

# Are Northern Ireland's Two Communities Dividing?: Evidence from the Census of Population 1971-2001

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## **Introduction**

Media coverage after the 1991 Northern Ireland Census of Population emphasised large increases in residential segregation. Speculation continued in the same vein at the time of the 2001 Census with confident predictions that its results would show continued and increasing residential segregation.<sup>1</sup> These discussions of residential segregation were closely related to discourses about Catholic advance and Protestant retreat in population and political terms around the times of both the 1991 and 2001 Censuses and, in 2001, with fears that the institutions of the 1998 Belfast/Good Friday Agreement were widening the gap between the two communities not only at the level of Northern Ireland but also locally.<sup>2</sup> Population is clearly a political issue in a communally-divided society and a variety of statistics about population are used to inform political and public debates. It is beyond the scope of this short article to deal with all aspects of the population debate in Northern Ireland even though they are entwined. Instead, for the sake of manageability, the focus will be solely on residential segregation and the ways in which it changed between 1971 and 2001.

Here, there is a need to provide more reliable statistics on residential segregation to give politicians and the public better information about what is happening in Northern Ireland. There *have* been increases in residential segregation between 1971 and 2001 but these increases have often been exaggerated. Furthermore, the analyses on which these conclusions were based were sometimes partly true and sometimes wholly false but always with significant statistical problems and limitations. The article will show how at

least some of these limitations can be overcome by the use of a new Census dataset and will provide estimates of how residential segregation changed between 1971 and 2001 for Northern Ireland's Catholics and Protestants. It will concentrate on two issues: firstly, the extent to which segregation changed between 1971 and 1991<sup>3</sup>; and, secondly, the degree to which segregation continued to grow between 1991 and 2001. Far from being an 'inexorable' growth in 'apartheid' it is suggested that increases in residential segregation have been relatively stable some times and far more marked at others.

### **Measuring Change through Time**

There has always been an interest in analysing demographic and social change through time using Censuses of Population. This need, however, has been particularly urgent in Northern Ireland given its situation of communal division. Yet the Census is not always a good instrument for analysing temporal change since it suffers from two major classes of problems. The first of these problems concerns the units used to present Census data. Commonly, this has either been a political geography (such as electoral wards) or, before 2001, a geography used to collect the Census (like the Enumeration District). These units are ad hoc but more importantly they change in numbers and boundaries through time. Boundary Commissions, for example, revise ward boundaries to take account of shifting populations. This reflects contemporary needs to ensure the political representation of the population, and these boundaries help people to understand more about the current demographic and social complexion of these political units. However, the changing geography of Census outputs seriously hinders analysis of change through time simply because it is impossible to compare 'like with like' easily. Data from the 1971 Census, for instance, were released for 526 wards in Northern Ireland, 566 wards in 1991, and 582 in 2001. These changes in the boundaries, and numbers, of units can have major knock-on effects and if not taken into account can skew results about segregation change making them unreliable. The second class of problems concerns the type of questions that are asked between Censuses, and the ways in which the Census is constructed. Again, there is a tension between collecting information that is currently relevant and maintaining contemporary best practice, and yet still enabling comparisons with earlier Censuses. Sometimes there are new questions in one Census that are not directly comparable with earlier years. Other issues include different ways of counting the population between Censuses – the 2001 Census was

undertaken using a different procedure to earlier Censuses for example – and differential responses to either the Census as whole or to some questions in particular.

These issues make the analysis of demographic and social change through time using the Census more of an art than an exact science. Nevertheless, there are ways to deal with these problems and to minimise their effect. This task of improving the comparability of the Northern Ireland Census 1971 to 2001 has been undertaken by a team based in the School of Geography, Archaeology and Paleoecology in QUB through a project funded by the UK Economic and Social Research Council (ESRC)<sup>4</sup>. The work was made easier by the Census data, unique to Northern Ireland, that were made available for the project.

### **The Data and the Analysis**

The basis for the project to improve the comparability of Northern Ireland Census data 1971-2001 was the grid-square data product. This is a unique dataset that provides Census data for 1km squares all over Northern Ireland, and 100m squares in towns. The data released using this format are more restricted than other Census products as they are mainly counts per grid square and there are few cross-tabulations. Nevertheless, they are a useful source for several reasons. Firstly, they are already released on a geography that is consistent through time – the 1km and 100m grids are used in each Census. Secondly, the data give a good basis to make links to other Census geographies such as those used for the 2001 Census. These include Super Output Areas (SOAs) and electoral wards used for the release of the 2001 data.

There are general issues in making Census variables comparable through time but these will not be discussed fully since our focus is limited to residential segregation by religion. In this context, it is worthwhile noting that the religion question in the 2001 Census was similar to that used in 1991 but that there was a new question in 2001 on community background that a person had been brought up in. This question is therefore not directly comparable with 1991, and the changed nature of the 2001 Census – it is a One-Number Census (ONC) with missing values and people who are estimated to be missing included in the dataset following a procedure developed by the Census Office – means that there are good reasons for treating comparisons through time with caution. Nevertheless, the availability of data on a

consistent geography is an improvement over previous analyses, and permits more rigour in the analysis of residential segregation through time.

The analysis that was undertaken uses data for 1km grid squares for a first examination of changes in segregation through time. Population counts for these 1km squares are available all over Northern Ireland although there are no counts for religion or community background for squares with fewer than 25 people or 8 households as a means of preserving the anonymity of Census respondents. The vast majority of people live, however, in grid squares with larger total populations and tests have shown that this limited missing information does not alter the results of the analysis. The analysis that is now presented is based on (i) a description of the distribution of the population by religion and community background and (ii) by a short discussion of some indicators of residential segregation. These two types of evidence paint a consistent picture of the evolution of segregation from 1971 to 2001.

## **The Results**

### *Population distributions through time*

Charts 1 and 2 show the residential concentration of Catholics and Protestants between 1971 and 2001 using 1km grid squares for all Northern Ireland. They are descriptive and it is worthwhile to show how they should be read. The bottom x-axis of the chart (marked 'threshold') measures religious composition. The vertical y-axis (marked 'percentage above the threshold') measures population proportions. If we look at Chart 1, describing the situation of Catholics, and look along the x-axis to the 80 per cent mark, and then look at the value of the point in 1971 above it on the y-axis, we see that it is something like 40 per cent. This means that, in 1971, about 40 per cent of Catholics lived in grid squares that were 80 per cent or more Catholic. Looking now at the same 80 per cent cut off for 1991 and 2001 it appears that nearly 60 per cent of Catholics in those years lived in grid squares that were 80 per cent or more Catholic. This indicates that the Catholic population became more concentrated through time – the movement of the lines toward the upper right hand corner of the charts indicates growing population concentrations.

Looking at Charts 1 and 2 together, three features are immediately striking. Firstly, in 1971, Catholics were less concentrated than Protestants. However,

they became much more concentrated between 1971 and 1991 when their concentration approached that of Protestants. Secondly, there was little change in Catholic concentration between 1991 and 2001. The lines nearly overlap each other. The same observation holds true if the community background variable, as opposed to religion, was used as the main measure so this additional detail is not reproduced on the chart. Thirdly, the concentration of Protestants in Chart 2, except in areas which are highly Protestant, does not appear to have changed much between 1971 and 2001.

The descriptive analysis in Charts 1 and 2 suggests that there is some evidence of growing segregation and population concentration through time as Catholics *in the past* became concentrated in grid squares with high Catholic population proportions. The charts also indicate that the bulk of this change was between 1971 and 1991, and that the changed geography of Catholics could have been the main driver of increased segregation over these two decades. Contrary to the received wisdom there is little sign of *continued* increases in segregation between 1991 and 2001. There is, if anything, evidence that the concentration of Catholics and Protestants remained roughly constant between 1991 and 2001.

The charts are silent, however, about the issues of the exact timing of the change in the distribution of Catholics and the causes of these changes. Because we only have three time points at which the population can be measured – 1971, 1991 and 2001 – it is impossible to know exactly when there were major developments. Looking at the 1971-1991 period, it is possible, for instance, that there could have been steady year-on-year changes. In theory, this could be the case, but given the volatility of the political situation in Northern Ireland in the early and mid 1970s it is also possible that the bulk of the changes happened earlier in the 1971-1991 period than later, and it is hard to discount this case. The factors that caused these changes are also unknown but there are two basic candidates. One explanation could be large-scale population movements through internal migration. The other explanation is that there have been large *in situ* increases in the Catholic population in some locations. These are not 'either/or' explanations and it is more than probable that the pattern observed is a result of some combination of these two explanations operating together. Sectarian factors such as forced population moves might provide partial reasons for these patterns, but it is not always necessary to invoke these special explanations. The growth of large Catholic populations in peripheral housing estates in areas such as Twinbrook, for

example, might also be important forces creating the patterns seen in Charts 1 and 2. The virtually consistent distribution of Catholics and Protestants between 1991 and 2001 suggests that shifts in the distribution of both populations were not marked over this decade. For the Catholic population it is plausible to argue that decreasing birth rates that are converging on those for Protestants may have lessened the role of *in situ* increases in causing population concentrations.

### **Indicators of Residential Segregation**

There are many different indicators of residential segregation. They measure various dimensions of this complex phenomenon such as interaction, isolation and the spatial unevenness of different groups in the population. The indicator that was selected as the focus for analysis was  $D$  – the Index of Dissimilarity. This is a commonly-used statistic that measures the unevenness of the spatial distribution of Catholics and Protestants. It varies between 0 and 1 where 0 is equal to no segregation and 1 is equal to complete segregation. In the case of residential segregation between 1971 and 2001 in Northern Ireland it tells the same story as the other indicators that were calculated indicating that there is considerable confidence in the results. In 1971  $D$  was equal to 0.56 for Northern Ireland using 1km grids. By 1991 it had increased to 0.66 showing that over this two-decade period the distributions of Catholics and Protestants had become more uneven, demonstrating increased segregation. In 2001, using the religion variable, it had only grown marginally to 0.67 and, using the 2001 community background variable, it had decreased to 0.64. So the image here is one of quite a large growth in segregation between 1971 and 1991, with residential segregation that has either remained approximately constant between 1991 and 2001, or even slightly decreased. This runs counter to received wisdom about the inexorable growth of residential segregation, and things worsening in the 1990s, but it is in accord with Charts 1 and 2 which show fairly large changes between 1971 and 1991 but stability between 1991 and 2001.

It is possible to question these results. Perhaps decreases in segregation in some areas have been balanced by increases elsewhere. Perhaps 1km grids are not a very appropriate geography to examine this type of issue since segregation indicators are dependent on the scale used for the analysis. We have examined these and other similar issues, conducting analyses using other

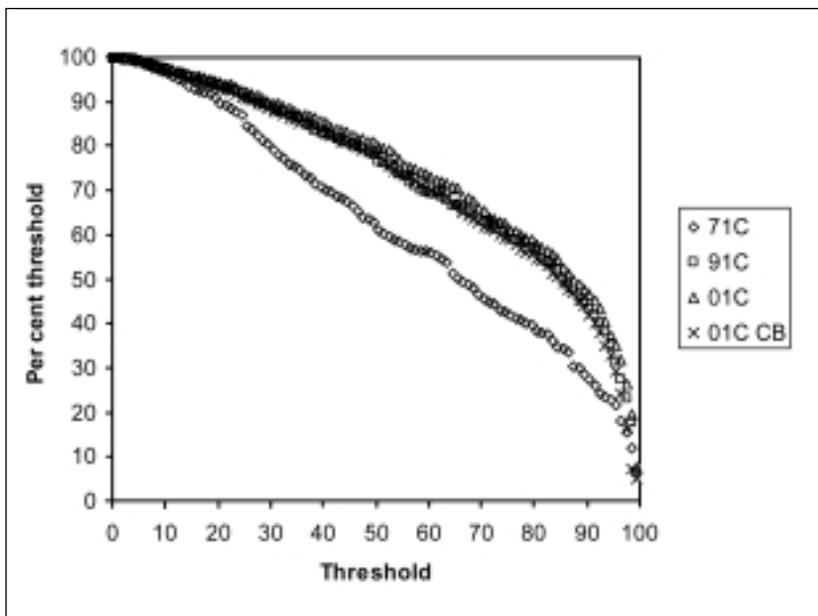
spatial units, and taking different perspectives on the data, and the same type of picture consistently emerges with segregation growth 1971-1991 and stability (or even decreases) from 1991 to 2001.

## **Conclusion**

There have been very few analyses of residential segregation using the 2001 Census of Population and, in general, there has been far less media attention paid to population issues post 2001 than after 1991. The news of stable, or possibly decreasing residential segregation, has been notable by its absence – like Sherlock Holmes' dog that did not bark. There is, however, a strong and growing evidence base that the 1990s did not see a widespread widening of the divide between Catholics and Protestants, and this finding is significant for politicians and public alike since it runs counter to many of the perceptions that were fostered at and before the time that the 2001 Census results were released. The basis for this conclusion is stronger than that which was used to proclaim increased residential segregation in the early 1990s using the 1991 Census results. Our main conclusion is that in 2001 we were living in a more residentially-segregated society than in 1971 but not markedly more segregated than in 1991.

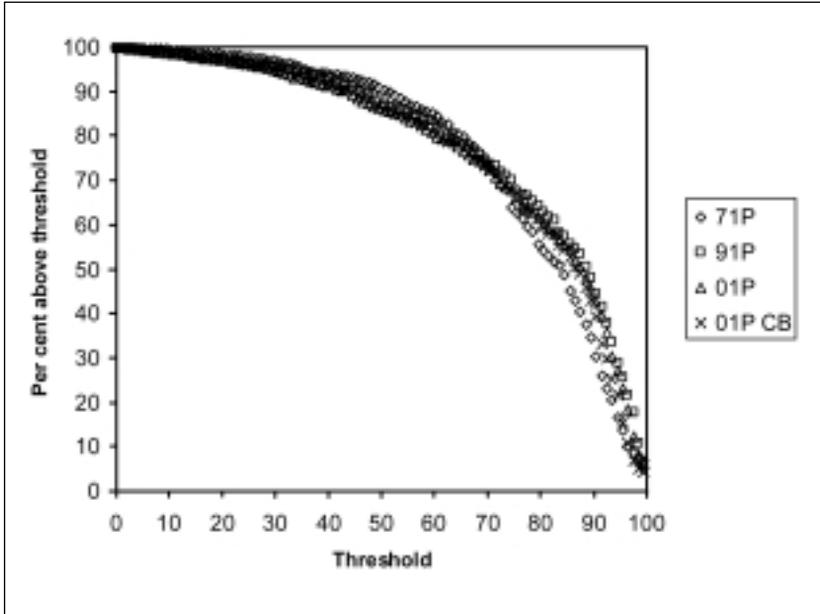
Residential segregation is only one dimension by which communal divisions can be measured. It is possible to argue that there is increased political polarisation as the voting shares of both the DUP and Sinn Fein have gone up since the Agreement. Despite this, there is evidence from other arenas that divides between the two communities have not widened. Equality Commission data indicate, for example, that the numbers and proportions of segregated employers fell during the 1990s and there was the possibility of greater mixing in the workplace.<sup>5</sup> It is probable that the 1990s, therefore, did not see a general growing apart of the two communities but instead a continuation of the status quo or even a growing together in some ways. The truth about Northern Ireland is far more than 'polarisation' and 'apartheid' but whilst these terms make good copy they fail to capture the complexities of reality.

**Chart 1: Residential concentration profiles for Catholics in Northern Ireland, 1971, 1991, 2001. 'C' is Catholic Religion, 'CB' is community background**



*Source: Census of Population 1971, 1991 and 2001; own calculations*

**Chart 2: Residential concentration profiles for Protestants in Northern Ireland, 1971, 1991, 2001. 'P' is Protestant Religion, 'CB' is community background**



*Source: Census of Population 1971, 1991 and 2001; own calculations*

## Notes

- 1 *Irish News*, 30 August 2001.
- 2 *Independent*, 6 April 2004.
- 3 1981 Census data are not analysed because of the well-known problems of non-response to the religion question and under enumeration that year.
- 4 RES-000-23-0478
- 5 McCrudden et al, 2004.

## References

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