# Demography in Canada: Looking Backward, Looking Forward<sup>1</sup>

Sylvia T. Wargon Statistics Canada Ottawa, Ontario

#### Abstract

This article presents a general summary of how demography developed in 20<sup>th</sup> century Canada. It begins with some brief but pertinent details about the evolution of the science of population in Europe, and the historical demographic, cultural and political background in Canada. The body of the text is focussed on the period of close to 80 years, from about 1920 to the present, for which information from a variety of sources was collected, compiled and analyzed. This information provides a picture of the gradual establishment of the discipline "as a science and a profession" in the English-speaking and French-speaking regions of the country. The importance of including the stories for both regions is clear: it is the only acceptable way to record the history of a social science discipline in a country that is officially bilingual. The details of how demography evolved are presented in terms of three periods: the decades before 1950, the years of growth from 1950 to 1970, and the contemporary period from 1970 to generally, 1995. Important events after 1995 are noted where relevant. Other aspects treated briefly, such as the participation of women, and the status of the discipline in Canada on the eve of the 21st century, complete the summary.

### Résumé

Le présent article propose un résumé du développement de la démographie au Canada du 20<sup>e</sup> siècle. Il débute par une série de détails, brefs mais pertinents, au sujet de l'évolution de la science de la population en Europe et des antécédents démographiques, culturels et politiques du Canada. Le texte principal traite d'une période d'environ 80 ans de 1920 à aujourd'hui. L'information, qui a été tirée d'une variété de sources, ensuite compilée et analysée, décrit l'établissement graduel de la discipline de la démographie «comme science et profession» dans les régions francophones et anglophones du Canada. Il est clair qu'il faut inclure des récits provenant des deux régions : c'est le seul moyen convenable de rapporter l'histoire des sciences sociales dans un pays officiellement bilingue. Les détails de l'évolution de la démographie sont présentés pour trois périodes : les décennies qui précèdent 1950, les années de croissance entre 1950 et 1970, et la période contemporaine de 1970 à 1995 approximativement. Les événements importants survenus après 1995 sont notés, là où ils sont pertinents. Finalement, d'autres aspects sont traités brièvement tels que la participation des femmes et le statut de la discipline au Canada au seuil du 21<sup>e</sup> siècle.

*Key Words:* demography, history, 20<sup>th</sup> century Canada, English-speaking and French-speaking regions.

### Introduction

## Why Write a History of Demography in Canada?

This article presents a general summary of how demography developed in 20<sup>th</sup> century Canada. It opens with some brief but pertinent details about the evolution of the science of population in Europe, and the historical demographic, cultural and political background in Canada. The body of the text is focussed on the period of close to 80 years, from about 1920 to the present, for which information from a variety of sources was collected, compiled and analyzed. This information is used to describe the gradual establishment of the discipline as a science and a profession<sup>2</sup> in the English-speaking and French-speaking regions of the country, in government agencies, in the universities and in the work of a few independent scholars. The importance of including the information for both regions is clear: dictated by Canada's history, geography, demographic evolution and political organization, it is the only acceptable way to report the history of a social science discipline in a country that is officially bilingual. The description of events in the 20<sup>th</sup> century is presented in terms of three periods. naturally demarcated and clearly discernible in the evidence on which a detailed historical account was based: the decades before 1950, the years of growth from

1950 to 1970, and the contemporary period from 1970 to, generally, 1995. Important events after 1995 are noted where relevant. Other aspects such as the participation of women, and the status of the discipline in Canada on the eve of the 21<sup>st</sup> century, complete the summary.

Analyzing fairly recent and current events no matter how well grounded in established fact can be a risky, even dangerous business. According to one scholar, such an account may require substantial revision when more evidence becomes available and social trends are easier to discern (Fisher, 1991, 1). In spite of the known and unavoidable risks, the project to prepare a history of demography in Canada was undertaken in the late 1980s³ for a number of reasons. Firstly, the way in which the discipline became established in Canada in both the English and French languages is a unique and interesting story that deserves to be told and disseminated here and abroad. Secondly, the project was designed to make a permanent record of the details of the development of demography in 20<sup>th</sup> century Canada before the recall of early events and oral discussions slipped away, and relevant documents disappeared from view with the passing of time. Finally, it was considered important to document Canada's experience in certain population fields that did not become visible until recent decades.

Canadian accomplishments in demography are well known here and in some circles abroad, but they have not received the attention they deserve in major assessments of the discipline.<sup>5</sup> For example, Canada has demographic information dating back almost four centuries. Interest in the 17th century roots and history of North America's French-speaking peoples engaged a 19<sup>th</sup> century cleric in 25 years of travel and dogged labour, and resulted in the documentation of the family genealogies of the French-speaking population in Canada and the eastern United States (Tanguay, 1871-1890). He also gave us information on the past in volumes of the 1871 and 1881 Censuses of Canada. To be sure, in "Histoire de la population canadienne française" (Langlois, 1934) the author made use of these and other historical data. Then in 1954, Henripin's "La population canadienne au début du dix-huitième siècle", based on a sample drawn from Tanguay's family genealogies was published in Paris by the Institut National d'Études Démographiques (INED). Further initiatives to mine. compile and analyze Canada's unique historical information did not get underway until the mid-1960s. But even at that time, aside from Henripin's introductory materials to the 1961 Census fertility monograph and other individual projects, historical work was concentrated on the computer preparation of nominal data bases, a very lengthy and time-consuming procedure. (Manual techniques were used in a study published in 1975). Hence reports and research results based on reconstituted historical data did not begin to appear in any appreciable way until the 1970s, and sometimes much later. This also occurred with work in specialties like demolinguistics and health demography. Therefore it was essential to set down and preserve Canada's experience in the last three decades, notwithstanding the risks associated with reporting and interpreting contemporary events.

### Early Roots and Later Influences: England and France, Canada.

Reporting and distilling the meaning of oral and written evidence for the past century revealed links with events and initiatives that began in various countries of Europe, mainly in England and France as well as in Canada, as far back as the early 17<sup>th</sup> century. In other words, a rigorous approach meant seeing Canada's experience in demography in historical perspective, as the culmination of a long, fairly continuous and ongoing evolution that commenced centuries ago and eventually reached fruition in this country in the last half of this century. It is fitting therefore to preface this summary with an account of the pre-20<sup>th</sup> century background, by briefly noting the beginnings and progress of the science of population, and the way in which Canada was uniquely suited in this century to the acquisition and assimilation of the principles and practices of demography in the two international languages of the western world, English and French.

### Early History of the Science of Population

Interesting reflections, ideas, even theories of population can be found in Plato's "Republic", in the work of other Greek philosophers, and in the treatises of a number of Roman and Medieval thinkers. However, the science of population as an empirical field of investigation emerged only in 1662 in England, with the publication of John Graunt's seminal work "Natural and Political Observations ....." Graunt invented the mortality or life table, prepared a variety of calculations, and introduced the scientific notion that vital human events like births and deaths obeyed universal, observable and measurable laws. One expert maintains that it was critical observation and analysis that made Graunt's efforts scientific (Henry, 1966). From the perspective of the late 20<sup>th</sup> century, Graunt's work was admittedly imprecise, but his approach, essentially empirical and quantitative, ushered in the "new" science of population. It subsequently became known as political arithmetic, the term invented by William Petty to describe the work pioneered by Graunt, Petty and Halley (of Halley's comet fame) and a small circle of dedicated thinkers in the latter half of the 17<sup>th</sup> century. Political arithmetic took hold in Europe, flourished in France in the 18<sup>th</sup> century, and in 1855, it acquired the French name *la démographie*. By the end of the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> century, it was identified by the corresponding term in English and in those European languages in which empirical research on population and vital human events such as births, marriages and deaths was conducted, published and disseminated.

# One Science Accessible in Two International Languages, English and French

The early political arithmeticians made up a relatively small circle of persons of quite different origins, backgrounds, professions and nationalities who were aware of one another's work, and were in touch about the details of their data, investigations, and research results (Henry, 1966; Dupâquier, 1985; Lorimer,

1959). Interest and involvement in the quantitative approach to human population took precedence over all these differences, including those of language. Thus, political arithmetic, and later demography, was essentially one body of knowledge, although there were differences among nations, as there still are today, because scholars of various nations, origins and languages have contributed, and continue to contribute their own distinctive emphases, inventions and methods.

In this connection, it is important to keep in mind how much of demographic expertise and knowledge was developed, written and published in the French language. This included the work of French thinkers and also of Dutch, Belgian and other scholars who came to France, or who wrote in or were translated into French, and contributed to the building up of a substantial body of demography in this language. 10 In the seventeenth and eighteenth centuries, the French language was as "universal" as the English language. Referring to the success of political arithmetic at the end of the eighteenth century. Dupâquier cites as oneof the reasons "... l'usage universel de la langue française, qui a facilité les échanges" (Dupâquier, 1985, 197). In the nineteenth century, French was still the language of science and the aristocracy, and was spoken in intellectual salons in many countries of Europe, in Russia, and in some near eastern countries, where France had gained political power and control, as in Lebanon. And in a number of African countries previously ruled by France, the status of French even today permits African students to pursue studies in the French language, in France and in Canada.

The use of French in the modern era is much "less" universal than previously. Indeed, by the mid-20<sup>th</sup> century, English had replaced French as the language known and used by the largest proportion of the world's population. But, in spite of having lost ground in certain regions of the world, French is still firmly established on major continents, such as North America, Europe, Africa, and in the Caribbean, and is used in almost all international organizations, of which the UN is only one prominent example. In the next century French will likely remain, next to English, one of the world's two leading languages. Thus the legacy of demographic literature in the French and English languages is still highly visible today. Nowhere is this more evident than in officially bilingual Canada, where demography continues to be taught, discussed, written and published in French and in English, and where the vitality of the discipline owes much to its evolution and practice in both languages.

## The Evolution of Canada's Population

Canada's constitution as set down in the 1867 British North America Act (now the Constitution Act 1867) marked its formal establishment and recognition as a modern unified nation. However its recorded political, economic and cultural history goes back more than three hundred and seventy five years, to the first decade of the seventeenth century. Occupied for centuries by the aboriginal peoples – the Indians and Inuit – before the arrival of Europeans who settled

permanently, communication was based on a number of native languages maintained by a strong oral tradition.<sup>12</sup> From the early seventeenth century, Canada was gradually peopled by successive waves of immigrants from abroad: the French in the seventeenth century, the British and Americans in the eighteenth century, an increasing variety of other Europeans, Americans and Asians in the nineteenth and early twentieth centuries, and after the close of the Second World War, but especially from the 1960s, by "new wave" immigrants who have come in ever growing numbers from "non-traditional" source countries in Asia, Africa, Central and South America, and the Caribbean. Of course Canada always had recognizable "multiracial," multilingual and multicultural features because of the presence of the indigenous peoples, the slaves who escaped into Canada from the United States, the Chinese and Japanese who arrived in the late nineteenth and early twentieth centuries, and the immigrants of a wide variety of origins, cultures and tongues, who have continued to come and settle in Canada from all over the globe. However, since the late eighteenth century, immigrants from abroad were received into a community that reflected the historical and numerical importance and political ascendancy of the two "charter" groups. 14 The French and the British had established roots that remained firmly anchored in different regions, cultural traditions and languages, and this duality persists.

Canada is a large country in terms of land mass, second in size only to the former USSR, but much of it is sparsely populated. The population as reported by the 1996 Canadian Census was close to 28.9 million. Although distributed among ten provinces and two territories that extend over a vast domain measuring more than 9 million square kilometres, the largest proportion of the population lives in cities within three hundred kilometres of the U.S. border. Of the ten provinces, Quebec is the largest in terms of land area, second largest in population size — over 7.1 million — and historically French- speaking. Ontario, Quebec's neighbouring province on its westerly border, is second largest in terms of land area, largest in population size — over 10.7 million — and historically English-speaking. The rest of Canada is mainly English-speaking, with francophone communities of varying size, larger in the provinces adjacent to Quebec than in the west, the largest, relatively speaking, in New Brunswick. (Canada, 1997).

Canada's early history, geography and demographic evolution, especially the regional concentration of its French-speaking and English-speaking peoples, indelibly stamped the establishment and development of the science of population in this country. As a body of knowledge, demography was available and accessible to Canada in English and French which became the nation's main languages in the late 18<sup>th</sup> century and its official languages in the late 19<sup>th</sup> century. In the late 20<sup>th</sup> century, Canada's population, increasingly multicultural and multiracial in composition, continues to evolve within an enduring bilingual context.

## Canada's Long History of Census and Vital Data

Of considerable importance in the history of demography in this country, was the availability of information on Canada's population dating back to the early days of New France. In the 17th century, the commencement and maintenance of the parish registers by the Roman Catholic clergy, and the earliest censuses, beginning with Jean Talon's enumeration in 1666, provided demographic data for the first French-speaking settlers, and their descendants.<sup>16</sup> After the British conquest and the peace settlement in the Treaty of Paris in 1763, census and vital statistics gathering activities provided information for the earliest Englishspeaking settlers from Europe and the United States<sup>17</sup>, and eventually for the later flows of immigrants from a changing variety of source countries, origins and tongues. Eventually, with Canada's formation as a nation in 1867, some of the information from these "official" sources was made available in both languages. 18 In the 20th century, new sources supplemented the federal censuses, the vital statistics, and Tanguay's 19th century genealogical dictionaries. Archange Godbout continued and improved upon Tanguay's work in the first half of this century. And in the last 50 years, a variety of population statistics from a number of alternative sources such as sample surveys were developed by academics in the universities, and by officers in charge of new programs in government agencies, particularly Statistics Canada. In these years, developments in statistical science such as sampling and related techniques, and progress in computer and electronic technology gradually provided the means of collecting, processing, accessing and evaluating population data in ways not heretofore possible.

### The Singular Optique in Quebec

In the first 50 years of this century, the terms "English Canada / French Canada" were generally used to describe the nation's early and continuing bicultural and bilingual character. French Canada referred to Quebec, the sizeable francophone communities in neighbouring provinces, especially in New Brunswick and Ontario, and the less prominent francophone presence in the western provinces. English Canada usually referred to just about everything outside these regions. However, the fundamental institutional and social transformations wrought by "la révolution tranquille" in the 1960s in Quebec, also led to altered ways of thinking about, and defining "French Canada, French Canadians", etc. The term French Canada came to be more closely identified with the province of Quebec, and French Canadians were increasingly defined as Québécois. Nowadays it is more appropriate to refer to French-speaking and English-speaking Canada, terms that have become fairly synonymous with Quebec and the rest of Canada respectively.

In regard to matters of population, there has always been a different climate in Quebec than in the other provinces, with greater importance attached in Quebec than elsewhere, to the history, "roots" and survival of its people. This optique has persisted in the 20<sup>th</sup> century, with continued interest in and weight accorded

to provincial population issues, especially those considered to affect directly, the future status of the province as a French-speaking society in anglophone North America. Subjects of interest have included the history of Quebec's population and family trees, the reasons for its historically high fertility, the effects of the rapid decline in fertility on the province's demographic and demolinguistic make-up, and more recently, the implications of the changing ethnocultural composition of immigrant arrivals to Quebec on the use of French in the schools, at work, and at home. These and similar matters have always been considered important in Quebec, attracting the interest in the 19th and early 20th centuries of a number of scholars like Tanguay, Godbout and Langlois. Later they drew the attention of provincial social scientists and demographers who pioneered their investigation, media personnel who faithfully reported the research results, and provincial government officials as well as the public, who followed the discussions closely. 19 The public and political nature of population questions in Quebec is reflected in the importance placed on the discipline of demography in this province, which for many years surpassed that in the rest of Canada (Caldwell and Fournier, 1987). However, developments since the mid-1980s have also brought population and demographic concerns to public attention in English-speaking Canada.

# Differences between English Language and French Language Demography

Certain differences between English-language and French-language demography are highlighted here in the testimony of contemporary experts. The intention is not to make the existence of such differences a matter of debate, but simply to state a "given", a reality that has shaped the contours of demography in Quebec and in the rest of Canada.

In a preface to their English translation of Louis Henry's "Démographie, analyse et modèles" (1972 edition) which is rendered in English as "Population, Analysis and Models" (van de Walle and Jones, 1976), the translators point out how Henry's work on the measurement of natural and controlled fertility, and his pioneering labours in historical demography, have profoundly influenced demographic scholarship in the English language, adding that for this reason,

...the study of population remains a field where a reading knowledge of French is necessary to keep abreast of some of the most recent developments in methodology... (van de Walle and Jones, 1976, Preface, ix).<sup>20</sup>

The translators refer to the "parallel" development of demography in the two languages, the separate development of techniques and terminology in English and French, and the fact that text books in English tend to be much more sociological in orientation (van de Walle and Jones, 1976, Preface, ix). Assessments of the differences in demography in the English and French languages also appeared in the English version of Roland Pressat's 1979

Dictionnaire de démographie (Wilson, 1985). In an Introductory Note, Pressat commented on the differences between his original 1979 French language dictionary, and the 1985 English version, which Wilson echoed as follows:

... The English- and French-speaking worlds of demography are not identical. The relatively small size of the francophone demographic community lends its work a coherence of interest and methodology not seen in the larger, more heterogeneous, anglophone world. This difference is reflected in the two dictionaries, the present work covering a wider range of material and methodology than the French volume... (Wilson, 1985, xii).

In Canada, these differences between French language and English language demography were reinforced by the training of those who pioneered teaching and research; the content of French and English teaching materials especially before. English translations of classical French demographic texts began to appear, and the data series and related information available for research on Canada's earliest French- and English-speaking peoples. In assessing the development of demography in the two languages, these differences must be kept in mind, since they were automatically reflected in the instruction and training given to students, in the nature of subjects chosen for teaching and investigation, and in the specialties pursued and emphasized.

## Impact of Feminism

The subject of women in demography in 20<sup>th</sup> century Canada is best understood when viewed against the background of feminism as it evolved in this country. In the earliest decades of this century, when the goal was the "emancipation of women", important gains such as the right to vote in federal elections and to be regarded as "persons" under the law, were won. This was soon followed by the granting of similar rights to women in most provinces, although this did not occur simultaneously everywhere. The nature and tempo of the evolution of feminism was somewhat different in Quebec than in the other provinces. Women's right to vote in provincial elections, their position under the law, and sympathy for women's causes generally, came more slowly and later in Quebec (than in the rest of Canada) due to the unique history of that province, and the conservative influence of the Catholic Church.

The Second World War saw women enter the labour force in an unprecedented way, but although this eventually meant a great and irreversible change in the attitudes toward women's gainful employment, such ideas were "put on hold" in the immediate postwar period and during the 1950s. Young adults retreated to the "breadwinner" family life-style, with father the only income earner in the labour force, and mother at home with the children in the suburbs. In the 1960s, all this began to change: women, including an increasing number of married women with young children, entered the labour force as never before,

and issues related to their situation were drawn to public attention. In 1967, the Royal Commission on the Status of Women in Canada was established. The deliberations of this inquiry and its funding of an extensive and distinctive body of literature, helped to "open the door" to the recognition of the right of women to equal treatment in all spheres of life. The women's "liberation movement" blossomed in Canada as elsewhere. And as for Quebec, once the 1960s were over and la révolution tranquille had swept away the remaining vestiges of traditional institutions and beliefs in this province, women more than "caught up" to those in the rest of Canada. This was clearly evident from the 1970s in the roles that Quebec women were permitted, encouraged, and called upon to play in all spheres of provincial life.

Bolstering the change in attitudes toward women's participation in all aspects of Canadian life, was a most important "enabling" factor: growing rates of higher education for women. From the 1970s, changes in the gender composition of the young adult population 15-24 years of age in post-secondary institutions were reflected in an increase in the number of women who completed post-secondary education. By 1981, the number of women 15-24 years of age with a university degree surpassed that of men in the same ages in all provinces. With graduate training in a variety of fields, including demography, women benefited in terms of employment, remuneration and professional status. All these developments contributed to important changes in the timing, frequency and conditions of employment of women in the demographic field, similar to those in other scientific fields and in other countries.

# Demography in 20th Century Canada

The following summary account of the history of demography in 20<sup>th</sup> century Canada highlights developments in terms of key factors or elements that figured historically in the establishment of the discipline in various countries around the world. After the emergence of the science of population, these key elements were: the availability of comprehensive and regular sources of numerical information, the establishment of university teaching programs and related activities leading to graduate degrees in the discipline, the foundation of national professional population associations with links to corresponding international societies and agencies, and the impetus given to population research by pressing social "problems". These key factors are treated for three periods, distinctly visible in the details of the history of the discipline in Canada.

### 1920 - 1950. One Science, Two Solitudes

In the period from the beginning of the 20<sup>th</sup> century up to 1950, demography was not taught in Canadian universities, although there were a number of academics in universities, mainly in Quebec, Ontario and British Columbia, who taught history, economics, economic history, geography, and sociology, who were knowledgeable about, and interested in the study of population.

However, there were no programs of instruction in the discipline, only some occasional courses in demography in the 1940s. Enid Charles, a visiting demographer from Britain who worked at the bureau in the years 1940 (officially from 1942) to 1946, also gave a course in demography in the academic year 1943-44 at Carleton (then) College. Betty Macleod taught courses in population in the late 1940s, for two academic years in McMaster University's economics department. (Since she was not yet an Assistant Professor, she could not be identified as the one giving the course. It was Hurd therefore who was credited as the professor in charge in the university's annual list of programs and courses.)

There were two government agencies that reported demographic research in this early period: the provincial Bureau des statistiques (later, de la statistique) du Québec, or BSQ, founded in Quebec in 1913, and Canada's federal statistical agency, the Dominion Bureau of Statistics or DBS (also known as the bureau) which was formally established in Ottawa in 1918. In the original year of BSQ's establishment, the first Quebec statistical year book was prepared, and published in both English and French versions, with an important chapter on the province's population (Québec, 1914). DBS had responsibility for the census and the vital statistics. The decennial and quinquennial censuses in the years ending in 1 and 6, and the vital statistics program (in cooperation with the provincial governments) dating from 1921, and including Quebec from 1926, provided data useful in the conduct of demographic research. Two 1921 Census monographs were published. In connection with the 1931 decennial enumeration, a comprehensive publication program of 10 monographs, treated mainly the census and vital statistics. An important innovation was the inclusion of questions on the 1941 federal Census schedule designed to yield data on fertility, nuptiality and migration. Although there was no comprehensive monograph program in connection with the 1941 Census, one on fertility and the family became a milestone in Canadian demography (Charles, 1948). Another by Hurd, the third in a series of what were then called "racial origins" was not released until 1965. In this earliest period a number of gifted individuals working independently, some in English, some in French, also contributed to the demographic literature.

Demography's development in the century's earliest decades bears out the contention that, in the past, to find women working in what we now call "scientific" endeavours, it is necessary to look outside traditional academic teaching and research environments, often mistakenly regarded as the only places where "science" can proceed (Nyhart, 1992). If we did not look for them in government bureaus, or in the private sector, they would remain invisible. In the decades preceding the Second World War, unmarried women with training (BA degrees, teachers' certificates, etc.) and others with no post-secondary education found employment as clerks in government service, federal, provincial, municipal. Some who worked for years in the bureau's jurisdictions responsible for the vital and census population statistics acquired considerable experience in the collection, compilation, analysis and publication of population data, and in the preparation of population estimates. A few who attained the highest clerical level, were ranked as "Chief', and were regarded as subject-matter experts in

their specific fields. (In these early years in the bureau, both men and women with university degrees entered employment as clerks, and with experience "on the job", they eventually moved up to the junior statistical or professional level). In the 1940s, women were needed in the government service because of the absence of men overseas; they found employment in the bureau where there were considerable personnel demands because of the census and other large programs, and in those other federal and provincial agencies responsible for dealing with the anticipated problems of post-war reconstruction in the late 1940s and early 1950s.

In the first half of the twentieth century, population research in the English language reflected concerns related to the factors determining the growth, composition and distribution of Canada's population. Canada was undergoing considerable rural to urban migration, urbanization and industrialization. Therefore the nature and repercussions of these trends and related subjects were chosen for investigation. In the very first decade of this century, Canada had reported the highest net immigration from abroad ever experienced before or Accordingly, research concentrated on the demographic, social and since. cultural characteristics, and particularly on the ethnic origins of Canada's population. There was concern about the degree to which immigrants from abroad could "fit in" or become "Canadianized". Since most of the data used in the analysis of the various subjects and issues of interest were the official statistics produced by the Dominion Bureau of Statistics, early demographic research was largely "data driven". Because the census and vital statistics cover the nation, research based on these data treated most subjects at the national, provincial and sub-provincial levels and according to various rural-urban and other standard geographical breakdowns. Although published in both languages, the French translation of English texts was of dubious quality. Quebec, research on population was generally regional. Godbout continued Tanguay's work. The publication of Langlois' 1934 volume on the history and growth of Quebec's French-speaking population was an important milestone. Jean Charles Falardeau, a sociologist at Laval in the early 1940s was instrumental in pointing out the importance of population research in explaining social change in Quebec.

Up to 1950, in spite of interest in the work in the "other" language on the part of some scholars, demography developed in parallel fashion, along somewhat independent paths, in those regions where the English and French languages predominated. For this reason the period from 1900 to 1950 is described by the phrase "one science, two solitudes".

### 1950 - 1970. Growth and Dualism

During the twenty years following the close of the Second World War in 1945 and its immediate aftermath to 1950, demography became established in Canada. In the 1950s, some population research activities were ongoing in English Canada and French Canada (as they were then called), and the teaching of occasional courses in demography began in Quebec. It was only in the 1960s

that demographic teaching and research emerged in organized and planned academic programs, but always within the framework of the nation's English/French duality. Programs of instruction in demography and population studies were formally installed in the early and mid-1960s in three major Canadian universities: in Quebec at the Université de Montréal, and in Ontario and Alberta at the University of Western Ontario, and the University of Alberta. In addition, the deliberations of a number of royal and provincial commissions of inquiry in the late 1950s and in various years in the 1960s to assess and make recommendations about specific issues and "problems", called on demographic expertise, solicited population research from social scientists, and published their research results, thus heightening the public awareness and visibility of the discipline and its perceived relevance.

At the University of Western Ontario (in London, Ontario) under the leadership of John Kantner, and at the University of Alberta (in Edmonton, Alberta) with the initiatives of Warren Kalbach, graduate courses making up structured programs of population studies began to be taught in English in the early and mid-1960s, as they still are today, in existing departments of sociology. At the Université de Montréal, in 1964-65, in the Département de démographie, with Jacques Henripin as first Director, graduate instruction in the discipline was (and is) given in French; it is still the only autonomous department of demography in Canada, and indeed one of the few at the present time, in North America. All three programs initially offered degrees at the Master's level, in demography (Montréal), and in sociology with a specialization in demography (Ontario and Alberta). Linked with these programs of instruction, affiliated agencies such as population research laboratories and centres were established to provide facilities where students could obtain practical experience compiling and manipulating demographic and statistical data, and where staff members could conduct major research projects, often with graduate student assistants, or in collaboration with colleagues in their own or other disciplines. The Population Research Laboratory (PRL) linked with the University of Alberta's sociology department was founded in 1966. (At the University of Western Ontario the Population Studies Centre began operation in 1974.) In the Département de démographie at the Université de Montréal, research projects focussing on specific subject-matter areas (e.g. historical demography, family and fertility in Quebec, etc.) were conducted with teaching and research staff and students participating in research These centres and team projects played an important role in the development of demography in Quebec and in the rest of Canada.

In the 1960s at the bureau, senior managers made efforts to bring Canada "up to date" in the demographic field. The inclusion in the 1961 Census, for the first time since 1941, of basic demographic questions on fertility, nuptiality and migration, the installation of demographic research sections within the bureau's census data production jurisdictions, and the promotion of a comprehensive 1961 Census monograph program, were initiatives that helped to establish the discipline on firm ground. The 1961 Census monograph program in particular, was an important milestone. Major volumes on important demographic variables and subjects, some treated for the first time in Canada, were undertaken by bureau officers and also by academics. An invitation to Henripin to author

the 1961 Census monograph on fertility opened a door to the bureau, and led in the late 1960s to the flow into Ottawa of the first generation of francophone students trained in demography in Quebec.

In the 1960s, Canada did not have sufficient numbers of professionally trained demographers and social scientists with the requisite credentials to undertake these rapidly developing teaching and research programs. Up to, and during the 1950s, students at Canadian universities who wished to obtain graduate degrees, or academics wishing to advance their careers in the social sciences, were obliged to do so abroad, because advanced training and career opportunities were simply not available in Canada. Both anglophone and francophone students were obliged, indeed, were encouraged by their mentors to go abroad for further studies or career advancement. English-speaking Canada "exported" and lost, often permanently, some of its best social science talent, mostly to the United States. Thus, the demographic expertise so urgently required in Canada in the early 1960s had to be "imported". The movement of students and gifted academics north to south across the Canadian-U.S. border in the decades before 1960, the so-called "brain drain" (but more likely, as Samuel has pointed out, a "brain trade") was followed in the early 1960s by the inflow of academics from the United States to Canada, to take up university positions newly created for the teaching of the social sciences generally, and of demography and population studies in particular. This had further repercussions: the inflow of academics from American universities and the lack of specifically Canadian teaching materials, led to a widespread fear of an American "take-over" of Canadian English-speaking universities, still evident in publications of this period. The teaching of demography and population studies by these "imported" American professors revealed a lack of texts with examples based on Canadian data for use in English lecture halls. One sociologist noted that in the 1960s, Canadian students knew more about black-white relations in the U.S. than about English-French relations in Canada (Hofley, 1992, 106). Furthermore, English texts with Canadian population and statistical data were unavailable before 1971, while early sociology texts were usually edited collections of previously published articles with only one or two in the population field.

In addition to this inflow from the United States, professionals from all over the developed and developing world with training in demography, who divined the opportunities opening up in Canada were quick to accept job offers to teach demography, mostly in the English-speaking universities, or to engage in demographic research, mainly at the bureau, and to a lesser extent in other federal and provincial government agencies. Thus in the early and mid-1960s, professional demographers were hired from all over the world, to work in the English language in universities and in government agencies in Canada. Many who came in this way settled permanently, and became Canadian citizens. Alongside native-born Canadians, they helped to establish the discipline in this country, contributing valuable expertise acquired in their various countries of birth, of training, and of professional experience.

In French-speaking Canada, the few students who went abroad for advanced training in demography, mostly to France, eventually came back to Quebec, to

reinvest their training in the province's francophone universities and government agencies, where they taught and engaged in research. Furthermore, in developing programs of instruction, Quebec scholars drew on the large and rich body of work in demography originating in Europe in the French language, including text books, monographs, reports and articles in demographic journals. A French text compiled for use in social science courses at the Université Laval included materials by Sauvy, with illustrative Canadian data appended (Montmigny, 1965). In addition, the enterprising founder of demography in Quebec devised a text in French for use in the teaching of an introductory course (Henripin, 1968). Quebec could also count on invited guests, who came from France, particularly from INED, from Belgium, and elsewhere, to give special guest lectures or courses of study (which had to be given in French) on a part-time or temporary basis.

In the years before 1970, those involved in demography in Canada, still made up a fairly-small group, and in conducting research, or in teaching, they did "alittle bit of everything". However over and above the investigation of the basic demographic variables, fertility, nuptiality, migration, mortality, and of fundamental subjects such as the age/sex composition of national and provincial populations, and the preparation of various estimates and projections, a concentration on specific fields gradually began to engage scholars, mostly in subjects for which Canadian data were particularly suited, or on questions of public or policy import. Notable were historical demography, ethnocultural demography, and demolinguistics, followed by specialization in other fields, all of which bore fruit in the 1970s and subsequent decades.

Population "problems" also played a role in the development of demography in Canada. Even before 1950, and then during the two decades between 1950 and 1970, special investigative Senate Committees, federal (royal) and provincial government commissions of inquiry promoted the development of the discipline, generally in two ways. First, the deliberations and research programs of these committees and commissions revealed the growing importance of demographic issues, some of which were central to specific commissions. Secondly these inquiries called for, and stimulated the exploration and examination of demographic issues, publishing and disseminating the research results, which, in the case of the federal inquiries, appeared in both English and French. This led to a greater awareness of what demography was, and of what it could do, and also contributed directly to the growth of important subdisciplines. For example, the specialty now called la démolinguistique / demolinguistics owes much to the research commissioned, funded and published by the Royal Commission on Bilingualism and Biculturalism after its establishment in 1963, and to Quebec's 1968 Gendron Commission. Similarly the development of "women's studies" and the field of gender issues based on population research were important by-products of the work prepared for the Royal Commission on the Status of Women in Canada (1967). Thus by the late 1960s, the language of demography (e.g., "projections of manpower and employment") as well as the scope, application and uses of demography and demographic research were sufficiently understood and appreciated by politicians, the media, and eventually, the public. Or, if they were not well understood and appreciated before the hearings of the various committees and commissions began, comprehension came with the testimony of social scientists, including demographers, and the media attention that the hearings and deliberations of such special investigations usually attracted.

Although the development of demography in Canada drew people during the 1960s who came from all over the world to take up positions in this country, the discipline continued to evolve within the framework of the nation's regional and linguistic duality. Hence the period from 1950 to 1970 is best described as one of "growth and dualism", after the title of Beaujot and McQuillan's 1982 text.<sup>22</sup>

### 1970 - 1998. Maturity and Rapprochement

In the contemporary period, the graduate programs of The Universities. instruction in demography and population studies expanded in the three universities in Quebec, Ontario and Alberta, and courses of study leading to the Similarly, the associated population centres, Ph.D became available. laboratories (labs), and team research projects grew. Other courses in population studies and demography at the graduate and sometimes undergraduate level soon appeared, especially in the 1970s in various provincial anglophone universities in a number of departments (not just sociology), and in bilingual and francophone universities in Ontario, New Brunswick and Quebec. Thus courses in the discipline were given in a sociology department and another agency linked with the University of Toronto (Erindale College and the Ontario Institute for Studies in Education), and in the sociology departments of the universities of Waterloo, Carleton, York, Ottawa, Sir George Williams (later combined with Loyola College to become Concordia). Departments of economics at Queen's, Toronto and Wilfred Laurier universities also introduced The University of Toronto's Medical School population-related courses. included instruction in demography in its Department of Preventive Medicine Subsequently, sociology and other departments in and Biostatistics. universities in Manitoba, Saskatchewan, Alberta and British Columbia encouraged population specialists to teach and conduct research in their field. In the Université de Moncton in New Brunswick and in universities in the other Atlantic provinces, interest in demography and population studies also emerged: academics who could were encouraged to give occasional courses, or to conduct research on population even if they did not teach the subject. The geographical location of these teaching and related research activities illustrates the striking prominence of central Canada, with a solid concentration in Ontario and Quebec, and a rather widespread dispersion across the eastern and particularly the western regions of Canada.

Instruction in demography was facilitated by the appearance in 1971, of the first substantial English language volume featuring Canadian population subjects, issues and data. Ironically, it was co-authored by two American scholars who had come in the 1960s from the United States to the University of Alberta's sociology department. "The demographic bases of Canadian society" (Kalbach

and McVey, 1971) began to be used for courses given in both English-speaking Canada and Ouebec.

The expansion of academic programs in demography and population studies in the years from 1970 grew out of events of the 1960s, notably the increase in student enrolment in the nation's universities, the astonishingly rapid growth of the social sciences in this decade in which demography shared, and the long retarded development of "home grown" programs of graduate training in Canada. A sign of the times in both English-speaking and French-speaking Canada was the appearance of a number of university-based interdisciplinary research agencies whose personnel participated in graduate programs of instruction in which demographers and demographic projects figured in various degrees, from marginally to substantially. There are two noteworthy Quebec examples. The Institut interuniversitaire de recherches sur les populations (IREP) as it is now called, was founded in 1972 as a social history project by Gérard Bouchard at the Université du Québec à Chicoutimi (UQAC). INRS - Urbanisation-wasestablished in 1970 in Montréal as an affiliate of the Université du Québec, and currently has a strong demographic program and corps of research and teaching professionals.

From the 1960s, with the opening up of graduate programs in demography and population studies, interested women took advantage of the opportunities to complete MA and Ph.D. training in these subjects. They earned the credentials required to fill a variety of teaching, research and administrative positions in demography in Canada, some at the highest levels. From the late 1970s, students interested in professional careers in demography and population studies were no longer obliged to go abroad for training leading to higher degrees and employment. During the 1970s and 1980s job opportunities for demographers of both genders, and for those with training obtained solely in Canada were more plentiful and positions were easier to obtain than previously. Indeed the programs of instruction in demography in this country drew students of both genders who came here from other countries and continents for graduate training. Some remained in Canada and found employment here, once their training was completed.

In the late 1960s and early 1970s, "new" sources of demographic data were also developed by academics. In the universities of Montréal, Western Ontario and Alberta, the conduct of fertility/family surveys yielded data that were analyzed and released in volumes, articles and reports of research results. Eventually, in 1984, the very first national initiative of its kind, the Canadian Fertility Survey, was planned and conducted by a team of three academics from these universities; the data were processed in the Université de Montréal's "Centre de sondage", and the research results were documented in a coauthored English-language volume (Balakrishnan, Krotki and Lapierre-Adamcyk, 1993).

Government Departments and the Private Sector. In the bureau, which became Statistics Canada in 1971, demographic work and research expanded. A 1971 Census Analytical Studies Program (CASP) produced a series of

monographs authored by bureau officers and academics. The first release of what are now called Census Public Use Microdata Files (PUMF) were based on the 1971 Census results, (when they were called Public Use Sample Tapes) making Canada the second country after the United States to release such files. (They are now identified as standard products prepared in conjunction with every census). The 1976 Quinquennial Census was enlarged in an attempt to provide more information for planning and policy purposes. The program of estimates and projections, and the vital statistics were added to in significant ways to meet user demand. New household (including longitudinal) surveys were designed and conducted on a recurring and occasional basis to yield new types of information, including demographic information not possible to obtain from the traditional official statistics. The compilation of data bases from administrative records was also explored. Important in these developments was the rapid progress made in macro- and micro-computers and related electronic technology. In addition, interdisciplinary (including demographic) research was installed by design in the agency's jurisdictions outside the normal data production areas, where new initiatives could be pioneered and developed.

Relations between the bureau and the universities, which had received an enormous impetus from the 1961 Census monograph program, expanded and were formalized. University professors continued to be invited to author studies in the bureau's census and survey research programs, to which the agency's officers also contributed. Students trained in demography and population studies in English-speaking and French-speaking universities (including an increasing number who came specifically for such graduate instruction from abroad, especially from developing countries) were recruited for periods of orientation, training, and work in the bureau. Some eventually joined on a fulltime basis. This has meant the location in Ottawa, of a sizeable group of francophone demographers of both genders, mostly from Ouebec and mostly employed at the bureau. Since work in the agency can be conducted in either French or English, the bureau has played and continues to play an important role as a meeting place for anglophone and francophone professionals and academics. Furthermore, since it has always employed demographers from all over the world, the bureau has become a meeting place for Canadian and international demography and demographers.

Population-related research was also pursued within a number of other federal government departments, especially in those where such work had been ongoing in the years prior to 1970 because their mandates involved population concerns (e.g. immigration, housing). The "Review of Demography", initiated and conducted from 1986 to 1992 by officers in Canada's federal health department, promoted research in both official languages, and provoked lively discussion "pro and con" within the professional community. Quite apart from the quality of the studies (some were negatively assessed by peers), the Review became a milestone in the development of demography in Canada. Media reports of the Review's research results made demographic terminology commonplace, and it was gradually incorporated in the everyday language of the "man on the street". In a number of provincial government agencies, demographic research continued to expand, and was particularly marked in Quebec in various government

departments. One Ontario government official remarked that in comparison with his own jurisidiction the Quebec government had a "mini Statistics Canada". This was no exaggeration, in view of the proliferation of demography positions in various Québécois government agencies. Paradoxically in Ontario, there were sharp reductions in the 1980s and 1990s in demographic and related research in the ministry where such activities had previously been conducted with some vigour. This was not due to a lack of initiative or interest, but rather to a restructuring of the department responsible for population research. Over and above minimal activities that were retained, needed demographic research and data were and continue to be acquired from the private sector. In the western provinces, most provincial administrations became involved in varying degrees in population-related research projects and data compilation initiatives. A growing demand for demographic research results also led to the emergence of private sector companies which were founded to supply this demand, mostly in large cities like Montréal, Ottawa, Toronto and Vancouver.

Collegial Activities. Of considerable importance in this period was the founding of professional population societies, demographic journals, newsletters and bulletins, and the organization of annual and occasional conferences dedicated to the presentation of scientific and professional population questions. Characteristically these were established and exist for anglophones and francophones separately, although a number of members of both groups belong to the two societies and participate in the activities both organize. In 1971 in Quebec, the Association des démographes du Québec, or ADQ, was founded. In 1974, the Canadian Population Society, or CPS was born. These societies each support a professional journal: the French, Cahiers québécois de démographie, and the English, Canadian Studies in Population. conferences provide a forum for the presentation of research results and the discussion of professional issues and questions, and these also take place at different times and locales: for English-speaking scholars under the auspices of the Congress of the Humanities and the Social Sciences (previously the Learned Societies), and for French-speaking scholars, under the umbrella of the Association canadienne-française pour l'avancement des sciences (ACFAS). Consequently, if the question were posed: "Is there a mainstream in Canadian demography?" the answer of necessity would be: "There are two mainstreams". However subsequent developments have brought the two mainstreams together by means of an institutional structure, which has successfully created a national platform and forum for the discipline in this country. In 1978, the Federation of Canadian Demographers/La fédération canadienne de démographie, or FCD was founded, to link as the sole members, the two population societies. This was an important step in coordinating the activities of the two associations, and in furthering collaboratively their goals and thereby the interests of all The FCD proposes and initiates conferences demographers in Canada. representing the concerns of Canadian demography and demographers, successfully organizes events like the 1993 IUSSP conference in Montréal, bringing together members of the anglophone and francophone demographic communities to achieve results. In this way, the FCD is an association that brings about cooperation and collaboration across regional and linguistic

boundaries, and thus acts as an agency that "bridges solitudes" (Murphy et al., 1994).

Therefore, the contemporary period in the history of the discipline in Canada is described as one in which there has been a perceptible rapprochement between English language and French language demographers and demography.

# Whither Canadian Demography on the Eve of the 21st Century?

Today, alongside demography in the English language in most of the rest of Canada, demography in the French language is alive and well in Quebec,<sup>2</sup> thrives in some government departments in the national capital region, notably in Statistics Canada in Ottawa, where francophone demographers since the late 1960s have been, and continue to be employed, and (after a brief florescence in the 1970s and 1980s) manages to survive in New Brunswick in the work of a few connected with the Université de Moncton, and in a recent initiative of the provincial government.24 The "institutionalization" of the presence of francophone demographers in Ottawa (mostly trained in Quebec, with a few trained in French in New Brunswick and Ontario) is important, although geographically limited to the capital city. In comparison with the situation in Ottawa as described by historians before and at mid-century and even during the 1960s, the 1990s decade demonstrates that where demography is concerned a progression from a "theoretical" to an "actual" bilingualism has taken place. It is also noteworthy that Québécois trained demographers have become willing to fill academic positions in universities in English-speaking Canada, not only in Ontario, but in the western provinces.

Although much progress has been made, the contemporary situation is not without its imperfections and drawbacks (quite apart from the recent problems of cutbacks in programs and resources). The "language divide" as it affects communication is still considered a problem by some demographers (both bilingual and unilingual) in English-speaking Canada and by their Quebec counterparts. And in other respects, as for example in the matter of applying for funding, it is difficult to explain to federal granting agencies why Canada's relatively small community of population specialists, currently under 400, must solicit funds for separate anglophone and francophone journals, associations and scholarly events.

On the other hand, there are advantages. The increasing internationalization and globalization of economic, ecological and population problems and issues demonstrate the advantages of a national demography pursued in both English and French: it facilitates access to populations, publications and colleagues all over the world, and "normalizes" consideration of work in other languages. The demographic problems of the developing regions in Central and South America are increasingly brought to the attention of Americans and Canadians, and presupposes that in Canada, the ability to communicate and to conduct work in Spanish (for example) will develop as a matter of course. This has already been

taking place for some time. Furthermore, the nation's bilingual heritage means that Canadian demographers and population specialists are "at home" in the world in other ways. Because they are available in English and French, Canada's demographic teaching programs, research initiatives and publications have an international reputation. The result is that Canadian practitioners of the science play a visible role in population circles and societies abroad. They have always participated actively in international population activities: the World Population Conferences in Bucharest in 1974, in Mexico in 1984, and in Cairo in 1994, are selected but by no means the only examples. Interest in the developing world has always played an important role and continues to engage Canada's anglophone and francophone demographers abroad. Thus the advantages of a national demography that proceeds in both official languages more than makes up for the disadvantages. The contributions of both enrich the practice of the discipline in Canada, and multiply international contacts, projects and activities. They give us not only the best of both worlds, but the best of all—worlds.

The future of demography in the national sense will benefit from the accumulation of collaborative research ventures, successfully completed by teams of dedicated professionals, irrespective of the language and regional location of individual members. Such activities will reinforce and solidify the growing climate of rapprochement between anglophone and francophone demographers.

A concluding note is called for about the recession in Canada in the 1990s that resulted in cutbacks to the funding of various academic and government programs in demography and population studies. (This was not unique to Canada; similar restrictions took place abroad.) Even during the years of demography's expansion in Canada in the 1970s and 1980s, astute analysts and educational planners began to warn of the inevitable results of demographic and economic changes that were taking place or were anticipated to occur. These were the effects of the baby boom generation as it "aged", the subsequent "baby bust", the expected changes in the demands of the labour market due to evolving economic and industrial trends in Canada, and eventually, the economic recession that refused to turn around. In the early 1990s university teaching and research programs in demography and population studies began to feel the pinch brought on by these events and circumstances. The need to retrench was followed by further sharp reductions in the funding of their programs as well as in other projects (outside the universities) that had provided demographers in academe with research opportunities. In some cases, certain programs were canceled outright.

The effects of these reductions, which became increasingly visible as the 1990s progressed, were somewhat alleviated by the announcement in 1996 of the federal funding of four Centres of Excellence dedicated to research on immigration, located in Montréal, Toronto, Edmonton and Vancouver. These centres are major components of Canada's participation in the *Metropolis Project*, an international initiative examining the impact of immigration on cities around the world. They are important in the context of demography in Canada in the late 1990s because, in a decade of drastic funding and program

cuts which adversely affected instruction and research in the discipline, they are sources of support for comprehensive, long-term projects requiring in part, expertise in demographic research. Another example is the formation of the Centre interuniversitaire d'études démographiques (CIED), created in late 1997 by an agreement between the Département de démographie of the Université de Montréal, and the Institut national de la recherche scientifique—Urbanisation. In the context of the restricted resources of the 1990s, and in an effort to create a critical mass of teaching and research personnel in demography, this centre was conceived as a cooperative venture to consolidate, support and develop the teaching, training and research activities of both parties to the agreement.

There are positive signs that inspire hope for the future of the discipline, despite current drawbacks. But it is still too soon to ascertain with any degree of certainty how unfolding events will transform the picture drawn here of the situation of demography in Canada on the eve of the 21<sup>st</sup> century.

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Statistics Canada provided office space, library, text production and other services. Useful comments by three anonymous reviewers are also gratefully acknowledged. Any errors, omissions or faulty interpretations are the sole responsibility of the author.

#### Endnotes:

- 1. This article is dedicated to the memory of Dr. Françoise Ricour-Singh. It is based on Chapters 1 and 8 of the manuscript "History of Demography in Canada" (Wargon, 1997, 1998). The subtitle was inspired by two works: Becker and Barnes (1961, 560), and a paper by M.G. Kendall in the Journal of the Royal Statistical Society (1968, 182).
- 2. The phrase "... as a science and a profession" was first encountered in Hauser and Duncan, 1959: 23. The term "discipline", often used interchangeably with "science" is explained by a pioneer of American demography as follows:
  - ... The word "discipline" is used ... in the sense of a field of related studies in which there develops a community of scholars with common interests who stimulate one another in their investigations, a set of related techniques, a cumulative body of knowledge, and certain generally accepted principles of procedure. Such a discipline also tends to acquire an apparatus associations, periodic publications, and research and training centres. The assumption that demography is a "discipline" does not necessarily imply that it is, or should be, treated as a distinct "school" or

department within the structure of a university. This is a matter of academic convenience... (Lorimer, 1959, 158).

- 3. In the early 1970s, as a hobby, I began a project to search out on my own time, materials for a book on the life and work of Enid Charles, the British demographer who had worked in Canada from 1940 (and officially from 1942) to 1946 at the Dominion Bureau of Statistics. In the late 1980s, I decided that the materials compiled about Charles were of more immediate interest in the context of the broader story of how demography became established in Canada. I developed an approach to this subject in 1987, and in 1988, thanks to I.P. Fellegi, Chief Statistician, D.B. Petrie, Assistant Chief Statistician, and the late E.T. Pryor, when he was Director-General, Census and Demographic Statistics, I began the project at Statistics Canada. Although I retired officially from the Bureau in early 1993, a booklength draft manuscript was produced in late 1994, and comments received in the following-year from four-academic-reviewers-were-incorporated.—Afinal version was completed in 1997, and revised in December, 1998.
- 4. The importance of unrecorded oral testimony in the history of science and the insoluble problems of the documentation of such testimony have been described by a contemporary Canadian philosopher of science (Hacking, 1990, 7). Hacking's comments are substantiated in a footnote to the title of an early article coauthored by Keyfitz when he was still in Canada:

... It is difficult to give proper credit in a subject in which a considerable part of knowledge is still oral; in so far as the remarks below appear original and useful, they probably result from conversations with W.E. Deming, M.H. Hansen, W.N. Hurwitz or P.C. Mahalanobis... (Keyfitz and Robinson, 1948-49).

Written reports and documents of an administrative nature are easier to track down for verification of historical details and events, but often they are difficult to locate, access and verify.

- 5. The most notable comprehensive works are "The study of population. An inventory and appraisal" (Hauser and Duncan, 1959), and "Histoire de la démographie. La statistique de la population des origines à 1914" by Jacques and Michel Dupâquier (1985). Although these volumes have now been supplemented by various accounts of national and international achievements in demography because of the natural tendency everywhere to sum up accomplishments on the eve of the 21<sup>st</sup> century, there has been little reference to Canada, except for the volume of proceedings of a 1995 conference celebrating the 50<sup>th</sup> anniversary of INED (Chasteland et Roussel, 1997).
- 6. This was reported in the volume "Canadian birth registration and birth statistics" by one of the century's pioneers of demography (Kuczynski, 1930). It is also documented in Volume IV of the 1871 Census which

- details the history of the Canadian census from the 17<sup>th</sup> century to 1871 (Canada, 1876), and in Volume V which was released two years later.
- 7. See encyclopaedic works like the third edition of "Social thought from lore to science" (Becker and Barnes, 1961).
- 8. "Natural and Political Observations Mentioned in a Following Index and Made upon the Bills of Mortality, with Reference to the Government, Religion, Trade, Growth, Air, Diseases and the Several Changes of the Said City". Cited in Dupâquier, 1985 and in Pressat, 1971. The word "population" as generally understood today is said to have originated in the work of Sir Francis Bacon, but it was not used by Graunt (Lorimer, 1959).
- 9. Achille Guillard defined demography in his book "Éléments de statistique humaine ou démographie comparée" (1855).
  - ... la connaissance mathématique des populations, de leurs mouvements généraux, de leur état physique, civil, intellectuel et moral. Son domaine embrasse la succession des générations, la durée de la vie, les rapports de l'homme à la nature, et ceux de l'homme à l'homme, en un mot, tous les genres d'études qui ont trait directement à l'espèce à ses besoins, à ses souffrances, et à son bien-être... (quoted in Dupâquier, 1985, 419).
- 10. This is undoubtedly why Pierre Chaunu in his preface to the Dupâquier volume, says:
  - ... C'est une science qui longtemps a été française, qui continue encore avec prédilection elle est la dernière à écrire et à parler français,... (Dupâquier, 1985, 7, 8).
- 11. English has official status in over 60 countries, and French in over 30 countries. Spanish is the world's third international language and is used in over 20 countries (Crystal, 1987, 357). It has been reported (but not substantiated) that English and French are the only two languages taught in every country of the world. Various estimates of the world's most frequently used languages are available (Canada, 1967, 15; Tétu, 1987, 46; Crystal, 1987, 287). Such estimates are not used here because they are based on different criteria, and therefore yield quite different results which are not comparable.
- 12. Historical accounts and more recent studies of pre-17<sup>th</sup> century aboriginal society and life in Canada are illuminating. See Canada, 1876; Pouyez, Lavoie et al, 1983, and Delâge, 1993.
- 13. "Multiracial" is commonly used by contemporary scholars to refer to the presence, alongside Caucasians, of non-white groups of diverse origins nowadays described in Canada as "visible minorities" (Samuel, 1990).

- 14. I am grateful to Dr. Helen Ralston, Professor Emerita, St. Mary's University, Halifax, for pointing out that Oswald Hall originated the expression "charter groups" (Hall, 1960, 13), later used and credited to Hall by John Porter (1965, 60-61).
- 15. The 1996 Canadian Census statistics show that although the percentages of anglophones and francophones (persons with English and French mother tongues respectively) have declined from 1991 levels (due to the continuing increase of immigrants with mother tongue that is neither English and French, and also due - in the case of francophones - to their declining fertility over recent decades) anglophones are still the majority in all the provinces and territories outside of Quebec, while francophones continue to be the majority in Quebec. This is so when only one or more than one mother tongue are considered, and when statistics on home language, 100 p.c., or weighted sample data are the basis for calculations. enclaves of French-speaking people in the other provinces, larger in the provinces adjacent to Quebec, the largest (relatively speaking) in New Brunswick. Census statistics used in a number of studies show not only the regional concentration, but also the continuing polarization within these regions of English- and French-speaking Canadians (Lachapelle and Grenier, 1988; Bourbeau, 1989).
- 16. Canada's first census, the famous nominal Census of Jean Talon, is usually considered the first "modern" census. Previously referred to as the census of 1665-1666 because the enumeration in 1666 was for the reference year 1665, it is more often referred to today as the 1666 census. Sweden and Iceland also had usable census data in advance of other nations. However census taking in the "modern" sense began earlier in Canada than elsewhere.
- 17. Census taking under the British was not as effectively promoted and carried out as under the French. Also in the case of the recording of vital events, the system of parish records for the French-speaking population maintained by the Roman Catholic clergy in what became the province of Quebec was far more efficient than the record-keeping for the English-speaking population in the rest of Canada (Kuczynski, 1930).
- 18. Canada recognized the equal status of the English and French languages federally in the 1867 BNA Act, now the Constitution Act 1867. However, in view of how things worked out in practice in Quebec, some would dispute the "official" status of both languages as of 1867. Historians have amply documented how in business, in financial and in certain major educational institutions, especially in Montréal, English remained the principal language of communication until "la révolution tranquille" had run its course, that is, for about a century after Confederation. Furthermore, the quality of the mandatory French translation of federal demographic materials in English left much to be desired, and therefore were not convincing illustrations of the spirit of bilingualism. The federal administration became more fully bilingual with the passing of the Official Languages Act in 1969, and the quality of French translations of English

- texts has gradually improved. For a detailed examination of the evolution of the status of English and French in Canada, see Brazeau, 1992.
- Raymond Breton noted about 10 years ago how in Quebec, "...
  demographic research occupies an important place in public debates..."
  (Breton, 1989).
- 20. This explains why Mindel Sheps wished to make available to the international English-speaking community some of Louis Henry's work in an English translation, accomplished in the coedited volume "On the measurement of human fertility. Selected writings of Louis Henry" (Sheps and Lapierre-Adamcyk, 1972). Since that time English translations of classical French demographic texts have become more numerous and more readily available to anglophone scholars.
- 21. The word "feminism" originally appeared in the early 20<sup>th</sup> century, but did not come into general use until much later. It is used here as a global term, encompassing the earliest twentieth century efforts to win women's political and legal rights, as well as the many activities over ensuring years, designed to create opportunities for Canadian women to participate fully and equally with men in all spheres of life.
- 22. I am indebted to Evelyne Lapierre-Adamcyk for this use of the phrase during a personal interview.
- 23. And is also pursued there in English, as at Concordia University in Montréal, and occasionally at Bishop's University in Lennoxville.
- 24. "Le Nouveau-Brunswick à l'aube d'un nouveau siècle. Un document de travail sur les questions démographiques touchant le Nouveau-Brunswick" is a report of a special legislative committee set up in early 1995, to tackle the subject of the repercussions of demographic changes on public policies in the province (Cahiers québécois de démographie, 1996).

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