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ABSTRACT

In the sociology of religion of the past thirty years or so, one can identify three major approaches to the relation of religion and modernity: secularization theory, the Stark-Bainbridge rational choice theory, and the Finke-Stark "supply-side" theory. In this paper, I study churchgoing rates in England in 1851 to examine which of these three theoretical approaches appears the most valid. Victorian England provides a compelling case study. Not only are the data very good (uniquely so in the case of Britain), but also England in 1851 takes us back to one of the original locales of urban-industrial development. My conclusion is that both "supply-side" (of religion) and "secularization" processes were influencing English churchgoing rates in 1851. However, the former were much more limited and transient in their effect, being restricted to isolated rural areas. In the more urban places, where most people lived, secularization processes were operating. There are parallels between this "duality" of process operating in rural and urban England in 1851 and the fact that churchgoing appears to have increased during the nineteenth century up to that point, but declined, unabated, thereafter.

VARIATIONS IN CHURCHGOING RATES IN ENGLAND IN 1851: SUPPLY-SIDE DEFICIENCY OR DEMAND-LED DECLINE?

The big picture: religion and modernity.

One can identify three major theorizations of the relationship between religion and modernity in the western world – secularization theory; the Stark-Bainbridge rational choice theory; and the subsequent development of that approach as the Finke-Stark "supply-side" theory. In the 1960s and 70s, secularization theory was a dominant and seldom challenged body of social theory concerning religion in the modern World. In the 1980s and 90s the Stark-Bainbridge rational choice theory and the Finke-Stark "supply-side" theory have produced a sustained criticism of secularization theory. In the United States they are seen as defining a new "paradigm", while secularization theory is seen as an old, and largely defunct one (Hadden 1995; Warner 1993, 1997). In Europe, secularization theory remains more widely accepted, and any sustained attention given to rational choice and supply-side theories has tended to be critical (e.g. Bruce 1999).

Secularization theory is, superficially at least, a well-known body of work, and for reasons of space I do not offer a lengthy summary here. The most important British secularization theorist remains Bryan Wilson. The three key trends or processes in Wilson's account are *rationalization*, *societalization* and *secularization* itself (see Wilson 1982). He argues that all these facets of modernity rob religion of its latent functions; these being defined as social cohesion, social control, and reinforcement of group identity. While certain of these erstwhile religious functions are taken over by other agencies, others loose relevance outright. Wilson criticises functional definitions of religion for their implication that there can be a net translation of religious functions into the "secular" sphere, rather than the outright loss of certain religious functions that he proposes.

The process of rationalisation, which Wilson identifies as the rise of science and technology, is fundamental to Wilson's arguments. He argues that rationality, in contrast to most other social developments, is almost uniquely anathematic to religion, largely because the ultimate claim of salvation lies beyond rationality. For Wilson, rationalization is the process which transforms social organisation from community (*Gemeinschaft*) to society (*Gesellschaft*), and this is the dominant mechanism of secularization. He terms this product of rationalization "societalization", and offers the following summary (Wilson 1982:155-6):

> 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*. [My italics].

Wilson's account is only one theory of secularization and other theories (most importantly, Berger 1967 and Luckmann 1967) differ in substantial and important ways. A full review of secularization theory is beyond the scope of this paper. The important point is the common core premise that the social significance of religion declines as modernity advances, such that religion becomes confined to individual questions of meaning – the so called "privatization" of religion.

In contrast to secularization theory, the Stark-Bainbridge rational choice model (Stark and Bainbridge 1980, 1985, 1987) views secularization and religious revival as an ongoing cycle throughout history. Stark and Bainbridge's interpretation stems from their deductive theory of religion, which is based upon exchange theory; a theory centred upon the concepts of *rewards* and *costs* as empirically measurable determinants of behaviour. From this perspective, Stark and Bainbridge (1980:123) state that '*Religion* refers to systems of general compensators based on supernatural assumptions.' [Their italics]. The twenty-fifth proposition of Stark and Bainbridge's theory of religious commitment (Stark and Bainbridge 1987: 126) reads: 'Regardless of power, persons or groups will tend to accept religious compensators when desired rewards [i.e. material rewards] do not exist.' The implication is that the need for supernatural compensators is a constant whenever, wherever, and for whom, desired rewards are not obtainable.

The Stark-Bainbridge interpretation is that there is a cyclical continuity of secularization, innovation and revival. The dynamic of the cycle is the *tension* between religious organisations and the wider society. Under the Stark-Bainbridge schema, churches and denominations are in states of low tension while sects and cults are in states of high tension. Whereas sects are produced by schism within a low-tension group, cults are produced by innovation, and it is cults that provide the innovation part of the Stark-Bainbridge cycle of secularisation, innovation and revival.

Secularization arises as religions tend to become bureaucratic and worldly, i.e. sects gradually become low-tension denominations and churches. As tension is reduced so religious participation falls away – which is the limited role Stark and Bainbridge assign to secularization. However, since they argue that *potential* demand is something of a constant, decline in conventional religion leaves a gap for an innovative cult to meet this untapped demand. Where the conditions and the cult's message match, the cult will grow into a major world religion – revitalising religious participation and completing the cycle by reversing secularization. This new religion

will itself eventually become worldly and bureaucratic, restarting the cycle of secularization. From the Stark-Bainbridge perspective, Mormonism is the latest in a long series of world religions arising from cults that flourish where conventional religion has become too weak. In their words, 'cults will abound where conventional churches are weakest' (see Stark and Bainbridge, 1985: 475-505).

The third major conceptualisation of religion and modernity, the Finke-Stark supply-side theory draws on strands of the Stark-Bainbridge rational choice theory. They argue that if potential religious demand is something of a constant (as the Stark-Bainbridge approach assumes), it follows that variation in realised religious demand (such as the churchgoing rate or church membership) is a product of variation in religious "supply". Thus, one should look towards economics rather than sociology to understand why levels of religious participation vary between or within societies.

Following the supply-side principles of neo-classical economics, Finke, Stark and their associates argue that since modernity tends to facilitate the formation of a free religious market, it leads to the more efficient production of religious goods and thereby the overall size of the religious market increases. In their words: '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.'(Stark, Finke and Iannaccone 1995: 432). Finke and Stark (1992) argue that American history shows that modernity can foster religious vitality. Turning secularization arguments on their head, they argue that it is pre-modernity and certain European forms of modernity – in which official churches represent lazy and inefficient monopolies – which provide the conditions under which religious involvement is low. It is modernity, especially the American denominational style of modernity, which fosters religious vitality.

In the following analysis, I examine how congruent these three theoretical approaches appear with the English data from the 1851 Religious Census. In so doing, I devote most attention to secularization and supply-side arguments. The Stark-Bainbridge cycle of secularization, innovation and revival is concerned with a long time period, and is not amenable to empirical investigation with data from one year (though the absence of any reversal in the decline in church attendance in twentieth-century England is noted in the conclusion).

The little picture: England in 1851.[2]

The 1851 Religious Census is the only fully comprehensive religious census in the history of the modern United Kingdom. The comprised parish returns for each place of worship, taken on Sunday, 30th March 1851. The returning forms documented numbers of "free", "appropriated" and "other" sittings, numbers of attendances at religious services in the morning, afternoon and evening, average attendances over a recent period, Sunday school attendances at the three times of day, dates when post-1801 places of worship had been built , sources of income for the established church, and other comment.

More than 30,000 census workers collected data for 34,467 places of worship. The timing was fortuitous, since churchgoing rates in 1851 were close to their highest level since measurement began, as Gill (forthcoming) documents. The reason for the rise in churchgoing rates over the century or so leading up to 1851 was the rise of "new dissent".[3] By far the most numerous new element of dissent was Wesleyan Methodism and its offshoots.

The Census revealed that the Church of England secured 50.3% of all attendances in England (and fared less in Wales), while the various Methodist denominations secured 24.3%. As a consequence of the growth of Methodism (and the revival of older dissenting denominations such as the Congregationalists and Baptists), England can be considered a religiously plural nation by 1851. To illustrate, of the 576 registration districts comprising England, all contained more than one denomination and over 90% contained five or more denominations (using the term loosely, to cover any religious organisation, including the Church of England and the Roman Catholic church).

After 1851, however, just as this competitive religious market had been set in place and churchgoing rates had risen to very high levels, recruitment and retention of adherents began to falter, first among the dissenting denominations, then in the Church of England. To pluck one summary from many, Cox (1982:7) observed that:

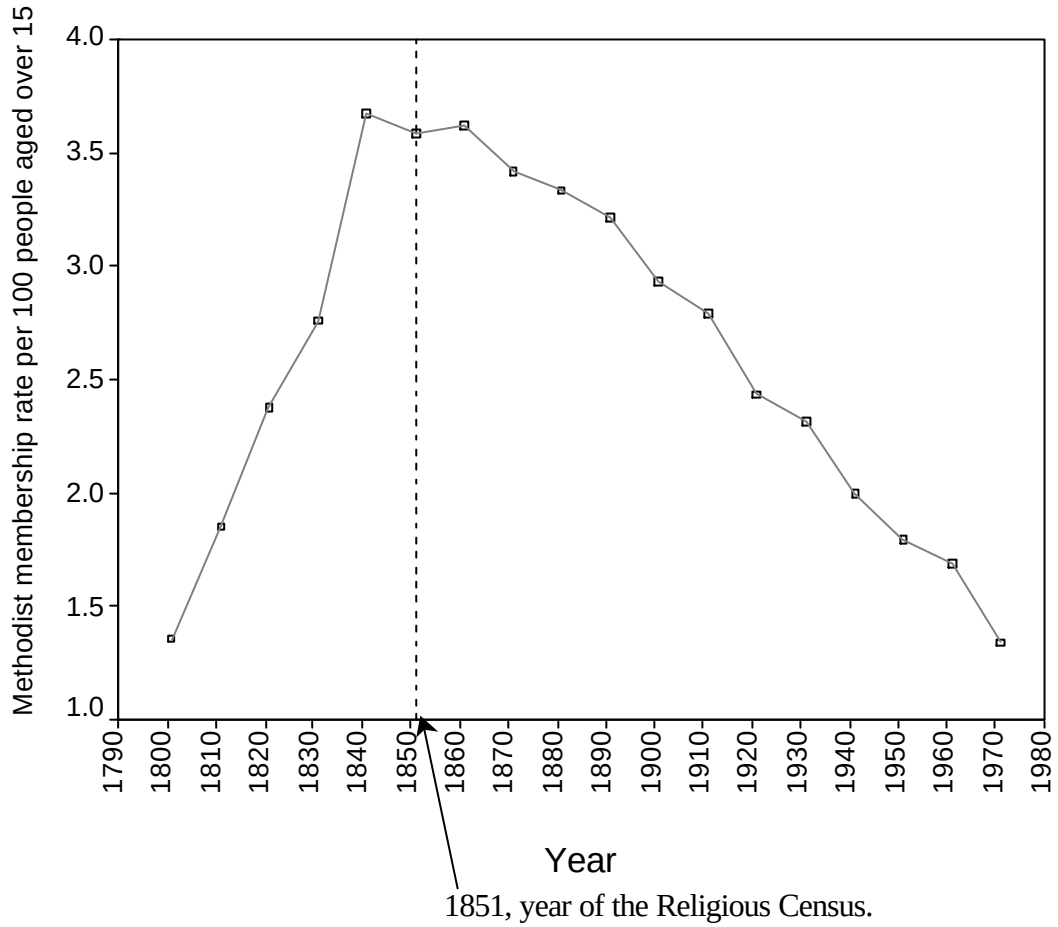
> Sometime after 1850 this great religious crusade faltered. ... Whether this institutional decline began as early as 1850 or as late as World War I is a matter of dispute. Some Nonconformist denominations ceased to grow in real terms around 1850, others in the 1880s. Nonconformity continued to grow 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.

[2] For reasons of space, I do not examine Wales in this paper. Crockett (forthcoming), and Crockett and Olson (forthcoming) examine England *and* Wales.

[3] "Dissent" is defined loosely as all Protestant denominations outside the Church of England.

The trends in Methodist membership rates between 1790 and 1970 serve to highlight the pivotal timing of the 1851 census in relation to the prior rise and subsequent decline in the popularity of extra-establishment (i.e. non Anglican) Protestant religion.

Figure 1: the rise and fall of Methodism in England, 1801 to 1971



Note: the Y axis shows Methodist members per hundred adults (aged over 15) in England. This includes all Methodist denominations except the Wesleyan Reform Union and the Independent Methodists. Membership density is computed at 10 year intervals, from 1801 to 1971.

Source: Currie, Gilbert and Horsley (1977: tables 2.5 (p. 40) and A3 (pp. 140-146)).

Figure 1 shows the membership rate (per 100 adults) of all the principal Methodist denominations combined, at ten-year intervals from 1801 to 1971. The peak in membership around 1851 is remarkably clear given the frequent schisms and subsequent reunification hidden within this aggregate Methodist figure.

In this paper, I argue that the *cross-sectional* relationship between urbanization and church attendance across England and Wales in 1851 offers important clues as to why religious participation (whether measured by membership or attendance) appears to have risen over the hundred years or so prior to the 1851 census, but has declined unambiguously thereafter.

Data.

The principal dataset analysed in this paper is a transcription of the Religious Census data published by Horace Mann (1853) for the 576 English registration districts.[4] I also refer to a dataset of more geographically sensitive data transcribed from the original returns for 2,076 parishes (which comprise 131 of the 576 English registration districts).[5] To both these sets of religious data, a large number of demographic and socio-economic variables have been added (from the 1831, 1851 and 1861 population censuses), allowing religious behaviour to be related to local socio-economic and demographic contexts.[6]

The analysis centres on the registration-district data because these cover the whole of England. The parish data are used to provide additional support. The parish data are important for two reasons. First, although registration districts provide a complete national coverage, parish data offer greater geographical sensitivity: the median parish contained 505 people and covered 8.5 square kilometres, in comparison the median registration district contained 20,050 people and covered 207.4 square kilometres.

Secondly, the parish data make it possible to separate Sunday scholars from churchgoers. In the published registration-district data, Mann (1853) combined Sunday scholars with attendances at worship. The inability to separate Sunday scholars from churchgoers raises a potentially serious problem (Sunday scholars were numerous: the concomitant Education Census revealed that there were 1,787,363 Sunday scholars, 10% of the total population, present in Sunday school on Sunday March 30th).[7] The Sunday scholar data obtained in the Religious Census are problematic, because there is evidence of widespread "double-counting" of the

[4] The registration-district data were assembled by Keith Snell, Paul Ell, and Alasdair Crockett at the Department of English Local History, University of Leicester. The data were transcribed from the reprinted series: British Parliamentary Papers, Population, Vol. 10. Shannon: Irish University Press, 1970.

[5] The parish data were assembled by Keith Snell, Paul Ell, and Alasdair Crockett at the Department of English Local History, University of Leicester. The data were transcribed from Home Office microfilm, coded as follows: Cambridgeshire (HO 129, 185-93); Dorset (H0 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). The Derbyshire data were kindly provided by Margery Tranter (and since published as M. Tranter (ed.), The Derbyshire Returns to the 1851 Religious Census (Chesterfield, 1995)).

[6] The variables analysed in this paper were derived from births and deaths (1840-50), transcribed by the author from the Thirteenth Annual Report of the Registrar General, and from the 1861 census data transcribed by David Alan Gatley, University of Staffordshire (made available to the author via the History Data Service (HDS) of The Data Archive, University of Essex).

[7] The figure is derived from pp. 235-275 of the 1851 Census Great Britain: Report and Tables of Education, XC (1852-3).

same class of children at several times of day (e.g. the morning and the afternoon),[8] which (sadly) removes the possibility of isolating attendances at church by subtracting the Sunday scholar figure given in the Education Census (which is not affected by double counting) from the combined Sunday school and church attendance figure.

The Religious Census returns did, however, elicit Sunday scholars separately from attendances at church. In this way, the parish-level data (which were transcribed from the returns) permit an examination of the effect of calculating the churchgoing rate with and without Sunday scholars (and no substantial bias to interpretation was detectable).

The measure of churchgoing typically calculated is the "index of attendances", which is defined as total attendances (all services and denominations) as a percentage of the (total) population. Because some people attended more than once in the day (known as multiple attendance) a few registration districts have an index of attendances greater than 100. The Religious Census did not monitor the extent of multiple attendance, and hence one cannot deduce the number of *churchgoers* from the number of *attendances*. This issue has dogged analysis of the Religious Census, and has led some to question whether churchgoing can be usefully estimated. Elsewhere (Crockett 1998:110-119), I have analysed the issue of multiple attendance in considerable detail, and concluded that it was not as common as historians often assume (often entirely erroneously).[9]

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[8] To illustrate, analysing a sample of parish returns (see note #5); reveals that of the 2,722 Sunday school attendances recorded in pairs (i.e. at two times of day for the same Sunday school), 926 (34%) were exactly the same figure, an improbable coincidence that only affected 168 (3.5%) of the 4,816 church/chapel congregations that were recorded in pairs.

[9] The Mudie-Smith (1904) report on church attendance in London selected a small sample of churches holding more than one service and gave everyone attending worship therein a card. Those attending twice in the day ("twicers") were counted. The report quotes a "percentage twicers" of 39% for Inner London and 36% for Greater London, with many nonconformist chapels displaying a rate of 70% or more (Mudie-Smith 1904: Appendix A, 449-450). These figures are misleading. The figure given is actually "twicers" as a percentage of *morning* attendances, and afternoon service was generally the best attended for nonconformist denominations. The more meaningful "percentage twicers" (that is, twicers as a percentage of all attendances at churches holding more than one service) was, in fact, only 14.7% in Central London and 15.1% in Greater London. Even this figure is potentially misleading, since it refers only to churches that held multiple services. There is no information in the Mudie-Smith survey regarding the proportion of churches that held only one service. In 1851, between a fifth and a third of churches of the major denominations held only one service (Crockett 1998: 119). The ambiguous phraseology of the Mudie-Smith report has misled many. Even within the report itself, for example, 'The Problem of East London', the problem (i.e. low church attendance) is made to look all the worse by the excessive subtraction of attendances to calculate churchgoers (I refer to Alden 1904:24-5). Most recently, Peter Brierley (2000: 226-227) makes excessive deductions to the 1851 and 1904 attendance data and substantially underestimates churchgoing at these dates.

As will become clear, the variation in churchgoing rates across England in 1851 was so great that it must have reflected far more than any modest variation resulting from local differentials in multiple attendance behaviour.

The geography of churchgoing in 1851.

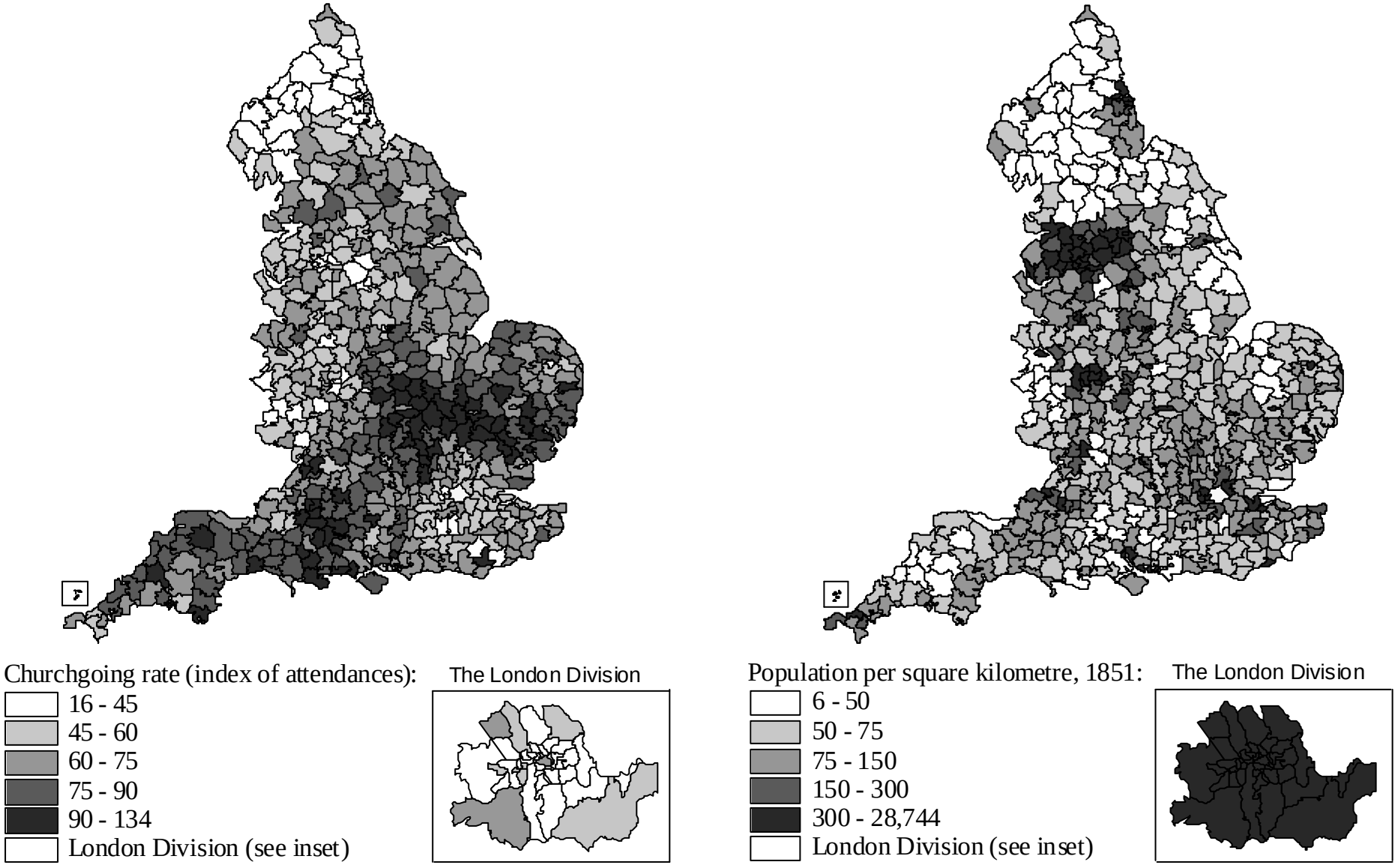
Before commencing statistical analysis, it is important to gain a sense of the substantial geographical variation in churchgoing revealed by the census. Figure 2 maps churchgoing (the index of attendances) across the 576 registration districts of England, and alongside shows the density of population to allow a simple visual comparison.

A comparison of churchgoing and population density makes clear that while urban churchgoing rates were generally low (note the low rates in London, and the industrialized parts of Lancashire, the West Riding and the black country), some of the most rural parts of England – particularly the Scottish and Welsh border areas – were characterised by equally low churchgoing rates. The difference between areas of high and low churchgoing should be stressed. The palest areas in the map of churchgoing in figure 2 recorded fewer than 45 attendances (including Sunday scholars) per hundred people, while the darkest shading indicates that over 90 attendances were recorded per hundred people.

The 1851 data have provoked a protracted debate concerning the relationship between churchgoing and urbanization. Before 1851 there was already disagreement over the extent to which low churchgoing was concomitant with urbanization and industrialization, and such disagreement continues today (see Brown 1988). Horace Mann's analysis (Mann 1853), in which he firmly equates low churchgoing with the urban working classes, remains central to this disagreement. To recall Mann's often quoted remarks (Mann 1854:93):

> 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 alics].

Figure 2: a comparison of churchgoing and population density (by registration district)

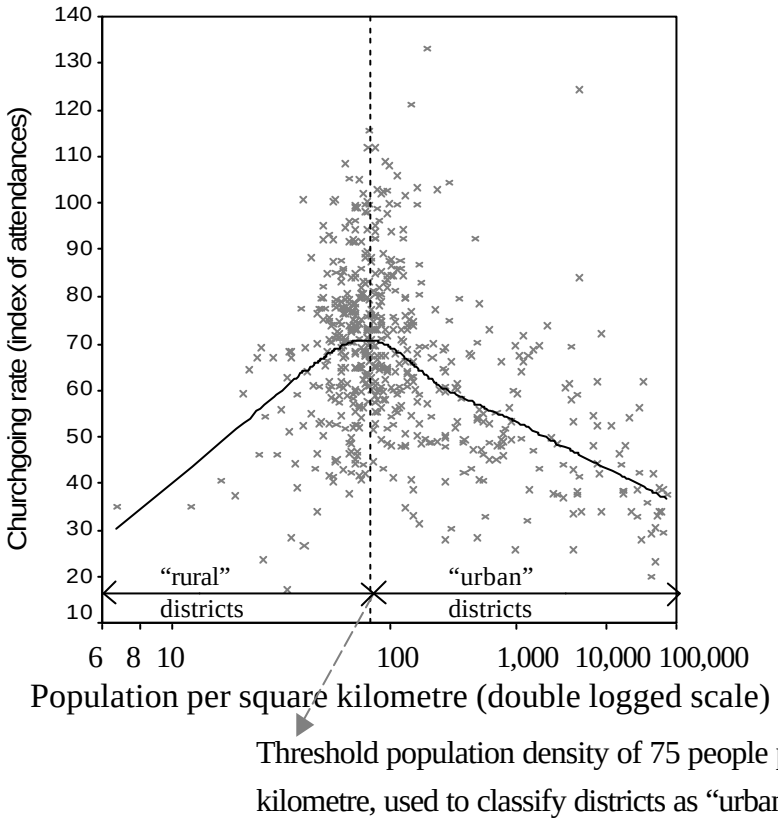


Almost 150 years since Mann's report, a detailed and systematic empirical examination of the relationship between churchgoing and urbanisation as revealed by the 1851 data has yet to be produced. Rather, the census data have been tabulated and mapped at very broad spatial scales (typically the county) or for highly selective samples (typically large towns and cities).[10] This has tended to conceal the variation of greatest interest – the nature and generality of any rural-urban discrepancies in churchgoing.

The relationship between population density and churchgoing is an extremely revealing one. Not only does it provide the basis for understanding the spatial variation in churchgoing rates across England in 1851, but it is also rich in explanatory implications for the longer chronology of churchgoing rates in England from the mid-eighteenth century to the present day.

Figure 3 shows a scatterplot and locally weighted best-fit line of population density against the churchgoing rate for the 576 English registration districts.

Figure 3: the "curvilinear" relationship between churchgoing and population density



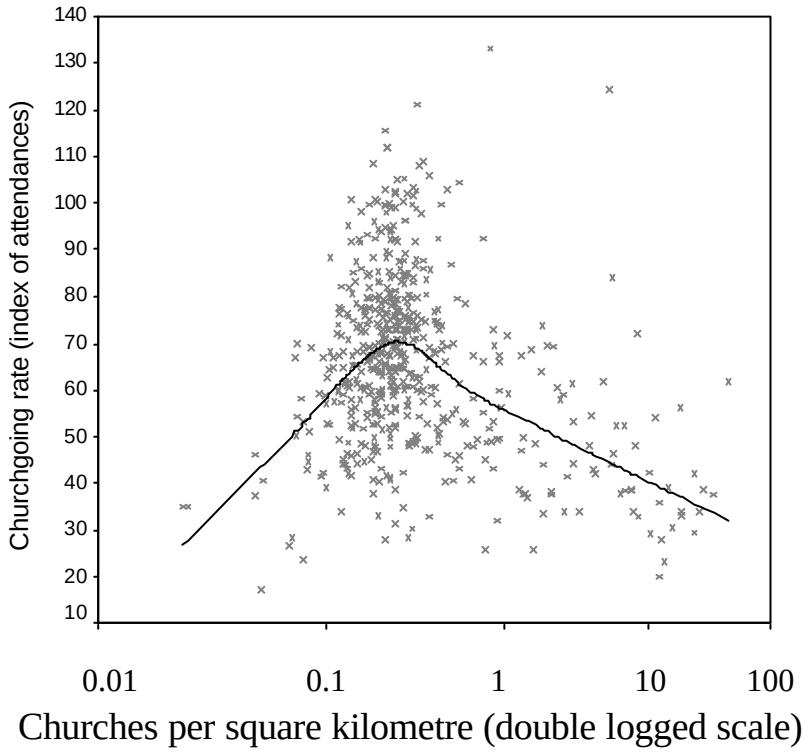
Note: the best-fit lines in figures 1, 2, 8, 9 and 10 are locally weighted best-fit lines of variable bandwidth, plotted using the SPSS "Lowess" algorithm (specifying 80% of cases and five iterations).

[10] I refer to, Inglis (1960), Pickering (1967), Gay (1971), Coleman (1980), Bruce (1992), Stark, Finke and Iannaccone (1995); McLeod (1996), a recent exception is Snell and Ell (2000).

The best-fit line shown in figure 3 makes clear that the trend of churchgoing by population density is distinctly "curvilinear". In other words, there is a *positive* relationship between population density and churchgoing among the lower population density English districts (r_s = 0.27***, n = 258), but this switches to become a negative relationship among the English districts of higher population density (r_s = - 0.57***, n = 318).[11] The "breakpoint" figure of 75 people per square kilometre, fitted by eye in figure 3,[12] is used to divide districts into low and high population density, and these groups are henceforth termed "rural" and "urban" (the geographical distribution of these rural and urban districts is traceable in figure 2).[13]

A highly similar curvilinear trend is visible if one plots churchgoing by church density (i.e. churches per square kilometre), as figure 4 shows.

Figure 4: the "curvilinear" relationship between churchgoing and church density



[11] The Spearman's rank (non-parametric) correlation coefficient is quoted here to show that the relationships presented in figure 3 are not a function of a few extreme values.

[12] The curvilinear nature of the relationship, and the breakpoint in the curve, can be analysed more formally using a model of the form: churchgoing rate = $a \times (\text{log popdensity})^b + c \times (\text{log popdensity}) +$ constant. The optimised solution (solved to minimise the residual sum of squares), yields a breakpoint value of 82.7 – very close to the value of 75 picked out by eye.

[13] Church attendance also exhibits a curvilinear pattern with the other principal indicators of urban-industrialization – population growth rate and the percentage in non-agricultural employment.

This similarity of trend is unsurprising, given that population density and church density are highly correlated ($r = 0.96$, $p<.001$, $n = 576$).[14]

It is instructive to examine further the interplay between church density, population density and churchgoing. As already noted, church density and population density are almost perfectly inter-correlated. However, the remaining association that each displays with churchgoing once the other is statistically controlled for is extremely revealing, as table 1 shows.

Table 1: the inter-relationships between population density, church density and the churchgoing rate (index of attendances)

Direct correlations:	rural districts n = 258	urban districts n = 318
Population density and churchgoing rate	0.353***	-0.536***
Church density and churchgoing rate	0.572***	-0.418***
Partial correlations:		
Population density and churchgoing rate controlling for church density	0.099	-0.617***
Church density and churchgoing rate controlling for population density	0.379***	0.532***

* indicates $0.01 < p < 0.05$; ** indicates $0.001 < p < 0.01$; *** indicates $p < 0.001$

Note: population density and church density are logged in the urban analysis.

Table 1 shows a series of direct (i.e. zero-order) and partial (i.e. first-order) correlations across rural and urban English registration districts. The upper part of table 1 reveals that population and church density both appear positively correlated with churchgoing rates among rural districts and both appear negatively correlated among urban districts (as is predictable from figures 3 and 4).

It is the partial correlations, shown in the lower part of table 1, that are of greater interest. Taking rural England first, it is clear that there is no remaining significant positive association between population density and churchgoing once church density is controlled for. In contrast, the strong positive association between church density and churchgoing persists once population density is controlled for.

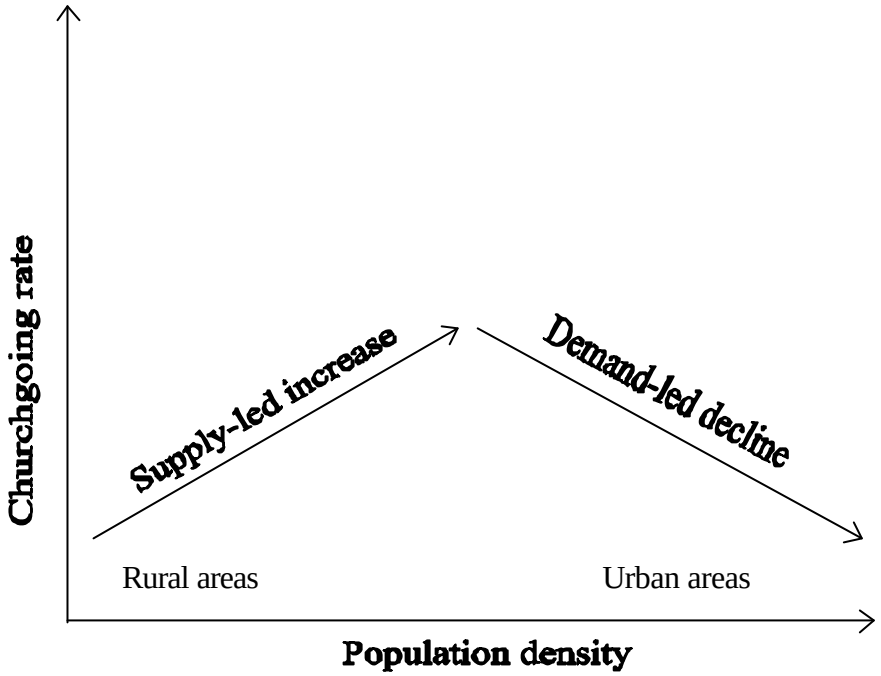
[14] This correlation is between the log of both variables.

In other words, population density only appears positively associated with churchgoing across rural England because of its relationship with church density.

The partial correlations for urban England (shown in the right-hand column of table 1) are no less interesting. The strong negative relationship between population density and churchgoing persists once church density is controlled for. Church density, however, appears strongly and *positively* related to churchgoing rates even after population density is controlled for. Thus, in urban England, church density only appears negatively related to churchgoing via its relationship with population density. Once population density is controlled for, a more intuitive positive relationship between church density and the churchgoing rate emerges.

These partial correlation results underpin my separate explanations of churchgoing in rural and urban England, which are outlined in figure 5.

Figure 5: explaining the curvilinear trends



The upward, left-hand, trend represents a supply-side augmentation of churchgoing rates caused by increased church density in rural England in the nineteenth century. In contrast, the downward, right-hand, trend represents a "demand-side" reduction in churchgoing rates (with population density a causal variable) that occurred across urban England.

One can devise a simple model of the churchgoing rate expressed as a function of log church density and log population density squared. Such a model specification acts to make church density the dominant (and positive) influence on church attendance in more rural settings, while population density becomes the

more dominant (and negative) influence on church attendance in urban settings. Such a model "explains" 38% of the spatial variation in the churchgoing rate.[15] In the remainder of the paper, I attempt to show that underlying this statistical explanation is a plausible sociological explanation.

In rural England, I argue that one can align causality from one measure of supply (church density) to one measure of demand (churchgoing), because there was a "supply-side deficiency" caused by geographical isolation. Put simply, where people lived far from church they were unlikely to be regular attenders, owing to the time involved in making the journey.

In contrast, the large cities contained a multitude of churches and chapels of many denominations, many within easy walking distance of a given resident. There was hardly ever an outright deficiency of churches (or, as will be shown, seating capacity), yet churchgoing rates were as low as in the most geographically isolated rural areas. In urban areas of England, I propose that causality ran from demand to supply – it appears that urbanization (of which population density is a key indicator) acted to decrease people's propensity to attend church.

"Rural" England.

At a time when most people walked to worship, geographical isolation was a major limitation on churchgoing in sparsely populated rural areas (Crockett and Olson forthcoming). "Suppliers" found it difficult to build and sustain a congregation in places where few people lived nearby, and "consumers" incurred "costs" in travelling to distant places of worship. Both these reasons explain why churchgoing was depressed in proportion to geographical isolation in 1851.

These ideas are not new. The organiser of the 1851 Religious Census, Horace Mann (1853:cxix) noted: 'The Maximum [need for religious accommodation] for rural districts is put lower than for towns; the distance of the church from people's residences operating an unavoidable check upon attendance.' A concurrent parliamentary inquiry into the need for Anglican church building found that a mile was often considered the limit that most people would regularly travel to worship (Gilbert 1973: 276).

Alan Gilbert (1976) has examined in detail the problems facing religious organisations, especially the Church of England, in isolated rural areas. In what he labelled the "highland sector" (drawing on Joan Thirsk's work in agrarian history), Gilbert (1976:97-121) detailed the structural weaknesses of the Anglican parochial system: high rates of absenteeism, pluralism (of benefice), weakness of the

[15] The percentages of explained variance refers to the R squared coefficient of 0.38 obtained from the following regression model: churchgoing rate = $a \times$ log church density + $b \times$ (log population density)^2 + *constant*.

"squirearchy", isolated settlements, freehold tenure and smallholdings, and extra-parochial areas and townships. All were characteristic of the uplands, but not unique to them, and as Gilbert noted such problems arose wherever the terrain encouraged sparse and scattered settlement. Finke and Stark (Finke and Stark 1992; Finke Guest and Stark 1996) have noted that geographical isolation depressed religious vitality in the nineteenth-century United States.

Using the 1851 Religious Census data, one can investigate the effects of geographical isolation empirically by using "church density" (places of worship of all denominations per square kilometre) as an ecological proxy for what I propose top be the key facet of geographical isolation – the distance between home and worship.[16]

Across the 258 "rural" English districts the median church density was 0.17 churches per square kilometre (inter-quartile range = 0.13 to 0.22). Put another way, a quarter of "rural" districts displayed a church density of less than one place of worship per 7.7 square kilometres (3 square miles). The point is reinforced by the parish data. Of the 1,422 rural English parishes (comprising eleven counties) the median church density was 0.18 churches per square kilometre (inter-quartile range = 0.11 to 0.26).[17] Since places of worship were not equally spaced (they were often clustered within the principal settlement), such figures are suggestive of journeys to worship of several miles for many of those living in the more isolated rural areas.[18]

Table 2 shows the results of regression analyses of the 258 rural English registration districts. The first analysis models the churchgoing rate as a function of three measures of urbanization and industrialization – population density (per square kilometre), "net migration" (net migration in or out of each district between 1840 and 1850 expressed as a percentage of the 1851 population), and the percentage of adults in non-agricultural employment (in 1861). This first analysis shows that population density appears strongly and positively related to churchgoing (as would be expected from figure 3), while the other two variables – "net migration" and the percentage employed in non-agricultural employment – appear unrelated to churchgoing.

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[16] A potential deficiency of this measure is its inability to distinguish between denominations. I constructed a more complex variable that was the sum of the church density of each denomination multiplied by that denomination's percentage share of attendances. However, the resulting variable differed little from the churches per square kilometre measure (across rural English districts, $r = 0.81^{***}$, $p < .001$, $n = 258$).

[17] "Rural" parishes are defined with respect to their population density, not with respect to location within a rural registration district.

[18] A further issue, not addressed here, is that isolated churches and chapels were more likely to hold irregular (e.g. fortnightly or monthly) services.

Table 2: regression models of churchgoing rates in "rural" districts (n = 258)

	Dependent variable = churchgoing rate (index of attendances)							
	Analysis (i)		Analysis (ii)		Analysis (iii)		Analysis (iv)	
Variable:	Beta	T	Beta	T	Beta	T	Beta	T
Population density, 1851	0.37***	6.16	0.40***	4.51	0.13	1.70	0.11	1.42
Net migration, 1841-51	-0.05	-0.83	-0.07	-1.10	-0.10	-1.74	-0.10	-1.66
Percentage of adults in non-agricultural employment, 1861	-0.07	-1.19	-0.07	-1.17	0.04	0.68	0.04	0.71
Religious pluralism index	----	----	0.20***	3.56	0.10	1.70	----	----
Churches per square kilometre	----	----	----	----	0.41***	5.62	----	----
Anglican churches per square kilometre	----	----	----	----	----	----	0.25***	3.61
Dissenting churches per square kilometre	----	----	----	----	----	----	0.33***	5.71
	$R^2 = 0.134$		$R^2 = 0.176$		$R^2 = 0.267$		$R^2 = 0.260$	

* indicates $0.01 < p < 0.05$; ** indicates $0.001 < p < 0.01$; *** indicates $p < 0.001$

Note: all variable inflation factors are below 2.

The second analysis of table 2 adds a "supply-side" variable – the religious pluralism index. This is a measure of the inter-denominational pluralism of attendances, favoured by Finke and Stark as a measure of the intensity of competition in the "religious market".[19] As previously noted, Finke and Stark argue that the more intense the competition among religious groups, the greater the efficiency and volume of religious production, and the greater the consumption of religious "goods". They have typically measured the intensity of competition using the pluralism index, giving rise to the so-called "pluralism hypothesis" (see Finke 1992; Finke and Stark 1988; Stark, Finke and Iannaccone 1995; Finke, *et al.* 1996), which at is most simple states that 'as communities gain religious alternatives, the attendance rate increases' (Finke *et al.* 1996:210).

[19] This pluralism index equals one minus the Herfindahl index of concentration (long used by economists as an inverse measure of competition in economic markets), i.e. $1 - \sum_{i=1} p_i^2$ where p_i is the proportion (of all religious attendances) that belong to a particular religious group, *i*, given a total of *n* religious groups present in the area. It reflects both how many groups are found in an area and how equally attendances are distributed among those groups. The index equals zero when all attendances belong to one group and reaches its highest value, 1- (1/*n*), when all groups attract the same number of attendances.

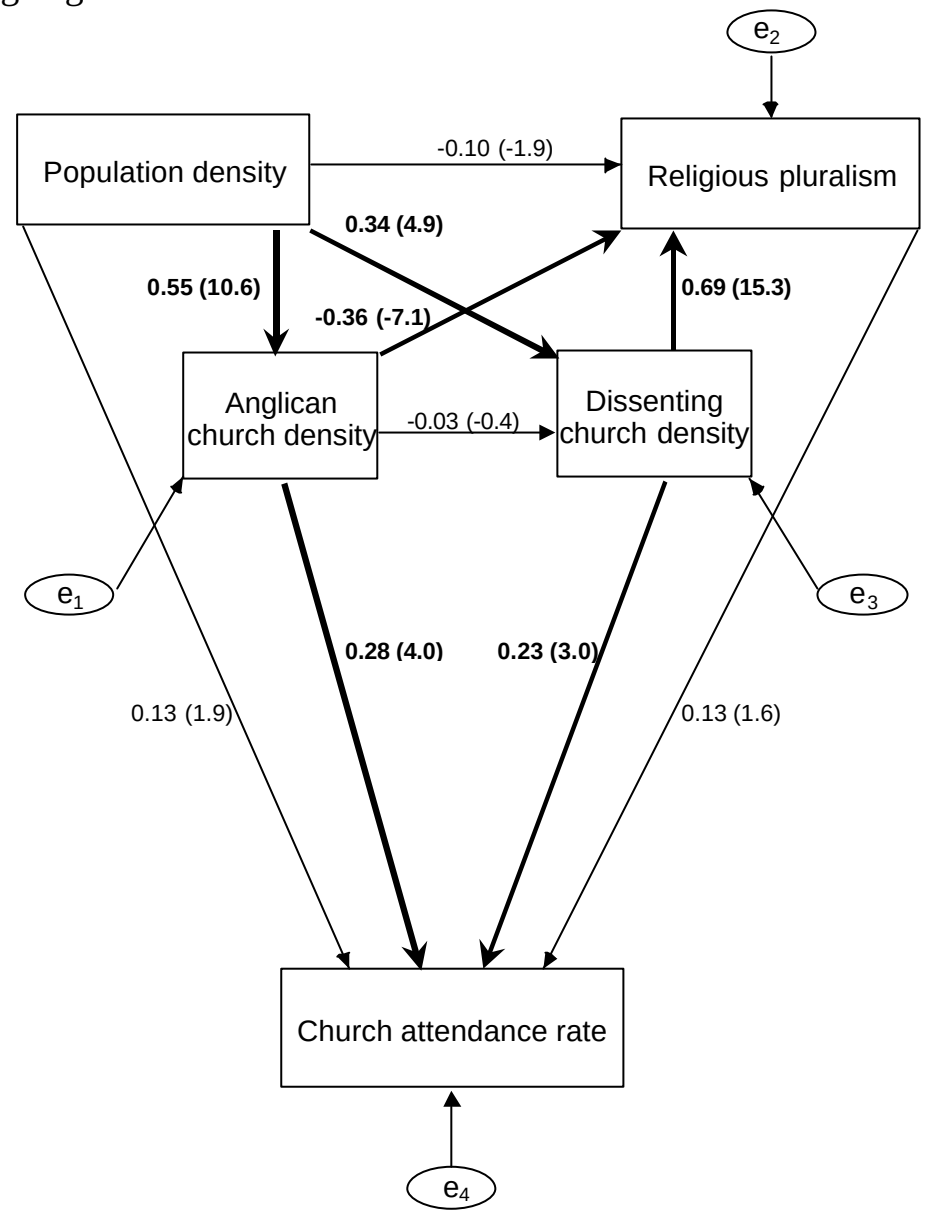
The results of the second analysis reveal that churchgoing appears strongly and positively related to both the pluralism index and population density, but remained unrelated. to the other two variables. In this way, this second analysis supports two central claims of the Finke-Stark model. First, the more densely populated areas displayed higher churchgoing rates (a characteristic predicted by Finke and Stark 1988:41), and secondly, the more religiously pluralistic areas displayed higher rates of churchgoing, congruent with the pluralism hypothesis.

In the third analysis of table 2, the key indicator of geographical isolation – church density – is added to the analysis. The results reveal a strong positive relationship between church density and churchgoing. In addition, two important changes arise: both population density and religious pluralism drop short of statistical significance ($p > .05$). This suggests that in so far as population density and pluralism are positively related to the churchgoing rate, these relationships are indirect – they are mediated via church density.

In the fourth analysis, church density is split into its Anglican and dissenting (i.e. non-Anglican) components. This analysis is included to show that the churchgoing rate is positively related to both dissenting and Anglican church density (the pluralism index is excluded from this analysis because of a structural dependence with dissenting church density). In this way, the series of regression analysis presented in table 2 suggests that Anglican and dissenting church density are the principal direct influences on church attendance, while population density and religious pluralism should be considered as indirect influences on church attendance – their influence is mediated via their relationship with church density.

This interpretation can be clarified and refined using structural equation modelling. Figure 6 shows the results of a structural equation model in which the churchgoing rate is specified as a function of population density, religious pluralism, Anglican church density, and dissenting church density (as in analysis (iv) of table 2). In addition, causality is further specified as follows: religious pluralism is modelled as a function of Anglican and dissenting church density and population density; Anglican church density is modelled as a function of population density; and dissenting church density is modelled as a function of both population density and Anglican church density. One should note that there is no path from pluralism or dissenting church density to Anglican church density, since few Anglican churches had been built or closed in the seventy years or so of widespread dissenting strength and religious pluralism.

Figure 6: Structural equation model summarising the direct and indirect influence on the churchgoing rate in rural districts



Key: the figures refer to standardised regression coefficients (betas) with T values in parenthesis. Significant regression paths ($p<.05$) are emboldened. The variables e_1 e_2 and e_3 are residual terms with regression coefficients fixed to unity and unconstrained variance. The analysis was carried out using AMOS and cross-checked using EQS.

Figure 6 appears complex, but the main points can be easily identified. First, focusing on the direct influences of church attendance (the arrows feeding into it), the regression paths from religious pluralism and population density are both statistically insignificant (as indicated by the T values shown in parenthesis) indicating that these variables should not be considered as direct influences on churchgoing. Conversely, the regression paths from Anglican and dissenting church density to churchgoing achieve strong statistical significance, indicating that these

two variables should be considered direct influences on churchgoing (as was also established in analysis (iv) of table 2).

Secondly, turning to the other relationships specified in the model, religious pluralism did not appear directly related to population density. Pluralism was, however, positively and significantly related to dissenting church density and negatively and significantly related to Anglican church density (these relationships are obvious, given that areas of Anglican dominance will inevitably be areas of low religious pluralism). Turning to population density, this was very strongly related to Anglican church density, and was also significantly related to dissenting church density.

With all due caution in interpreting such structural equation analysis as representing a definitive casual model, I interpret that church density (both Anglican and dissenting) was the primary direct positive influence on churchgoing rates. Population density was indirectly related to church attendance via its close relationship with Anglican (and, to a lesser extent, dissenting) church density. Religious pluralism was indirectly related to churchgoing via its close relationship with dissenting church density.

It is important to establish a broad compatibility between the parish and registration district analyses since, as previously noted, the parish data exclude Sunday scholars, and thereby yield both a more accurate and geographically sensitive measure of churchgoing behaviour. Analysis of the parish data (which cover 64 of the 258 rural districts) does indeed yield a similar interpretation (though for reasons of space these results are not reported here).

How does this interpretation of the influences on church attendance in rural England relate to the ongoing dispute between supply-side and secularization theory? At first glance, the results appear congruent with supply-side theory, in the sense that population density and religious pluralism are positively related to the churchgoing rate. In this way, rural England conforms to Finke and Stark's (1988: 41) central proposition 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 and that pluralism causes levels of activity and participation *to increase*'. [Their italics]. As Crockett and Olson (forthcoming) note, the results for rural England appear to match very closely the results Finke *et al.* (1996) report for New York State in 1855/65 (which forms an empirical cornerstone of the Finke-Stark supply-side theory).

A steadier gaze at the results reveals two important qualifications to this apparent support for the Finke-Stark position. First, although my explanation, founded as it is on the effects of geographical isolation, can be labelled a "supply-side" one in a very broad sense, it does not support Finke and Stark's central

competition hypothesis. “Competition” can only be said to have boosted church attendance in parts of rural England in a very specific sense – in terms of the ability of extra-establishment religion to operate more effectively than the Church of England in geographically isolated areas (see also Crockett and Olson forthcoming). Importantly, there is no evidence that competition acted to increase churchgoing rates by offering increased *choice* to the individual. It is axiomatic to the Finke-Stark position, stemming from the Stark-Bainbridge rational choice premise of “utility maximization”, that increased choice represents an increased probability of a given individual finding an agreeable and persuasive religious group with which to affiliate. The fact that the church density variable completely eclipses the pluralism index, suggests that people were mobilised by whichever dissenting denomination moved into their locality.

One does not have to rely solely on cross-sectional data analysis of the 1851 data to reach this conclusion. Alan Gilbert, following his exhaustive study of English church membership statistics for the eighteenth and nineteenth centuries, concluded that:

> it was a catchment comprised of people geographically isolated from the establishment [i.e. the Church of England] which was most systematically exploited by Nonconformist [i.e. dissenting] recruiting. Protest might or might not be an element in commitment among such people. But recruitment was in many cases simply a matter of providing religious services where no others were available. (Gilbert 1973: 439).

As Gilbert (1973, 1976) details, dissent was extremely effective in colonising hitherto underprovided areas, since its system of administration – particularly itinerant preaching – made it far more effective than the Anglican parochial system (see especially Gilbert 1973: 320-325).

The second major qualification to the Finke-Stark perspective emerges when one examines the more urban districts of England. While one can generalise that the more “urban” parts of rural England contained higher levels of church attendance (e.g. the market town generally displayed higher rates of church attendance than the more scattered and peripheral farming communities it served), when one examines the larger industrial towns and cities in which most people lived, a very different picture emerges. Herein, and as documented below, urbanisation appeared unambiguously deleterious to church attendance.

“Urban” England.

In urban districts geographical isolation ceases to be relevant. In the more populous areas of England, people typically lived close to places of worship belonging to several of the principal denominations (see, for example, Cox 1982:24). The median

church density across the 318 “urban” English districts was 0.31 places of worship per square kilometre (inter-quartile range = 0.23 to 0.81). In other words, there was an average of one church for every 3.2 square kilometres (1.3 square miles), and in a quarter of districts there was more than one church for every 1.2 square kilometres (0.5 square miles). Such figures suggest that the journey between home to worship was generally short and easy, so church density should be expected to reflect rather than influence churchgoing rates.

Those arguing from a supply-side perspective have invoked other arguments to account for the comparatively low urban churchgoing rates in nineteenth-century England. As previously noted, a cornerstone of the Stark-Bainbridge and Finke-Stark perspective is that the “potential demand” for religious goods is something of a constant, and thereby spatial variations in “realised demand” (such as the churchgoing rate) are best understood in terms of supply-side economics. Thus, from the Finke-Stark perspective, it is necessary to invoke some form of “supply-side deficiency” to explain the low urban rates of churchgoing. Such a case has indeed been made, both for western Europe in general (Stark and Iannaccone 1994) and more specifically for urban England in 1851 (Stark *et al.* 1995).

Stark *et al.* (1995) argued that a lack of seating, especially free seating, was the cause of low urban churchgoing rates in England in 1851. In summarising their interpretation, Finke and Stark (1998:764) stated: ‘the confounding effects of rapid urbanization and industrialization, combined with the widespread use of pew rents excluded the working classes from churches in England in the mid-1800s.’

Claims that seating capacity (especially seating not charged for) was deficient in urban areas are not without precedent (see Brown 1987). Indeed, the 1851 Religious Census had been instigated partly because of the perception that the religious apathy of urban areas had been facilitated by a deficiency of church accommodation. Yet, the Census revealed that any such deficiencies were themselves in decline by 1851, as Mann (1854:13) noted:

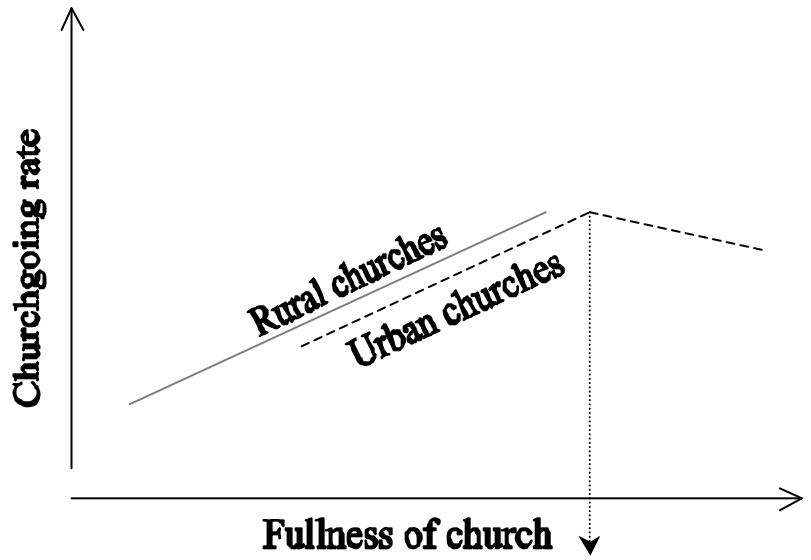
> The chief addition [of churches] has occurred, as was to be expected and desired, in thickly peopled districts, where the rapid increase of inhabitants has rendered such additional accommodation most essential …. the increase of churches has been much greater than the increase of the population, that the proportion between the accommodation and the number of inhabitants is now considerably more favourable than in 1831.

The most detailed research to date (Gill 1993), goes even further. Robin Gill, who examines many sources in addition to the 1851 census, challenges the interpretation that seating capacities were generally deficient. He argues that the *over-provision* of religious accommodation is perhaps a more accurate description – even in urban areas. He goes so far as to claim the churches became more empty

largely as a *result* of increased and excessive religious supply, and not (at least initially) as a result of declining churchgoing rates.

The contradictory interpretations provided by Gill (1993) and Stark *et al.* (1995) clearly require investigation. Let us consider what the visible symptoms of a deficiency in seating capacity, of the sort proposed by Stark *et al.* (1995), would look like. Figure 7 show the idealised trends one might expect to observe.

Figure 7: the outward signs of a shortage of seating in urban England



Threshold of supply-side deficiency: churches are full to the point of discouraging additional worshippers, negating the positive influence of churchgoing on fullness of church.

The graph illustrates the two likely symptoms of an urban shortage of seating capacity. First, the graph shows that urban churches would generally be fuller than their rural counterparts (as indicated by the rightward displacement of the urban best-fit line). Secondly, the graph shows a "threshold" level of fullness of churches in urban areas. Below this level, increased fullness of churches is indicative of higher churchgoing, (as in rural areas). Where there is no deficiency of seating, causality runs that the higher the churchgoing rate, the fuller the church. Above this level, churches become so full as to discourage additional worshippers. At this stage, causality switches to run from the greater the deficiency of seating capacity, the lower the churchgoing rate.

Do the 1851 data exhibit such characteristics? A useful way of quantifying a potential seating deficiency is to calculate the "mean fullness of church". This is the sum of all attendances at the best attended service (morning, afternoon or evening) for each denomination divided by the total seating capacity and multiplied by that

denomination's attendances at the best attended service as a proportion of the total attendances (i.e. the sum of each denomination's best attended services).

Mathematically, this can be expressed as:

Mean fullness of church = $\sum_{i=1}^{i=n} (ba_i / ts_i) \times (ba_i / ba_{tot})$

Where there are *n* denominations and:

ba_i= best attended service for denomination *i*

ts_i= total seating capacity for denomination *i*

ba_{tot} = sum of all best-attended services (i.e. all denominations, 1 to *n*)

Put more simply, for each denomination, the fullness of that denomination's churches is multiplied by that denominations share of attendances. The resulting figure is summed across all denominations to provide a proxy of the average fullness of church in a given district experienced by each attendant during the best-attended service.[20] A value of zero indicates that all churches were empty, while a value of one indicates that all churches were full.[21] This measure excludes Catholics, owing to the fact that many Catholic churches held more than one morning service, leaving a genuine best-attended service figure untraceable from the census data.

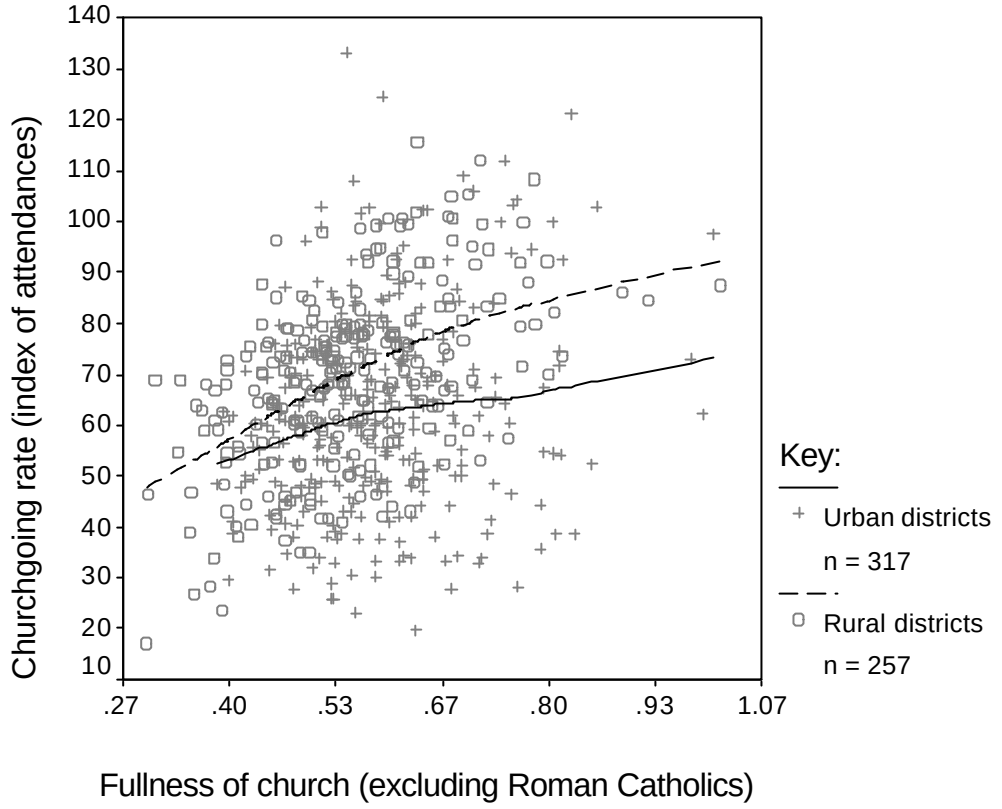
Figure 8 shows the scatterplots and locally weighted best-fit lines of churchgoing plotted against fullness of church across the rural and urban English registration districts.[22]

[20] The variable is inaccurate to the extent that not all places of worship of a given denomination in a given registration district would have been best attended at the same time of day. However, as already noted, by no means all places conducted more than one service. Also, there was a widely-established pattern of Anglican and Catholic churches being fullest in the morning, and dissenting chapels fullest in the evening. A further complication is the inclusion of Sunday scholars which will act to inflate the apparent fullness of churches.

[21] In a few districts the value was slightly greater than one (which is possible because the attendance data include both multiples attendants and Sunday scholars). The district of Steyning recorded an extreme value of 1.4. On closer inspection, this outlier was found to be due to a substantial omission in the Wesleyan Methodist returns – which recorded 669 afternoon attendances, but only 140 seats. Steyning was, therefore, excluded from the analysis reported in table 3.

[22] I do not show the analysis of "urban" parishes (though such analysis does support the registration-district analysis reported here). The parish data are less useful than the registration-district in this regard. Not only do they not cover many of the largest cities (including London), much of the urban population covered by the parish data was concentrated into a handful of extremely large parishes. For example, what was effectively still the single parish (with numerous townships) of Manchester contained 452,158 people, almost twice the population of the Manchester registration district, and comprises 14.8% of the total population covered by the "urban" parish sample.

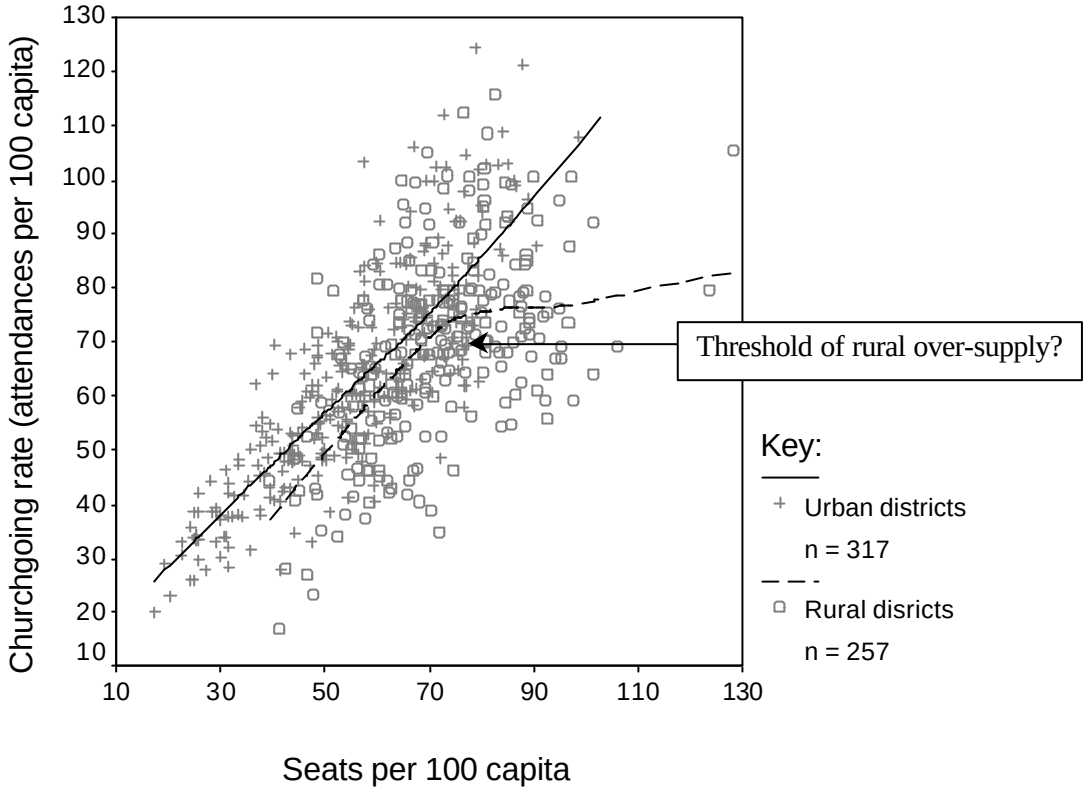
Figure 8: searching for the outward signs of a shortage of seating in "urban" England



It is clear that the 1851 data do not exhibit strong parallels with the idealised trend. First, figure 8 shows that urban churches, although generally slightly fuller than their rural counterparts, did not contain more extremely full cases (for example, cases in which fullness lay above 0.7), leaving it difficult to sustain the argument that urban areas were particularly deficient in seating capacity. Secondly, there is no marked "threshold" value of the sort shown in figure 7. Rather, the relationship between fullness of church and churchgoing was essentially linear in both rural and urban England. The relationship was weaker across urban districts ($r = 0.20$), than their rural counterparts ($r = 0.51$), but this looser relationship existed across the full spectrum of fullness of churches, not just where churches were fullest.

For churchgoing to be so loosely related to the fullness of church across these urban areas, there must have been a very close relationship between seating provision and the churchgoing rate (since only where seating capacity matches church attendance very closely can the fullness of churches not have lain in close proportion to the churchgoing rate). Figure 9 shows the scatterplot and locally weighted best-fit lines of the index of sittings (seats per hundred capita) against the index of attendances (attendances per hundred capita).

Figure 9: the relationship between churchgoing and seating provision



As figure 9 shows, there was indeed a very tight linear relationship between the index of sittings and the index of attendances in urban areas (r = 0.83) but a much looser relationship across rural districts (r = 0.51). The best-fit line in figure 9 illustrates that the relationship between seats and attendances was especially weak in rural districts where the seating capacity lay above about 70 seats per 100 people. This supports Gill's (1993) proposal that many parts of rural England mirrored his case-study area of Northumberland, where seating capacity was increasing against a background of depopulation – leading to the "over-supply" of religious accommodation.

Why was there a much closer relationship between seating capacity and churchgoers in urban England than in rural England? This question is addressed by figure 10, which shows the population increase over the period 1811-51 plotted against the fullness of church. The graph suggests that there was slack in the system (i.e. spare seating capacity) below a fullness of church measure of about 0.55.

Figure 10: the relationship between population growth and fullness of church

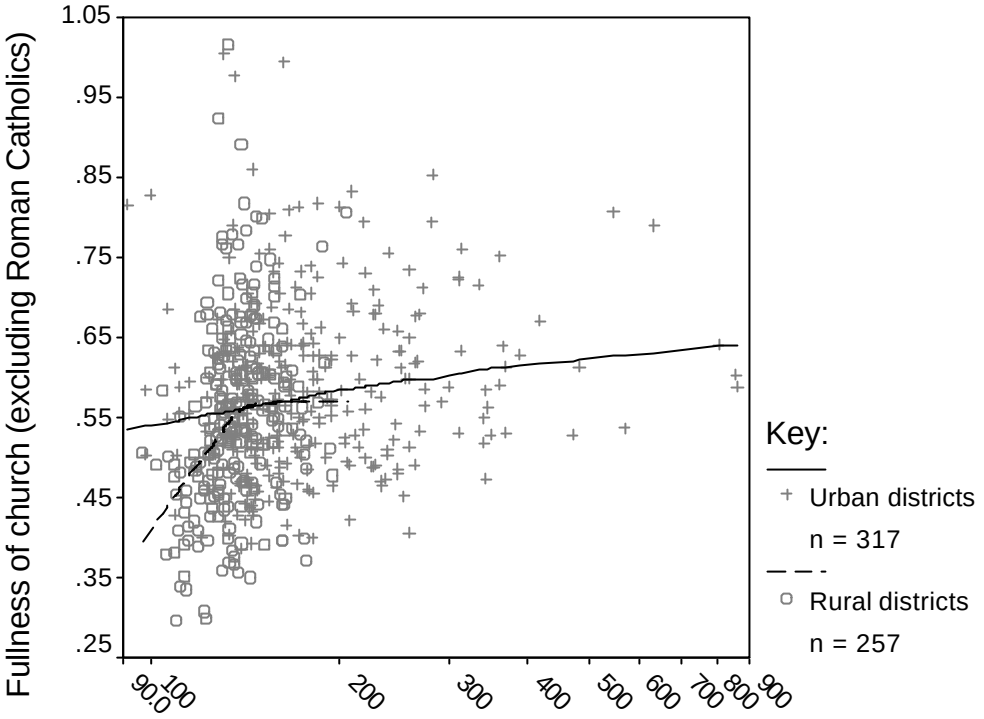


Figure 10 shows that where population growth would have led to churches becoming fuller than about 0.55, substantial additional seating must have been created. In short, seating capacity in urban England responded largely as the logic of the free market would suggest. This was *not* to create seating provision to the levels pertaining in some rural districts (which, as indicated in figure 9 and charted in detail by Gill (1993), were often "excessive"). Rather, seating provision increased in line with the increase in churchgoers brought about by population growth.

If "supply-side" deficiencies did not govern the variation in urban churchgoing rates as Stark *et al.* (1995) argued, the question is what did? Table three shows regression analysis of the churchgoing rate in the urban English districts. The first analysis is of the churchgoing rate regressed against three measures of urban-industrialization – population density, "net migration" (as defined in the rural analysis), and the percentage of adults born outside England in 1861, as well as the Finke-Stark religious pluralism index.[23]

[23] The percentage of adults in non-agricultural employment (used in the analysis of rural districts) is not used in the urban analysis because it is highly multi-collinear with the other dependent variables. Church density is not used since it is not believed to be causal on churchgoing in urban areas. If one does include church density, the strong negative relationships between population density, the percentage of the adults born outside England and churchgoing persist.

Table 3: regression models of churchgoing rates in "urban" districts (n = 317)

	Dependent variable = churchgoing rate (index of attendances)					
	Analysis (i)		Analysis (ii)		Analysis (iii)	
Variable:	Beta	T	Beta	T	Beta	T
Population density, 1851 (log)	-0.21***	-3.92	-0.31***	-6.24	-0.30***	-5.52
Net migration, 1841-51	-0.09	- 1.66	-0.17**	-3.40	-0.12*	2.31
Percentage of adult population born outside England, 1861 (log)	-0.49***	-8.42	-0.38***	-6.74	-0.47***	-7.97
Religious pluralism index	0.00	0.04	0.05	1.22	0.03	0.62
Fullness of church, excluding Roman Catholics (log)	----	----	0.32***	7.59	----	----
Fullness of free seats, excluding Roman Catholics (log)	----	----	----	----	0.22***	4.96
Roman Catholic percentage share of attendances	----	----	0.04	0.90	0.01	0.29
`	$R^2 = 0.477$		$R^2 = 0.559$		$R^2 = 0.516$	

* indicates $0.01 < p < 0.05$; ** indicates $0.001 < p < 0.01$; *** indicates $p < 0.001$

Note: all variable inflation factors (v.i.f.s) are below 2 except the percentage of the adult population born outside England in analysis (iii), which records a v.i.f. of 2.3.

The first analysis reported in table three serves to substantiate just how closely churchgoing rates declined in proportion to urbanization: the first three variables account for almost 48% of the variation in churchgoing rates, and both population density and the percentage of adults born outside England appear as strongly significant negative influences on churchgoing rates. Religious pluralism - Finke and Stark's favoured measure of competition - shows no significant relationship with churchgoing.

This first analysis suggests that secularisation theory looks well placed to account for the variations in urban churchgoing rates. However, before accepting and developing such an interpretation, I further examine Stark *et al.'s* (1995) supply-side explanation. The second analysis of table 3 adds the fullness of church variable (since this excludes Roman Catholics, the percentage share of Catholic attendances is also included as an additional control).[24] This second analysis shows

[24] The logic being that if a deficiency of Roman Catholics seating capacity depressed overall churchgoing rates, a negative relationship between the Roman Catholic percentage of attendances and the churchgoing rate should ensue (though such an effect is unlikely due to the relatively small Catholic population in all but a few Lancashire cities).

that the fullness of church variable appears strongly and positively related to churchgoing. Further, the strong negative relationships between population density, the percentage of adults born outside England and churchgoing remain. Also, churchgoing rates did not appear depressed in areas of strong Catholic presence, suggesting that the omission of Catholics from the fullness of church variable does not alter the interpretation. In this way, this second analysis further refutes Stark *et al.'s* (1995) claim that low urban churchgoing rates were a product of deficient seating capacity. Stark *et al.* (1995) had also asserted that religious pluralism was not positively related to churchgoing among British cities because of the deficiency of seating capacity. The results of the third analysis show that pluralism remains unrelated to churchgoing, even after controlling for the fullness of church.

As a further investigation of supply-side arguments, the third analysis calculates the fullness of church variable using "free" seats (i.e. seats not charged for or otherwise appropriated) in place of the total seating capacity, to give a measure of the "fullness of free seats". This is to check that pew rents were not the over-riding factor. As already noted, Stark *et al.* claimed that pew rents were central to the effective urban deficiency of seating capacity. The fourth analysis shows that almost identical results are obtained using the "fullness of free seats" variable, giving no support to Stark *et al.'s* claims. As one final check that Stark *et al.'s* arguments can be discounted, the three analyses of table 3 were restricted to "highly urban" districts with more than 500 residents per square kilometre (to check whether any shortages were confined to such areas). The results were similar to those reported in table 3, other than the emergence of a negative relationship between religious pluralism and churchgoing (a finding explained in Crockett and Olson forthcoming).

In this way, both the descriptive evidence presented in figures 8 to 10, and the multivariate analysis presented in table 3, suggest a very different picture of the interactions of supply and demand to that conjured up by Stark *et al.* (1995). It appears that low urban seating capacity was, in large part, a function of low urban demand for religion rather than *vice versa.*

It follows that to account for the low urban churchgoing rates requires some form of "demand-side" explanation. Table 3 has made clear that the three measures of urbanization and migration – population density, net migration 1841-51, and the percentage of adults born outside England – were all strongly and negatively related to churchgoing rates. The remaining question is precisely what facet of urbanization do these variables capture? It is hard to investigate this question directly with ecological data of this sort. Of greatest interpretability, due to its greater independence of other variables, is the percentage of adults born outside England. As is clear in table 3, this variable appears as by far the strongest negative influence

on churchgoing (r = -0.66, n = 318). In urban areas, the percentage of the population born outside England serves as a proxy of the employment opportunities available for long-distance migrants, most of whom were Irish, and most of whom were seeking unskilled manual work. Thus, the percentage of non-English born adults is highest in the poorest, most densely populated, parts of the major industrial cities, such as London, Liverpool and Manchester.

The precise link between population density and churchgoing is difficult to isolate. Population density should be viewed as more than simply a measure of the density of habitation, it is an effective summary indicator of many facets of urban-industrialization.[25]

Alan Gilbert's extremely detailed time-series analysis of eighteenth and nineteenth century church membership statistics provide the necessary additional information to permit a leap of faith in interpreting the cross-sectional associations presented herein as a causal explanation. Of particular resonance are Gilbert's (1973: 303-4) criticisms of the arguments made by certain Victorian churchmen (and subsequently by Finke and Stark), that people were naturally religious:

> This was a popular theory of Nonconformist [dissenting] growth among contemporary churchmen. Man was naturally religious, its proponents stated or implied, and if the church [of England] failed to satisfy his religious needs then he would turn to Dissent. True up to a point, the theory left several problems unsolved. ... The theory was applicable, for a generation or so, to people separated by migration from the associations and religious facilities of rural society, but not plunged into the areligious culture of some large city. It applied, in short, primarily to the industrial villages and outwork settlements of early industrial society: to the era and to the social structures of transition from pre-industrial to modern urban society.

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[25] This fact is highlighted in the following analysis. One can see how the indicators of an urbanized working class (the percentage of the population employed in manufacturing, transport, and unemployed) and middle class (the percentage of the population employed as public servants and "dealers") are all closely linked to population density.

Analysis of *all* English *1851* registration districts (n = 576)
Dependent variable = log population density in 1861

Variable	Beta	T
Percentage of the population employed in manufacturing, 1861	0.50	20.67***
Percentage of the population employed in transport, 1861	0.19	7.96***
Percentage of the population unwaged, 1861	0.27	11.21***
Percentage of the population employed as dealers, 1861	0.50	21.01***
Percentage of the population employed as public servants, 1861	0.21	10.33***
		$R^2 = 0.788$

* indicates $0.01 < p < 0.05$; ** indicates $0.001 < p < 0.01$; *** indicates $p < 0.001$.

Note: all variable inflation factors are below 1.6.

These facets of modernisation described by Gilbert tie in closely with Wilson's view that "societalization" (the transition from community to society) was the principal erosive agent with respect to religious participation. While analysis of registration district data cannot pin down the precise link between socio-economic conditions and church attendance, it does serve to substantiate a clear negative relationship between urban-industrial development and church attendance. It is clear that, with respect to Victorian England at least, the negative relationship between cities and religious participation is far from Stark and Finke's (1988: 41) "nostalgic myth".

Conclusion: from cross-section to chronology.

The Religious Census data hold important clues concerning the rise of churchgoing rates up to the mid-nineteenth century and their subsequent unbroken decline. Taking the century or so leading up to 1851 first, what little evidence there is points to an increase in the churchgoing rate over this period (Gill forthcoming). The increase in churchgoing rates between, say, 1750 and 1851 appears at least partly interpretable in terms of increased population density and the rise of dissent, both of which operated to overcome the key depressor of church attendance in rural areas – the distance between home and worship. The most influential figure behind the rise of England as a religiously plural nation – John Wesley – made it the Methodist mission to bring spiritual provision to the under-supplied, geographically isolated parts of the nation (see Currie 1967).

This period of "churching" exhibits parallels with that charted in the United States by Finke (1992). As they might observe, church involvement grew concurrently with a lessening of the regulation of non-Anglican religious groups, and the rise of religious pluralism. As in rural England suggest, the growth of religious pluralism fostered the construction of new churches, which acted to increase churchgoing rates. Rural England makes clear that the early stages of modernization – of which the rise of religious pluralism was part – could help overcome the "supply-side deficiency" of geographical isolation, but this process was self-limiting and transitional. This was because an increasingly large majority of the population resided in urban environments. To illustrate, in 1811, 46.3% of the population of England and Wales resided in (1851) registration districts containing more than 75 people per square kilometre. By 1831 the figure stood at 61.8%, rising to 73.4% by 1851 and 76.8% by 1861. Thus, purely as a result of urbanization, one would expect any processes operating to overcome the effects of geographical isolation to decline in relevance in explaining the overall levels of churchgoing. Also, and more recently, mass access to motorised transport since the mid twentieth

century leaves anything but extreme geographical isolation unlikely to affect churchgoing behaviour.

In urban England in 1851, and more generally across England after 1851, supply-side interpretations and historical fact part company. It was from the mid to late nineteenth century – when a competitive and increasingly "free" religious market was in place and religious participation was very high – that popular support for religion started to decline. This decline occurred first, and hitherto most intensively, amongst the "free-market" nonconformist denominations (see Watts 1995:13), while the Catholic "monopolists" have retained members far more successfully, outnumbering all major Protestant denominations (including Anglicans) by 1970 (see Currie, Gilbert and Horsley 1977: Table 2.3, p.25; Gill forthcoming).

The negative relationships between urban-industrial development and church attendance visible in urban England in 1851 appears to anticipate the unbroken decline in churchgoing that has occurred since 1851 (or thereabouts). The twentieth century was a period of unremitting decline, for both overall church membership and attendance rates. The membership figures (of all major Christian denominations) dropped from 30% of the population in 1900, to 29% in 1930 to 25% in 1950, to 19% in 1970 and 14.9% in 1990.[26]. Churchgoing rates have followed a similar downward trend, Peter Brierley's church census data (Brierley 2000:27) indicate that English churchgoing rates on a typical Sunday fell from 11.7% of the population in 1979, to 9.9% in 1989, to just 7.5% in 1998.

No doubt, sociologists and historians will continue to debate whether such trends do represent "secularization", but the attendance and membership data from 1851 onwards surely represent a far greater challenge to the applicability of the Finke-Stark supply-side theory. Also, if the other major body of theory – the Stark-Bainbridge cycle of secularization innovation and revival – is valid, one must suppose that England is now long overdue the arrival of a new religious movement capable of attracting tens of millions of adherents.

[26] These figures were calculated for 1900 to 1970 from Currie *et al*. 1977, table 2:4, p.31, and for 1990 the figure was taken from Peter Brierley's data, reported in Davie (1994: 46).

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