

Chapter 2

A History of Census Taking in the United Kingdom

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Abstract

A census is most easily seen by researchers as being a set of data about the population of a country, but is more broadly understood as being a workflow process of legal and practical planning, of data collection and of data editing and processing which finally results in a set of outputs being produced, be they printed volumes, analytical reports or sets of machine-readable data. This chapter provides some historical context for the 2011 Census and, in particular, considers how the questions which have been asked in censuses since 1801 have evolved.

2.1 Introduction

The first census in the UK was taken in 1801, and censuses have continued to be taken at ten-year intervals, with the most recent one being in 2011. The first four censuses were in fact aggregate collections of data, and it was not until the 1841 Census that the collection methodology shifted to individual level data collection as recognised today. The exceptions to this ten-yearly pattern have been in 1941 when no census was taken due to the war, and in 1966 when an additional sample census was taken. The 1941 Census can be partly seen as being replaced with national registration; whilst similar data were gathered, the purpose and nature of civil registration was different from that of a census. Both the number and range of topics which have been included in UK censuses have grown considerably over time, with the 2011 Census being the most detailed in terms of topic coverage yet conducted, although the differences between the censuses conducted by statistical agencies in different parts of the UK have also grown.

A census is a collection of data across the whole population of a country. In the context of this book we are interested in population censuses, but other censuses may gather data about land use, production, employment, physical or

intangible assets or particular population sub-groups, with a defining common characteristic that censuses generally attempt to be comprehensive in their coverage. As described in Chapter 1 of this volume, the United Nations offers a definition of a population census (UN, 2007) which makes clear that a census is not just a set of numeric outputs, but a broader process which encompasses the collection and processing of data relating to the population of a country. In offering this definition, it is clear that a population census can be understood not just as a set of resulting count observations, but also the entire administrative process that has led up to the publication of those counts.

This chapter reviews the history of census taking in this country (the scope of 'this country' is itself something not fixed over a two-century period), and the motivating factors that led to the first census in 1801. This historical synopsis can be divided into a number of distinct phases: the period leading up to the first census and the censuses of 1801 to 1831; the censuses during the remainder of the nineteenth century and the early twentieth century; the post-war twentieth century censuses; and more latterly, the censuses of the current century. The development of census methodology does not, of course, strictly follow temporal distinctions quite so easily, and is intertwined with the history of data processing technology, from data being collated entirely by hand, through mechanical processing of punched cards and early digital computers, to the current era in which data are not just processed by computer, but increasingly collected in a digital form.

The first part of this chapter works through this history of census taking, identifying developments of note in census methodology; the points at which innovations were introduced and when certain questions were first asked. The second part of the chapter looks in more detail at the inclusion of questions on different topics in each census and presents a tabular summary of topics included in each census.

2.2 Early census taking in the UK

Descriptions of census taking in the UK typically start out with reference to Domesday as an early example of an attempt to collect data on a national (in this case, England and parts of Wales) basis. However, whilst it did refer to people,

Domesday's remit, as ordered by William the Conqueror in 1085, was a survey of landholdings and value for the purpose of taxation. It was, however, a very large data gathering exercise, and in that context continues to serve as a useful starting point for any history of census taking. In fitting with the UN definition of a census as process of collecting, processing and publishing data, it is notable that Domesday was the process of collecting data, and the results were collated and published as the Domesday Book (see Martin, 2003, for a modern translation), although popular history has tended to focus on the latter rather than the former.

Whilst Domesday is celebrated, data gathering continued to be carried out in subsequent periods, but is less remarked upon. The '1279-80 Hundred Rolls' were commissioned by Edward I in 1279, as a national survey of landholdings in England and were so called as data were collected with county divisions known as hundreds. Few of the rolls survive and it is not known whether other results have been lost, or whether full data collection did not actually take place (Raban, 2004). The data collected in these 'Hundred Rolls' were more extensive than those collected by Domesday, and it is possible that it is primarily because the data were not edited and collated that they did not survive. In the past, as well as in modern census taking, it is important to see data collection, processing and publication as equally vital parts of a production chain.

Data collection continued to be carried out by various stakeholders: by the Government and agents of the Crown, by private landholders, and in parish registers. A bill proposing an annual enumeration of the population was put forward in Parliament in 1753, and passed through both Houses, but did not complete all committee stages before the end of the Parliamentary session, and thus lapsed (Higgs, 1989). This enumeration was to be carried out by Overseers of the Poor, officers who would also be instrumental in the census.

The Census Act of 1800 paved the way for the 1801 Census. Census taking had become common in a number of European countries in the eighteenth century, and had started in the United States with the census of 1790; a quinquennial series of censuses in France started in 1801 (Durr, 2005). A variety of pressures faced England at this time (Taylor, 1951), which could all be informed by an assessment of the size of the population, a number which was then not known. It was a period of war and thus there was interest in determining the size of any army that could be

raised. At the same time, there was pressure to increase agricultural production in order to produce food. Thomas Malthus' *'Essay on the principle of population'* in 1798 had drawn this into sharper focus. Malthus had argued that population and food production grew at separate rates: that food production grew in an arithmetic progression, increasing at a constant rate, whereas population was subject to geometric growth, doubling and then re-doubling. A logical consequence was that at some stage, the population would grow beyond the agricultural capability of the country to feed itself. In order to contemplate when this might occur, it was necessary to have an idea of both the current agricultural production and the current population size. There was interplay between the influence of war and of food production, in that military campaigns would divert labour from agricultural work to military service.

The 1801 Census – and those of 1811, 1821 and 1831 – were far removed from what we now consider to be typical census taking. Higgs (1989) describes in detail both the content of these early censuses and the administrative machinery involved in their collection, which was based around overseers of the poor and the clergy. A set of six questions were posed in the schedule of the 1800 Census Act, and these sought to identify for each area (parish, township or place):

- the number of inhabited houses and the number of families inhabiting them; and the number of uninhabited houses;
- the number of people, by sex, excluding men on active military service;
- the number of people occupied in agriculture, in trade, manufacture or handicraft, or not occupied in those classes;
- the number of baptisms, by sex, in various years over the preceding century;
- the number of marriages, annually, since 1754; and
- any other remarks.

Thus, rather than collecting data about individuals, the data were collected on an aggregate basis. In that respect, the results of the early censuses resemble later census results, and we can see them in a continuity of censuses stretching across more than two centuries. However, there are no base individual records for demographers or family historians to examine. The next three censuses after 1801 were of a similar design, and also collected aggregate observations, albeit with

modifications to the question schedules. The 1811 Census altered the focus of the question about occupations from persons occupied in different categories to the number of families employed or maintained by work in a given sector. Whilst counts of persons had always distinguished between men and women, the 1821 Census was the first to address the age of people as well as their gender, with counts gathered for five-year age groups up to twenty and ten-year age groups beyond that age. The 1831 Census saw significant expansion of the number of different occupations recognised, with additional sub-division of those employed in agriculture to separately tally those who occupied land and employed labourers, those who occupied land without employing others, and those who were employed as labourers.

The 1841 Census was the first to be based around household schedules, in which details of all individuals in households were recorded. The use of these schedules was authorised after pilot testing and allowed an assessment to be made about the size of the field force that would be required, given concerns that literacy levels would be a problem with household enumeration (Higgs, 1989). The 1841 enumeration gathered considerably more detail about individuals than had been permitted by the aggregate returns of 1801-1831. For each person, sex and age in years was recorded, as was 'profession, trade (or) employment' or whether of independent means. Additional questions were included on the schedule which addressed a topic not included on the preceding censuses: where a person had been born. Whilst earlier censuses had (perhaps enforced by the collection design) viewed people as being connected to one location only, the 1841 Census recognised that populations were mobile. The question structure also recognised that geography and mobility could simultaneously be viewed at more than one scale. Thus, the first of these new questions asked whether or not a person had been born in the same county (as they were now being enumerated) and the second asked about country of birth.

As the nineteenth century progressed, so the census schedule continued to expand. Some question topics were introduced and later dropped out of use, but for the most part the story of the census has been one of steady accretion of question topics. This is considered in more detail in Section 2.7. Higgs (1989) argued that the mid-Victorian censuses of 1851-1871, in their administration under the

epidemiologist William Farr, and in their expansion of content, can be seen as rooted in medical surveys. Whilst the process of taking a census developed in the nineteenth century, there was not a permanently established Census Office, but rather a set of administrative processes which were established every ten years, with each census being carried out under the authority of a separate Census Act. Lawton's edited collection of essays (Lawton, 1978) shows how the nineteenth century censuses were essential documents for the analysis of a range of demographic, social and economic variables, including the first comprehensive study of migration in the UK (Ravenstein, 1885).

2.3 Early twentieth century censuses

The 1911 Census featured the first use in the UK census of automated technology (Campbell-Kelly, 1996) in the form of automated tabulating machines for processing the returns collected by enumerators. These machines – similar to the Hollerith machines developed for the 1890 US Census – stored and processed data on punched cards, improving data processing capabilities, but incurring additional costs for the acquisition of equipment. The census was also notable for an organized boycott of the census by suffragette organisations (Liddington and Crawford, 2011), and the ironic dual recording of the address on census night of leading campaigner, Emily Davison, both at home in Russell Square and in a broom cupboard in the Houses of Parliament (UK Parliament, undated), thus highlighting her claim for equal political rights as men. Further developments followed in methodology and form design, in the technology used to process the census, and in the administrative and legal underpinnings of the census. The 1920 Census Act made provision for the regular taking of a census, removing the need for a separate Act for each census. The 1920 Act also formally introduced ideas of confidentiality and restrictions on release of individual data.

Census questions have always reflected the changing interests of the day. The 1921 Census was no different in this regard; following the First World War, it included a question on orphanhood (whether either or both parents were dead) (Newman, 1971). Such a question had not been included before and has not been

included since. Reflecting increasing population mobility, the 1931 Census was the first to include a question on usual residence.

2.4 The census and the Second World War

Were it not for the Second World War, it might have been easy to see the twentieth century sequence of censuses as one of gradual change – of a slow, steady increase in the number and range of questions asked, and a change in the way that censuses were carried out and the way in which data were processed. However, the war enforced a mental division that permits us to view that history as pre and post war. The expected 1941 Census did not take place due to the war; the only time since 1801 that a decennial census was not conducted. However, under the 1939 National Registration Act, registration took place from September 1939, and this registration can be viewed as very much census-like. The Act mandated the collection of the following information for individuals:

1. names;
2. sex;
3. age;
4. occupation, profession, trade or employment;
5. residence;
6. condition as to marriage; and
7. membership of Naval, Military or Air Force Reserves or Auxiliary Forces or of Civil Defence Services or Reserves.

Aside from the final one of these ‘particulars’, this can readily be seen as a simplified version of the preceding censuses. The National Registration Act explicitly referenced the 1920 Census Act, and required “...*persons who have undertaken to perform duties in connection with the taking of a census under the Census Act, 1920, to perform in lieu thereof similar duties...*” (www.histpop.org). However, in other respects national registration should not be seen as a census. A census is conceptualised as being a snapshot count of people and their characteristics at a particular point in time. In contrast, national registration was a continuing process, covering all persons in the UK at the time of the Act and all those entering or born in the UK afterwards. There is also a significant difference in purpose: censuses are

carried out specifically as a count of the population, whereas national registration served a wider set of purposes, including the issuance of identity cards.

A further occurrence during the war emphasises the distinction between the pre and post war periods in the census, when viewed as a series of data sets that can be analysed. In December 1942, a fire occurred at an Office of Works store in Hayes, Middlesex. Amongst the material destroyed were the schedules and enumeration books containing the raw data of the 1931 Census. The fire was not related to war. In a letter reporting the fire, W A Derrick (National Archives, RG 20/109) indicated that there was no salvageable material. The same letter also referred to the 1921 Census materials, and noted that some schedules (stored in a separate location) had previously sustained water damage but had since been dried out. An overall effect of the 1942 fire and the cancellation of the 1941 Census is that the sequence of original individual data ends with the 1921 Census, and does not pick up again until the 1951 Census.

2.5 The post-war censuses

The 1951 Census can be seen as a transitional step in the sequence of historical censuses. In terms of data collection and processing, it bore more similarity with earlier censuses than it would with later ones. However, in terms of subject coverage, it can be seen as heralding a new era of taking censuses which would all add new areas of interest. The 1951 Census was of considerable significance given the cancellation of the 1941 Census; it was the first full census in twenty years. The subsequent 1961 Census was the first to be processed by computer, opening the door to a wider range of possible outputs. A lengthy phase of data entry from hand-completed forms was still required. The 1961 Census was the first in the UK to use a two-form design: all households received a standard 'short' form, with every tenth household (thus a 10% sample of households) also receiving an alternative 'long' form, with a wider set of questions for individuals. In the case of communal establishments, extra questions were asked of every tenth person (HMSO, 1961). This long form was, however, broadly similar in length to the form used in 1951. More detailed outputs were made available from the 1961 Census than had

previously been possible: the Small Area Statistics product was developed, which published data from enumeration districts (EDs) for the first time (Dewdney, 1983).

The 1920 Census Act had allowed for the taking of a census every five years, although until 1961, this had only been carried out every ten years in practice. A five-year census was conducted in 1966, and so far remains the only such census conducted in the UK. The 1966 Census was only collected for a 10% sample of the population. Unlike the main decennial censuses, little information about or description of the 1966 Census is available. However, information about its content is reflected in documents such as the magnetic tape layout document held by UK Data Service (OPCS and GRO, 1966). Two questions introduced in the 1966 Census, which have been asked in subsequent censuses, were about the mode of transport used to travel to work, and about the availability of cars in households.

In 1961, a question about internal migration had been included, asking whether people had changed their usual residence in the year preceding the census. For the 1966 Census, this question was repeated, and paired with an additional question asking about change of usual residence in the preceding five years – thus linking back to the time of the 1961 Census. This five-year question was repeated in the 1971 Census (again, alongside a one-year transition question), providing a conceptual link to the 1966 Census. This implicit reference to earlier censuses has not since been repeated in the questions asked. The 1971 Census shared the parallel sample design of the 1961 Census, in that there was a 10% sample of data as well as a full 100% enumeration. However, unlike the 1961 two-form approach, all households in 1971 were given the long form. In the data entry phase, the answers to a number of 'hard to code' questions were only recorded for a 10% random sample of households (or 10% of persons in communal establishments). The 1971 Census Small Area Statistics (SAS) were produced for all EDs, greatly increasing the volume of possible outputs. A further innovation of the 1971 Census was the geocoding of data, allowing re-aggregation of data into new boundaries, including a new 1km grid square based set of outputs. A number of questions included in the 1971 Census explored areas such as occupation one year ago and country of birth of parents. The 1971 Census was not the first census to include a question on children born to married women. There was a question in 1951 asking about children born in

marriage. However, the 1971 Census asked for details on women under 60 who were married, widowed or divorced and birth of each child in marriage.

Subsequent censuses continued to expand the range of outputs, and made growing use of new technologies for dissemination of data, but with a broadly similar methodology, with paper forms being delivered and collected by enumeration officers, and with the continued practice of 10% coding of some hard to code fields in the 1981 and 1991 Censuses. These two censuses were not without innovation. An approximately 1% sample of individuals had been drawn from the 1971 Census for England and Wales, which formed the basis of a new form of output: the Longitudinal Study. The 1981 Census therefore permitted the first opportunity to add another wave of census data to this sample, permitting the same individuals to be observed over a ten-year transition period. In terms of census methodology, the 1981 Census was the first to feature a post-enumeration follow-up coverage survey (Britton and Birch, 1985), a practice which would be repeated and developed with subsequent censuses.

A number of the questions that had been featured in the 1971 Census were dropped for the 1981 Census and, although a question on ethnicity was trialled, it was not included on the final census form (Dale, 2000). However, a question on ethnic group was included for the first time in the 1991 Census. The 1991 Census also saw the introduction of a new microdata product: the Samples of Anonymised Records (SARs) (Marsh and Teague, 1992). The 1991 SARs consisted of two files; a 1% sample of households (and the individuals in them) and a 2% sample of individuals. These files permit the flexible creation of any cross-tabulation of component variables, as long as the sample size gives sufficient values in each cell to make the resulting table usable or meaningful. Similar studies (with different sample sizes) would follow in Scotland (first census data from 1991) and Northern Ireland (first census data from 2001, with earlier waves added subsequently).

A considerable cause of concern arising from the 1991 Census was the level of enumeration, leading to a so-called 'missing million' (Simpson and Dorling, 1994): persons – often young adult men – who had not been captured in the census data. Much commentary identified concerns related to the Community Charge (or Poll Tax) as a possible reason for deliberate avoidance of the census. As a result of this, revised counts were produced with missing persons imputed (OPCS, 1994), and

additional estimates produced by academic projects such as 'Estimating with Confidence' (Norman *et al.*, 2008). Imputation and disclosure control have now become key steps in the 'census data system' (Rees *et al.*, 2002). In the case of the interaction data from the 1991 Census – two sets of Special Migration Statistics (SMS) and one set of Special Workplace Statistics (SWS) – the suppression of counts under 10 was used with potentially disclosive tables, necessitating innovative recovery methods to be devised by researchers requiring a complete picture of migration (Rees and Duke-Williams, 1997).

2.6 Twenty-first century censuses

The 2001 Census saw a number of methodological innovations, as well as new questions included in the census questionnaires. Following the problems with enumeration in 1991 and the revision of counts, a strategy known as the 'One Number Census' was adopted (Brown *et al.*, 1996), with the aim that outputs would have a 'final' set of counts and would not need revision. The process included imputation based on findings from a detailed Census Coverage Survey (CCS). The 2001 Census was the first to detach the census output geography from that used for enumeration for the main body of small area outputs. A new set of reporting units known as output areas (OAs) were produced for England and Wales after the census data were collected (Martin, 1998; 2002); these areas were designed in order to satisfy requirements relating to minimum population counts, to reflect postcode boundaries where possible, and to maximise social homogeneity within zones.

Whereas the preceding censuses had used 10% coding for some questions, the 2001 Census data were fully coded, with 100% counts published for all observations. A further methodological innovation was the widespread use of 'post-back' return of census forms, with field officers then concentrating on collecting non-returned forms. The 2001 Census forms included a question on religion, with variations in wording across parts of the UK (Weller, 2004), the first time outside Northern Ireland that a question of religion had been included since 1851. In contrast to all other questions, the religion question was explicitly identified as being optional. In terms of statistical disclosure control in the 2001 Census, one of the methods used was the 'small cell adjustment method' (SCAM), essentially removing all counts

of one or two individuals from any census tables and replacing them with values of zero and three and, in so doing, adding considerable uncertainty to the counts for small areas, particularly for flows between output areas (Stillwell and Duke-Williams, 2007).

The most recent round of censuses took place on March 27th, 2011, again seeing methodological developments (White, 2009) as documented by Compton *et al.* in the next chapter of this book. Following the use of 'post-back' for the 2001 Census forms, one extension of methodology in 2011 was 'post-out' of forms, with questionnaires being delivered by mail rather than by an enumeration officer. In order to operationalise this, a comprehensive address register was constructed prior to the census and the register was used to underpin a new questionnaire tracking system. A major shift from previous practice was the development of an option to allow completion of the census form via the Internet; around 16% of census returns in England and Wales used this route in 2011 (ONS, 2012a). The availability of an internet channel has consequent implications for data editing and processing, as it is possible that individuals may return details both on paper and via the Internet, with reconciliation thus required.

Following the introduction of OAs with the 2001 Census (revised where required for the 2011 outputs), an additional change was made to the reporting geographies in England and Wales (with similar geographies planned elsewhere) with the introduction of new workplace zones (WZs) (Martin *et al.*, 2013) – small reporting areas for workplace related data, permitting OAs to be split where a large number of people work, or merged in places where few people work.

A significant number of new questions were included in the 2011 Censuses, including ones on main language and English language proficiency, date of most recent arrival, passports held and national identity, and in England and Wales, on whether or not an individual uses a second residence.

2.7 The questions asked in censuses

Since 1801, the number of questions asked in UK censuses has grown, and the subject areas covered has diversified. The inclusion of a question on a particular subject (or, in some cases, a set of subjects) is marked in the table, but it must be

noted that the actual question asked may vary between different parts of the UK and may also vary over time. For example, a question on 'occupation' is ever-present, yet this has varied from a simple classification ('Agriculture', 'Trade, Manufacture and Handicraft' and 'Other') in early censuses, to the detailed classification of occupations with which we are now familiar. Similarly the scope of questions about birthplace have changed over time from capturing detail of place of birth within Britain in the nineteenth century, to capturing country of birth for those born outside the UK in more recent censuses. Table 2.1 shows a general increase in the number of questions asked over time, and also suggests shifting perceptions as to what is considered to be of interest. Thus, for example, under household amenities, questions were asked between 1951 and 1991 about the availability of a flush toilet, and whether the entrance was inside or outside (with a related question about exclusive use of a toilet in 2001 in Northern Ireland). This question is no longer asked, but rather, questions about central heating are included. The changing pattern of questions over time may perhaps indicate something about issues that are or have been considered to be of political or social interest.

Table 2.1 is adapted from ONS (undated), which shows the variation in census questions from 1801 to 2011, and from a similar table showing topics from 1801 to 1991 by Diamond (1999). Documentation relating to the 1966 Census is less widely available than for other censuses. Information on the questions asked in different parts of the UK was assembled from a number of sources, including the UK Data Service user guide and Vidler (2001). The set of questions asked include elements (such as name) which are not normally released (until final release of the data after the 100 year rule), but which are included here for completeness. The questions asked include some - such as name - for which responses are not retained in processed data, but which are noted here for completeness.

The table is simplified, and indicates whether questions on a particular subject were asked in at least one of the UK censuses. The first four columns refer to the 1801-1831 Censuses and, as previously discussed, as aggregate observations of the total number of persons in an area, they are rather different in nature to later censuses. If the 1841 Census is also regarded as being somewhat transitional in

nature, and the main sequence of censuses seen as running from 1851 onwards, we can see that there are a number of questions that have always been asked. These are name, age (or date of birth), sex, relationship to the head of household, marital status, occupation, economic status, whether an employer or employed and birthplace – broadly: who we are, who we live with, and what work we do.

Table 2.1 Questions asked in censuses from 1801 to 2011

	1801	1811	1821	1831	1841	1851	1861	1871	1881	1891	1901	1911	1921	1931	1951	1961	1966	1971	1981	1991	2001	2011	
Individual characteristics																							
Names					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Sex	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Age			*		*	*	*	*	*	*	*	*	*	*	*	*							
Date of birth																	*	*	*	*	*	*	
Relationship to head of household						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Relationships to others in household																					*	*	
Whereabouts on census night																*	*	*	*	*			
Usual address													*	*	*	*	*	*	*	*	*	*	
Absent persons																*		*	*	*			
Second address: use of; type																						*	
Student term-time address																				*	*	*	
Marriage and fertility																							
Marital status					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Civil partnership status																						*	
Year and month of liveborn children in marriage																		*					
Number of liveborn children in marriage												*			*	*							
Liveborn children in last 12 months															*	*							
Duration of marriage												*											
Year and month of marriage															*	*							
Education et cetera.																							
Student / scholar status					*	*	*	*	*	*	*	*	*		*						*	*	
Age at which full-time education ceased															*	*							
Types of qualification															*	*		*	*	*	*	*	
Subject of study																		*					
Awarding institution																		*					
Transport to place of study																					*	*	
Address of place of study																					*	*	
Employment & work																							
Economic activity					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Students of working age														*	*	*		*	*	*	*	*	

Full time / part time														*	*	*		*	*	*	*	
Hours worked															*		*		*	*	*	
Occupation (<i>et cetera</i>)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Occupation one year prior to census																	*					
Apprentice / trainee														*	*		*	*	*			
Employer / employed				*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Industry										*	*	*	*	*	*	*	*	*	*	*	*	
Place of work									*	*	*		*	*	*	*	*	*	*	*	*	
Transport to work															*	*	*	*	*	*	*	
Time since last worked																				*	*	
Voluntary work																					*	
Migration & nationality																						
Birthplace				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Parents' country of birth																	*					
Nationality									*	*	*	*	*									
National Identity																					*	
Passports held																					*	
Year/month of entry																*					*	
Intended length of stay																					*	
Address one year before														*	*	*	*	*	*	*	*	
Address five years before														*	*							
Ethnicity & religion																				*	*	
Religion				*																	*	
Religion (NI)													*	*		*	*	*	*	*	*	
Religion brought up in																					*	
Ethnic group																		*	*	*	*	
Health & dependency																						
Ages of children under 16												*										
Orphanhood												*										
Infirmity				*	*	*	*	*	*	*												
General health																				*	*	
Limiting long term illness																			*	*	*	
Long term health condition																					*	
Provision of care																				*	*	
Language																						
Main language used																					*	
Welsh language use								*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Irish language use																				*	*	
Scottish language use						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Ability in English																					*	
Household characteristics																						
Number of rooms								*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Number of rooms with one or more window				*	*	*	*	*	*	*	*											
Number of Bedrooms																					*	
Sharing accommodation														*	*	*	*	*	*	*	*	
Tenure													*	*	*	*	*	*	*	*	*	
Furnished / unfurnished																				*	*	
Lowest floor level																				*	*	
Accommodation on more than one floor																				*	*	
Landlord																				*	*	
Adaptation to Accommodation																					*	

production and handling of a large number of physical documents, and the IT costs for data handling, storage and processing.

ONS have put the cost of the 2011 Census at £480 million (ONS, 2012b). Campbell-Kelly (1996) produced a table of costs of the censuses from 1841 to 1901, which provides some opportunity for comparison. The quoted costs rise from £66,727 in 1841, to £148,921 in 1901. The website MeasuringWorth.com (Officer and Williamson, 2016) provides a variety of time adjusted prices, including inflation adjusted prices and other measures that take into account changes in the relative purchasing power of money. The inflation adjusted prices (in 2011 terms) thus range from £5 million for the 1841 Census to £13 million for the 1901 Census, whilst the economy cost (taking into the cost of a project as a share of GDP) is calculated as ranging from £214 million in 1841 to £128 million in 1901. Whilst these Victorian censuses were expensive operations, they do not appear to have had the same relative cost as the 2011 Census; recent censuses, of course, include a larger number of questions, and lead to a wider range of outputs.

A gross comparison of inflation-adjusted 'cost' only addresses a limited part of the financial interpretation of a census: for a fuller analysis – beyond the scope of this chapter – it would also be necessary to consider the ways in which census data are used, costs that would be required to gather information were census data not available, and efficiency savings made through setting planning and policy decisions in a context informed by accurate data. Cope (2015) discussed the results of a cost-benefit analysis conducted by ONS, which suggested that benefits from use of census data rapidly outweighed the initial cost.

2.9 Conclusions

Many aspects of the 2011 Census are explored in the following chapters of this book; it is suggested here that the 2011 Census should not be considered in isolation, but that each modern census should be seen as building upon, extending, and developing out of its predecessors. An overriding design issue for topic selection, for question phrasing and for response categories is to provide harmony where possible with earlier censuses. This is not always possible: an obvious recent example is to consider the response categories of a 'marital status' topic: whilst the

topic remains the same, the definition of marriage has been expanded to include same-sex couples and thus the response categories used will change in line with changes in legislation such as the under the Civil Partnership Act and the Marriage (Same Sex Couples) Act.

A more subtle reading may be made of the purposes of taking a census: from early assessment of population stock, to assessment of medical and public health conditions, to a more wide-ranging collection of population statistics. A nuanced understanding of the 2011 Census is important, as it will in turn act as an important element for the design of the 2021 Census. Several topics were newly introduced in the 2011 Census, largely reflecting interest in the role or perceived role of immigration in shaping our society: in part these questions should be seen as setting up follow-up questions on the same topics in future censuses or equivalent data collection instruments.

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