Journal of the Statistical and Social Inquiry Society of Ireland. Vol. XXVI, Part IV

HISTORY AND DEVELOPMENT OF IRISH POPULATION CENSUSES

THOMAS P LINEHAN Former Director of Central Statistics Office

(Read before the Society, 5 December 1991)

1. INTRODUCTION

This year, 1991, was a Census year and marked one hundred and fifty years since the "Great Population Census" of 1841 was taken. I thought an appropriate way to remember that historic event would be to look briefly at the history of Census taking in Ireland over one and one-half centuries, including the pre-1841 period, but with particular emphasis on 1841 itself. My task would have been impossible without the invaluable help received from CSO, particularly from Mr Aidan Punch.

My topic is very appropriate for this Society given the statistical and social inquiry aspects of the Census and the close association with the Society of those charged with responsibility for the national Censuses throughout the whole period of the Society's existence whether as Census Commissioner, Registrar-General or Director of Statistics. It is worthy of notice that at the founding in 1847 of the Dublin Statistical Society (which subsequently blossomed into the Statistical and Social Inquiry Society of Ireland) one of the vice-presidents was Capt. Thomas A. Larcom who acted as a temporary Commissioner for the 1841 Census and was, it would seem, its chief architect (Black, Millin).

2. THE PERIOD BEFORE 1841

Population estimates have been made for Ireland since the time of Sir William Petty over 300 years ago (Connell, General Reports of 1821, 1841 and 1926 Censuses of Population, Wood). The detailed critical assessment of all these estimates, from 1672 to 1804, made by K. H. Connell in 1950 in his book "The Population of Ireland 1750-1845" and the later critical assessment of Connell's proposed revision of these estimates show clearly how uncertain they must be (Connell, Clarkson, Dickson et al.).

"With few exceptions these estimates were arrived at by multiplying the returns (modified or unmodified) of the number of houses in the country (made by the collectors of hearth-money¹) by an estimate of the average number of people in a house." (Connell, p.3).

I will not refer further to these mainly eighteenth century estimates.

Censuses before 1841

Official endeavors at Census taking in Ireland belong to the nineteenth century and any consideration of them must take cognizance of our close administrative links at that time with Great Britain where the series of official decennial Censuses, still current, began in 1801. Almost from the start these had implications for Ireland and there was interaction between the two systems.

For all Censuses specific legislation is involved. For Great Britain each Census from 1801 up to and including that of 1911 was taken under a special Act of Parliament passed in the preceding year. In 1920 however the system changed with the passing of a general Census Act which was a permanent enactment applicable to all future Censuses in Great Britain with some specific details, such as the date of the Census, the nature of the particulars to be collected, etc, being presented by an Order in Council as each occasion demanded. While the Acts usually covered Scotland as well as England and Wales, separate legislation for Scotland was introduced for the Censuses 1861-1891 (Vaughan and Fitzpatrick).

For the Irish Censuses there was always separate legislation, commencing with an Act passed in 1812 for taking an account of the Population of Ireland in 1813. Because of organisational and control problems, referred to below, this was not a success and there was another Act in 1815 leading eventually to a second and much more successful Census in 1821. Subsequently there were decennial Acts in the same years as those for Great Britain, the last one being in 1910 in respect of the 1911 Census. There was no Census in any part of Ireland in 1921 but new Irish series started in 1926. For this country all of these were taken under the general Statistics Act of 1926 which covered not only Population Censuses but any other statutory statistical inquiries, with specific details such as date (or period), particulars to be collected, etc., being specified in a Ministerial Order as each occasion demanded.

¹An annual tax in respect of "All chimneys, stoves and hearths" (Connell, p.6)

In Northern Ireland too, 1926 saw the first Census after that of 1911. For that and for subsequent NI Censuses there were specific Acts of Parliament, until the Census Act (Northern Ireland), 1969 which, like the 1920 Act for Great Britain, was a permanent enactment applying to all further censuses there, with a specific Order in Council each time for the details.

To return to the earliest Irish Census (that of 1813) the following quotation from the Report on the second Census (i.e. 1821) tells the outcome (Census of Ireland 1821 Report, p. vii) - a further extract from the same source, given in Appendix II, explains matters further:

"In 1812 an Act passed for taking an account of the Population of Ireland, and of the Increase or Diminution thereof: it was chiefly copied from that of 1810 for Great Britain; to the provisions of which it adhered in all the practical details, more closely than the different circumstances of the two Islands would justify. At the expiration of two years employed in trying to accomplish the object of the Legislature, it was found, on examining the Returns, that out of the forty Counties and Counties of Cities and Towns into which Ireland is divided, ten only furnished complete Returns; in four, no steps whatever were taken in pursuance of the Act; and those of the remaining twenty six were inaccurate or defective. The Act therefore may be considered to have been wholly inoperative as to its main object, that of ascertaining the number of Souls by actual Enumeration. By the aid of comparative calculations founded on previous inquiries and on the partial results of the Act, the amount of the Population in 1813 has been conjectured to be 5,937,856".

To remedy this defective return, another Act was passed in 1815, whereby the general supervision was vested in the Bench of Magistrates assembled at Quarter Sessions rather than in the Grand Juries as in the 1812 Act. The Magistrates were aided by the advice of the permanent legal coalutor for each county. This led eventually in 1821 to the taking of the first really proper and successful "official" Census, carried out throughout the whole Island at the same time. So careful were the authorities to obtain as exact as possible a return of the true state of the population that the enumerators (chosen, wherever possible, from among the collectors of local taxes as being familiar with their area and its inhabitants) were obliged to submit in advance certain returns which enabled their capabilities to be judged for the Census. Enumerators were supplied with Note Books in which the required particulars were to be entered, viz., the name, age and occupation of every individual then resident in his district. These particulars were subsequently copied from the Notebooks into printed forms or books. Uniformity in the details throughout the several counties was secured by a previous requirement that the whole process should be conducted according to Instructions issued from time to

time from the Chief Secretary's department to the Bench of Magistrates through the Assistant Barristers of each county, and Recorders of counties of cities and counties of towns respectively.

There was a further Census ten years later in 1831. This was planned on the same lines as 1821 but was not considered to be quite as successful as it was carried out over an extended period and it is alleged that there was some overcounting because Enumerators believed payment was related to numbers returned (Census of Ireland 1841 General Report, p.viii).

The procedure adopted was that of recording in notebooks the information gathered while moving from house to house and then transferring this to printed forms or books for submission in aggregate format to higher authority. This procedure was introduced in the initial Census in Great Britain in 1801 and retained until 1841 in both Islands. However while in Ireland in 1821 the information was gathered on each individual by name (including relationship to head of household) and age, in Great Britain the individuals in each family were not recorded separately and there was no age information until 1821 when a system of seeking the age to the nearest quinquennial age-group was introduced there. After the intrduction of the "Family Form" in 1841, the copying procedure was retained in Great Britain (until 1911) but not in Ireland (Guide to Census Reports p.24).

3. THE 1841 CENSUS

The 1841 Census brought a number of fundamental changes for both Islands as regards the crucial elements both of collection procedures and content. In Great Britain the civil registration of births, marriages and deaths had been inaugurated in 1837 and use was made of the associated administrative system under the Registrar General as a framework for future Censuses there. In Ireland a new network - the Officers and men of the police Force of Dublin Metropolis and of the Constabulary Force - had come into existence and was employed as the field force for Censuses forthwith. In each country special Census Commissioners were appointed to prepare the detailed forms and instructions and to develop procedures.

Another major change in the collection procedure occurred in both systems - for the first time the "family" schedule, Form A, was introduced whereby a separate form was used for each family. It was delivered to the dwelling by the enumerator before the appointed Census day, (which in 1841 was Sunday 6th June) and subsequently collected. It is of interest to note that that procedure is still in operation and in 1991 a Form A was delivered to every household with provision for every person there on Census night to be

recorded on a separate line. Census day was April 21 but it was Sunday again, the schedule was still "Form A" and the people delivering and collecting the completed forms were still described as "Enumerators". The earlier censuses were geared to a Monday and in the Initial Acts for 1841 the Census was planned for Thursday 1st July, but following some adverse reaction to such a late date the enumeration date was brought forward in an amending Act which covered some other matters as well.

Two terms have been used above, "family" and "household". While these have different connotations in current Census publications, with "family" being a subset of "household", it would seem that the 1841 term "family" is equivalent to our present "household" and covers all the persons living together in the one dwelling. In the 1841 Report it is referred to as the "Social family" as distinct from the "natural family". The *de facto* or snapshot basis of the coverage for each form remains the same too i.e. everyone who spent Census night there (everyone included where they were that night). It is interesting to see how the formulation has varied between 1841 and 1991 on the Form and instructions:

- 1841... all Members, Servants and Visitors of this Family who slept in this house on the above night;
- 1871... Members, Visitors, Boarders and Servants of this Family who slept or abode in this house on the above night;
- 1926... every person who is alive at midnight on the night of Sunday, 18th April, 1926, and who, whether as member of the family or as visitor, boarder or servant in the household or establishment, passes that night in the dwelling of the household or establishment, or arrives and is received into the household or establishment on the morning of Monday, 19th April, 1926, not having already been enumerated elsewhere.
- 1991... every Person, whether a Family Member, Visitor, Patient Employee or Other Person who passes the night of Sunday 21st April in the Household.... or who arrives on the morning of Monday, 22nd April, not having been enumerated elsewhere.

In all cases it was made clear that other persons, normally resident there but who were absent on Census night, should not be included in the Census count for that house. However a feature of the 1841 Census was the inclusion in Form A of a second "Table" seeking a return of "Members of this Family now alive, and whose home is this house but who were absent on the night of Sunday 6th June 1841". Apart from its relevance to an analysis of average

number of live children born per married woman no use seems to have been made of this information in the subsequent Census compilations in the context of population numbers, although the additional return was repeated for the next three Censuses. Perhaps the existence of this extra information on the 1841 forms may have helped some people in getting evidence of age in the context of claims for old age Pensions in the first decade of this century (Wood, p.228).

The 1841 Census was a pioneering effort not only in the method of collection of data but also in the type of data covered and the type of results produced and published. Despite repetition of some of the points already made, to convey some idea of the high regard in which the 1841 Census operation was and still is held, I quote from the introduction to the General Report of the 1926 Census which gives a useful summary account of the early Censuses.

"The remarkable Census of 1841 merits particular attention even these days, not only because many of the features introduced at this enumeration have been used at all subsequent Censuses, but also because of its intrinsic excellence. This was the first Census at which the Family Form was used (instead of the Enumerator's Note-book and viva voce interrogation) and also the first at which the police acted as enumerators. The scope of the inquiry was greatly extended, questions being asked relating to:

On Form A:

- 1. name and surname.
- 2. age,
- 3. sex.
- 4. relation to head of house,
- 5. condition as to marriage and duration of marriage.
- 6. occupation,
- 7. education,
- 8. birth-place,
- number of persons employed in agriculture, number of days' labour, and wages given by farmers.
- 10. particulars of members of the family alive but absent from home,
- particulars of persons residing with family who died during the previous ten years,

On Form B:

- 1. particulars of house, including:
 - (a) built or building,
 - (b) material of which built,
 - (c) nature of dwelling,
 - (d) number of rooms,
 - (e) number of families in house,
 - (f) agricultural statistics."

There is more praise to come, but before completing the extract from the 1921 Report, I would like to focus attention on three references which may be relevant to the quantum leap whereby from 1841 onwards, the Census came to be much improved and much more than a mere enumeration of the population.

Firstly I refer to the 1841 Report itself which bears the date 14th August 1843, under the names of the three Commissioners. The following rather lengthy extract is relevant to the broadening of the scope of the Census, and it also explains the existence of the forms A and B, mentioned above, as well as introducing a very important factor contributing to the accuracy of the whole operation - the availability, for the first time, of detailed maps.

"Our first step was to procure from the Ordnance Survey Department a Map of every barony in Ireland, showing the boundaries and details of its several parishes and townlands, with classified lists of these subdivisions. As the Survey had been completed, except in the counties of Cork, Kerry, and Limerick, we thus, for the first time, possessed the advantage of a set of maps which not only indicated correct boundaries but exhibited every house upon the face of the country. For those three counties the maps were formed from less perfect documents, and exhibited, for the most part, no more than the boundaries.

It having been resolved that the Constabulary should be employed for the enumeration, we next distributed the maps and lists to the several Officers and Head Constables of the force, selected by the Inspector-General for each barony. They again divided these into districts of contiguous townlands, to each of which was assigned a Superintending Constable or Sub-Constable, or in those districts where the constabulary were not sufficiently numerous - one of the coast-guard, or - where such assistance was not available - a Civilian selected by the Superintendent. We were thus enabled to mark on a general map the districts and stations of all the enumerators, and the whole force

thus marshalled was in readiness before the arrival of the period fixed by the Act of Parliament for the enumeration.

In the meantime, having maturely considered the best mode of ascertaining the various facts we had in view, we resolved to adopt the course of sending a form of Return to each family, to be filled by its head, as less intrusive than requiring it to be filled by the enumerator from viva voce inquiry. But we, of course, took means to check the returns so obtained, and required from the enumerator a certificate that they were true to the best of his belief. Another form was supplied to the enumerator, in which he was himself required to record the various particulars sought, as to houses and matters of a similar nature. The general distinction we followed was, that the statement of all facts which were of a personal nature, and only ascertainable by personal inquiry was, as far as possible, left to the head of the family, whilst that of all facts which could be ascertained by mere observation was demanded from the enumerator.

"The Act required us to ascertain the Age, the Sex, the Occupation, and Place of Nativity of every person abiding in Ireland on the night of Sunday the 6th of June, with such other particulars as the Lord Lieutenant should direct. We accordingly made provision under the latter power for such inquiries as appeared likely to illustrate or verify the information specifically required. Thus, we asked the name of every individual, as a proof of identity; and the relationship, with a view to distinguish the members of the natural family from the servants and other members of the establishment, constituting what may be considered the social family. We also demanded a return of absent members, which, together with the measures adopted at the ports, to be described hereafter, we hoped would obviate the danger of error from the lateness of the season at which the Census was to be taken. We also ascertained the dates of Marriages and of Deaths since the last Census, in order to institute a comparison of ages with the former returns, and, in the absence of Registries, test in some degree the correctness of the enumeration.

The Act also required a Return of the Houses, distinguishing those which were inhabited from those which were uninhabited or building; and by a similar extension of the inquiries into subjects of a kindred nature, we sought to ensure a correct knowledge of their state in point of accommodation; whilst, from the combination of these several returns with those before mentioned, we hoped to throw some useful light upon the general condition of the community, as there can be no more obvious indication of the advances and condition of a people than improvement in the comfort of their residence. So, in an agricultural community, the quantity of land held or tilled by each occupant, not only throws light upon Agriculture as a branch of national wealth and

industry, but by its influence on the condition of the people, affords a test of the relative advantages of large and small farms. Again, the quantity of cattle, and other stock of every description, is necessary to a just estimate of the productivenness of a country, and its influence upon the comfort of the inhabitants.

Many inquiries of a similar nature might, no doubt, have been pursued with advantage to a current knowledge of the condition of the people. We felt, in fact, that a Census ought to be a Social Survey, not a bare Enumeration. But we were restrained by the apprehension that jealousy and prejudice might be excited if we made our inquiries too searching and too minute. People are slow to see that questions relating to themselves and their households can have any bearing on the general good, and forget that, in accounts of large numbers, the individual is wholly lost sight of in the average, but that the average can only be obtained by an accurate knowledge of all that pertains to the individual".

Secondly I draw attention to a similar message which is conveyed by Larcom's own words in the opening paragraph of a Paper he read on 20th August 1843 to the Statistical Section of the British Association meeting in Cork (Larcom, p.323):

"In 1841 I was appointed a Commisioner of the Census in Ireland, and as the Ordnance Memoirs, of which a single volume only had been published, were then suspended, I felt anxious to seize this opportunity of accomplishing one of the objects which I had embraced in that memoir - I mean the statistical portion. Under the name of Social Economy, I had included in the memoir, the statistics of Education, Benevolance and Crime, as well as the number of the people, and, at former times, their condition, their religion, the different races of which they were composed, the amount of property and capital in stock, and a variety of other matters of interest as bearing on the state of a country and its inhabitants. The Act of Parliament for the Census prohibited inquiries On religion, but allowed such matters to be collected "as the Lord-Lieutenant should direct". This was understood by the authorities to mean that his Excellency might direct such inquiries as were likely to afford checks upon the accuracy of the enumeration, and the other points which were specifically enjoined by the Act. But I obtained the concurrence of my colleagues in such a careful arrangement of these additional inquiries as should subsequently enable us by their combination to throw some light on the condition of the people, and the result has been that the present Census presents more the aspect of a statistical document than returns of the kind have done before."

Thirdly In a wider context, and more than two years earlier in time, there is

the interesting report, in April 1840, to the council of the Statistical Society of London (precursor to the Royal Statistical Society), from the Committee which the Society had appointed to consider the best mode of taking the Census of the United Kingdom in 1841. Some extracts from the Report are given in Appendix III dealing particularly with the Committee's recommendations which would seem to have a close relationship with the procedures and scope adopted (subsequent to the Report) in both Great Britain and Ireland in the 1841 and later Censuses and it would seem possible that the Report had a direct influence although I have no documentary proof of this. I have highlighted the principal points of the Report in bold type. It is worthy of note that:

- by 1861 all the topics recommended in the Committee's report were included in the Irish Census, and also in that of Great Britain except Religion and Education (both of which, however, were covered in 1851 in GB in a separate voluntary inquiry);
- commencing in 1841, the "Family Form" was in general use in both Countries;
- from 1841 onwards the Police acted as Enumerators in Ireland.

I now return to the laudatory extract concerning the 1841 Irish Census from the 1926 Report

"The published returns marked an enormous advance in scope, manner of presentation, interest and in statistical technique. Perhaps the most important improvement was with respect to the statistics of occupations, described in some detail in Chapter III. The territorial divisions used were the same as in the two previous Censuses. In the "civic" and "rural" districts the population was classified by (a) years of age, (b) age and education, (c) age and conjugal condition, and (d) number of families in each house. The distinction between civic and rural areas of the country, of fundamental importance for the purposes of social and vital statistics, was explicitly recognized for the first time at this Census. The "Tables of Deaths" (in which the deaths in each county in each of the ten years preceding the Census were classified by ages and causes of death) as well as tables relating to births and marriages, were published, as the Census Commissioners state, to supply the want of a "General Registry" in Ireland. (Actually the compulsory registration of all births, marriages and deaths in Ireland was inaugurated in 1864.) These tables of deaths were prefaced by a remarkable report by Surgeon (afterwards Sir William) Wilde, in which there is a most interesting and etymologically valuable examination of the Irish names of diseases.

Other notable features of the 1841 Census are:

- 1. Life Tables for the Civic and Rural Districts of the country and for Dublin City, amongst the first ever constructed anywhere;
- 2. inquiry into the Fecundity of Marriages, also pioneer work, which showed for each age of husband and age of wife at marriage, the number of male and female children born and the numbers per 100 marriages in the provinces and large towns;
- 3. tables of overseas emigration during the ten intercensal years specifying particulars of embarkation and destination;
- 4. charts indicating densities of population, of housing, etc.;
- 5. agricultural statistics classified by sizes of holdings.

It is possible, of course, to criticize the methods of some of these inquiries and their results, indeed the Commissioners themselves were their own severe critics; but after a passage of nearly a century no student of this great Census can fail to recognize the virtuosity of the Census-takers judged by the standards of any age."

You know now why at the outset I spoke of the "Great Census of 1841" and why I thought it useful to put on display a copy of the comprehensive Report which extends to almost nine hundred pages.

4. OVERVIEW OF CENSUS TOPICS

At this stage I invite you to look briefly at Appendix I which is an attempt to condense as many Census particulars as is possible in a three part synoptic table covering such a long time span, thus updating similiar tables first presented in M.D.McCarthy's paper delivered prior to the 1961 Census. The first part covers particulars collected on Form A in respect of individuals while the second part deals with household or dwelling questions whether partly from Form A as in the later years or from the house and building return referred to as Form B. The third part of the Appendix reproduces Table 3 of McCarthy's paper and shows, in a slightly modified way, the additional forms used in the period 1851-1911. Some of these were a means of segregating certain groups of the population, not in private households, for clerical summarisation. In other cases they were needed for the collection of data on topics such as Inquests, Deaths in Institutions and School Attendance, which do not now form part of the Census.

I would caution readers that Appendix I is intended as a general guide only.

- It does not necessarily cover all the changes in the formulation of questions at successive Censuses e.g. No. 20 of Part 1. For 1926 only Area, but not valuation was covered in the questions. Users of Census data must be alert to the possibility of such changes and should consult the subject matter volumes which usually contain copies of the relevant questions.
- The absence of an explicit question in a particular year does not always imply that there is no information for that topic for that year. For example, information on the topics "Employment Status Q.24" and "Labour Force Status Q.35" was deriveable for some earlier years back to 1926 from the replies received to questions on "Occupation" and "Employer and Employer's Business" i.e. the "Industry" question.
- The presence of an explicit question in a particular year does not automatically imply that there is information available for that entry. For example for Form A no information concerning "name and surname, Q.1" is available as this item is not processed, while for "absent family members, Q.7", there does not seem to have been any analysis carried for the years in which the information was sought. For "period of employment in previous year, Q.21" because of poor response nothing was published for 1946 while for 1936 published results were presented in percentage form only (see McCarthy 1961).
- There is a certain interconnection between some similar questions. Thus
 questions 29 and 30 on "usual address now and a year ago" (introduced
 in 1971) taken together, provide, inter alia, information on inward migration during the preceding year. In the absence of these questions
 in 1979, the single question Q.33 was used, but the need for its continuation vanished with the re-appearance of questions 29 and 30 in
 subsequent Censuses.
- Appendix 1 does not include the Register of Population taken on 16
 November 1941 under the Emergency Powers Act, 1939 for purposes of
 getting lists of persons and addresses for the Department of Supplies for
 the issuing of Ration Books. The items of Appendix 1 Part 1 covered
 in the registration procedure which was carried out on census lines, were
 numbers 1, 2, 4, 5 and 23. One statistical report, akin to a "Census
 Report" was prepared and published (see Register of Population 1941).
- Consequential inquiries are not covered. For example there was a detailed follow-up, at least in some years, based on responses to the question on "Incapacity, Q.13". In 1851 each case was followed up to ascertain (i) whether congenital or acquired; (ii) to what cause attributed;

(iii) age at which person became afflicted, if not from birth; (iv) whether afflicted in any other way; (v) whether any other member of the family afflicted.

5. SPECIFIC TOPICS

While time does not permit separate discussion of the development of each subject matter area, the following are some points of interest.

Housing

One of the innovations in the 1841 Census was the novel attempt to classify the accommodation provided by the inhabited housing stock using the following system:

"The value or condition of a house, as to the accomodation it affords, may be considered to depend mainly on - 1st, its extent, as shown by the number of rooms - 2nd, its quality as shown by the number of windows - and 3rd, its solidity or durability, as shown by the materials of its walls and roof. If numbers be adopted to express the position of every house in a scale of each of these elements, and if the numbers so obtained for every house be added together, we shall have a new series of numbers, giving the position of the house in a scale compounded of all the elements i.e. their actual state. We adopted four classes, and the result was, that in the lowest, or fourth class, were comprised all mud cabins having only one room - in the third, a better description of cottage, still built of mud, but varying from 2 to 4 rooms and windows - in the second, a good farm house, or in towns, a house in a small street, having from 5 to 9 rooms and windows - and in the first, all houses of a better description than the preceding classes.

The rule we adopted for classifying accommodation was but an extension of the rule that guided us in classifying the houses themselves. First class accommodation consists of first class houses each containing one family. Second class accommodation consists of second class houses, each containing one family, and first class houses, each containing two or three families. Third class accommodation consists of third class houses, each containing one family - of second class houses, each containing two or three families, - and of first class houses, each containing four or five families. Fourth class accommodation consists of all fourth class houses, - all third class houses containing more than one family, - all second class houses containing more than three families, - and all first class houses containing more than five families."

The result of this exercise for 1841 is summarised in the following Table. Its value is richly enhanced by the availability of corresponding analyses for subsequent Censuses. The results for 1911 - the last Census in which this type of information was collected - are also given, and show the dramatic changes over 70 years especially the virtual elimination of the houses of the fourth class which reduced in number from half a million to some five thousand (1841 and 1911 General Reports).

Number of families which occupy each class of accommodation in 1841

	Number of families (000)											
	In Houses	First	Second	Third	Fourth							
	of the	Class	Class	Class	Class	Families	Houses					
		Acc.	Acc.	Acc.	Acc							
1841												
	1st Class	31	11	7	17	67	40					
	2nd Class	*	230	62	29	322	264					
	3rd Class	*	*	505	62	567	533					
	4th Class	*	*	*	517	517	491					
	Total	31	242	574	625	1473	1329					
1911												
	1st Class	77	7	8	18	110	84					
	2nd Class	*	569	26	10	606	583					
	3rd Class	*	*	189	1	190	189					
	4th Class	*	*	*	5	5	5					
	Total	77	576	222	35	911	862					

From 1926 onwards analyses of the housing position were carried out on the basis of "overcrowding" using Census data relating size of family to number of rooms in dwelling. The proportion of the population in private households in permanent housing units with a density of more than two persons per room fell from 27% in 1926 to 3% in 1981. Correspondingly the proportion of the population in households having less than one person per room rose from 21% to almost 50% in the same period.

In 1946, for the first time, the Census household queries were extended to include water supply and sanitary facilities, nature of occupancy and age of dwelling. Most recently information on winter heating arrangements was added.

Between 1946 and 1981 the proportion of private dwellings in Aggregate Rural Areas with piped water supply increased from 9% to 89% and the proportion with flush toilets increased from 9% to 78% (Census of Population 1981, Volume 8). In 1946 less than one in four (23%) of private dwellings in Aggregate Town Areas (population clusters of 1,500 or more) were owner-occupied. By 1981 this proportion had risen to almost two in three (66%).

Education

Comparison of the 1841 topics with those for 1991 shows some considerable differences in what might seem to be areas of similiar content, based on summary titles of subject matter areas. For example the Education question in 1841 was in terms of literacy and sought information for each person on whether he or she can "read", "read and write", or "cannot read". The literacy question was continued in all Censuses up to and including 1911.

It may be of historical interest to repeat here the statistic for illiteracy derived from the Census returns - the proportion of the population 5 years old and over who could neither read nor write declined from some 53 per cent in 1841 to some 12 per cent in 1911.

The subject of education, which, after 1911, was dropped until 1966, has been retained since then. By 1991 the approach was to ascertain (i) the age at which fulltime education ceased (ii) the highest level of education which was actually completed and (iii) the scientific or technological qualifications held.

Apart from "literacy", further information on education was collected in 1841. From the head of each school, particulars were sought on children undergoing instruction there during the week preceding the Census; from 1851 until 1911 inclusive, Censuses of Education were carried out in a more formal fashion as part of the global Census inquiry and the statistical results were incorporated in the Census reports.

This system ceased with the 1926 Census which also saw a number of other changes, both additions and deletions.

Prior to that Census, the first since the establishment of Saorstat Eireann, during the 1925-26 Session of the Society, Prof. C. H. Oldham delivered a Paper entitled "Reform of the Irish Census of Population". In effect he argued for the dropping from the Census itself of a number of large sections, including specifically (i) the School Census and recommended that the Department of

Education should take its own Education Census (ii) the Religious professions section as these would be better done by each Church covering its own members (iii) the "Occupations of the People" given the well-known difficulty of handling it in a useful way and (iv) the "formidable Land Census (Agricultural Holdings)". This latter was an 1881 addition which I have not referred to before and which would seem to have arisen from an earlier proposal made through the Society by H. I. Jephson in his paper "Suggestions for the Irish Census of 1881" in February 1880.

In the general context of the "land question" Jephson considered that the Census should also be a census of the holdings and farms in Ireland, and the number of people in 1881 resident thereon. This was, apparently, put into effect and retained in subsequent censuses. The result is described by Prof. Oldham in the following graphic terms, referring to the General Report on the 1911 Census:

In the event the 1926 Census did not embrace either the School Census or the Land Census but one notes the introduction in 1926 of question number 20 seeking information on "area of agricultural holdings of which usual residents of the household were rated occupiers".

Religion

As already mentioned the 1840 Act ruled out any question on religion in the Irish Census and this embargo was repeated ten years later. However the topic was declared legitimate for the 1861 Census and has been included on a regular basis since then. It is of interest to note that, while this topic was not

covered in the pre-1841 enumerations, information was collected in 1834 as part of the work of the Commission For Inquiring Respecting The State Of Religious And Other Instruction Now Existing In Ireland (see First Report of Commission of Public Instruction Ireland). This work was linked to the 1831 Census returns.

Irish Speakers

This topic was not included in 1841 but at the 1851 Census an instruction relating to the column for "Education" (i.e. literacy) read

"The word "Irish" is to be added in this column to the name of each person who speaks Irish but who cannot speak English; and the words "Irish and English" to the names of those who can speak both the Irish and English Languages".

This approach was continued until 1881 when a separate column was introduced for the "Irish" topic. Although the categories remained the same there was a certain discontinuity because of statistical scrutiny procedures. In 1926 the choices offered were: "Irish only", "Irish and English" for native speakers who could speak English also, "English and Irish" for others who could speak both languages, and "read but cannot speak Irish", with the same direction as before for all others. From 1936 the second and third categories were combined into one, "Irish and English" and the formulation of the question has remained unchanged since then.

Occupations

This topic has been included in one form or another in almost every Census commencing with 1821. However it does not lend itself readily to adequate historical treatment in a general purpose paper of the present kind. Separation of the two concepts "occupation" and "industry", as commonly used today, was introduced in the 1926 Census but in all previous enumerations this distinction was obscured.

There are other basic factors which affect the comparability over time of the Irish classifications and Chapter III of the Report on the 1926 Census should be consulted by those interested in the earlier periods. In using the results from later Censuses the qualifing notes in the published volumes should be consulted.

6. OTHER ISSUES LINKED TO 1841 CENSUS

Agricultural Statistics and the Population Census

The list of 1841 topics given earlier included "agricultural statistics". The information collected by the enumerator on form B under this heading was not as detailed as in the annual series of agricultural inquiries subsequently inaugurated in 1847. It covered land under three headings - arable, pasture and waste; and all livestock under six headings - horses, cattle, sheep, goats, pigs and poultry. The value of livestock was estimated by applying fixed average unit values to each category yielding a total estimate of some £20.7 million in 1841.

A full Census of Agriculture was carried out in June of this year using the same field force structure employed earlier in the year for the Population Census. The final question shown on the first synoptic table provides a link between the two Censuses which will help in preparing analyses of the agricultural population incorporating information re the agricultural statistics.

That list of questions asked in the 1841 Census included as item 9. "number of persons employed in agriculture, number of days' labour and wages given by farmers". The information was sought at the foot of the 1st table on form A. While the Report does not contain a copy of the Census form it does contain a copy of the "Explanation of the Return" which was on the reverse side of the form and which contained Pattern Tables as a guide. At the foot of the pattern First Table the following was given:

"What Number of Persons usually resort to the FARM for daily Employment?

Answer: Males No of: 5; Females No of: 2.

Total Number of days' Work given to Males in one year: 150.

Total Number of days' Work given to Females in one year: 100.

Wages of Males per day without diet: 10d. Wages of Females per day without diet, 4d.

It is to be observed the Number of Days' Work will be ascertained by multiplying the number of persons employed by the number of days they work, thus, in the example given above, 5 men have worked for 30 days each, and 2 females 50 days each.

No statistical results are given and no reference whatsoever is made in the Report to any use made of the replies received to these questions. Perhaps some use was made in another context.

Examination of the documents in the public Archives revealed that a similarly structured question had been included in the same fashion for "Persons usually resorting to the HOUSE for daily employment". No mention of this is to be found in the Report, even in the Pattern table, which dealt with a farm household.

Structure and Layout of Form

In 1991 the Census household schedule was of booklet type (as distinct from a single large sheet) with many precoded answers both for individual and household information and it had provision for eight people. The booklet format was first introduced at the 1981 Census. In earlier Censuses there was no precoding for individual's responses (except in the simplified one of 1979), while precoding of household replies began with the 1946 Census, which as already mentioned, introduced questions on water supply and sanitary facilities for the first time.

Provision was made for up to 20 individuals for the pioneering 1841 form. Next time, in 1851 the form covered up to fifteen persons and this parameter remained unchanged in all succeeding Censuses up to and including 1911 with the single exception of 1871 when the number of "lines" was reduced to twelve.

In 1926, the first Census after 1911, no doubt a time of general reassement, the Census form was geared to ten persons and this parameter was retained up to and including 1979 with two exceptions - the first in 1946 with a reduction to nine when the design of the form was changed on a once-off basis to provide a column rather than a line for each person - the second exception was in 1956 with an increase to eleven for what was basically a population count. Since 1979 the capacity of the Form has been kept at eight persons.

I referred already to the use of "family" in the earlier Censuses to denote what is now implied by "household". This was one of the changes made in the 1926 Census and references in the forms to "head of family" now became "head of household".

Fieldforce

It was mentioned earlier that one of the innovations of the 1841 Census was the use of the Police force as Enumerators i.e. for the distribution prior to Census date of the household schedules and the subsequent collection of the completed documents. This arrangement was retained from Census to Census and from 1926 the Garda Siochana took on that role and covered the whole Country up to and including 1946. From 1951 the Dublin Metropolitan Garda Area was enumerated by Postmen and from 1961 the Police enumerators were increasingly supplemented by temporary civilian enumerators. From 1979 onwards, however, the entire enumeration work was carried out for each Census by a specially recruited field force of temporary officers consisting of whole-time Supervisors and part-time enumerators.

Processing

There is one other dimension to the success achieved by those working on that 1841 Census - the very detailed Report with many cross-classifications produced in little more than two years after Census day with none of today's technological aids. No doubt there were some tricks of the trade developed, to determine the smallest unit of aggregation or building block which would faciliate regrouping without repeated extraction, and to design suitable worksheets. In that general context I would like to refer to yet another Paper to the Society. It was read in April 1889 under the title "The Mechanism of Statistics" by Robert E. Matheson who was attached to the Registrar General's Office and closely involved with several Censuses. In Chapter IV of his Paper he deals with mechanical appliances in aid of the work of tabulation. These include (i) appliance of Folding Flaps, (ii) Racks for Cross-totting, (iii) Arithmometers, (iv) Slide Rules and (v) Mathematical Tables. Evidently the slide rule was found to be particularly useful in ratio calculations of which there were a great number in the early Census Reports. The paper included a drawing of a particular model and I have on display here a similiar slide rule dated 1917. It may well have been used for calculating ratios in preparing the analyses of the 1926 Census results.

In 1926, for the first time, the actual compilation and tabulation work was carried out by means of punched cards and related machinery. Such cards were used up to 1971; key-to-disk data-entry was used from 1979 onwards. For processing - in 1966 CSO used, in-house, an IBM 360 Model 20 together with card sorters; for 1971 to 1986 processing was in the CITS IBM bureau, using disks and tapes, while the 1991 Census will be completly processed in-house using Digital Computers.

Dissemination of Results

The full results of the 1841 Census were issued in the mega-volume already referred to. Subsequently the system adopted was to issue a series of subject-matter volumes, each covering all the geographical subdivisions for a particular subject. In 1871 the practice was changed and County Books were issued,

each covering all the subjects. A return to the first arrangement was made in 1926 and this subject-matter approach is still in use for the final volumes. However at an earlier stage County Bulletins with the principal results for many topics are released as the processing advances county by county. Once overall results are available, it is possible to make statistics for small areas available to users in the form of computer print-out etc. long before the printed publication appears - a facility not present in 1841.

Folklore

To many respondents the litary of detailed queries may well have seemed to be overwhelming. In this context it may be of interest to play for you a recording of a "Census Ballad", dealing with the 1891 Census, which was broadcast from RTE on Census day 1991. The words are reproduced in Appendix IV.

7. CONCLUSION

Undoubtedly the 1841 Census was a gigantic undertaking which was planned and executed admirably. The fact that the basic approach to conducting a Census has not altered fundamentally is probably the best indicator of that. However, apart from having an exceptionally able team at the helm, the greatest asset was the availability, at marginal cost, of a nationwide network of enumerators already in existence, trained and disciplined and capable of carrying out the different stages of the work. That is not now the case and each time there has to be an initial phase of recruiting and training a nationwide fieldforce of some 3,500 suitable people. This multiplies the cost enormously and makes it all the more necessary to ensure that the right questions are being asked in the Census and that the results produced are in the most useful format.

If we were starting now to carry out the first Irish Census with the objective of describing statistically in a meaningful way the condition of the people, not only at national level, which could be done by sample survey, but especially at the level of each small area, what topics would we recommend for inclusion? Apart from consideration of continuity with the past, this is much the same as asking what if anything should be deleted from the 1991 schedule for future Censuses and what topics if any should be added.

Perhaps it is time now to look at the long-term plans for all aspects of future Censuses, not only the content but the collection and processing as well.

Year of Canaus

APPENDIX I - PART 1 PARTICULARS FOR INDIVIDUALS ON FORM A AT EACH CENSUS

- = Not collected; Y = precoded; E = entered by Enumerator; y = reply menu given in notes 1901 1911 1926 1871 **Year of Census** 3 Month 21 9 18 12 30 7 2 3 31 8 11 10 10 15 15 Capacity of Form-Number of Persons X X X Name and sumame x X Sex X Relationship to head of household C C C C C Ace (A) Years: (B) Years, Months; (C) Date of Birth YS YS Marital status (8 shows separated) x X X Place of birth [County, City, Country] Absent family members (separate table on Form A) Deaths in family members since last Census [separate X X Literacy (Read, write); y = notes gave reply menu tΧ tΧ tX tX tΧ Occupation: † pre 1928 no separate "industry" D D Marriage date "D" or duration "d"; w women only D D v 12 * * Irish: as addendum to Literacy question; y as 9 4 DĹ DĹ. DL DŁ. D incepacity (0 = deaf, dumb, blind; L = lunatic, etc.) 13 Religion 14 Live births to present marriage for married women Children of present merriage still living Orphanhood (for children) 17 Decendents = no. <16 for married men and all widowed Industry (Question "Employer and Employers' Business") ~ 20 Area, vain, agric, holdings; H=household; I=individual 21 Period of unemployment previous year; 3 causes Period of residence for immigrants 23 Home address of visitors Y 24 Employ, status-sep, ques, re employee/own account ~ 25 Subsidiary occupation X 26 Age at which fulltime education ceased 27 Types of schools etc. attended fulltime: I - duration 28 Scientific or technological qualifications X 29 Liquel regidence now X 30 Usual residence one year ago V 31 Means of travel to work, school etc. X 32 Distance to work, school etc. 33 Became resident within past year; Yes/No X 34 Address of place of work, achool or college Y 35 Present status - sep. ques, re labour force status X 36 Lived outside >=1 year; when, whence came Y 37 Highest level of education completed - (for no. 27) 37 is person terming - principal or subsidiary? 1891 1901 1911 1926 1936 1946 1951 1956 1961 1966 1971 1979 1981 1986 1991 Y 1871 1881

APPENDIX I - PART 2 HOUSEHOLD DWELLING PARTICULARS ON FORMS A AND B (OR PRESENT EQUIVALENT)

- = Not collected: Y = precoded: E = entered by Enumerator

	- = Not conected; r = precoded; E = entered by Enumerator																					
Y	Year of Census	1841	1851	1861	1871	1881	1891	1901	1911	1926	1936	1946	1951	1956	1961	1966	1971	1979	1981	1986	1991	Y
	FORM A																					
39	Number of rooms	-	-	-	-	-	-	_	-	E	E	E	-	_	х	X	X	_	X	X	X	39
40	Building type	-	-	-	-	-	-	_	_	_	-	E	-	E	E	E	_	-	E	É	E	40
41	Nature of occupancy	_	-	_	-	~	-	-	_	_	-	Υ	-	_	Y	-	Υ	_	Y	-	Y	41
42	Rent (where relevant)	_	-	-	_	-	-	-	-	-	-	X	-	-	×	-	X		X	_	X	42
43	Water supply		_	-	_	-	-	-	-	-	_	Y	-	-	Y	-	Υ	_	Y	_	Υ	43
44	Fixed bath	_		_	-	_	-	-	_	_	_	Y	-	_	Y	-	Y	_	Y	_	Y	44
45	Sanitary facilities	_	-	-	-	-	-	-	-	-	_	Y	_	-	Y	-	Υ	-	Y	_	Υ	45
46	Hot water	-	-	-	_	-	-	-	-	-	_	-	-	-	Y	-	-	-	Y	_	-	46
47	Year in which built	-	-	-	-	-	_	-	-	-	_	-	-	-	Υ		Υ	_	Y	-	Y	47
48	Electricity supply	-	-	-	-	-	-	-	-	_	-	_	-	-	Υ	-	Y	_	-	_		48
49	Heating (wintertime) arrangements	_	_	-	-	_	-	-	-	-	-	-	-	-	-	-	_	_	Y	-		49
50	Number of motor cars	-	-	-	-		-	_	_	-	_	_		-	-	-	Х	_	_	X	X	50
51	Are specified facilities shared	-	-	-	-	-	-	-	-	-	· -	Υ	_	-	Y	-	Y	_	Y	-	Y	51
52	Summary of persons—entered by Enumerator (E)	E	E	E	E	E	E	E	Ε	E	E	E	E	Ε	Ε	. E	E	E	E	Ε	E	52
	FORM B																					
53	Identification of premises	E	Ε	Ε	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	53
54	Description of building	E	E	Ε	Ε	E	E	E	E	E	E	E	Ε	E	E	E	Ε	E	Ε	Ε	Ε	54
55	Built or building	E	Е	E	E	E	E	E	E	E	E	Ε	-	-	-	-	-	_	-	-	-	55
56	Inhabited or uninhabited	E	E	E	E	E	Ε	E	E	E	E	Ε	-	_	E	-	_	E	E	E	Ε	56
57	Households in house or building	E	E	E	E	E	Ε	E	E	E	E	E	E	E	E	E	E	E	E	E	Ε	57
58	Persons in household — Total	-	-	-	-	-	_	E	E	E	Ε	E	E	E	Ε	E	E	E	E	E	E	58
69	Persons in household - by sex	-	-	-	-	-	-	-	-	E	E	E	E	E	E	E	E	E	E	E	Ε	59
60	Rooms in house (see no. 39, also)	E	E	E	E	E	E	Ε	E	_	_	_	-	-	_	_	_	-	-	_	_	60
61	Walls-material of construction	Ε	E	Ε	E	E	E	Ε	E	-	-	_	-	-		-	-	_	-	-	-	61
62	Roof-material of construction	E	E	Е	E	E	E	Ε	Ε	_	-	-		-	-	-		_	_	-	-	62
63	Stories – number	E	E	E	E	-	-	-	-	-	-	_	-	_		-		-	-	_	_	63
64	Windows-in front	Ε	E	E	E	E	E	E	Ε	-	-	-	-	-	-	_	_	_	_	_	_	64
65	Windows-outside		E	E	E	-	-	-	-		_	_	_	-	_	-	-	_	_	_		65
66	Persons sick in household (count from additional																					
	household form"	-	E	E	E	E	E	E	Ε	-	-	-	-	_	-	-	-	_	-	-	-	66
87	Rooms occupied by each family	-		-	-	_	-	Ε	E	E	Ε	E	-	-	_	-	-	_	-	_	_	67
68	Outoffices and farm buildings - Total	-	-	-	-	E	E	E	E		-	_	-	-	-	_	-	_	-	_	-	68
69	Farm acreages (arable, pasture, waste)	E	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	_	-	-	69
70	Livestock (horses, cattle, sheep, goats, pigs, poultry)	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	70
Y	Year of Census	1841	1851	1861	1871	1881	1891	1901	1911	1926	1936	1946	1951	1956	1961	1966	1971	1979	1981	1966	1991	Y

This form requested the following additional particulars for any person who laboured under sickness and who slept or abode in the house on Census night:

 (i) whether "able" or "unable" on Census date to follow usual occupation;
 (ii) principal disease under which labouring, and if the result of an injury; the particular injury which caused the liness;
 (iii) how long affected.

APPENDIX I - PART 3

COVERAGE OF OTHER SEPARATE FORMS USED AT CENSUSES OF POPULATION, 1851-1911

ine	Description of Form	1851	1861	1871	1881	1891	1901	191
1	Ship Return (incl. No. Crew and Passengers)	X	×	×	x	×	x	×
2	Paupers in Workhouses	x	x	х .	ħ			
3	Paupers sick in Workhouses	x	x	×	} ×	x	x	X
4	Persons in Hospitals	x	×	×	×	x	x	x
5	Teachers and Students in Residential Schools and Colleges	x	x	x	×	×	×	×
6	Persons in Barracks	x	x	x	×	x	×	X
7	Lunatics and Idiots not in Institutions	x	x	x	×	×	×	х
8	Lunatics in Asylums	x	×	x	×	x	×	>
9	Persons in Prisons etc.	x	x	×	×	×	x	>
10	Scholars attending Schools	x	x	x	×	×	x	,
11	Children on rolls at Schools	_	x	x	x	×	x	,
12	Scholars attending Colleges	_	_	_	×	x	x	,
13	Persons on rolls of Universities and Colleges		-	_	×	x	. ×	,
14	Return of Outoffices and Farm steadings (distinguishing types)	_	_	_	x	x	×	,
15	Return of Landholders, acreages, valuations, families, persons, houses and farm buildings	_			x	×	×	,
16	Paupers who died in Workhouses (since previous Census)	×	×	×	_		_	
17	Persons who died in Hospitals (since previous Census)	×	×	×	_	-	_	
18	Persons who died in Schools etc. (since previous Census)	-	_	x	_	_		
19	Deaths in Asylums (since previous Census)	×	×	×	_	_	_	
20	Deaths in Prisons (since previous Census)	-	-	×	_	_	_	,
21	Inquests	x	×	x	_	-	-	
22	Emigrants	×	_	_		_	_	

APPENDIX II

EXTRACT FROM REPORT ON 1821 CENSUS

"The failure of the Act of 1812 proceeded, as has been hinted, from the want of due observation of the difference of the circumstances of the two Countries. In England, the details of the measure were entrusted to the Overseers of the Poor; a body, which, from its long establishment, and its necessity of frequent and minute investigation into the localities of the country, particularly with reference to the poorer classes of society, was possessed of all the information and of every facility necessary for giving effect to a legislative enactment on this point. In Scotland, the Parish Schoolmasters presented a body equally pervasive, and, if inferior in knowledge of local peculiarities, surpassing the other in intelligence and capability in the use of its materials. In Ireland, where there are no poor laws, and where, in consequence of the extent of parishes and number of unions, Parish Schoolmasters are comparatively few, and from the limited quantity of instruction they are required to impart, also comparatively inferior in intellectual qualifications, no constituted body was to be found possessing all or even most of the requisites for this duty. Inferior agents were therefore to be chosen, for the special purpose: and hence necessarily proceeded deficiency of information in some instances, and want of zeal in others. The commands of the Legislature also were communicated to those persons, not immediately from the Government, but through the intervention of the Grand Juries. A brief consideration of the manner in which these bodies are constituted, will shew they are not the best adapted to superintend the operations of a measure, requiring much time, much complex arrangement and considerable minute responsibility in its execution. They are not permanent: they meet for a short time, at two periods of the year; during each of which, OCCUPIED as they are in the discharge of judicial and magisterial functions, various in their nature and numerous in detail, little time can be spared for carrying into effect a measure of a novel and complicated character. only check over their subordinate agents was at the time of remunerating them for their services; - but as the Act required these agents to submit to the Grand Juries, not the particulars they had collected, but the aggregates resulting from them, it is evident that, even had there been time for minute investigation, sufficient means of detecting error was not afforded, except where a manifest incongruity shewed itself between the several facts in the Return; a defect which required but little attention to prevent. Hence it has happened that in some counties, the Grand Juries totally neglected taking any step to enforce the Act, though given in charge to them by the Judges of the Assize on their respective circuits. In others, the persons appointed to take Account of the Population proceeded without any regular system of control,

adequate to insure uniformity, or to prevent the ill-effects of negligence or fraud. The Census, though generally commenced at the same period, was carried on irregularly and often carelessly, insomuch that subsequent inquiries have proved that the Enumerators, in many instances, satisfied themselves with a conjectural estimation of the population of a district, founded on their opinion as to the Number of Houses, and probable average of the Inhabitants in each. The Returns were transmitted to the Chief Secretary's office, slowly and irregularly: when sent back to the respective counties for correction, this part of the duty was, in many instances, executed negligently, and in some the documents were never returned. In fine, when all that could be procured was collected, it was found to be, as a whole, unsuitable to be laid before Parliament, as an authentic public document. It may be proper here to remark, that though the preamble to the Act states one of its objects to be, the ascertaining of the Increase or Diminution of the Population, it contains no clause whatsoever to that effect."

APPENDIX III

JOURNAL OF THE STATISTICAL SOCIETY OF LONDON VOLUME III - LONDON, 1840

Extracts from and comments on "Report to the Council of the Statistical society of London, from the Committee appointed to consider the best mode of taking the Census of the United Kingdom in 1841" as adopted by that Council on 8th April 1840.

p. 72 "The Committee appointed for the purpose of 'considering the steps most desirable to be taken with reference to the census of the population in 1841, more especially with regard to the machinery which may be most effectual to the furtherance of that important work, and the points which it may be most desirable to include in the inquiry,' beg to submit the result of their labours.

Their first efforts were directed to obtaining from those countries in which good enumerations of the population have been made, information respecting the forms used, the agency employed, and the expenses occurred and through the kindness of several of the foreign members of the Society, and the Ministers of foreign States in England, an extensive collection of such information, with regard to the most recent enumerations has been made."

The Report then gives a brief notice of the principal features of each system of enumeration described in the documentation received, commenting especially on aspects which the Committee considered particularly appropriate or inappropriate to the U.K. situation. The enumerations covered were as follows:

Country	Year of Census
Prussia	1837
France	1836
Belguim	1829
Sweden	Quinquennial reports
Norway	1835
Sardinia	1838
USA	(1840)
Great Britain	1801-1831
Ireland	1821

An interesting remark in the review of the Irish experience was:

"The Irish census of 1821 appears to have been by far the most perfect in its machinery and method of any that has yet been executed in these islands."

Pages 94-102 give the Committee's suggestions concerning the Census of the United Kingdom in 1841.

Page 94 "The Committee hope that these more important features collected for the guidance of their own judgement, so far from being deemed irrelevant, will show by comparison the defects in the system of enumeration heretofore adopted in Great Britain, and furnish ground for gratulation, that, since the date of the last census, an agency has been created, by the re-organisation of our systems of Poor-law administration and registration, which possess nearly every quality desirable for the future execution of such a labour. The British Population Abstracts have heretofore presented not the results of a national census, but merely a summary of parochial censuses, made on whatever variety of systems the agents for each thought well to adopt, and liable, therefore, to inaccuracies, such as Dr. Heysham has pointed out at Carlisle."

Page 97 "In Ireland, if the new poor-law machinery be yet incomplete or unprepared to be loaded with unusual duties, resort can still be had, under vigilant control, to the special agency which has twice been employed, or to the police.

These are the principal considerations which occur to this Committee in searching for the combination of machinery which shall be most effective in accomplishing the great work of a national census; and before suggesting the heads of information which it seems most important to collect, they beg to state their deep conviction, derived from the experience of the Continent as well as of the British islands, that the only security against fallacious returns is the system of enumeration by names, as pursued on the Irish census, both in 1821 and 1831, and not by mere marks, which open the door for every kind of error and fraud, but appear to have heretofore been universally used in Great Britain, by the undirected agency of overseers, &c. Whatever particulars are required concerning each individual, the name of each should appear in the note-books used by the enumerators, to be kept as a public record in each parish or union; while a clear copy should be entered in printed forms especially provided, and, after due verification, be forwarded to the Secretary of State's office to be abstracted in the central office of the census. It is obvious that this arrangement is essential to accuracy, and that any attempt at the correction of imperfect returns without it, is hopeless.

The Committee conceive that a census to be made by Government, extending, as in every country it has been extended, beyond a mere counting of heads, contemplates various purposes besides a mere ascertainment of numerical strength. Some of these concern immediate administration, such as engross nearly the whole of the Prussian census, and are entirely foreign to the province of the Committee. But a census is also generally extended to circumstances influencing the condition of the people, such as their industrial occupations; and to various facts illustrative of that condition, belonging to the field of vital statistics. It is in solicitude for the collection of the largest amount of these data, and for assuring to them a scientific correctness, that the Committee feel their appointment to the present labour to have originated."

The following are the heads of information which the Committee thought it most important to collect:

- Name & relationship to head of household
- Age (minute classification)
- Sex
- Marital status
- Occupation
- Place of birth
- Religious persuasion
- Education (difficult quality of the instruction can be conveyed by no census)
- Health (several members of Committee)
 - 1. healthy;
 - sick or permanently infirm, stating through what sickness or infirmity, and with regard to such infirmity, whether it have been endured from infancy.

Concerning the actual execution of the enumeration the Report says:

Page 99 "The labour of actual enumeration among rural population, and those aggregated in but small numbers, can be accomplished in no form more simple or expeditious than that of the entry in books at each house of the particulars concerning its inmates. But in the towns, the method pursued in Belgium of circulating a form of queries to the master of each house, eight days previous to the day of the census, and on that day calling for the written answers, and filling up other forms for those who were unable or had omitted, to prepare the answers, is well worthy of imitation. The answers to these queries should then be entered in an enumeration book, in like manner as though the enumeration had been made in this book from house to house; and a copy of it will then be returned to the central office, as in other cases."

APPENDIX IV

TRANSCRIPT OF CENSUS BALLAD

1891 Census Song sung by John Dineen, of Incheens near Kilgarvan between Coolea and Kenmare, recorded around 1956/7 by Ciaran Mac Mathuna and played on his radio program "Mo Cheol Thu" on Census Day 1991:

Throughout Ireland at the present time the police they are going, taking down the census both in country and in town
To know how many emigrated from this lovely shamrock shore
It is just ten years or better since they took them down before.

Chorus: They are taking down the Census in the year of ninety-one For to know how many people in this isle we dwell upon.

They will ask if you ever paid a visit to Rosslare
To view that monstrous greenland whale that is just acting there
For inside of her mouth there were found just twenty thousand men
and ten gunboats for the navy when she goes to war again.

They will ask for the names of the blankets, quilts and sheets how many fingers on your hands and toes upon your feet. How many windows in your house to them you'll have to tell and how many persons every night inside your door do dwell.

They will ask of you how many stools unto the house belong you must show you kitchen poker your bellows and your tongs. You must count for them your chickens your ducks and donald cock and to tell to them the old bucks eat the grazes on the rock.

They will ask you the names of the creamjug and the bowl the looking glass, the washing stand the hairbrush and the towel and the sugarpot that you have got in the bedroom stowed away and the top and all which Jack and Paul used every morning play.

They will ask you if your dwelling house was built of mud and stones or if the roof was thatched or slated by Brown, Hennessy or Jones They will ask how many inches of a tail is on your pig and how many hairs old granny wears when she throws off the wig.

They will ask the young girls how much comfort they do feel since the bustle in their dress it was changed from cane to steel. They will ask of you the diamonds that are on the lady's ring sure they'll ask the married women does their husband steal the hens.

They will ask you if you ever in a rage do beat your wife or how many years has passed away since you now changed your life if you answer them correctly they'll reward you I'll go bail they will bring you a rib of Juno that was swallowed by the whale.

References

Black, Prof. R. D. Collison, 1947. The Statistical and Social Inquiry Society of Ireland Centenary Volume 1847-1947, Dublin.

Census of Ireland. 1821 Report (Ireland) 1822 XIV; Accounts and Papers 1824 XII.

Census of Ireland. 1841 General Report.

Census of Ireland. 1911 General Report, (Col. 6663), London 1913.

Census of Population. 1926 General Report, (P. No. 1242). Dublin 1934

Census of Population of Ireland. 1981, Vol. 8, Housing, (Pl. 4043), Dublin 1986.

Clarkson, L. A. "Irish Population Revisited, 1687-1821" in J. M. Goldstrom and L. A. Clarkson (eds.) *Irish Population, Economy and Society - essays in honour of the late K. H. Connell*, Clarendon Press.

Connell, K. N., 1950. The Population of Ireland 1750-1845, Oxford.

Dickson, D., O'Grada, C. and Daultrey, S., 1982. "Health Tax, Household Size and Irish Population Change 1672-1821", *Proceedings of the Royal Irish Academy*, Vol. 82, C, No. 6.

Eason, Charles, 1881. "Acts for taking the Census in England, Scotland and Ireland of 1881", Journal of the Statistical and Social Inquiry Society of Ireland. Vol. VIII.

First Report of the Commission of Public Instruction Ireland, 1835. London.

Geary, R. C., 1935/36. "The future population of Saorstat Eireann and some observations on population statistics", *Journal of the Statistical and Social Inquiry Society of Ireland*, Vol. XV.

Guide to Census Reports - Great Britain 1801-1966, 1977. HMSO, London.

Jephson, H. L., 1879-80. "Suggestions for the Irish Census of 1881", Journal of the Statistical and Social Inquiry Society of Ireland, Vol. VII., p. 46.

ibid, p. 158. "Report as to Mr. Jephson's Suggestions"

Journal of the Statistical Society of London, 1840. Vol. III., p. 72, London.

Larcom, Capt. Thomas H., 1843. "Observations on the Census of Ireland in 1841", Journal of the Statistical and Social Inquiry Society of London, Vol. VI., London.

Lyon, Stanley, 1935-36. "The forthcoming Census of Population", Journal of the Statistical and Social Inquiry Society of Ireland, Vol. XV.

Matheson, R. E., 1889. "Mechanisms of Statistics", Journal of the Statistical and Social Inquiry Society of Ireland, Vol. IX., Appendix.

Matheson, R. E., 1909. "Review of the Topographical Index of Ireland", Journal of the Statistical and Social Inquiry Society of Ireland, Vol. XII.

McCarthy, M. D., 1960-61. "The 1961 Census of Population", Journal of the Statistical and Social Inquiry Society of Ireland, Vol. XX.

Millin, S. Shannon, 1920. Statistical and Social Inquiry Society of Ireland Historical Memoirs, Dublin.

Oldham, Prof. C. H., 1925-26. "Reforms of the Irish Census of Population", Journal of the Statistical and Social Inquiry Society of Ireland, Vol. XIV.

Register of Population 1941. Compiled by the Department of Industry and Commerce, (P. No. 6506), Stationery Office, Dublin.

Thompson, Sir W. J., 1910-11. "Development of the Irish Census and its National Importance", Journal of the Statistical and Social Inquiry Society of Ireland, Vol. XII.

Thompson, Sir W. J., 1913. "Census of Ireland 1911", Journal of the Statistical and Social Inquiry Society of Ireland, Vol. XIII.

Thompson, Sir W. J., 1925-26. "The first Census of the Irish Free State and its importance to the Country", *Journal of the Statistical and Social Inquiry Society of Ireland*, Vol. XIV.

Vaughan, W. and Fitzpatrick, R. J. Irish Historical Studies - Population 1821-1971.

Wood, Henry, 1908-09. "Methods of registering and estimating the Population of Ireland before 1864", Journal of the Statistical and Social Inquiry Society of Ireland, Vol. XII.

DISCUSSION

Mr Aidan Punch: As one of the present management team engaged in carrying out the Census of Population I would like to add my voice to that of the proposer in thanking Mr Linehan for undertaking this very valuable work. Before doing so I should say that the Director of CSO, Donal Murphy, is unable to be present this evening due to his presence abroad at the twice yearly meeting of the Directors General of the National Statistical Offices of the EC. He sends his apologies to the Society.

In the day to day press of official statistical work we sometimes neglect to take stock of the long history underlying much of what we do. I am glad that one of Mr Linehan's first tasks on his recent retirement was to fill this gap in the case of the Census of Population. I can think of none better qualified than he to undertake this work, having been Director of CSO for close on quarter of a century and consequently having had overall charge of the last five Censuses.

The statistical history is particularly rich in the Agriculture and Census areas of the Office. At the moment in the Census division we are busily engaged on the main processing phase of the 1991 Census. Our basic raw material is a "library" of completed Census forms or "Forms A" to use the historical term. This is our inheritance from Thomas Larcom and his successors.

Mr Linehan draws our attention in Section 4 of his paper to the synoptic tables in Appendix 1. These tables are an invaluable source of information on the main aspects of each of the Censuses carried out since 1841. As they bring together in three matrices a wealth of interesting detail on past Censuses, we in CSO will no doubt have cause to make frequent reference to them. Like so many synoptic tables, however, the simplicity of their output belies the effort in their compilation. This is something to which we can readily attest, as even the checking of Mr Linehan's basic extraction work was not an insignificant task.

On the subject of tables there is possibly one omission which given the author's downplaying of his role in Censuses since 1971 is easy for us to understand. This is a table which I would call the League Table of Census Commissioners since 1841.

it reads as follows:

Linehan, T P	5
• • •	5
Donnelly, W	3
Wilde, W	3
Abraham, G W	3
Matheson R E	3
Grimshaw, T W	2
Bellingham, Brady T J	2
Lyon S	2
Geary R C	2
McCarthy M D	2

followed by a host of others, including Larcom, who were responsible for one Census. It should of course be pointed out that in Censuses up to and including 1911 three Census Commissioners had responsibility while since the foundation of the State one person has overall control. Also in latter years Censuses have tended to be held every five years rather than every ten.

Looking back at the pioneering effort of the 1841 Census prompts us to ask about the likely shape of the Census of 2041 (assuming of course that there will be a Census in that year). The last sentence of the paper provokes comment on two aspects (a) the content of the questionnaire and (b) the collection and processing. I will confine my comments to the latter as I feel the questionnaire content will vary little in terms of the basic demographic information being sought and will probably reflect the societal pre-occupations of the day in the marginal extra questions to be asked. A case in point is fuel usage in the most recent Census. A number of points are relevant to future collection and processing methods - I should add of course that the views expressed are my own and do not necessarily reflect official thinking:

• Will we be still using Larcom's Form A in 2041? It is very hard to pronounce on this given the pace of modern technology and the greater usage of computers in all aspects of our lives. I can see possibilities for the keying of certain demographic details in the field but this would be from the basic paper copy. Indeed we have already conducted a limited pilot study of this in the Labour Force Survey and it has proved quite successful. However, I cannot at this stage see how individuals in households throughout the country would complete their Census forms electronically and send the results "over the wires" rather than complete the paper copy. It would be a brave person who would introduce such a

change given the success and stability of the present methods and given the difficulties of ensuring quality control in such an environment;

- The public acceptability of official inquiries (particularly Censuses) has diminished over time in many countries. Indeed the so-called Census undercount question is a major item of concern in the US where the Census figures determine State budgets and where the Census Bureau has had to defend its methods in the highest Courts of the land. Thankfully so far in Ireland, we have not had to wrestle with a Census undercount problem. A lot of the credit for this must go to the very professional field forces we have been lucky enough to employ. In 1991 over 80% of the 3,200 Enumerators were women the majority of whom were married. Their diligence and persuasiveness in following up the small number of difficult cases has contributed in no small measure to the success of the Irish operation;
- The use of population registers for determining population counts is I was more not a practice to which we are accustomed in Ireland. than amused to learn from a Finnish colleague at a recent meeting that they manage to carry out their population Census with fifteen people - they have something like 25 registers covering population, housing, education etc. which they merge for the purpose of determining their population data. The nearest we have to such a system in Ireland was the population register introduced during the "Emergency" where on the basis of the Enumeration each individual was accorded a unique number for the issue of a ration book. However, the unique reference number disappeared with the "Emergency" and in my view, given the Irish psyche we will probably have to await another Emergency before we have the appearance of unique reference numbers. We can therefore look forward, in my view, to traditional Censuses carried out by field enumeration for the foreseeable future:
- The final point I would like to raise, Mr Chairman, concerns the processing of the Census results. While traditional paper questionnaires persist the problem of transferring their contents into machine-readable form will be with us. However, this is not a major problem. Regardless of what medium we use much resources will have to be invested in ensuring the integrity of the data base in terms of area codes and internal consistency in the responses to questions. This scrutiny could be achieved more quickly and earlier publication of the main results put in place if a greater block of resources were allocated for a correspondingly shorter period of time. While we were not successful in the recent past in having this view accepted by our colleagues in the Department of Finance we will be putting it more forcibly in the future. From a purely cost benefit point of view it does not make good economic sense to invest over £6m

in the fieldwork phase of the Census and then to skimp on resources afterwards so that the final results are delayed.

I would like to conclude, Mr Chairman, by once again congratulating Mr Linehan for his reminder of our statistical past and by so doing in focussing on the challenges that lie ahead.

Dr Daniel McCoy: I would like to thank Mr Linehan for an excellent paper and an equally impressive delivery. If I could paraphrase the evening, given Mr Linehan's use of audio and visual media and exhibits, as a "paper on the census that required all of the senses". Mr Linehan demonstrated the wealth of information and techniques contained in previous censuses that still have relevance and bearing on the present. I think this is mirrored by the papers delivered to this society on this topic which Mr Linehan has drawn upon tonight. Indeed having done some research using previous SSISI papers recently, I was struck by the wealth of information and topics covered by this society. I believe that these papers are an untapped source of information by all the social sciences in Ireland and they should be drawn upon to help shape the policy of the present. I would encourage people to read Professor Black's short history of the SSISI, contained in the 1947 centenary volume of the society's journal, to appreciate the wealth of this endowment. On a topic alluded to earlier tonight of what information was collected in the census and that which was not I have just one observation from the paper. Mr Linehan shows in Appendix I the coverage of separate items in other censuses. It strikes me, the primary function of a census notwithstanding, that there was more concern with the type of individual remaining in the country rather than the numbers that left. This is indicated by the fact that emigration data was collected in just one census while information was systematically collected on lunatics and persons in prisons in all censuses until 1911. This observation probably stems from a conspiracy theorist's point of view but unfortunately it may have equal validity in the present. I would like again to thank Mr Linehan for a stimulating and informative paper.

Mr John Markham: I would like to add my congratulations to Mr Linehan both for heading the Census league table and for his paper on the history of the Census. I wish to make three points:

- Even though our membership of the European Communities (EC) was relatively short given the 150 year time period which was the subject of the paper, I am surprised to see little or no mention of EC influence.
 How far were we from or would there be an EC census.
- The seconder of the vote of thanks, Mr Punch, had drawn attention to

the need to inject more resources into the analysis of the Census and to concentrate these into the months immediately after the fieldwork in order to achieve earlier output. I support the call for a cost benefit analysis of the census resource inputs, as particularly in 1991, considerable funds were being expended in 1991/2 collecting origin/destination data for the Dublin Transportation Initiative (DTI). Earlier processing of the small area data and journey to work/school/college data included in the 1991 Census would have reduced the DTI budget.

• Finally, I would be interested to hear how the "self-completion" aspect of the "Form A" had been treated over the years. There was a large literature dealing with self-completion errors and how had the census coped with these? I am particularly interested in answers provided to the journey to work-school/college question.

Mr Damien Courtney: I join with the previous speakers in congratulating Mr T P Linehan on his very timely and excellent contribution one hundred and fifty years after the "Great Census of 1841" and wish to be associated with the vote of thanks accorded him. His presentation shows evidence of the hard work undertaken by him in its presentation. His painstaking detail provides an appreciation of the Census of Population as a demographic tool of observation and demonstrates in particular the value of the 1841 census as a benchmark in the collection, compilation, analysis and publication of official Irish statistics. Its success in using the police force as enumerators for the first time is one of quite interesting historical significance given the volatile political situation prevalent in Ireland then. The legacy of the 1841 Census of Population is well maintained and evident in the type and range of questions posed in 1991. The way in which data sought in respect of individuals has evolved since 1841 is very well furnished in Appendix 1 of the paper.

Questions about usual residence one year previously and at the time of the census introduced in 1971 have been very useful in providing continuity of data about internal migration and "one year immigrants" since then. This is of particular value given that compulsory registration in Ireland is confined to births, deaths and marriages. I have previously expressed concern about this country's lack of information about the number and profile of its emigrants (Courtney, 1989). This is especially disturbing as migration rather than natural increase in population has consistently been the primary determinant of demographic change in Ireland. Unfortunately, the Census of Population has been unable to provide a solution to this problem in spite of the very wide and impressive range of data provided by it. In fact both Mr A Punch and Mr D Garvey have already adverted to the likely ongoing value of the Census of Population as a means of official data collection in the future.

The ideal solution to this kind of problem would be recourse to a form of central population register such as exists in some of the Scandanavian and Benelux countries. Emigration is registered there when a person indicates a change in address to outside the country. In Denmark migration statistics are calculated using such data which are subsequently adjusted to take account of the effect of a possible interval in reporting the movement. The data are published in the same detail as Irish vital statistics. The Census of Population is mostly derived from their central population register. Such a system would, unfortunately, prove extremely difficult to effect in Ireland for historical, cultural and possible even constitutional reasons. The Central Statistics Office should, however, be given responsibility for the Electoral Register and allocated additional resources to provide a comprehensive list of questions which would yield information on gross migration flows including those under 18 years of age and the reasons why people migrate.

A more realistic way forward for migration and other kinds of demographic data in Ireland may be through greater use of the annual European Community orchestrated Labour Force Survey. More and better designed questions are of great value. In addition to the data on "one-year immigrants" similar to that furnished by the Census of Population the revision in 1988 of a question on emigrants is supplying extremely valuable information. Its effectiveness may take a few years to determine but in time should provide the basis of a long overdue gross migration series.

Given the value of such "usual resident" data and the prevalence of "de jure" Censuses of Population in many other countries which reflect the usual or normal family and/or household situation I conclude by asking whether the "de facto" Census of Population, which has existed in Ireland since 1841, should be retained in preference to the "de jure" format?

Reference: Courtney, D., 1989. "Recent Trends in Emigration from Ireland", paper read to the Development Studies Annual Conference, The Queen's University of Belfast, September.

Reply by Mr Linehan: I would like to express my thanks to the various speakers for their generous remarks and to make two further points arising from my concentration on the 1841 Census because of its novel ideas, wide scope and organisational approach.

Because of focusing on the 1841 Census I may have been somewhat unfair to the 1821 Census which was the first successfull official inquiry of its type in Ireland and which yielded very valuable information.

Moreover it would be wrong to leave readers with the impression, if only by implication, that the execution of the 1841 exercise was absolutely perfect and that the statistical results and analysis were "beyond reproach". Over time two different and unrelated faults have been suggested:

- As the 1841 Report itself emphasises, the pattern of ages by individual years, as returned, showed substantial irregularities, with appreciable bunching at certain points. However it was taken for granted that coverage was complete even if specific age information was in some way distorted. More recently a critical assessment (Tucker, 1970) of the published results for 1841 has led one user to conclude that there was a significant undercount of young children.
- In connection with the "agricultural statistics", mentioned in Section 6, which though incidental to the main purpose of the 1841 Census represented the first collection of such statistics, it is claimed that, in the absence of specific instructions, most if not all areas were returned in Irish acres but interpreted as being in Statute acres. It is further claimed that the definition of "farm size" was narrower in concept than in the subsequent post-famine statistics, thus invalidating the basis for assessing changes in farm structures over the period (Bourke, 1965).

References

Bourke, P. M. A., 1965. "The Agricultural Statistics of the 1841 Census of Ireland - a Critical Review". *Economic History Review*, 2nd Series, Vol. 18, pp. 376-391.

Tucker, G.S.L., 1970. "Irish Fertility Ratios before the Famine", *Economic History Review*, 2nd series, Vol. 23, pp. 267 et seq.