

## **The Geography of Housing in Britain: What can the 2001 Census tell us?**

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Based at the Universities of Bristol, Edinburgh and Sheffield in departments of medicine and geography, the authors most recently collaborated on the report series “Life in Britain” for the Joseph Rowntree Foundation. The ‘housing’ section of the series provided the basis for this article.

### **Abstract**

The 2001 Census tells us a great deal about the housing in which the UK population lives. In this article, we describe our findings from studying the geography of two housing-related issues using census data. Firstly, we investigate how much space people have to live in, comparing the distributions of households that are overcrowded and those living in underoccupied conditions. Secondly, we look at the geography of holiday homes/second residences across the UK, and how this relates to areas in which people might be struggling to get onto the property ladder.

### **What is the decennial census?**

We described the census in our previous article, “The Geography of Health in Britain: What can the 2001 Census tell us?” (see *Geography Review*, May 2006). In brief, the government has carried out a census every ten years for the last 200 years. The census not only tells us how many people live in the UK, it tells us where they live, and a large amount of information about their housing, health, employment, education, ethnicity and so on. Census data are used to help the local and national government plan and run services and devise

social policies, but they are also very useful for researching what life in Britain is like for all of us.

We used information from the most recent census for a research project called 'Life in Britain: using 2001 Census data to understand poverty, inequality and place'. In this article, we describe some of the results of the 'housing' part of the study which looked at the geography of housing in the UK.

### **How can the 2001 census inform us about the homes in which people live?**

The census form asked a number of questions that tell us something about peoples' housing conditions. For each household, the census tells us how many people there are, and how many rooms the household has exclusive use of (that is, rooms that they do not share with any other household). A 'room' in the census has a very specific definition; the question was asked as follows:

#### **How many rooms do you have for use only by your household?**

- Do not count bathrooms, toilets, halls or landings, or rooms that can only be used for storage such as cupboards.
- Do count all other rooms, for example kitchens, living rooms, bedrooms, utility rooms and studies.
- If two rooms have been converted into one, count them as one room.

Using these pieces of information, the number of 'persons per room' can be calculated. For example, a household with 4 people and 4 rooms would have 1 person per room, while a household with 4 people and 8 rooms would have 0.5 persons per room. This figure gives an indication of how crowded the household is.

The census also tells us about the dwelling itself – what type it is (detached, semi-detached, terraced, a flat, a caravan/mobile home etc.), whether it is owned, being bought, or rented (and if so, who it is rented from), whether it has central heating, whether the household is ‘self-contained’, or if it shares a front door with another household, and so on. In addition to these ‘occupied’ dwellings, the 2001 census also counted the number of holiday homes and second residences that were unoccupied on the night of the census (29<sup>th</sup> April 2001).

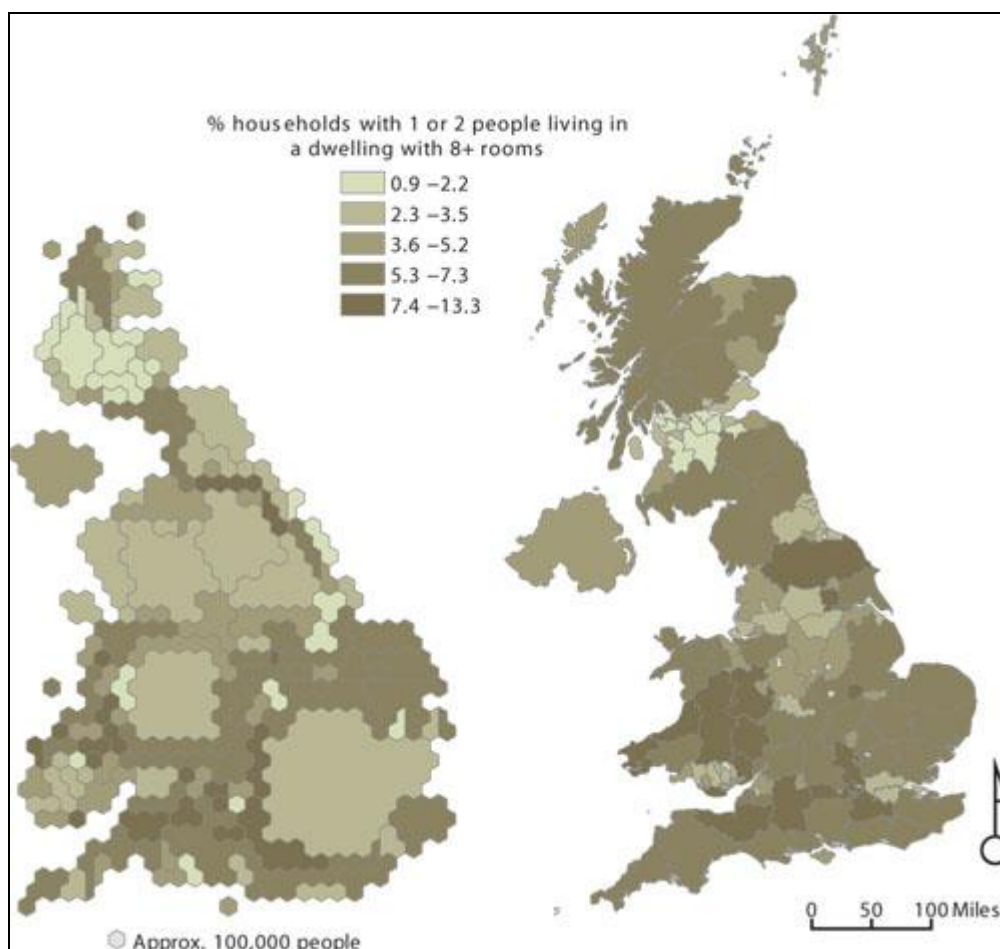
### **What does the 2001 census tell us about overcrowding and under-occupation in the UK?**

The 2001 census counted 57.7 million people living in 24.5 million households. For the purposes of this study, we defined a household as ‘overcrowded’ if it had more people than rooms (i.e. 1+ persons per room). Similarly we defined a household as ‘under-occupied’ if it had one or two people living in a dwelling with 8 or more rooms (equivalent to 0.25 persons per room or less, living in a relatively large house). Using these definitions, around half a million households (1.9% of all households) were overcrowded, and about a million (4.3%) were under-occupied.

### **How does overcrowding and under-occupation vary across England and Wales?**

Using the same areas as the other analyses in this series (counties, unitary authorities and former metropolitan authorities), we mapped how the under-occupied households are distributed across the UK. Figure 1 shows that although the overall under-occupation rate is 4.3%, this figure varies between 0.9% and 13.3% across the UK.

**Figure 1.** Proportion of households that are under-occupied, UK 2001

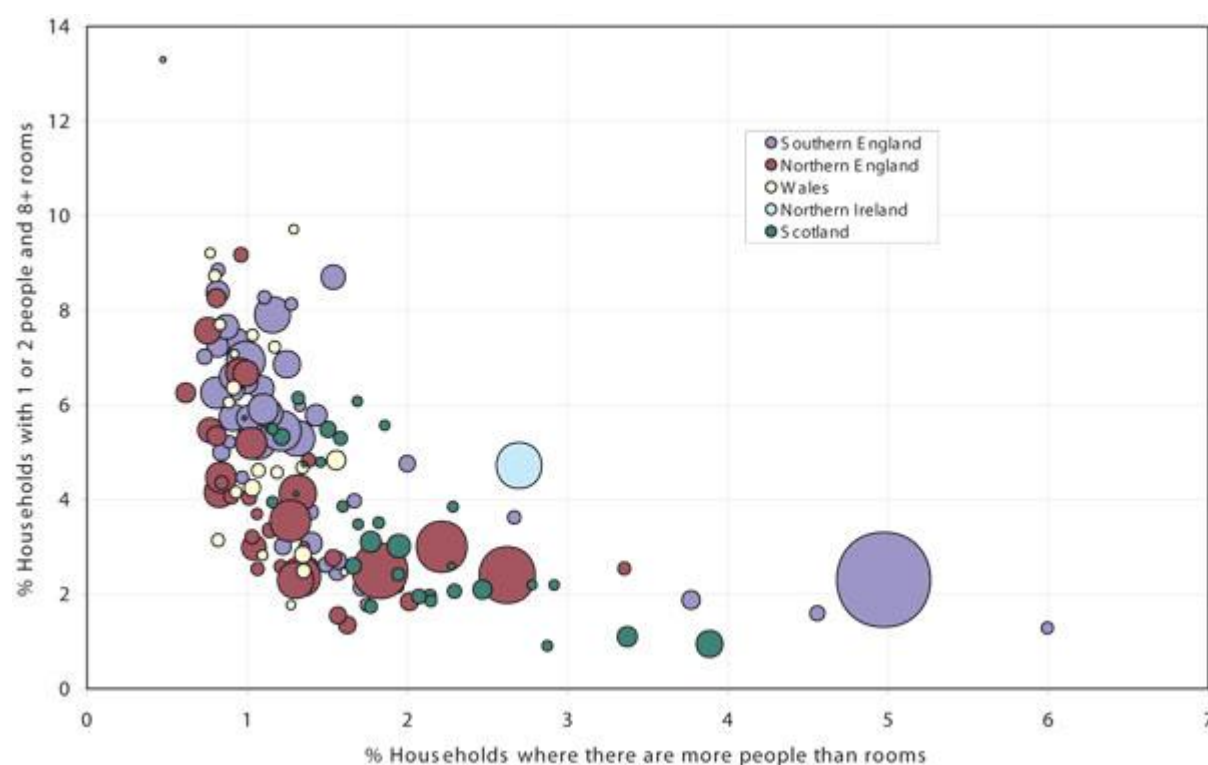


### Box 1: Maps & Cartograms

You might have noticed that the map on the left looks a bit odd. It is a *cartogram*, and actually shows the same information as the map on the right, but in a different way. Each of the areas is re-sized so that its space on the page is proportional to its population. This is helpful, because on the normal map, urban areas (like London) that are small but have large populations can be hard to see, and rural areas (like the Highlands) that are very large, but have relatively small populations are dominant. The cartogram helps you to see geographical patterns that otherwise might not be visible.

The graph in Figure 2 shows how the overcrowding and under-occupation measures are associated across the 142 areas. London is the largest circle, with a high rate of overcrowding as might be expected. The graph indicates that the two measures tend to vary ‘inversely’ – that is, areas with a higher level of under-occupancy tend to have a lower level of overcrowding, and vice-versa. However, the curved shape of the graph indicates that this relationship is not entirely straightforward. There are quite a lot of areas with similar overcrowding rates (about 1%), but with a wide range of under-occupation rates (from about 2 to 10%).

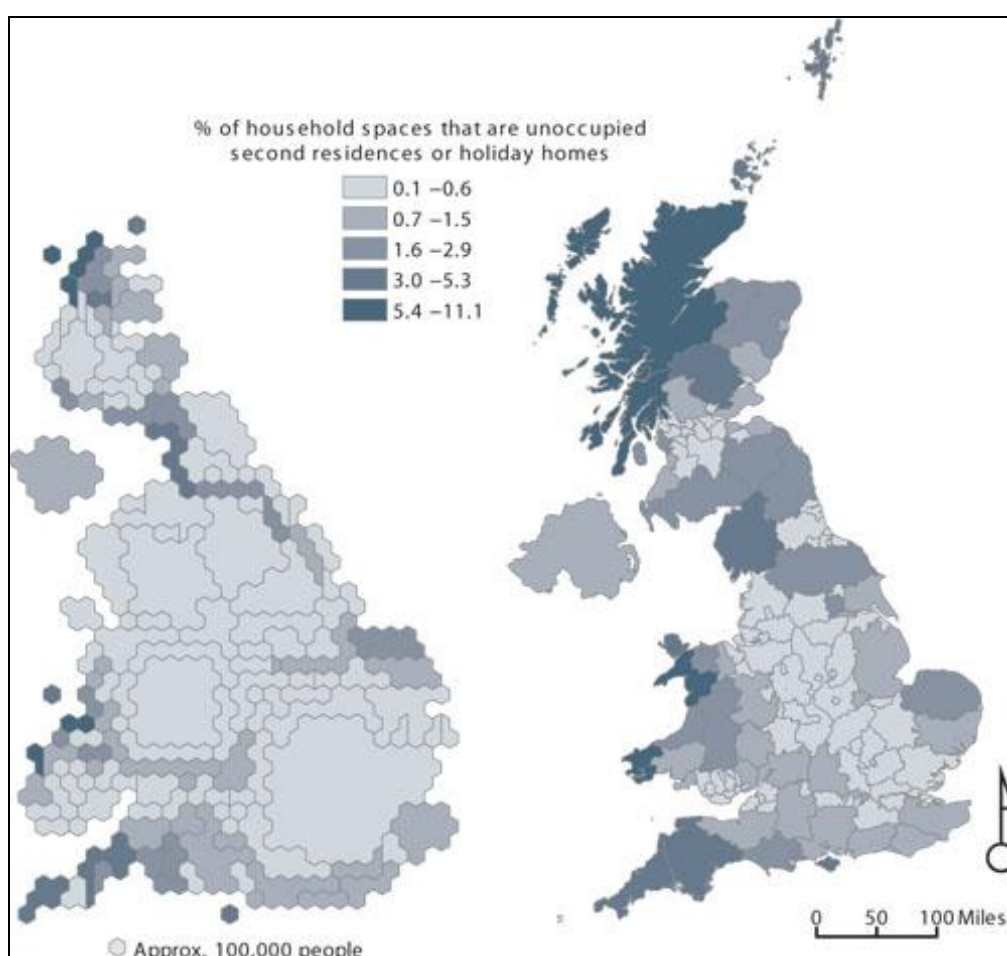
**Figure 2.** The association between overcrowding and under-occupation across the 142 areas of the UK, 2001 (source: Wheeler et al, 2005). Circles are sized in proportion to area population.



**What does the census tell us about areas where there are many holiday homes and second residences?**

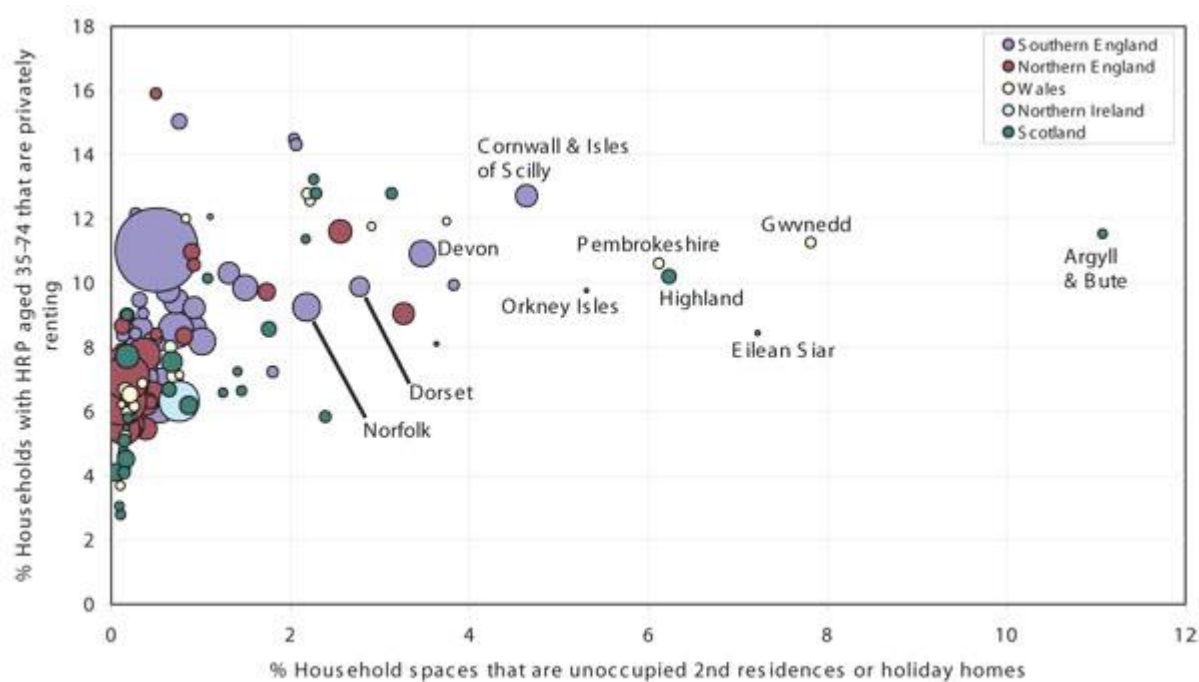
The 2001 census counted 185,000 unoccupied holiday homes and second residences in the UK. This is probably an underestimate due to the way that census data are collected; more recent data from the Office of the Deputy Prime Minister indicates that 500,000 English families own a second home, with 330,000 of those homes being in the UK. Many second homes are owned in rural areas of the country, although quite a substantial number are in cities, especially London. The map in Figure 3 shows in more detail the distribution of second homes counted by the census across the UK. This map also shows that many areas of the country have very low numbers of second homes.

**Figure 3.** Holiday homes and second residences across the UK. A ‘household space’ is used by the census to define the space within a dwelling that a household would be expected to occupy, this usually means the entire house/flat/mobile home.



One issue that often arises with second homes is that they can make it difficult for local people to buy their own house, as local house prices are inflated and locals have to compete with buyers from elsewhere. In order to investigate this issue with census data, for each of the areas we calculated a measure of the number of households that might be having difficulty entering the housing market. The census does not measure this directly, but we used the number of households with a 'Household Reference Person' (the person who filled in the census form) aged 35-74 who were renting their home from a private landlord as an estimate. Figure 4 shows the graph of the association between the two measures. Whilst it is hard to see a pattern at the lower end, given the large number of areas with few second homes, it is clear that all of the areas with a high proportion of second residences score highly on our measure of households having difficulty buying their own home.

**Figure 4.** The association between the prevalence of second homes and households who might be having difficulty buying a house (source: Wheeler et al, 2005).



### **What does this all tell us?**

Living in very overcrowded housing conditions can be associated with physical and mental health problems, and it is clear that some of the areas have much more overcrowding than others. The inverse relationship of overcrowding with under-occupation suggests that localised reorganisation of housing may not be sufficient to deal with overcrowding, given that housing demand and capacity are to some extent geographically separated. However, there are places with spare rooms in houses (such as in Surrey) not far from areas of housing shortage (such as in London). Clearly we have enough housing to go round if we shared out what we had in a better way. Information from the census also supports the notion that in areas with lots of holiday homes, local people might be having a hard time getting onto the property ladder. The numbers of second homes in the UK have been increasingly steadily for a number of years, and there is no reason to expect this trend to change in the near future. This issue is therefore unlikely to resolve itself.

In general, there are substantial geographical inequalities in housing and housing conditions across the UK, which may be determined by planning decisions, the nature of local housing stock, the distribution of the population and the variations that we allow in our economic circumstances.

## **In Summary**

- Areas with many households living in overcrowded conditions tend to be geographically separate from those areas with many under-occupied households.
- Areas with many second residences and holiday homes, largely in rural and coastal parts of the UK, may present challenges to those households that would like to join the housing market.
- Access to good quality, appropriate housing is a critical determinant of health and wellbeing, and there are substantial inequalities across the UK.

## **Questions to discuss or investigate**

- What steps might be taken by local authorities or national government to help local populations address challenges presented by high prevalences of second homes?
- Can you find a recent example where this has been done?
- What benefits might be brought to an area by the presence of second homes and their owners?
- Can you think of some specific reasons of why it might be unhealthy to live in overcrowded housing?
- How could folk with more than enough housing for their needs be encouraged to become better at sharing?

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## **References, further reading and resources**

Much of the data from the 2001 census is available on the internet from the National Statistics website <http://www.statistics.gov.uk/census2001/census2001.asp>. You can also find census statistics for the area where you live by putting your postcode in at <http://neighbourhood.statistics.gov.uk> (this gives lots of other statistics for your local area as well as those from the census).

Wheeler, B., M. Shaw, R. Mitchell & D. Dorling (2005) Life in Britain: Using millennial Census data to understand poverty, inequality and place. The Policy Press.