a result Spearman correlation was only calculated for the weighted data when the total parish sample was used.¹⁹ For smaller sample sizes the margin of variability of the coefficient (and thereby its statistical significance) was seen as unacceptably large.

Multivariate statistics.

Multivariate statistics are too readily used in the social sciences, often where a more reflective use of 'simpler' techniques would have benefited the reader and researcher alike. There are nonetheless circumstances where multivariate statistics (which are typically parametric) are extremely useful. This utility arises in two sets of circumstances. First, a single multivariate analysis can replace a long series of bivariate statistical tests. Because of the implications of reduction in power (or the high incidence of Type I error) already noted, such a replacement of several tests by one is, in itself, desirable. A more distinct advantage of multivariate statistics is their ability to uncover interactions between variables. For example, in this thesis, it is a running theme that the intensity of religious diversity was closely linked to indicators of urban and industrial development. A series of (non-parametric) correlations can demonstrate such links well, but cannot produce a measure of the 'net' relationship between religious diversity and the socio-economic environment. Put more simply, one does not know by how much the sum of the individual relationships is greater than the largest constituent part. Multiple regression can help answer this question.

In this thesis, non-parametric correlation is often used to lay the introductory groundwork, whilst linear regression is used to summarise the results and shed light upon the degree of interactions between the 'independent' variables. In this way it is hoped that non-parametric techniques provide a rigorous basic test of the various hypotheses whilst regression provides a further elaboration.

¹⁹ A full account of the weighted dataset is given in Appendix 6.

As already noted, there are many potential pitfalls in using parametric statistics with this sort of data. Specific tests were performed to make sure that none of the most important assumptions of these test were broken. These tests and checks are summarised in table 3.

Table 3

Tests and checks for the violation of assumptions in the multivariate statistical techniques used in this thesis

Name	Test and checks
Oneway analysis of variance	Levene's test of inequality was carried out to check for homogeneity of variance. Subsequent analysis was not performed if the Levene statistic exceeded the $\alpha = 0.05$ confidence level.
Linear Regression	<p>In all reported regressions, unless noted in the main text, there were no points of undue influence (defined as a Cook's distance greater than 1). On the rare occasions such cases occurred, they were excluded from the reported analysis. All 'F' values exceeded the 99% confidence level, except the analysis reported in table 23, in which F only exceeded the 95% confidence level.</p> <p>Visual inspection of diagnostic graphs was performed to check for the constancy of variance of the residuals, and to examine whether the residuals approximated the normal distribution. Where regression was used for more predictive purposes, the diagnostic graphs are presented in the main text (figures 8 and 9).</p> <p>Many of the regressions were inevitably characterised by high degrees of multi-collinearity. This was not, in itself, a problem; indeed, illustrating the interdependence of the 'independent' variables was part of the function of some of the analyses.</p>

Appendix 6

Weighting the Data

Appendix 5 contains a summary of the statistical methodology used in this thesis. This appendix refers to one specific part of that methodology - the 'weighting' of the datasets.

It was noted in section 3.3 of the thesis that certain of the findings obtained from the parish dataset might entail a 'rural bias'. This potential for rural bias arises because using the 'raw' data, all parishes receive equal statistical weight regardless of the size of their resident population. For basic 'geographical' analysis - describing the spatial distribution of various phenomena - this is not an unwanted quality.

However, for parts of the analysis it was important to give statistical influence to the parishes in proportion to the size of their resident populations. For example, if one was advocating that certain socio-economic conditions were responsible for low rates of religious practice, then it would be important that the analysis was sensitive to the number of people 'affected' by these conditions, and not just the number of parishes. To illustrate further, in the unweighted parish dataset, a parish such as Manchester with 452,158 people was given the same statistical importance as North Marden in Sussex with a population of just 19 people. Clearly, the religious and socio-economic conditions which existed in an urban parish like Manchester were experienced by a much greater number of people than such small rural parishes. Weighting the data is a way of giving statistical influence to each parish or registration district in proportion to its population. Weighting the data can alter greatly the impression gained from data analysis.

That the conclusions one draws from the data are dependent on whether or not the data are weighted can be illustrated by examining the relationship between the index of attendances and population density. To recall from Chapter 1 this

relationship underpins the long-running argument as to whether urbanisation was a principal cause of religious decline. Table i shows the correlations obtained using the parish-level data, the corresponding 147 registration districts, and all 624 registration districts. The left-hand column shows the correlations obtained with the 'unweighted' data, the right-hand column shows the correlations obtained with the weighted data.

Table i

	Correlation between the index of attendances and population density:	
	Unweighted data	Data weighted by population
Parish data n = 2,214	$r_s = + 0.04^*$ $p = 0.046$	$r_s = - 0.33^{**}$ $p = 0.000$
Corresponding registration districts n = 147	$r_s = - 0.17^*$ $p = 0.045$	$r_s = - 0.63^{**}$ $p = 0.000$
All registration districts n = 624	$r_s = - 0.30^{**}$ $p = 0.000$	$r_s = - 0.63^{**}$ $p = 0.000$

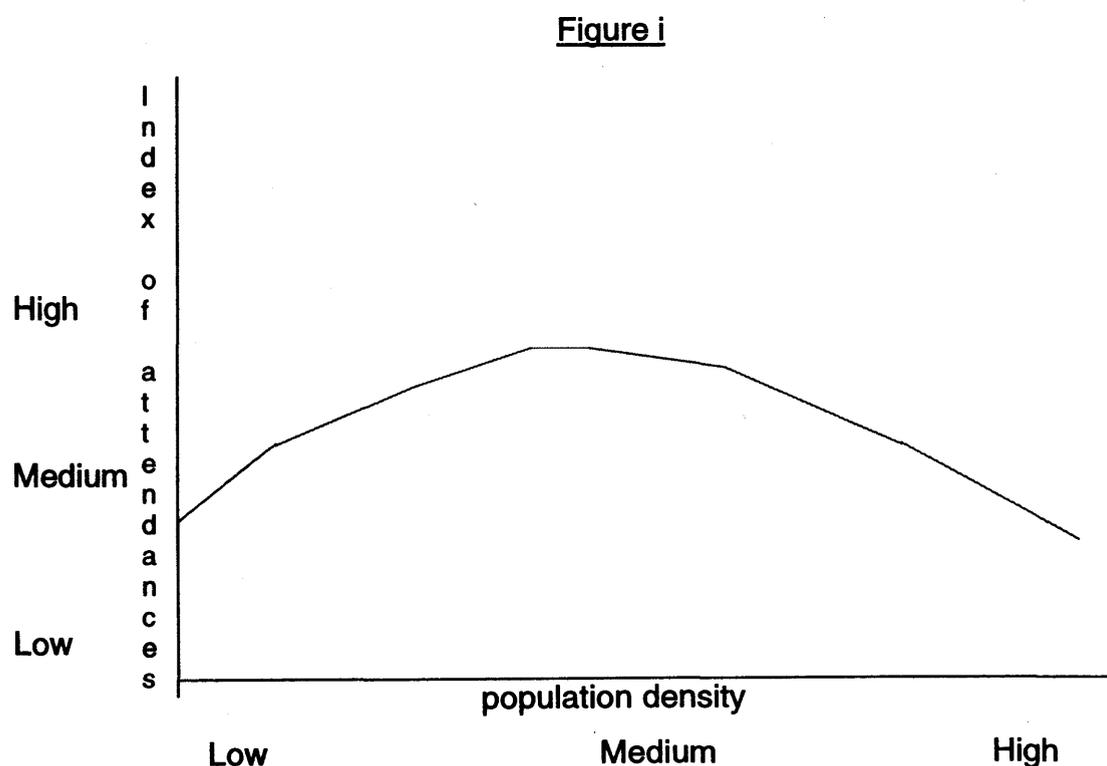
** Indicates that the Spearman correlation coefficient exceeded the 99% confidence level

* Indicates that the Spearman correlation coefficient exceeded the 95% confidence level

It can be seen that the correlation obtained with the unweighted parish data actually showed a weak, but statistically significant, *positive* association between population density and the index of attendances. In apparent contradiction, the corresponding 147 registration districts displayed a weak, but statistically significant, positive association. The correlation for all 624 districts was positive

and achieved strong statistical significance. At first sight, one is left questioning the quality of one's data, and unable to state whether the index of attendances was generally lowest where the population density was highest.

The correlation results obtained using the weighted dataset (the right-hand column of table i) present no conflict or uncertainty of interpretation. In all three cases there was a strong negative association between population density and the index of attendances. The reason that weighting the data makes such a difference is that the areas with the lowest indices of attendances were not highly urban, but highly rural, concentrated in Cumberland and Northumberland. To simplify greatly, and draw one facet from many, the relationship between the index of attendances and the population density in the unweighted parish dataset looks something like the pattern shown in figure i below.



It is precisely because of the trend shown in figure i that neither parametric correlation (as a test of linear association), nor non-parametric correlation (as a test of monotonic association) would reveal a close association when calculated from the unweighted parish data. To weight the data is to give greater attention to the negative trend shown in the right-hand side of figure i, and to give much less attention to the positive trend revealed in the left-hand side. To weight the data by the population is to give parishes with low population densities a much decreased statistical influence and parishes with high population densities a much increased influence. The net result (at both parish level and registration-district level), was that the index of attendances appeared far more closely and negatively associated with population density once that data were weighted by the population.

Weighting the datasets by the population.

The actual procedure of weighting the dataset is very simple using the SPSS software package. The main point to note is that simply weighting each parish or district by its respective 1851 population would massively increase the apparent number of cases in the dataset. Whilst the unweighted parish dataset consisted of 2,432 cases,¹ each one corresponding to a parish, to weight each case by its total parochial population would have resulted in each parish yielding the same number of cases as its resident population - i.e. from 19 to 452,158. In this manner the weighted dataset would have contained millions of cases.

Such a multiplication of cases would have made a nonsense of statistical significance levels, which are specific to sample size (see Appendix 5). Wherever the data were weighted, this was done by dividing the population of each parish or registration district by the *mean* population of the relevant sample. In this way a parish with a population equal to the mean population remained one case in the weighted dataset; a parish with twice the mean population became two cases; and a parish with half the mean population became half a case. In this way, the apparent number of cases remained the same as in the unweighted dataset.

¹ This figure excludes the 170 parishes with 'zero' attendance data.

Technical Issues.

To keep the sample size constant is not to guarantee that the statistical significance levels of tests carried out on the weighted dataset were correct. The fact that some parishes (and registration districts) were providing more than one case means that any errors in the data could have had a much greater effect than in the unweighted dataset. A further weakness of the weighted dataset is that it carves up the larger populations into sub-units all displaying the same characteristics. If the data had actually been collected for these sub-units, the religious and socio-economic characteristics would not have been identical. These issues are far more serious in the parish data, where the population was far more variable than at the registration-district level. It is for these reasons the weighted analysis is presented in an Appendix, so that the figures are not accorded the same status as the main analysis. As already stated, the function of the weighted analysis was solely to check for any 'rural bias' in the unweighted analysis.

A measure of the increased influence that one parish could have in the weighted dataset is given in Table ii. It can be seen how the lion's share of the 2,260 cases of the weighted dataset arose from the 565 parishes with a population of over 1,090. A quarter of the parishes yielded over 80% of the cases in the weighted dataset. The parish of Manchester alone, with a population approaching half a million, accounted for over 200 cases in the weighted dataset. In contrast, the 566 parishes (25% of the total) with populations of less than 289 accounted for just 47.7 cases in the weighted dataset - just 2% of the total.

The populations of the 147 corresponding registration districts were rather more equitably distributed. The population totals ranged from 2,493 in Catherington (Hampshire) to 258,236 in Liverpool. As shown in Table iii, there was a far more equitable correspondence between the number of districts and the number of cases yielded in the weighted dataset.

Table ii

An examination of the translation from parishes in the unweighted dataset to cases in the weighted dataset

	Parishes with a population of less than 289 in 1851	Parishes with a population between 289 and 540 in 1851	Parishes with a population between 541 and 1089 in 1851	Parishes with populations of over 1,090 in 1851
Number of parishes	566	564	565	565
Number of weighted cases	47.7	112.5	212.4	1887.4

Table iii

An examination of the translation from registration districts in the unweighted dataset to cases in the weighted dataset

	Registration districts with a population of less than 13,858 in 1851	Registration districts with a population between 13,858 and 20,171 in 1851	Registration districts with a population between 20,172 and 32,630 in 1851	Registration districts with a population of more than 32,631 in 1851
Number of districts	156	155	157	156
Number of weighted cases	56.2	90.7	135.9	341.2

Using the weighted data.

The weighted dataset served two main functions. Firstly, as already indicated, it allowed the issue of rural bias in the parish dataset to be tackled by conducting a parallel analysis, which is reported in the tables at the end of this Appendix.

Secondly, weighting both the parish-level and registration-district data allowed the relationships to be compared at these two spatial scales. It was indicated in Appendix 2 and section 3.1, that certain of the uncertainties regarding the interpretation of the 1851 Religious Census data were specific to the parish-level data. Comparing the relationships between the parish-level and registration-district data formed an important method of checking that the parish-level data were not being misinterpreted.

Analysis.

The following tables represent the results of a 'parallel analysis' carried out with the weighted parish dataset. These tables are pertinent to Chapter 4 of the thesis, and are referred to in the main text where relevant.

Table 1**The associations between religious diversity, the index of attendances and selected socio-economic variables**Spearman's rank correlations (r_s)

Description of socio-economic variables	Index of total attendances	Religious diversity measure (1851)
correlation results (n=2,231 - 2,260)		

Agricultural

Percentage of families in agriculture (1831)	+ 0.33** (p = 0.000)	- 0.65** (p = 0.000)
Labourers in agriculture as a percentage of the population (1831)	+ 0.36** (p = 0.000)	- 0.68** (p = 0.000)
Labourers not agricultural as a percentage of the population (1831)	- 0.15** (p = 0.000)	+ 0.33** (p = 0.000)
Occupiers not employing labourers as a percentage of all occupiers (1831)	- 0.12** (p = 0.000)	+ 0.35** (p = 0.000)

Demographic / urbanisation

Population density in 1851	- 0.35** (p = 0.000)	+ 0.64** (p = 0.000)
Total population in 1851	- 0.49** (p = 0.000)	+ 0.77** (p = 0.000)
Mean annual population growth rate 1811-1831	- 0.25** (p = 0.000)	+ 0.56** (p = 0.000)
Mean annual population growth rate 1831-1851	- 0.29** (p = 0.000)	+ 0.52** (p = 0.000)
Sex ratio; males to females (1851)	+ 0.04 (p = 0.076)	- 0.20** (p = 0.000)
Mean household size in 1851	- 0.37** (p = 0.000)	+ 0.34** (p = 0.000)

Industrialisation / local economic structure

Percentage of families in trade (1831)	- 0.44** (p = 0.000)	+ 0.63** (p = 0.000)
Percentage of the population employed in manufacturing (1831)	- 0.48** (p = 0.000)	+ 0.58** (p = 0.000)
Percentage of the population employed in retail / handicraft (1831)	+ 0.05 (p = 0.013)	+ 0.28** (p = 0.000)
'Capitalists' as a percentage of the population (1831)	- 0.09** (p = 0.000)	+ 0.34** (p = 0.000)

** indicates that the correlation coefficient exceeded the 99% confidence level.

Table 2**Regression analysis to demonstrate the influence of selected socio-economic variables upon the intensity of religious diversity in 1851**

Regression analysis with selected socio-economic variables as predictor variables and the religious diversity measure as the dependent variable.		
N = 2,117		
Variable selection based on minimum significance of 'T' at 95%		
<u>Variables in the equation</u> (In order of ' β ')	<u>β</u>	<u>T (sig.)</u>
Labourers in agriculture as a percentage of the population (1831)	- 0.33	- 6.9 (p = 0.0000)
Percentage of families in agriculture (1831)	- 0.30	- 6.4 (p = 0.0000)
Total servants as a percentage of the population (1831)	- 0.27	- 10.7 (p = 0.0000)
Mean annual population growth rate 1831-51	+ 0.20	+ 10.2 (p = 0.0000)
Labourers not agricultural as a percentage of the population (1831)	- 0.12	- 6.5 (p = 0.0000)
Population density in 1851	+ 0.12	+ 6.2 (p = 0.0000)
Total occupied population as a percentage of the population (1831)	+ 0.09	+ 3.3 (p = 0.0004)
Mean household size in 1851	- 0.09	- 4.3 (p = 0.0000)
Regression result: adjusted R² = 0.51		

Table 3Regression analysis to demonstrate the influence of selected socio-economic variables upon the index of attendances in 1851

Regression analysis with selected socio-economic variables as predictor variables and the index of attendances as the dependent variable.		
N = 2,117		
Variable selection based on minimum significance of 'T' at 95%		
<u>Variables in the equation</u> (In order of ' β ')	<u>β</u>	<u>T (sig.)</u>
Mean household size in 1851	- 0.26	- 10.7 (p = 0.0000)
Percentage of families in trade (1831)	- 0.22	- 4.8 (p = 0.0000)
Percentage of the population employed in retail / handicraft (1831)	+ 0.17	+ 5.3 (p = 0.0000)
Percentage of the population employed in manufacturing (1831)	- 0.12	- 2.8 (p = 0.0045)
'Capitalists' as a percentage of the total population (1831)	- 0.12	- 3.5 (p = 0.0152)
Total servants as a percentage of the population (1831)	+ 0.11	+ 4.0 (p = 0.0001)
Percentage of families in agriculture (1831)	+ 0.10	+ 2.4 (p = 0.0181)
Occupiers not employing labourers as a percentage of total occupiers (1831)	+ 0.10	+ 3.9 (p = 0.0001)
Sex ratio: males to females in 1811	- 0.08	- 3.2 (p = 0.0012)
Population density in 1851	- 0.06	- 2.2 (p = 0.0311)
Mean annual population growth rate 1811-31	+ 0.05	+ 2.1 (p = 0.0394)
Ratio of male to female servants	+ 0.04	+ 2.2 (p = 0.0255)
Regression result: adjusted R² = 0.25		

Table 4

The associations between the various measures of religious diversity in 1676 and the two measures of religious practice in 1851

(N = 1,382)

Spearman's rank correlations (r_s)

	Index of attendances in 1851	'index of attendants' in 1851
Religious diversity in 1676 - Protestant nonconformity measure	$r_s = - 0.12^{**}$ (p=0.000)	$r_s = - 0.18^{**}$ (p = 0.000)
Religious diversity in 1676 - Catholic measure	$r_s = - 0.14^{**}$ (p=0.000)	$r_s = - 0.17^{**}$ (p = 0.000)
'Total religious diversity' in 1676	$r_s = - 0.16^{**}$ (p=0.000)	$r_s = - 0.20^{**}$ (p = 0.000)

** Indicates that the correlation coefficient exceeded the 99% confidence level

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