

# The Value of the Long Form Canadian Census for Long Term National and International Research

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The federal government's decision in June 2010 to replace the long form Canadian census with the voluntary National Household Survey (NHS) was met with vigorous opposition. While the opponents unanimously denounced the voluntary National Household Survey on the basis that it would suffer from the differential (and largely unmeasurable) non-response of particular population subgroups, two further effects of this decision are worth discussing: the termination of a 154-year national series of modern nominal censuses and the elimination of Canada's place in the International Integrated Public-Use Microdata Series (IPUMSi).

## PRESERVING CANADA'S NATIONAL SERIES OF MODERN NOMINAL CENSUSES

The Canadian censuses of the new millennium provide essential, detailed data to research fundamental social phenomena such as the evolution of family composition, migration patterns, the integration of different types of immigrants into Canadian society, and disparities in living conditions. To truly capture the importance and scope of these aspects, it is essential to situate these patterns in their historical context by comparing census findings for the present to those for the past. Statistics Canada's published research reports on Canadian social patterns are

usually confined to recent decades. In contrast, in the United States, the Integrated Public-Use Microdata Series (IPUMS) has made available harmonized US census data from 1850 to the present and has fostered extensive social science research situating US social patterns in the context of the entire twentieth century and last half of the nineteenth century. As a result, scholars such as Kathleen McGarry and Robert F. Schoeni, Steven Ruggles, and Joseph Ferrie have been able to explore the historic evolution of many behavioural patterns in the United States, such as the rise of living alone, the decline of multi-generational co-residence, and Americans' decreasing capacity to climb the occupational ladder in the course of a lifetime.<sup>1</sup>

Owing to the existence of a strong tradition of census-taking in Canada, Canada also has the potential to develop a modern series of national, nominal census data. Since the mid-nineteenth century, Canadian government officials worked in consultation with their international counterparts to develop a standard, core set of questions that were repeated in different countries. These questions included name, sex, age, birthplace, relationship to the household head, school attendance, and occupation. To this core set, Canadian census officials added other questions, reflecting early on their intention to study economic development, the distribution of

ethno-religious groups, and health issues such as infant mortality and longevity. The shaping of the census through the addition and subtraction of such questions mirrored the preoccupations of the time. The mid-nineteenth century censuses asked city dwellers about the pigs, cows, and horses they maintained to understand the nature of urban subsistence, while the censuses for 1901 and 1911 asked year of immigration and nationality to ascertain the population of newcomers to Canada. By 1931 the census asked Canadians how many rooms were occupied by the family, whether the family owned a radio, whether the respondent was unemployed, and if so, the reason, permitting analysts to explore the impact of the Depression on standards of living.<sup>2</sup> While the 1951 Census asked about veteran status, the 1971 Census once again asked the number of rooms in the dwelling and added questions on whether the household had a toilet or piped running water. During this time the core questions asked every decade expanded to include mother tongue, language spoken, nationality, class status, and earnings. As a result the Canadian national census has served as an important tool of population measurement, at once flexible and enduring, providing consistent information on a core set of socio-economic, cultural, and demographic questions, while integrating new questions to respond to researchers' and other data users' changing analytic needs.

For the past 20 years, various academic groups, genealogy societies, and Statistics Canada have forged mutually beneficial partnerships to transform Canada's national series of modern nominal censuses into a harmonized research infrastructure that permits analysis across multiple decades. Scholars from the Université de Montréal, the Université du Québec à Chicoutimi, York University, the University of Victoria, Université Laval, and the University of Guelph developed projects to transform the historic censuses from 1852 to 1901 into public-use microdata. Contributions from genealogical society partners including FamilySearch (Genealogical Society of Utah) and the Société

Généalogique Canadienne-Française are enabling these scholars to create complete-count databases that comprise 100 percent of Canadians originally enumerated, beginning with the 1881 Census of Canada. The advent of the Canadian Century Research Infrastructure (CCRI) in 2001 marked a new phase in the development of an integrated series of modern national censuses. Scholars from the Memorial University of Newfoundland, the Université du Québec à Trois-Rivières, Université Laval, the University of Ottawa, York University, the University of Toronto, and the University of Victoria collaborated with Statistics Canada to create anonymized public-use microdata samples of the censuses for 1911, 1921, 1931, 1941, and 1951, which are now beginning to be disseminated free of charge via the Internet.<sup>3</sup> Confidential versions of these data, with full geographic detail, are in turn hosted by Statistics Canada's Research Data Centres. Finally, through the Data Liberation Initiative, Statistics Canada has created a series of anonymized public-use microdata files (PUMFs) for the 1971 to 2006 censuses, allowing a wide variety of researchers to exploit these microdata while protecting the confidentiality of census respondents.

Together these academic, government, and private partners have been working steadily toward the creation of an integrated series of modern Canadian census microdata sets. With the exception of the 1861 and 1961 census years, sample databases and in some cases 100 percent databases exist for every census year from 1852 to 2006. These efforts have been supported by significant investments funded by the Canadian government in the form of grants from the Social Sciences and Humanities Research Council of Canada as well as the Canadian Foundation for Innovation. At the same time, efficiencies garnered from collaborating with national and international partners and leveraging the volunteer time of genealogical partners have enabled these researchers to create a research infrastructure whose value surpasses initial monetary investments by federal granting agencies.

Researchers using this census microdata series have discovered numerous important social, demographic, and economic patterns that put present-day developments in historical perspective. A dominant theme in such work is how Canadians shaped and navigated “modernity”—a cluster of social, economic, and cultural changes including urbanization, industrial work, immigration, ethnic pluralism, increased interest in schooling, privacy, changes in the gendered division of labour, and the creation of the middle class. To cite just a few examples, we have learned from these studies that the late nineteenth-century Canadian middle class evolved in rural as well as urban contexts. We have also learned about the complexities of the falling birthrate, which involved not only French-English distinctions but also differences between western and eastern provinces, between rural and urban communities, and across occupational classes. Studies of turn-of-the-century occupational reporting patterns have allowed us to trace the emergence of retirement during a period that preceded government pensions, with farmers, urban dwellers, and men living in Ontario adopting a gradual withdrawal from work. These studies teach researchers studying contemporary Canadian behaviour patterns to question simple explanations of human behaviour, such as the link between retirement and pensions; historical research also instructs researchers to attend to the different ways that ethnicity, race, class, and gender produced differences within provinces as well as across provinces (see, for example, Darroch 1998; Dillon, Gratton, and Moen 2010; Gossage and Gauvreau 2007).

While the value of this series for historians and historical demographers stands on its own, for the vast majority of researchers focused on contemporary populations this series is relevant insofar as it includes the most recent census microdata. Unfortunately, the extent of unmeasurable differential non-response in the NHS will render it non-comparable to all previous census data. This development will put an end to the usefulness of all previous censuses for the purposes of studying

our contemporary population and to the national series as a whole. This would be an ill-considered and wasteful end to the enormous investment that researchers, Statistics Canada’s employees, private partners, and Canada’s federal funding agencies have made in Canada’s national research infrastructure.

#### THE CANADIAN CENSUS AND INTERNATIONAL RESEARCH DATA INFRASTRUCTURES

In recent years Canadian researchers as well as Statistics Canada have collaborated with the Minnesota Population Center (MPC) to integrate contemporary Canadian census microdata into the International Integrated Public Use Microdata Series (IPUMSi). The IPUMSi database focuses on sample data from 1960 forward and disseminates these data free of charge to researchers through a web-based data extraction system. Statistics Canada has contributed to IPUMSi anonymized public-use microdata samples for the 1971, 1981, 1991, and 2001 Canadian censuses. IPUMSi features harmonized data from 55 countries and now comprises the world’s largest archive of publicly available census samples; by 2014, the IPUMSi database will feature 250 database samples from over 70 countries, about a third of all the countries in the world. As a result, researchers interested in studying socio-economic, demographic, and cultural behaviour patterns of Canadians in an international context can compare these patterns to those of Canada’s continental neighbours, the United States and Mexico, or to countries that predominate among the sources of Canadian immigration, such as China (1982 and 1990) and India (1983, 1987, 1993, and 1999).

While the primary purpose of building this international data infrastructure is to facilitate comparative research across national boundaries, the initiative also serves to preserve data and to foster scientific advances in the creation, treatment, and use of scientific population data through active

collaboration. Canada's presence in the IPUMSi statistical infrastructure ensures that Canada's data are available to researchers worldwide and encourages researchers producing internationally comparative studies to include Canada in their analyses. A voluntary Canadian NHS would not, however, be considered sufficiently robust to integrate into this international data infrastructure. In a personal communication to me on 2 August 2010, Dr Robert McCaa, co-director and ambassador of the IPUMSi project, stated:

Voluntary census data would be unacceptable for inclusion in the IPUMS-International database. We have suppressed a number of census samples entrusted to the project precisely because, despite their official nature, they failed to meet quality standards. We have never encountered a voluntary sample and never expected to see one. The lack of a scientific long form sample for the 2011 Census of Canada would be doubly unfortunate because, by country of residence, Canadians rank fifth among users of the IPUMS-International database and the Canadian samples rank tenth in terms of usage, with 1,614 extracts—above the UK and Spain.

Thus, the cancellation of the long form census is a regressive decision that will eliminate Canada's opportunities to participate in IPUMSi and will degrade Canada's position in the international knowledge community.

#### THE FUTURE OF THE CANADIAN CENSUS

In its statement of 12 August 2010 the National Statistics Council, the government-appointed advisory body to the Chief Statistician, called upon Statistics Canada to "consult widely and examine the process for deciding what questions merit inclusion in each census." This consultation process should, in fact, encompass a review of population data collection practices followed in other countries, not least because a partial understanding of

the absence of a census in certain countries can be used to undermine the case for an obligatory long form Canadian census. For example, an article in the 15 July 2010 edition of *The Economist* lauded the elimination of the census in Denmark, Sweden, Norway, Finland, Slovenia, and Germany as more efficient and cost-effective. What this article failed to mention is that population data collection in these countries is nevertheless based on mandatory data collection. In the cases of Denmark, Sweden, Norway, and Finland, this mandatory data collection centres on the maintenance of a population register that requires all citizens to declare not only births, marriages, and deaths but also every change of address. In other countries like the Netherlands and Slovenia, a virtual census will be synthesized by linking information drawn from a population register and other surveys (see, e.g., Valente 2010). The American Community Survey, which has replaced the US long form census and is conducted monthly, is also a mandatory survey instrument.

The federal government's move to cancel the long form of the 2011 Census and replace it with the voluntary NHS is not the first move to threaten the Canadian census. In November 1984 the newly elected Conservative government announced the cancellation of the entire 1986 Census; this census was saved only by a broad public outcry and proposals by Statistics Canada to increase their own cost-recovery activities (Wargon 2002, 126). Public debate on the value of the census is also nothing new. Systematic examination of 21 historic newspapers, federal parliamentary debates published in the *Hansard*, and *les Journaux de l'Assemblée législative de Québec* between 1911 and 1951 by members of the Canadian Century Research Infrastructure project has yielded examples of news reports questioning, critiquing, or lampooning the work of Canada's census takers. At the heart of these debates are broader questions about the development of our knowledge of Canadian society. Saurette (2010) suggests that the cancellation of the long form of the 2011 Census by the Conservative government is part of a broader effort to revert to "epistemological

populism,” “a theory of knowledge that assumes that the most reliable and trustworthy type of knowledge is the direct individual experience of ‘common’ people—the lessons of which can be unproblematically universalized. In such a theory, the more numerical, general, and statistical the analysis, the less trustworthy it is.” Consultative reviews of Canadian population data collection practices should confront more fundamentally our theories of knowledge and discuss our roles as researchers, planners, and policy-makers in nurturing a political culture that values evidence-based decision making. Statistics Canada, professional associations, and researchers have worked hard to demonstrate the value of population data, and must continue to promote participation in statistical inquiries as an essential part of citizenship in a modern democracy.

## NOTES

<sup>1</sup> See, for example, McGarry and Schoeni (2000), Ruggles (2007), and Ferrie (2005).

<sup>2</sup> The questions asked on the nineteenth-century Canadian censuses can be viewed at the Library and Archives Canada website: <http://www.collectionscanada.gc.ca/genealogy/022-911.010-e.html>. The early twentieth-century Canadian census questions are listed at the website of the Canadian Century Research Infrastructure: <http://www.ccri.uottawa.ca/CCRI/Censuses.html>. The University of Toronto Data Library Service also hosts a page that summarizes Canadian census variables from 1971 to 2006: <http://www.chass.utoronto.ca/datalib/censusq.htm>.

<sup>3</sup> The project website for the Canadian Century Research Infrastructure is <http://ccri.library.ualberta.ca/CCRI/index.htm>.

## REFERENCES

- Darroch, G. 1998. “Scanty Fortunes and Rural Middle-Class Formation in Nineteenth-Century Central Ontario.” *Canadian Historical Review* 79(4):621-59.
- Dillon, L., B. Gratton, and J. Moen. 2010. “Retirement at the Turn of the Twentieth Century: A Canadian Perspective.” *Canadian Historical Review* 91(1):27-59.
- Ferrie, J.P. 2005. “History Lessons: The End of American Exceptionalism? Mobility in the United States since 1850.” *Journal of Economic Perspectives* 19(3):199-215.
- Gossage, P. and D. Gauvreau. 2007. “Canadian Fertility in 1901: A Bird’s Eye View.” In *Household Counts: Canadian Households and Families in 1901*, ed. E. Sager and P. Baskerville. Toronto: University of Toronto Press.
- “Leviathan’s Spyglass: The Traditional Census Is Dying, and a Good Thing Too.” 2010. *The Economist*, 15 July, p. 16.
- McGarry, K. and R.F. Schoeni. 2000. “Social Security, Economic Growth and the Rise in Elderly Widows’ Independence in the Twentieth Century.” *Demography* 37(2):221-36.
- National Statistics Council. 2010. “Statement: Resolving the Census Debate.” 12 August. Accessed 20 August 2010 at <http://macleans.files.wordpress.com/2010/08/nsc-statement-aug-12-en.pdf>
- Ruggles, S. 2007. “The Decline of Intergenerational Coresidence in the United States, 1850 to 2000.” *American Sociological Review* 72(6):964-89.
- Saurette, P. 2010. “When Smart Parties Make Stupid Decisions.” *Mark News*, 23 July. Accessed 20 August 2010 at <http://www.themarknews.com/articles/1907-when-smart-parties-make-stupid-decisions?page=1>
- Valente, P. 2010. “Comment la population est-elle recensée dans les pays européens en 2010.” *Population et Sociétés* 467(May):1-4.
- Wargon, S. 2002. *Demography in Canada in the Twentieth Century*. Vancouver: UBC Press.



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