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Chapter 3

Infrastructures of Census Taking

On 2 June 1911, Thomas Vance, census commissioner for Centre Toronto, expressed delight with the way things had gone so far with the enumeration of his district. Based on his experience overseeing the same district in the 1901 census, things were proceeding ever more efficiently. Vance had accompanied three different enumerators the previous evening during their rounds of "The Ward" to ensure that counting the "foreign population" was going smoothly. And, leading up to census day, he had participated in meetings with the Ontario Special Commissioner Mr J.C. Macpherson and with the other four commissioners responsible for Toronto. He had also overseen the hiring of enumerators and their training based on instructions issued by Archibald Blue, the chief census commissioner for the Dominion of Canada.

Vance was part of a vast operation that included many actors beyond census officials. There were, of course, the politicians. At the top of the list was Minister of Agriculture Sydney Fisher, who was responsible for the "counting of noses." As part of Sir Wilfred Laurier's Liberal government, which had been in office since 1896, Fisher was well aware of the implications for parliamentary representation of this decennial enumeration. Since the last enumeration in 1901, two new provinces, Saskatchewan and Alberta, had become part of the Canadian federation, adding ever more numbers to an expanding western population. It was generally agreed that the count would result in the redistribution of seats in the House of Commons with the west making significant gains. In addition to the politicians, Vance was painfully aware of, yet also dependent on the interventions of civic officials, boards of trade

and industrial bureaus, as well as the newspapermen. They began reporting on the pending enumeration well before June 1911 and proved very useful in educating the population, especially its “foreign element,” about the process.

But, back in Toronto’s Ward, Commissioner Vance encountered difficulties. There were many impressions in circulation about the practices of enumeration, which he and the other commissioners had to regularly counter or at least clarify. For example, enumerators had reported that some “foreigners” thought that information about their family size would be reported to the city’s Water Department and lead to an increase in their water rates. In one account, a “foreigner” had reported his family as numbering two instead of nine, ostensibly because he had feared that a higher count would lead to an increase in his water rates. Yet others were hesitant to reveal details of their businesses as they were under the impression that this information would end up in the hands of the Tax Department. For Vance, however, these were minor difficulties; all that was required was to get the word out that answers would not be used for such purposes and would be kept strictly confidential.

Commissioner Archibald Blue was a veteran newspaperman, and this also proved to be beneficial in working with the fourth estate. Almost every newspaper across the country announced the coming date and the procedures, and most listed all forty-three questions on Schedule 1 verbatim, while others provided at least a summary. They were also very helpful in advertising the new date for, although previous enumerations had been taken on 1 April, legislation passed in 1905 had changed census day to 1 June. Furthermore, the newspapers were very thorough in pointing out that fines or imprisonment would result if questions were not answered or if false information were provided. But, on the other hand, their muckraking activities were a bother, sometimes fuelled by their political allegiance with the Conservative opposition. As June wore on, the most significant interventions involved claims that people were not counted or that whole districts or villages had been missed. In mid-July, R.L.

Borden, leader of the Conservative party and Official Opposition, called attention to the fact that he had not been enumerated, while Hon. Sydney Fisher, minister of agriculture, admitted that he had been counted twice. Vance was thus pleased that the national daily papers published Commissioner Blue's notice that invited people to communicate with him by mail should they suspect they had been missed. Despite all these difficulties, as the end of July approached, Blue was able to report that almost 88 per cent of returns had been received in Ottawa.

On 18 October 1911, following the election of Borden's Conservative government, Blue sent his first tabulations to the new minister of agriculture, the Hon. Martin Burrell. The tabulations of the total population of the country, as well as of provinces and cities and towns, led to a great outcry, as the figures were lower than anticipated. Rather than the expected population of eight million, the first reports revealed a count of just over seven million. Western civic leaders complained the loudest that their cities were undercounted with Calgary, Edmonton, Saskatoon, and Moose Jaw announcing that they would undertake their own census to prove so.

The foregoing narrative on the intricacies and politics of census-taking practices was compiled from a few dozen newspaper articles published around the time of the 1911 enumeration. The articles can be found in the CCRI ContextData database, which principally covers newspaper articles and parliamentary Hansard debates published around the time of each of the decennial enumerations (1911–51).¹ CCRI's objective in building the database was to provide additional "data on the data" to enable researchers to analyse the organization and taking of censuses. Despite extensive scholarly interest in nominal census returns as a source for much recent historical scholarship, there has been little scrutiny of these census-taking practices and processes. But, there are a few notable and recent exceptions, especially

in relation to late nineteenth-century census taking, such as Bruce Curtis's book on the 1871 enumeration, *The Politics of Population* (2001), and Patrick Dunae's article, "Making the 1891 Census in British Columbia" (1998).² Yet, we still lack detailed understanding of the actual workings of census taking, which can inform interpretations of nominal census returns and critical analyses of the infrastructural work involved in making population data.

Enumerator schedules, instructions, correspondence, and census reports provide important contextual data, and they have been the focus of the previously noted studies. CCRI's cross-country newspaper database complements these sources by providing data about other mediating actors and interveners and, especially, of popular understandings of census taking. How was census taking promoted and represented, and what criticisms, concerns, and interests did it inspire? Newspaper accounts provide us with insights into these questions as well as about some of the more mundane aspects of the practice such as how door-to-door canvassing was conducted and interpreted. They also reveal much about the immense social and technical infrastructure and relations between census officials, politicians, citizens, newspapermen, paper forms, and machines that were part of and mediated the taking of the 1911 census.³

It is the establishment of an elaborate infrastructure that Bruce Curtis has argued marked the 1871 enumeration as the first "scientific" and modern census of Canada.⁴ That census marked the transformation from a loosely disciplined set of practices into a centrally organized practice of census taking that translated accounts of social relations into authoritative categories and statistical forms. Centrally, Curtis examines how the deputy minister of the Department of Agriculture and Statistics at the time, Joseph-Charles Taché (from 1864 to 1888) governed census taking "at a distance" through the deployment of inscription devices that translated observations into the two-dimensional surface of texts. Inscription devices are "immutable mobiles" in that they can transport social relations to

distant sites where they can be worked up into administrative resources and come back again unchanged.⁵ For Curtis, such devices consisted, principally, of the manuscript form with its categories that established classes of equivalence through which individuals could pass from their singularity to a generality.

But, census taking also involved many other people and things. In 1911, it included the often difficult negotiations of enumerators and commissioners with census subjects; the accoutrements that mediated the enumerators' translation of relations into categories: portfolios, instructions, paper forms, and pens; the mediations of hundreds of clerks, checkers, and counters, along with their adding machines, who translated manuscript forms into population subtotals and totals; and then the dozens of clerks, along with their card-punch machines and tabulators, who compiled tables on everything from origins and immigration to language spoken and wage earnings. It was through such relays and interactions between various technological, political, and cultural actors that the census population was known.⁶ Thus, while centralized practices such as conventions of observing, reporting, and recording sought to "discipline" census taking, as Curtis has argued, they relied on the mobilization of dispersed and, sometimes, unruly technical and human mediators. How so can, in part, be elucidated from newspaper accounts, which in the early part of the twentieth century were especially attentive to census practices. In addition to interviews with enumerators, census commissioners, politicians, and citizens, verbatim transcripts of parliamentary debates were also published.⁷ In short, these accounts provide additional insights into one of the hidden histories of Canada: the workings and mediations of a dispersed and heterogeneous administrative infrastructure of people and things that made it possible to know a population.

For 1911, there are some 3,538 records in the CCRI ContextData database. Rather than attempting a comprehensive survey and analysis, I focus on English-language articles

principally published in Ontario newspapers that pertain to those records coded under the theme of “holding of the census”: preparation and organization, the gathering of data, and reactions to and analyses of the results.⁸ I supplement this with additional metadata, principally from the published reports and instructions to enumerators. Based on these sources, I identify two themes that encapsulate some of the people and things that made up the infrastructure of 1911 census taking: enumerators and devices. A third theme that I take up concerns other counting practices that also sought to know populations. The ContextData database includes newspaper accounts of some of these practices at the time of the 1911 enumeration. Municipal and provincial governments and religious, penal, charitable, and social service organizations all engaged in counting practices similar to census enumerations in regards to their classification systems and categories.⁹ These reveal both a capacity and an investment in similar techniques and the new statistical thinking that was often invented and implemented outside of the state by different makers of population such as doctors and clergymen.¹⁰ In other words, such practices were part and parcel of the infrastructure that formed and informed census-taking practices. In this last section – “Other Counting Practices” – I focus on a specific counting practice in the nineteenth and early twentieth centuries, that of the enumeration of populations living in city “slums.”

Enumerators: Appointments and Responsibilities

Archibald Blue, a quiet little gentleman, who sits in an office down on Slater Street, is the field marshal of a huge army that started out this morning to tag every living mother’s son and daughter in Canada. If there is one job more than another that required careful and thorough organization and system it is the taking of the census [and

its] chief controller must [be a] statistician extraordinary ... Such a task is enough to drive any ordinary man to drink. But the one man in a thousand grows fat and happy upon it. Archibald Blue just revels in figures. He dreams about mountains of them and he finds these mountains as rich and interesting as the hills into which he was wont to dig for precious metals when he was director of mines for Ontario ... When Archibald Blue is not twisting the figures of the census around like you and I might play a game of solitaire, he is analyzing the character of Mr. Pecksniff or Mr. Richard Swiveller or sympathizing with Little Nell ... By the way, Archibald Blue is an old newspaper man and has many good stories of Hon. George Brown, his chief. (*Ottawa Free Press*)¹¹

Archibald Blue, the chief census commissioner was head of the newly established permanent Census and Statistics Office (CSO) under the minister of agriculture. Established by legislation in 1905, the office was introduced to strengthen the Department of Agriculture's statistical mandate and enhance the knowledge and experience of staff responsible for census taking.¹² For all previous enumerations, the census was planned and conducted by staff assembled anew each time only to be disassembled just when competence had been assured. Although major personalities may have worked on several enumerations (Taché, for example), the lack of a continuous administrative infrastructure was a weakness that R.H. Coats, Blue's successor, would later come to highlight in his judgment on the history of Canadian statistics.¹³ So, while the 1871 enumeration under Taché was the first "scientific" enumeration, in that it put in place a national administrative infrastructure, its discontinuity

significantly undermined the building of institutional capacity. According to Coats, that capacity included intercensal activities focused more generally on regular statistical activities.

Blue, who had previously held the position of special census commissioner, was confirmed as its chief officer, at a salary of \$4,000 per annum. Prior to taking up this position, he had been a veteran journalist and latterly an Ontario bureaucrat for some sixteen years, first as assistant commissioner of agriculture and secretary of the Bureau of Industries, and then as head of the Bureau of Mines.¹⁴

Blue was described as “ruddy of face, white of hair, low and gentle of voice.”¹⁵ He was one of three permanent officers of the Census and Statistics Office assigned to meet with a team of 264 commissioners throughout the Dominion.¹⁶ Approximately 9,703 enumerators completed the count of people between 1 June 1911 and the end of February 1912, with the majority of their returns (approximately 97%) submitted by the end of August 1911 (compared with 82% in 1901).

In the few weeks prior to census day, newspapers reported the names of all of the commissioners and, in smaller towns and cities, the names of all of the enumerators. For example, the *Owen Sound Sun* listed the names of all fifty-seven enumerators who were to cover the district of North Grey,¹⁷ and *La Presse* published the names and photos of all thirteen commissioners responsible for Montreal.¹⁸ Many newspapers also reproduced the instructions to enumerators and expectations about their conduct, in particular, that they should be courteous and expeditious and approach their work judiciously and with civility. In particular, newspapers highlighted that enumerators and commissioners had sworn a binding oath that they would undertake their duties as discharged, make no false declaration, and keep secret the information gathered.

The responsibilities of enumerators and how they were to conduct the count were also thoroughly documented, often by reproducing excerpts from their instructions: “The enumerator should start at one corner of the block and proceed around and through it, entering every house or building in regular order, and collecting all the information called for in the schedules, before proceeding to the next block or square, and should so continue until the whole of his sub-district is finished.”¹⁹

Enumerators conducted their canvass through interviews with the heads of families, households, and institutions (fathers, mothers, landlords, superintendents, keepers, administrators, wardens). Male heads of households were typically expected to be the qualified person to furnish the information. However, other individuals in a household could do so, and in apartment buildings, the janitor could be consulted or a neighbour.²⁰ Interviews were often conducted on the front doorstep, as many newspaper accounts confirm, but also possibly inside the dwelling. A series of humorous cartoon images of the interviewing practices were published in *La Presse* during the month of June.²¹ (See Figure 3.1).

Most newspapers also reported on the consequences of refusing or wilfully supplying false information: “The penalty for refusing to answer questions asked by a census enumerator is a fine of \$10 to \$100; false answers \$5 to \$50; deception \$10 to \$100. For the benefit of ladies over sixteen years of age we may point out that the enumerators are sworn to secrecy under a \$200 penalty.”²²

Census taking was not an easy occupation. Two of London’s forty census takers quit, apparently because the “interrogations were too much for them.”²³ But, rather than attempting to hire replacements, the census commissioner, Mr Scatherd, announced that the work would be allotted to those of the remaining thirty-eight enumerators who first finished their sections. With perhaps some exaggeration, an account was provided of a South Toronto

enumerator who, after studying the instructions and attending a training meeting, complained of feeling unwell and lapsed into an epileptic fit.²⁴



Figure 3.1 Cartoon of a census enumerator in the home, from *La Presse*, 24 June 1911, 6. Heading: “LES JOYEUSES DE RECENSEMENT NO. 7

Notably, all enumerators were male, and little or no commentary attended to their occupations or social status. But, as one study of 1891 census enumerators in Ontario has shown, they were representative of the male population and typically “established men” who had “local knowledge and respectability.”²⁵ The one characteristic of enumerators that received some attention in 1911 was that of their political connections. On 15 May 1911, the Conservative opposition tabled a motion in the House of Commons that stated, “In the selection and appointment of public officers the government is exercising a public trust and should be guided by consideration of the character and capacity of the person whom it is

proposed to appoint. That the delegation of such a public trust to a local party committee or organizer is a public scandal and deserves the censure of this house.”²⁶

At issue was the claim that the appointment of census officials had been partisan, and several instances of party political influence were cited. H.E. Perry, the Liberal organizer for Manitoba, had been appointed enumerator and was found to have sent out letters signed with ‘Yours in the good cause, H.E. Perry.’ Opposition members from Ontario presented evidence to show that the enumerators in London and the surrounding districts were being appointed by a committee of three Liberals headed by G.M. Reid, who had been charged with conspiracy in a 1905 London by-election. Minister of Agriculture Fisher (who was responsible for the enumeration) refused to divulge the basis on which specific recommendations and appointments were made. This only fuelled speculation that Liberal appointments were being made in an effort to attain political advantage in the outcome.

Such claims are not novel. Census taking has often been seen to be influenced by politics, especially since the results determine the distribution of parliamentary seats and resources. Patrick Dunae, in his account of the taking of the 1891 census in British Columbia, found that nearly all census takers were political appointees, to some extent.²⁷ Bruce Curtis has also argued that the religious and political interests of Deputy Minister of the Department of Agriculture and Statistics Taché had influenced the shaping and making of the 1871 census.²⁸ Although, on the one hand, it was deemed the first “scientific” enumeration, Curtis’s account suggests that it was also a feudal science guided by Taché’s political strategy to construct and reinforce a Franco-Catholic nationality. His argument is that the science of census taking implemented through centralized and standardized administrative practices and statistical procedures did not completely banish local and political influences. Of course, the politics of census taking extend to the mediations and agencies of many actors

beyond those of the central authority, of which the example of enumerator appointments is but one.

Yet, just as Taché was part of an administrative infrastructure, so, too, were the enumerators who were connected to a standardized set of practices consisting of tools and devices, which in 1911 were unique in that new machinery was introduced for tabulating the results.

Devices: Paper, Pens, Portfolios, and Machines

The first batch of census schedules, weighing about eight tons, has just reached the Census Office. Something like 30 tons of returns are expected.²⁹

The troubles and trials of the enumerator are over; but this is by no means the end of it. Up in the census bureau in the Canadian building sits Mr. Archibald Blue, the man who thinks in figures. Around him are his cohorts, a staff of 31 regulars and 153 temporary clerks who will after three years' hard experience be second only to Mr.

Archibald Blue in juggling with figures.³⁰

Census taking required a lot of paper. "Each enumerator was armed with his bundles of eight different forms, measuring 12 by 8 inches," reported one newspaper.³¹ He was "furnished with a large canvas-covered folder, tied with the usual government red tape, and he might easily be taken for a large picture man, art calendar agent or book canvasser."³² The bundles

of forms consisted of some thirteen schedules and 549 questions, out of which two schedules and forty-three questions pertained to population.³³

Enumerators were instructed “to make all entries on the schedules in ink of good quality,” and so a pen was clearly a requirement. The “Canadian Census Recording Pen,” a fountain pen designed by Waterman’s in 1911, was advertised in the *Toronto Daily Star*, and perhaps was utilized by enumerators³⁴ (see Figure 3.2). The description that it was “especially adapted for rapid recording and manifold work” suggests that it was functionally intended to be.



Figure 3.2. Advertisement for “Canadian Census Recording Pen.” *Source: Toronto Daily Star*, 20 May 1911, 22.

Given the mountains of paper that had to be counted and tabulated, ensuring clarity and legibility was not a trivial issue. The instructions to enumerators emphasized the importance of this both for the present and future uses of census returns: “Every name, word, figure or

mark should be clear and legible. If a schedule cannot be read, or if the entries are made with a poor quality of ink, or in pencil, or if they are blurred or blotted, the work of the enumerator may be wholly wasted. The Census is intended to be a permanent record, and its schedules will be stored in the Archives of the Dominion.”³⁵

Unlike previous enumerations, each census book was sent to Ottawa as soon as it was completed, and only once the figures were verified and accepted would cheques be issued to the enumerators. When returns were received in Ottawa, a team of workers first registered them and then passed them on to a team of checkers who would go over the lists looking for errors and omissions and do revisions whenever possible.³⁶ If necessary, the returns would be sent back to local commissioners for correction and follow-up with the relevant enumerator. As the manuscript returns indicate, many corrections and changes were made, either by enumerators and local commissioners and/or by Ottawa checkers. One example of the latter is the numerous crossed-out entries of “Canadian” in the column pertaining to the question on “racial or tribal origins.”³⁷ The category, which was not recognized or accepted at the time, was changed, in many instances, with handwriting different from the enumerator’s and tended to indicate an ethnicity likely to correspond to a surname (e.g., O’Riordan as Irish).

The holding back of cheques until such time as verification had been completed was met with some consternation as enumerators often had to wait months before receiving their pay.³⁸ Enumerators were, thus, advised to get their books in early to avoid the inevitable volume that would eventually overwhelm the checking staff, thus delaying remuneration:

“First come, first served,” will be the manner in which the Government will treat the enumerators this time. Unlike previous occasions, it has been ordered that each census book shall be sent to

Ottawa as soon as completed, and directly the figures have been verified and accepted by the Government, checks will be forwarded to the enumerators. Thus, those whose books go in early will be rushed through by the large checking staff which has been engaged, while those which do not arrive till the end will have to take their turn with the large number which will have accumulated, and in consequence late enumerators will not be paid for a month or more.³⁹

Once a return passed the check, it then went through two independent tabulation processes conducted by “hand work”; one team of clerks tabulated the returns by “ordinary counting,” while another used one of eighteen adding machines.⁴⁰ Finally, a third team compiled the totals on individual returns and grouped them into villages, towns, cities, parishes, townships, provinces, and electoral districts. While enumerators were all men, accounts of the census tabulation process indicate that the teams of clerks consisted mostly of women, a gendered division of labour that continued through to the mid-twentieth century. These compilations served the basis of the first release, on 18 October 1911, and the first volume of results on 30 April 1912 (population totals for provinces, districts, and subdistricts, including sex, conjugal condition, and number of dwellings).⁴¹ The returns were then “carefully stacked and preserved for the future historian,” as Mr Blue remarked. *Le Temps* published an image (unfortunately of very poor quality) showing a long corridor lined with floor-to-ceiling shelves containing piles of paper returns called the “census archives.”⁴²

When Archibald Blue released the first volume of results, he noted that after the handwork was completed all other tables – of ages, origins, nativities, immigration, religions, occupations, literacy, language spoken, school attendance, wage earnings, etc. – were to be compiled mechanically using a punch-card system and electrical machines.⁴³ This process

involved a temporary staff of 160 clerks working with seventy card-punching machines and twenty tabulators.⁴⁴ The 1911 census was the first enumeration processed by this method and machinery, modelled on that which had been successfully used in the 1910 census of the United States. The U.S. machine was designed by the U.S. Census Bureau to replace the first counting machine invented by Herman Hollerith in the late 1880s.⁴⁵ Hollerith, a former U.S. Census Bureau employee, invented a machine that used specially encoded punch cards, where each card contained an individual's data: "The cards were fed into the counting machine, where the punched holes allowed metal pins to complete an electric circuit. When a circuit was completed, the dial for the corresponding trait would go up."⁴⁶ The U.S. Census Office used the machine for the 1890 census. In 1896, Hollerith founded the Tabulating Machine Company, which eventually became the International Business Machines (IBM) Corporation. However, for the 1900 enumeration, Hollerith raised his rental prices to such a level that the U.S. Census Bureau decided to build its own machines, led by an employee, James Legrand Powers. The new machine had an automatic feeder and card sorter, and it was considered an improvement over Hollerith's. It was first used for tabulating the 1910 census.

Given the successful use of the machine in tabulating the U.S. census, the Canadian government bought the use of the patent and commissioned the manufacture of its own fleet of machines.⁴⁷ To supervise this undertaking, the Canadian bureau temporarily borrowed Charles W. Spicer of the U.S. Census Bureau to oversee the manufacture of the machines in Toronto. Joseph P. Cleat was awarded the contract and, along with his mechanical engineer R.A. Scragg, set out to complete the machines by the middle of September 1911.

The seventy card-punching machines were used to condense the large manuscript forms into perforations on seven-by-three-inch census cards. The cards were then fed into the tabulator by an automatic feeder at the rate of two hundred per minute:

When the machine is adjusted for the required information the cards are fed over a cylinder, and through the openings a magnetic contact is made which operates a series of chutes of the same thickness as the cards and stops and starts so that the card enters the proper chute.

When the card is in its proper chute a series of fingers on an endless chain carries it from the chutes along two wires, which are about seven inches apart, to the proper compartment. When the card drops from the ends of the wires into the compartment the count is made by an electrical device. There are fourteen different compartments, and by running the cards through fourteen times all this information may be tabulated. By making other adjustments the information indicated by forty-two perforations may be tabulated.⁴⁸

Two full-time specialists were employed to oversee the mechanical tabulating, A.E. Thornton and F. Bélisle, who continued working for the Dominion Bureau of Statistics for many years.⁴⁹ After all of these stages and relays, and even after final printed tables were checked and signed off by both the chief census commissioner and the minister of agriculture, and then printed and distributed in the published volumes, A.J. Pelletier, an employee of the DBS, yet again made corrections.⁵⁰

In sum, it was through such relays and interactions between various technological and political actors that the census was taken in 1911. It was an enumeration that introduced new procedures and devices that were intended to improve the administrative infrastructure such as the establishment of a continuous office and workforce and the introduction of punch-card technology and mechanical tabulators. But, such advancements occurred alongside a capacity and investment in similar techniques and counting practices conducted by municipal and

provincial governments, and religious, penal, charitable, and social service organizations.

Such practices can be considered part and parcel of the infrastructure that formed and informed census taking in Canada. One example from 1911 concerns population counts of an area of Toronto known as “The Ward.”

Other Counting Practices: St John’s Ward, Toronto

“There is scarcely a one-family house in the district,” said a man connected with the returns. “Every building is a hive of roomers, and the tenor of the whole district has changed during the last decade.”⁵¹

These are some of the reflections of an enumerator concerning his canvassing of an area of Toronto, St John’s Ward, which was later called “The Ward.” By the mid-eighteenth century, The Ward, located in Toronto Centre, became the settlement area for different waves of immigrants.⁵² Owing to its tenements and crowded conditions, the area was referred to as Toronto’s version of the slums of the Lower East Side of New York. These references were, in part, a response to the rapid urban growth experienced in the late nineteenth and early twentieth centuries and the concomitant rise of urban poverty that was centred on the “slum.”⁵³ By the time of the 1911 enumeration, The Ward was predominantly occupied by Eastern European Jews and was the centre of Jewish shops, cafes, theatres, and synagogues and the location of numerous tailoring factories such as those of the T. Eaton Company. Because of the addition of numerous factories and the clearance of several acres of the Ward for the building of the new Toronto General Hospital, there was some speculation that The Ward would show a decline in population. However, early results reported an increase⁵⁴ with

estimates running from 50,000 to 60,000, up from the 43,000 reported in 1901.⁵⁵ This increase fuelled media discussions and accounts of the concentration and density of people and housing in the relatively small area of The Ward. Enumerators, for example, reported “dire conditions of congestion, finding as many as six families in six-roomed houses and, in others, a sufficient number of men to fill houses twice the size.”⁵⁶

But, the census was only one of many studies and surveys of The Ward, which was subject to many other counting practices and population studies. During the taking of the 1911 census, one such study was released by Dr Charles Hastings, medical officer of health for Toronto, which was variously summarized in newspaper articles and editorials: “The lodging-house evil. The foreign housing problem. Dark rooms. Back-to-back houses. Basement and cellar dwellings. Insanitary privy pits. Lack of drainage. Inadequate water supply. Exorbitant rents. Overcrowding of houses, rooms and lots. These are the conditions found by the medical health department in Toronto's slums.”⁵⁷

Hastings was a leader in Canadian public health reform as well as a key figure in Canadian urban reform. Between 1911 and 1913, his department published several reports on slum conditions in The Ward. Mariana Valverde argues that while Hastings sought to move away from the nineteenth-century moral discourses of social investigation, moralization continued to be an important undercurrent in his seemingly scientific approach. It was an approach that sought to move away from problematizing the population to that of the housing conditions, as evidenced in his 1911 study, which defined Toronto slums as follows:

“Originally the term was applied to low, boggy back streets inhabited by a poor, criminal population. The term as used here, however, applies for the most part to poor, unsanitary housing, overcrowded, insufficiently lighted, badly ventilated, with unsanitary and in many cases, filthy yards.”⁵⁸ However, as Valverde further argues, this shift did not result in shedding moralization but, instead, connected moral deviance to the physical environment

and imbued slum conditions with the power to produce deviant people.⁵⁹ Thus, the slum was not only an economic and public health problem but also a moral one. This was evident in newspaper reports that took up the “problem” of inner city “slums” and the “foreign population”:

Toronto should make short work of her slums. They are a disgrace to the city and to Canadian civilization. Dr Hasting’s report on housing in the congested area south of College and Carlton streets shows that over 26,000 people are living under conditions that are as bad for them morally as they are for the body ... The slum is a cancer that grows in the modern civic organism with terrible rapidity.⁶⁰

No city can be in any real sense beautiful or good in which many thousands of people live without the most vitally important requirements for health and morality.⁶¹

The Ward was, thus, subject to other counting practices that sought to enumerate and know the sanitary condition of its housing: baths, drains, water taps, windows, privy pits, water closets, rooms per dwelling, bathhouses, and so on. But, it was a moralization that was bound up with numbers – of bodies per square mile, per dwelling, and per room: “Over 26,000 people ... Of 4,696 houses inspected, no less than 2,137 of these houses had two families living in them. There were 198 one-roomed ‘dwellings’ occupied by families aggregating 472 persons.”⁶²

Moralization was also extended to include its racial composition as both the reports by Hastings and the census enumeration emphasized the ethnicity of The Ward’s inhabitants:

“The case of immigrants more or less recently arrived is always the more difficult. Born in some obscure province of Russia, Poland, or Italy, the newly-made Canadian really has very little idea of what is required of him. He knows that he was born ‘In the Old Country,’ but just when or where it is difficult to say. He knows that he came to Canada ‘in a big ship,’ but that was years ago, too.”⁶³ In this light, moral and governmental concern was also extended to the problems encountered when enumerating the foreigner. Not only were housing densities and physical conditions at issue, but also the capacity of “slum dwellers” to participate and comprehend enumeration (as noted in the opening narrative to this chapter). An almost full-page article published in the *Toronto Daily Star* (and republished in several dailies across the country) focused on reports from enumerators about their difficulties in gaining the cooperation of the inhabitants of The Ward: “There is the most amazing ignorance of the things that everybody is supposed to know. They are a timid people, these brown-eyed, simple folk of ‘The Ward,’ and too great insistence, a quick word, or a display of impatience drives them into silence and secretiveness.”⁶⁴

In this regard, census taking introduced another problem of the slum: that of knowing or, as Valverde would say, “shedding light” on the population. But, it was a shedding of light that involved bringing this population into the same categories and knowledge as the rest of the city and country, a process of statistical normalization that established household and dwelling size and population density standards. To do so, the census required people with the capacities to respond and recognize themselves as members and parts of the population through the various classifications and categories circulated via the manuscript form.⁶⁵ Like other counting practices, census taking was a moral enterprise – its categories and standards normalized social relations, rendering problematic whether subjects could understand the process or answer questions regarding how their household size and density compared with a statistical norm.

Census classifications and categories as well as methods such as door-to-door canvassing were, thus, constituted alongside and in relation to many other counting practices and forms of expertise involved in constructing and knowing populations. Observing, interviewing, conducting surveys, recording information, and the like were all techniques developed earlier and, most significantly, in the nineteenth century through which cities and territories were administratively ordered, categorized, and known. From house-to-house visits and the detailed recordings of the character and characteristics of inhabitants, census-taking practices were connected to forms of expertise developed by historical urban social researchers such as Sidney and Beatrice Webb, Charles Booth and Seebhohm Rowntree. As such, these practices were not disconnected but part of a general will to know populations, and it is in this regard that they can be considered part of the capacity and infrastructure of census taking.

Conclusion

I have argued that one of Canada's hidden histories is the working of the administrative infrastructure that made it possible to know a population. The standardization and normalization of categories, enumeration, training, and tabulation, as well as investments in an ongoing administration involved many relations between people and things. In 1911, such developments could be said to have extended the central government's authority and domination through "numbers." However, the expansion of the network of personnel and technologies, of hands and tabulators, served also to increase the number of mediators in the process such that the making of population knowledge was not simply improved or made more accurate. Rather, it was a process of social and statistical normalization that was mediated at every stage, by every hand and machine, and which extended across time in

space even into the work of the Canadian Century Research Infrastructure in the twenty-first century.

Notes

¹ For a detailed description of the methodology and database, see C. Bellavance, F. Normand, and E. Ruppert, “Census in Context: Documenting and Understanding the Making of 20th Century Canadian Censuses,” *Historical Methods* 40, no. 2 (2007): 92–103. The database can be accessed at http://132.209.6.178/fmi/iwp/cgi?-db=IRCS_CONTEXTDATA_WEB&-loadframes.

² B. Curtis, *The Politics of Population: State Formation, Statistics, and the Census of Canada, 1840–1875* (Toronto: University of Toronto Press, 2001); P. Dunae, “Making the 1891 Census in British Columbia,” *Histoire Social/Social History* 31, no. 62 (1998): 223–39. See Dunae for a summary of a few other studies (at n4).

³ For discussion and analysis of social and technical arrangements and their mediation of the taking of the 1911 census of the “far north,” see E. Ruppert, “Becoming Peoples: ‘Counting Heads in Northern Wilds,’” *Journal of Cultural Economy* 2, nos 1–2 (2009): 11–31.

⁴ B. Curtis, *Politics of Population*.

⁵ Curtis takes up this understanding of inscription devices from B. Latour, “Visualization and Cognition: Thinking with Eyes and Hands,” *Knowledge and Society: Studies in the Sociology of Science Past and Present* 6, no. 1 (1986): pp. 1-40.

⁶ Yet, even these were to be revised some 100 years later when the CCRI team incorporated Pelletier’s corrections in their digitized versions of the 1911 published tables; see n46 below.

⁷ Some of these debates were also compiled in the *Ontario Newspaper Hansard*, a collection of articles from the *Globe* and the *Daily Mail and Empire* that were clipped by archivists in

the 1960s, photographed, and turned into microfilm. Typically, articles were originally published on the day after the Legislature met and printed on the opening or editorial pages of either paper.

⁸ For an account of the criteria for the sample selection of Ontario newspapers, see H. Garrett, "Working Paper: Sampling Ontario Newspapers 1911–1951: Criteria, Coverage, Comparisons" (York University: Canadian Century Research Infrastructure 2004). Available at <http://www.ccri.uottawa.ca/CCRI/Images/Heather.Garret.pdf>.

⁹ See, e.g., the various practices documented in J. Caplan and J. Torpey, Introduction, in J. Caplan and J. Torpey (eds.), *Documenting Individual Identity: The Development of State Practices in the Modern World* (Princeton, NJ: Princeton University Press, 2001).

¹⁰ P. Joyce, *Rule of Freedom: Liberalism and the Modern City* (London: Verso 2003). See also the discussion in E. Ruppert. "Producing Population," *CRESC Working Paper Series*, Paper No. 37 (Milton Keynes: CRESC 2007).

¹¹ "The Census Man," *Evening Record*, 6 June 1911, 4.

¹² D. Worton, *The Dominion Bureau of Statistics: A History of Canada's Central Statistical Agency* (Montreal and Kingston: McGill-Queen's University Press 1998), 38. Blue died in office in 1914, and the 1911 census turned out to be his professional "swan song."

¹³ R.H. Coats, "Beginnings in Canadian Statistics" (1946), as cited in Worton, *Dominion Bureau of Statistics*, 44. The same issues were noted in relation to U.S. census taking, which also involved little intercensal statistical activity.

¹⁴ "Taking the Census," *Daily British Whig*, 1 June, 4; Worton, *Dominion Bureau of Statistics*, 21.

¹⁵ "Taking the Census," *The Empire* (Morden, MB), 22 June 1911, 7.

¹⁶ Canada, Department of Trade and Commerce, Census and Statistics Office, *Fifth Census of Canada, 1911*, vol. I, *Areas and Population by Provinces, Districts and Sub-districts*

(Ottawa: C.H. Parmalee, 1912). During the enumeration, newspapers reported 220 commissioners and 9,322 enumerators: e.g., “Taking the Census,” *Daily British Whig*, 11 May 1911, 7; “Preparing to Take the Census,” *Daily News*, 9 May 1911, 3; “Criticisms of Census Taking,” *Ottawa Citizen*, 20 July 1911, 2.

¹⁷ “Census Takers Start Thursday,” *Owen Sound Sun*, 30 May 1911, 1, 4.

¹⁸ “Les Commissaires du Recensement,” *La Presse*, 3 June 1911, 31.

¹⁹ “Census Men Start at Work To-morrow,” *Toronto Daily Star*, 31 May 1911, 6.

²⁰ “Did the Census-Taker Miss You?” *London Free Press*, 11 July 1911, 1. Also see Department of Agriculture and Statistics, *Fifth Census of Canada, 1911: Instructions to Officers, Commissioners and Enumerators* (Ottawa: Government Printing Bureau, 1911).

²¹ Newspaper articles often contained photographs or artist renditions. However, because of the poor quality of historical newspaper images, only a small number of illustrative examples can be reproduced.

²² “News about Town,” *St Mary’s Journal*, 18 May 1911, 5.

²³ “The Strain Is Too Great for These Enumerators,” *London Free Press*, 7 June 1911, 1.

²⁴ “The Lot of the Census Taker in The Ward Is Anything but an Easy One,” *Toronto Daily Star*, 1 June 1911, 1, 3.

²⁵ The CCRI microdata include the names of enumerators, so their socio-economic status and possibly political affiliations could be investigated. For an analysis of the socio-economic profiles of 1891 enumerators for Ontario, see G. Kennedy and K. Inwood, “A New Prosopography: The Enumerators of the 1891 Census in Ontario,” *Historical Methods* 45, no. 2 (2012): 65–77. They conclude that enumerators “were broadly representative of the rest of 1891 Ontario, especially the large class of independent farmers and tradesmen in the countryside and the growing middle class in the towns and cities” (75).

²⁶ “Warm Debate on Enumerators,” *Ottawa Citizen*, 16 May 1911, 10.

²⁷ Dunae, "Making the 1891 Census in British Columbia."

²⁸ Curtis, *Politics of Population*.

²⁹ "Heavy Census Returns," *Toronto Daily Star*, 22 May 1911, 3.

³⁰ "Work of Census Only Just Begun," *Nelson Daily News*, 26 July 1911, 2.

³¹ "Counting Noses in the Capital," *Ottawa Citizen*, 1 June 1911, 1, 12.

³² "Census Takers Make Progress," *Daily News* (Port Arthur), 20 June 1911, 5. Many newspapers listed enumerators for every district and many included pictures of them. A photo in *La Presse* (17 June 1911, 11) illustrated a group of enumerators, each holding a large canvas folder, for the Montreal district of Maissonneuve along with the census commissioner for the district Albert Gringas.

³³ Worton, *Dominion Bureau of Statistics*, 42.

³⁴ "Canadian Census Recording Pen," *Toronto Daily Star*, 20 May 1911, 22.

³⁵ *Fifth Census of Canada, 1911: Instructions to Officers, Commissioners and Enumerators*.

³⁶ This description of the handwork is summarized from the *Nelson Daily News* article: "Work of Census Only Just Begun." An image published in *La Presse* (23 Dec. 1911, 5) illustrated young women seated at rows of long tables poring over and checking manuscript forms.

³⁷ As early as 1871, individuals were claiming their ancestral origins as "Canadian," and this continued throughout the twentieth century. It was not until 1986 that "Canadian" was accepted as a category. See the following for a full discussion: E. Ruppert, "Producing Population." Curtis (in *Politics of Population*) also notes that many corrections and changes were made to the 1871 returns by Ottawa compilers to ensure that the answers conformed to census standards. See Adam Green, chapter 4 in this volume, on this issue in the 1911 census.

³⁸ "Cheques Are Issued," *Mail and Empire*, 5 Aug. 1911, 28.

³⁹ "Congestion Grows in St John's Ward," *Globe*, 21 June 1911, 8.

⁴⁰ An image in *La Presse* (23 Dec. 1911, 5) illustrated two woman clerks reading manuscript forms and typing entries into large adding machines described as “sophisticated.”

⁴¹ Canada, Department of Trade and Commerce, Census and Statistics Office, *Census of Canada, 1911*, vol. I, *Areas and Population by Provinces, Districts and Sub-districts* (Ottawa: C.H. Parmalee, 1912) ; “Results Announced by New Minister of Agriculture,” *Medicine Hat News*, 19 Oct. 1911, 8.

⁴² “Le travail du recensement,” *Le Temps*, 16 May 1911, 8.

⁴³ For an example of a punch-card machine used for the 1910 U.S. census see http://www.census.gov/history/www/innovations/technology/tabulation_and_processing.html

⁴⁴ “Tabulating the Census Returns,” *Evening Guide* (Port Hope), 28 June 1911, 4.

⁴⁵ The description of the U.S.-designed tabulation machine in this paragraph is summarized from “Tabulation and Processing,” *US Census Bureau History*. Available at http://www.census.gov/history/www/innovations/technology/tabulation_and_processing.html

⁴⁶ For an example of a Hollerith electric tabulator used in the 1901 U.S. census see http://www.census.gov/history/www/innovations/technology/tabulation_and_processing.html

⁴⁷ The account is summarized from several newspaper reports, most notably, in the *Cobalt Daily Nugget*, 25 July 1911, 2; *Evening Guide* (Port Hope), 28 June 1911, 2, 4; *Toronto Daily Star*, 10 June 1911, 7; *Globe*, 18 Aug. 1911, 9.

⁴⁸ “To Compile Census by Unique Device,” *Globe*, 19 Aug. 1911, 9.

⁴⁹ Worton, *Dominion Bureau of Statistics*, 42n12.

⁵⁰ For tables 1 and 2 of vol. I, the CCRI were given access to manuscript correction notes of A.J. Pelletier, and included these in the digitized published tables, which the CCRI has produced for 1911–1951. For example, the CCRI note changes to many of the totals for

Battleford, Saskatchewan, as indicated in Pelletier's annotated correction volume. See <http://bit.ly/CCRItables>.

⁵¹ "Congestion Grows in St John's Ward," *Globe*, 21 June 1911, 8.

⁵² The following narrative is summarized from M. Kluckner, *Toronto the Way It Was* (Toronto: Whitecap Books 1988), 135–42. The Ward was located roughly from Bathurst Street (west) to Sherbourne Street (east) and from College/Carlton Street (north) to Queen Street (south).

⁵³ As discussed and argued in M. Valverde, *The Age of Light, Soap, and Water: Moral Reform in English Canada, 1885–1925* (Toronto: University of Toronto Press, 2008).

⁵⁴ "Congestion Grows in St John's Ward," 8.

⁵⁵ "Toronto Census," *Ottawa Citizen*, 22 June 1911, 5.

⁵⁶ Ibid.

⁵⁷ "Toronto's Slums the Real Thing," *Globe*, 5 July 1911, 9.

⁵⁸ *Report of the Medical Health Officer on Slum Conditions in Toronto* (Toronto, 1911, 3), as cited in M. Valverde, *Age of Light, Soap, and Water*, 133.

⁵⁹ A similar set of moralizing arguments about slum conditions in Montreal's inner city was published in the *Montreal Daily Star*, 15 July 1911, 7.

⁶⁰ "Get Rid of the Slums," *Globe*, 6 July 1911, 6.

⁶¹ "Toronto the Good," *Daily British Whig*, 30 Sept. 1911, 3.

⁶² "Get Rid of the Slums."

⁶³ "The Lot of the Census Taker in The Ward Is Anything but an Easy One," , 1, 3.

⁶⁴ Ibid.

⁶⁵ See E. Ruppert. "Producing Population," for a discussion of the production of census subjects.