NOTE DE RECHERCHE / RESEARCH NOTE

Finding the Work Force in the 1901 Census of Canada

PETER BASKERVILLE
ERIC SAGER*

The authors assess the strengths and weaknesses of data relating to the work force recorded in the columns of the 1901 Canadian Census Population Schedules. A comparison of the Canadian data to the information found in British and American censuses of the same era suggests that Canadian census-takers made a more focused effort to uncover information about the work force than did their counterparts. Although the investigation lends some support to the perspective that censuses are problematic documents constructed in the interests of a male-dominated political and economic elite, it also suggests that the working class shared in the construction of the data. Carefully used, the 1901 census allows historians to recover voices rarely heard in their own time.

Les auteurs évaluent les forces et faiblesses des données sur la population active présentées dans les tableaux du recensement de la population du Canada de 1901. Une comparaison des données canadiennes de recensement aux données britanniques et américaines de la même époque semble indiquer que les recenseurs canadiens procédaient à une collecte plus attentive de renseignements sur la population active. Même si l'enquête corrobore dans une certaine mesure le point de vue selon lequel les recensements sont des exercices problématiques réunies dans l'intérêt d'une élite politique et économique à prédominance masculine, elle suggère aussi que la classe ouvrière a contribué à l'élaboration des données. Utilisés avec précaution, les résultats du recensement de 1901 permettent aux historiens de laisser la parole à des voix rarement entendues de leur temps.

IN ORDER TO SAY anything about unemployment in late nineteenth- and early twentieth-century Canada,[1] one must define work force, since the

* Peter Baskerville and Eric Sager are professors of history at the University of Victoria. The authors would like to thank the Social Sciences and Humanities Research Council for essential financial support, as well as the anonymous readers for their helpful suggestions.

1 See Peter Baskerville and Eric Sager, "The First National Unemployment Survey: Unemployment and the Canadian Census of 1891", *Labour/Le Travail*, vol. 23 (Spring 1989), pp. 171–178; Eric Sager and Peter Baskerville, "Locating the Unemployed in Urban British Columbia: Evidence from the 1891 Census", *Journal of Canadian Studies*, vol. 25, no. 3 (Fall 1990), pp. 38–54.

unemployed are a subset of some larger population deemed to be working or to be eligible for work. Extracting the work force from the 1901 census also serves a second purpose — to shed light on some of the strengths and weaknesses of that census, which has only recently been released for general public use. Much of the revisionist literature argues that censuses are problematic documents that tend to construct social reality in the interests of a male-dominated political and economic elite.[2] Our investigation of the 1901 census lends some support to this perspective; yet to view this document as merely an example of an imposed construction of reality would be to miss a large part of the process by which it was created. Put simply, the work force was constructed by the document — and also helped to construct it.[3]

We begin with a definition of our sample. For each of seven cities — Victoria, Vancouver, New Westminster, Winnipeg, Hamilton, Montreal, and Halifax — we took a 10-per-cent sample of households and stratified the sample by household size (one to three persons, four to five, six to nine, and ten or more). This sample yielded 41,181 individuals for the seven cities. The sample allows for analysis of cities in different regions and, to a certain extent, at different stages of industrialization.[4] Our next step is to analyze a sample of small towns and rural areas.

The current definition of labour force used by Statistics Canada divides those aged 15 and over into three categories, the first two of which constitute the labour force: the employed (those who did any work at all excluding housework, maintenance around the home, or volunteer work); the unemployed (those without work who had actively looked for work in the past four weeks, as well as those who had been on layoff and expected to

2 See, for instance, Edward Higgs, "Women, Occupations and Work in the Nineteenth Century Censuses", *History Workshop Journal*, vol. 23 (1987), p. 76; Nancy Folbre, "The Unproductive Housewife: Her Evolution in 19th Century Economic Thought", *Signs: Journal of Women in Culture and Society*, vol. 16 (1991), pp. 468–483; Nancy Folbre and Marjorie Abel, "Women's Work and Women's Households: Gender Bias in the U.S. Census", *Social Research*, vol. 56 (1989), pp. 545–570; Margo A. Conk, "Accuracy, Efficiency and Bias: The Interpretation of Women's Work in the U.S. Census of Occupations, 1890–1940", *Historical Methods*, vol. 14, no. 2 (Spring 1981), pp. 65–72.

3 For a parallel argument in the context of the history of crime, see Douglas Hay, "War, Dearth and Theft in the Eighteenth Century: The Record of the English Courts", *Past and Present*, no. 95 (May 1982), especially p. 158.

4 We have checked our sample in various ways. Numbers in the sample for each city are as follows (in brackets is the city sample as a percentage of the known total population of that city in 1901): New Westminster, 602 (9.3%); Victoria, 1,919 (9.2%); Vancouver, 2,652 (10.1%); Winnipeg, 4,194 (9.9%); Hamilton, 5,838 (11.1%); Montreal, 22,097 (8.3%); Halifax, 3,812 (9.3%). For Hamilton, we did a manual count of months worked for all people having information in columns 23 to 25 of the census. Our sample data closely approximate the data from the count for the total population. People working for three months or less were 1.6% of all people with some months reported; in our sample, 1.7% worked for three months or less. Those working for from four to six months were 5.2% of the total (6.5% in our sample); those working for from seven to nine months were 13.5% (11.7% in our sample); those working for from 10 to 11 months were 12.9% (13.1% in our sample); those working for 12 months were 66.8% (66.7% in our sample).

return to their jobs and those who had definite arrangements to start new jobs in four weeks or less); and those not in the labour force (''those persons who, in the week prior to enumeration, were unwilling or unable to offer or supply their labour services under conditions existing in the labour market'').[5]

Historians' definitions of work force in the late nineteenth century have pertained to whether or not an individual had an occupation. The absence of a stated occupation in a census is often taken to mean that an adult person was unemployed, except in the case of housewives.[6] Following census definitions, historians have generally excluded from the work force housewives and persons under the age of 15. This kind of definition makes sense for the period before 1891, when Canadian censuses gave no information other than ''occupation'' from which the historian might make inferences about labour force participation. In 1891, however, the census provided two other pieces of information related to labour force activity: it asked whether individuals were unemployed in the week prior to enumeration and whether they were ''employers'' or ''wage earners'' (from this one may deduce whether individuals were neither or both).

The Canadian government was not unique in its attempt to define work force characteristics more precisely. Indeed, by the late nineteenth century census-taking was very much an international affair.[7] Canada's census administrators paid close attention to the procedures implemented and the questions asked by their British and American counterparts. The queries concerning employee and employer were adopted from similar questions posed for the first time in 1891 by British census officials.[8] The unemploy-

5 Statistics Canada, *Labour Force Survey Economic Regions, 1986 Census: Labour Analytic Report No. 5* (Ottawa: Supply and Services, 1989), pp. xxviii, xxxi, xxxvi.

6 See Michael Katz, M. Doucet, and M. Stern, *The Social Organization of Early Industrial Capitalism* (Cambridge: Harvard University Press, 1982), p. 69.

7 For useful discussions of the British and American censuses in this period, see: Richard Lawton, ed., *The Census and Social Structure: An Interpretive Guide to Nineteenth Century Censuses for England and Wales* (London: 1978); *Guide to Census Reports: Great Britain 1801–1966* (Edinburgh: Office of Population Censuses and Surveys, General Register Office, 1978); Edward Higgs, ''The Struggle for the Occupational Census, 1841–1911'' in R. MacLeod, ed., *Government and Expertise* (Cambridge: Cambridge University Press, 1988), pp. 73–86; Simon R. S. Szreter, ''The Genesis of the Registrar-General's Social Classification of Occupations'', *The British Journal of Sociology*, vol. 35, no. 4 (1984), pp. 522–546; Catherine Hakim, ''Census Reports as Documentary Evidence: The Census Commentaries, 1801–1951'', *Sociological Review*, vol. 28, no. 3 (1980), pp. 551–580; Margo Conk, ''Labor Statistics in the American and English Census: Making Some Invidious Comparisons'' *Journal of Social History*, vol. 10 (1982–1983), pp. 83–102; Margo Conk, ''Occupational Classification in the United States Census: 1870–1940'', *Journal of Interdisciplinary History*, vol. 9, no. 1 (1978), pp. 111–130; Steven Ruggles and Russell R. Menard, ''A Public Use Sample of the 1880 U.S. Census of Population'', *Historical Methods*, vol. 23, no. 3 (1990), pp. 104–115; Steven Ruggles, ''Comparability of the Public Use Files of the U.S. Census of Population, 1880–1980'', *Social Science History*, vol. 15, no. 1 (1991), pp. 123–159.

8 Higgs, ''The Struggle for the Occupational Census'', pp. 82–83; *Guide to Census Reports*, p. 51.

ment question more closely paralleled American initiatives. The instructions to Canadian enumerators stated that the unemployment question "indicates the condition of the labour market" — suggesting that census designers were groping towards a flexible definition of labour force in which market participation was the key. This emphasis on market participation closely resembled the concept of gainful employment used by American census takers in this period.[9]

It would be a mistake, however, to conclude that Canadian census officials followed, with little thought, British and American precedents. In 1891, for example, Britain discontinued asking questions concerning employment. Nor in 1891 and 1901 did the United States ask workers to define themselves as employees or employers.[10] Clearly the Canadian census was more than a simple mirror image of the American and British versions. It also reflected local conditions and responded to local pressure.

Although the published censuses certainly reflected the agendas of those in power, the victims of the developing capitalist labour markets also had their say. In England labour unrest and the pressure from labour groups led to the creation of a Bureau of Labour Statistics and to the establishment of a Department of Labour. In Canada similar groups exerted similar pressure. Strike activity in the 1880s more than doubled that of the 1870s, and three-quarters of all strikes took place in urban centres. Testimony given to the Canadian Royal Commission on the Relations of Capital and Labour in 1887 reveals a strong concern about "steady" or "constant" employment and about "idle" or "broken" time. The Dominion Trades and Labor Congress underlined that concern when, in 1890, it forwarded to the federal government a long list of possible questions for the upcoming census. A question dealing with the unemployed headed the list.[11] As a result of this pressure the government included the question about unemployment. Although the state never tabulated answers to the question and thereby exercised its control over public discourse on the issue, working people did respond to questions about their employment status, and historians may use those answers.[12]

9 *The Instructions to Officers Employed in the Taking of the Census of Canada*, Department of Agriculture, 1891, p. 18; Jon R. Moen, "From Gainful Employment to Labor Force: Definitions and a New Estimate of Work Rates of American Males, 1860 to 1980", *Historical Methods*, vol. 21, no. 4 (Fall 1988), p. 149.

10 For the British census, see *Guide to Census Reports*, pp. 38–39; for the American census, see Conk, "Occupational Classification", p. 113.

11 Higgs, "The Struggle for the Occupational Census", p. 82; Bryan D. Palmer, "Labour Protest and Organization in Nineteenth Century Canada, 1820–1890", *Labour/Le Travail*, vol. 20 (Fall 1987), pp. 69, 73; *Proceedings of the Sixth Session of the Trades and Labor Congress of the Dominion of Canada*, 2–5 (September 1980), p. 20; National Archives of Canada, RG2, v. 5190, file 2569, G. W. Dower to J. A. Chapleau, November 10, 1890.

12 For a more detailed discussion, see Baskerville and Sager, "The First National Unemployment Survey".

The Trades and Labor Congress also lobbied for the creation of a labour bureau to gather and publish statistics about labour markets, wages, immigration, unemployment, and related matters. The government responded in 1890 with a bill to provide for the collection of labour statistics by a branch within the Department of Agriculture, which was responsible for overseeing census enumeration. In introducing the bill, C. A. Chapleau linked the labour statistics branch to the census — "the preparation of the census will coincide with the organisation of this bureau" — and implied that many of the labour statistics would come from the census: "It has often been stated as one of the grievances of the labouring classes that the different statistics obtained by governments and published by them were not such as would put their claims, their wants, their just demands before the public and before Parliament."[13]

It is clear from the information provided in Table 1 that Canadian census takers went far beyond their British and American counterparts in their interest in the 1901 work force. The Americans asked two questions relating to characteristics and activity of the work force, the British asked five, and the Canadians asked 14! At this stage in our research we have not been able to uncover the precise reason for such relatively intense concern, but we can comment on the general context. The connection between statistics and industrial relations certainly continued throughout the 1890s. At the end of the decade the Trades and Labor Congress was again demanding that the federal government publish labour statistics on a regular basis.[14] The Conciliation Act of 1900 and the census of 1901 occurred in the context of renewed state concern over labour-management relations and labour markets.[15] Strike activity continued to increase throughout the 1890s. More revealing, however, is the fact that just over half of all strikes in that decade occurred between 1898 and 1900. Several of these were large strikes in the mining sector but manufacturing accounted for 69 per cent of all strikes and included 47 per cent of all striking workers.[16] The Conciliation Act created both a conciliation process and a Department of Labour "to gather statistical information and other information affecting labour". There was an explicit connection between statistical information and voluntary conciliation as a means of settling disputes between capital and labour. William Mulock, who moved the Conciliation Bill, informed the House of Commons that "with more information, all parties to such controversies will be better able to

13 J. A. Chapleau, Canadian House of Commons, *Debates*, 1890, v. 2, pp. 4843, 4398.

14 *Proceedings of the Annual Convention of the Trades and Labor Congress, 1899*, p. 9, reporting on a meeting of the executive committee with Sir Wilfrid Laurier. See also *Proceedings of the Annual Convention of the Trades and Labor Congress, 1898*, for a motion on statistics.

15 See, for instance, Jeremy Webber, "Compelling Compromise: Canada Chooses Conciliation over Arbitration, 1900–1907", *Labour/Le Travail*, vol. 28 (Fall 1991), pp. 15–57.

16 Douglas Cruikshank and Greg Kealey, "Canadian Strike Statistics, 1891–1950", *Labour/Le Travail*, vol. 20 (Fall 1987), calculated from Table B, p. 134.

understand each other's views and conditions, and more amenable to conciliatory arguments and more ready to adopt peaceful arguments for the settlement of controversies.''[17]

The principle of conciliation, predicated on the collection and analysis of relevant social and economic data, was part of a larger context, that of the emergence of trained experts from the growing social science disciplines in Canada and elsewhere in the late nineteenth and early twentieth centuries. Throughout this period, as recent works by Barry Ferguson, Ken Cruikshank, and Marlene Shore have shown, these experts moved between academic and government positions, influenced much legislation concerning labour issues, chaired fact-finding and arbitration commissions, and in general helped set the context for (and perhaps influenced even more directly) the questions posed of workers by the census enumerators in 1901.[18]

The census was more than a count of population: it was a means by which the state codified and sanctioned certain values, including gender and status divisions of labour. A closer look at the evolution of the census in its definition of work force confirms these points. The census of 1901 was, in part, an attempt to count both labour and industrial establishments. The correct means of doing so prompted a lengthy debate in Parliament.[19] The growing concern to expand available information on labour and industry resulted in a census in which the respondent was able to define more precisely her or his niche in the work force. The state was still engaged in a social and cultural construction of ''work'', but in this process respondents had a wider range of choices than ever before. The state structured and controlled the information for its own purposes; within this context individuals had a wider opportunity to define their own work force activity.

The 14 questions break down into four categories (see Table 1). The first category is the general one: ''profession, occupation, trade, or means of living of each person'', which we refer to simply as occupation. The second relates to employment status and is an elaboration on the simple employer/ wage-earner dichotomy used in 1891. In 1901 there were five possibilities: ''living on own means'', ''employer'', ''employee'', ''working on own account'', or

17 William Mulock, Canadian House of Commons *Debates*, 1901, v. 3, p. 8399.

18 Barry Ferguson, *Remaking Liberalism: The Intellectual Legacy of Adam Shortt, O. D. Skelton, W. C. Clark and W. A. Mackintosh, 1890–1925* (Montreal and Kingston: McGill-Queen's University Press, 1993); Ken Cruikshank, ''Policy Entrepreneurs and Regulatory Innovation: Simon James McLean, William Lyon Mackenzie King and Business Government Relations in the Age of Laurier'' in Peter Baskerville, ed., *Canadian Papers in Business History*, vol. 2 (Victoria: Public History Group, 1993), pp. 103–124; Ken Cruikshank, *Close Ties: Railways, Government and the Board of Railway Commissioners, 1851–1933* (Montreal and Kingston: McGill-Queen's University Press, 1991); Marlene Shore, *The Science of Social Redemption: McGill, the Chicago School and the Origins of Social Research in Canada* (Toronto: University of Toronto Press, 1987).

19 Canadian House of Commons, *Debates*, 1901, v. 3, pp. 3870–3908.

Table 1 Work Force Characteristics: Canadian, British, and American Censuses,[a] 1880–1901

	1880–81	1890–91	1900–01
Occupation	A,B,C	A,B,C	A,B,C
Unemployed	A,B	A,C	A[b]
Employer	—[c]	B,C	B,C
Wage earner	—[c]	B,C	B,C
Working on own account	—	B[d]	B,C
Retired	—	—	C
Living on own means	—	—	C
Working at home	—	—	B,C
Working in factory	—	—	C
Working in both factory and home	—	—	C
Months employed at trade in factory	—	—	C
Months employed at trade in home	—	—	C
Months employed in other occupation than trade in factory or home	—	—	C
Earnings from occupation or trade	—	—	C
Extra earnings from other than chief occupation or trade	—	—	C

a) A = American, B = British, C = Canadian
b) The Canadian census did ask questions concerning months worked and from those one can estimate unemployment.
c) Great Britain did provide for the collection of employer and wage-earner information before 1891, but the question was only asked of the employer and the placement of the question on the back of the form led most respondents to ignore it. The 1891 census was the first time the question was put to the general populace.
d) If the Canadian respondent had an occupation, was not unemployed, and left the employer and wage-earner questions blank, then one can infer that the respondent was self-employed or working on own account.

Sources: See text.

"retired". Instructions to the enumerators did not say that these choices were mutually exclusive; thus it was possible for individuals to answer positively in more than one column. Therefore, a person could be both employer and employee (a ship master, for instance); it was possible to be both employer and working on one's own account (our sample yielded 243 of these).

The third category of information relates to employment duration. The 1901 census promised unemployment data of a different sort than that provided in 1891. The census asked about type of employment and duration of employment within each type. Once again census officials were constructing work into specific categories, but these allowed a more flexible reflection of working experience than ever before. The fourth category pertains to earnings from employment. The two possibilities were earnings from one's main and secondary occupations. Within this category is the implied recognition of occupational pluralism.

The collection of information in these categories was, of course, structured in terms desired by the state. The four categories were embedded in a conceptual frame which restricted and channelled the collection process. The historian must recognize the tension between the state's intent and respondents' agency. It is clear that the state had a specific agenda. For instance, in the enumerators' schedule and instructions, a single heading appeared above all columns relating to employment status and duration, reading simply: "Wage Earners".[20] This term, it will be recalled, was used in direct contrast to employers in 1891. Moreover, in the 1901 instructions to enumerators, earnings were described as relating to people who were "employed in any industry or other occupation". People "employed" were said to be those "paid salary, wages or other money allowances". Salary and wages referred specifically to money received "which one person employed by another" obtained "for his service". In 1901 employers, the self-employed or even partially self-employed, and those of independent means were distinguished in significant ways from wage earners: the former were encouraged to ignore questions about earnings and months worked; the latter were not allowed to do so.

Within the general preoccupation with wage earners, there is evidence of a new concern for types of wage earner. In 1881 the enumerators received only one-third of a page of instruction on how to classify an occupation. This resulted in a great deal of imprecision in the reporting of occupations. In 1891, accordingly, the enumerators received about six pages of instruction concerning the correct way to provide a "fully descriptive [occupational] designation". Most revealing was the distinction made between a "maker" and an operative factory hand. Enumerators were reminded:

> Thirty years ago, a shoemaker made a whole shoe, and a tailor made a whole suit of clothes; at the present time, owing to the sub-division of labour, few workmen begin and complete any article of manufacture. In every branch of work the specialist has succeeded the general worker, and statistics of occupation at the present day must possess the most specific detail or they will not satisfy the demands of the inquirer.

Thus "cotton mill operative" or "factory hand" would not suffice: "the actual occupation or kind of labour done, as cotton mill spinner, is what is needed."[21] These instructions reflected an attempt on the part of census officials to define and classify the emerging urban, industrial class. General

20 See Appendix A for the headings as they appeared on the enumerators' schedules for the Population Census. For enumerators' instructions, see *Fourth Census of Canada, 1901; Instructions to Officers*, Ottawa, 1901, p. 16.

21 *The Instructions of Officers Employed in the Taking of the Second Census of Canada, 1881*, Department of Agriculture, Ottawa, 1881, p. 30; *Instructions to Officers*, 1891, pp. 14–15.

labels had sufficed for an agricultural and artisanal population; the industrial revolution, however, necessitated more descriptive precision.

In 1901 census officials attempted to step even farther away from the old artisanal classification scheme. In 1891 the census had attempted to distinguish between two "classes", employer and employee. In 1901 enumerators were told to be especially sensitive to the respondent's "rank in principal calling or occupation". Three ranks were possible: an independent business manager, presumably an owner; a member of the business office, the first explicit recognition by census officials of the emerging clerical sector (an awareness which predates by 10 years similar attention from American census officials); and those who "stand in some working relation" to the above, such as journeymen, shopkeepers, and factory operatives.[22]

Consistent with the attempt by census officials to reflect accurately the changing world of work, of all those in the third "rank", factory operative received pride of place. The focus on the "factory" sector was emphasized in the enumerators' instructions; even those questions related to work "at the trade in the home" were "to refer particularly to employees in factory work". Moreover, three columns in the census itself related to the activity of employees working in a factory or home and only one to the activity of all other wage earners, even though the latter outnumbered the former.[23]

The unprecedented prominence given to factory work in this document emerged from two general pressures. The first related to the growing incidence of strikes and labour unrest both within the urban industrial class and in other sectors dominated by wage workers such as miners. In an agrarian country, where most politicians were elected from rural areas, urbanization and industrialization were still relatively new phenomena to be understood and controlled. Thus those wage earners who, whether at home or in a factory, were "employees in factory work", the emerging urban working class, were perhaps the most threatening because they were the least known. The collection of information on Canada's urban workers also served a second purpose: the desire to advertise Canada's coming of age. Industrial expositions had long been favoured sites for such proclamations. Viewed from this perspective, the census, too, could make a contribution: a properly devised census could yield an "inventory" of industrial progress.[24] "The more of that kind of work we do, consolidating our Dominion into one country and giving information of a national character, the more we are

22 *Instructions to Officers*, 1891, p. 18; *Instructions to Officers*, 1901, p. 16.

23 *Instructions to Officers*, 1901, p. 16; also headings in Appendix A.

24 Such an objective was central to the operation of Victorian science in Canada. "The basis of science as it was practised in Canada during the Victorian age", Suzanne Zeller has demonstrated, "was inventory, systematic surveys of the land and its resources with the ultimate goal of assessing its material potential." Suzanne Zeller, *Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation* (Toronto: University of Toronto Press, 1987), p. 269.

doing to make Canada a nation in the eyes of the world.''[25] Apart from its uses in other areas, the census had a direct role in economic development, according to the Minister of Agriculture. The census would ''furnish information to people who want to invest money or to settle in this country''. ''To those who engaged in the active life of this country'' the census would give essential information ''as to openings and the possibilities of development in their lines of business''.[26] The minister insisted that the Canadian census had to be different from that in the United Kingdom and had to include much more information on ''industrial, agricultural, fishery and forest production''. The economic inventory had to be both accurate and comprehensive, and some parliamentarians feared that the omission of small workshops (those employing fewer than five people) from the 1901 industrial schedules would lead to a disastrous underestimation of economic growth between 1891 and 1901. In his replies the Minister of Agriculture insisted that ''industrial establishment'' meant ''factory'' and justified a definition which rested upon the number of workers concentrated in one place rather than amounts of machinery or output.[27] A few people doing ''ordinary handicraft work'' were very different from a genuine ''manufacturing establishment'', and it was clearly the latter which needed to be understood and promoted.

In the end, however, conceptual clarity eluded census officials. Although it was not stated explicitly in the 1901 instructions, enumerators were presumably to know and understand the 1891 distinction between ''makers'' and factory operatives and to classify accordingly when filling in the columns pertaining to months employed. Perhaps enumerators were, indeed, referred to the 1891 instructions, but we uncovered no evidence pointing in that direction. The omission, nevertheless, is curious. Less curious, but more revealing of the transitional nature of the work world, is the language used by census officials in 1901. In the enumerators' instructions and on the census schedules all those who earned their living in factory work were called ''tradesmen'', a term traditionally used to describe artisanal workers. Census officials failed to devise a language appropriate for the task at hand. By appropriating a central descriptor from the artisanal world and using it to specify activity in the emerging industrial sphere and, indeed, to distinguish that emerging activity from other ''occupations'', they illustrated the very real difficulties experienced by people who tried to delineate the transformation of one work culture into another. It is not surprising that they fell short of the goal. The attempt nevertheless underlines the depth of their concern. The preoccupation with wage earners was itself a response to class relations and conflict. The Canadian working class helped to make the questions which they now answered.

25 Sydney Fisher in House of Commons *Debates*, February 7, 1905, p. 645.
26 *Ibid.*, p. 637.
27 House of Commons *Debates*, April 26, 1901, p. 3873.

Does this mean, then, that the respondents' voices are forever lost in a web of ambiguity? We think not. After all, ambiguity is the historian's stock-in-trade. What source is not shot through with conceptual tension? An awareness of the conceptual problems underlying the work force component of the 1901 census is an essential first step to utilizing that document in historical research. Here, then, we attempt, at a general level, to situate responses in the context of the expressed goals of the census takers, tempered by our awareness of the ambivalence built into their explication of those goals.

Given all of this, what can we learn about the work force in 1901? To what extent is the reporting of an occupation a useful guide to participation in the work force? We know that, for those with stated occupations (17,339), all but a mere 684 had some information under one or more of the columns on employment status, months worked, and earnings.

There is a very high correlation between those having an occupation and those defining their employment status more specifically (our second general category — see Table 2). Indeed, 94.3 per cent of the 17,339 with stated occupations provided further information about their employment status. Slightly more than two of every five who did not provide further information were in our "professional" category, and one in every five professionals did not provide information on employment status.[28] By contrast, while 18.5 per cent of all who failed to provide further information were in the "industrial, production and transport" categories, they represented only a minuscule 2.4 per cent of all people whose occupations fell within those general categories. This finding is consistent with what one might expect, given the enumerators' instructions and the structure of the schedule: those in an industrial or transportation occupation were much more likely to have their employment status reported. This is consistent with the emphasis put on collecting information on wage earners.

An obvious question about under-reporting relates to gender. Were men more likely than women to provide information on employment status? In fact the difference, while it exists, is slight: 7.8 per cent of women and 5 per cent of men with occupations gave no information on employment status. The under-reporting of women occurred in the occupation category, not after it. In some ways, this complex census can tell us things about women that no previous census did. For example, of the 484 people who had no stated occupation, yet did provide information about employment status, 71 per cent were women. Of those women, 92 per cent defined themselves as "living on own means". The general point is this: the census, by asking so many questions about labour force participation, allowed

28 We aggregate occupations into nine general categories: professional, managerial/government, clerical, sales, service, primary (mines, forestry, fisheries, agriculture), industrial production, transportation, and general labour.

Table 2 Employment Status of Persons with Stated Occupations

	Number	% of total
1. Total with occupations	17,339	100.0%
2. Retired	(274)[a]	
3. Living on own means	341	2.0%
4. Employer	575	3.3%
5. Employee	13,484	77.8%
6. Working on own account	1,611	9.3%
7. Employers and 3 and/or 6 above	289	1.7%
8. Employees and 3 and/or 6 above	53	0.3%
9. No information	986	5.7%

a) Enumerators were directed to enter "r" in column 17 (occupation) where people were retired. Some of the 274 have stated occupations; others do not. We do not include the retired in the employment status percentages.
Source: 1901 Census of Canada, seven-city sample (see text).

Table 3 Number of Persons with Occupations who Reported Months Worked in Three Workplace Categories[a]

	No. of persons
Total with occupations	17,339
"Months employed at trade in factory"	4,725
"Months employed at trade in home"	1,385
"Months employed in other occupation than trade in factory or home"	6,642
Missing	4,649

a) There were 63 people who reported months worked in more than one category.
Source: 1901 Census of Canada, seven-city sample (see text).

people to say something about their status even when they had no occupation. Within a structured and genderized document, there is nevertheless greater opportunity for self-definition than previous censuses allowed.

In contrast to information on employment status, a much higher proportion of information is missing in relation to months worked. Fully 26.8 per cent of individuals with stated occupations did not provide information on duration of work during the year (see Table 3). Once again, the professional category accounts for a disproportionate number, almost one in four, of these cases. Just over half of those in professional occupations reported no months worked. This finding is consistent with the directions in the enumerators' instructions which made clear that months were to be reported for wage earners only, and few with professional occupations were wage earners. Somewhat more difficult to explain, however, is the significant number of individuals in the industrial and transport categories (17.8 per cent) who gave no information on months worked. These categories accounted for 28.5 per cent of all those with months unreported. Regrouping those with no months

reported into wage earners and employers or self-employed goes far towards explaining this apparent anomaly. Thirty per cent of those with occupations in the industrial and transport categories who provided no information on months worked identified themselves as employers, self-employed, or both. A further 7 per cent did not provide any information on employment status, and another 10 per cent were retired. Just under half, therefore, were not wage earners. Of all those missing information pertaining to duration of work, 40 per cent were employers or self-employed (as opposed to wage earners) although such people only represented 17.5 per cent of the work force. A further 17 per cent provided no information in the employment status category. Of those 772 individuals who did not provide work duration or employment status, close to half were students over 18 years of age, ministers, nuns, or hospital patients. In other words, the document contains less under-reporting than one might think. There is an explanation for most of those cases in which information on months worked is missing, other than mere laziness on the part of the enumerator or a failure in communication between enumerator and respondent.[29]

29 A further question is raised about the three census columns relating to "months employed": months at trade in factory, months at trade in home, and months in other occupation than trade in factory or home. How did enumerators decide in which column to put a respondent? Were they able to distinguish in any consistent way between a factory, home, and other kind of worker? At a general level we believe that there is a fair degree of consistency in the enumerators' decisions. Seventy-five per cent of those in the factory column appear in our aggregated occupational categories of industrial worker and general labourer. Fifty per cent of those classified as working at home appear in the same two aggregated occupational categories. Most of the individual-at-home cases in these occupational categories are at least plausible "fits": tradeworkers like plumbers, carpenters, dressmakers, and shoemakers, for example. A further 20% of workers in the at-home column appear in our aggregated occupational category of service. Most of the occupations in that category were ones that could be conducted out of one's home: 56% were servants or washer persons. A discernable level of ambivalence is manifest, however, at this point. It is hard to understand how servants and washer people could be seen to be engaged as "employees in factory work". Many enumerators would seem to have ignored their instructions to "refer particularly to employees in factory work" who worked at home. Instead they listed all people who worked at home, whether in factory work or other occupations, in that column. At a general level, the third column, which, as indicated in Table 3, contains 52% of all cases with a known occupation, seems to have been filled in with reasonable consistency. Only 20% of cases, for example, fall within an industrial occupational category whereas 57% are found in our professional, clerical, sales, and service categories. That 75% of all general labourers (11% of all workers in the other than factory or home column) were listed in this column is also consistent with what one would expect. It must, however, be emphasized that when one looks at the distribution of many individual occupations it is often not immediately apparent why a particular individual's occupation was slotted in one or other of the three census columns. Six master mariners, for example, are found in the factory column, as are nine teachers. Rather incredibly, 12 "factory hands" are found in the third column, trade other than occupation at home or in factory. We are unable to put a percentage or plus and minus to our level of confidence in these data simply because of the variations found at the individual level. Nonetheless, we believe that the data are generally valuable. After all, two-thirds of all master mariners did appear in the third column, as did 70% of teachers (a further 22% worked at home), and a full 91% of factory hands appeared in the factory column.

Table 4 Number of Persons with Occupations who Report Earnings[a]

	No. of persons
Occupations	17,339
"Earnings from occupation or trade"	14,194
"Extra earnings from other than chief occupation or trade"	279
Missing	3,145

a) Note that 14,194 and 3,145 sume to 17,339. Note also that 168 people with no stated occupation did report earnings; these individuals are not included in this table.
Source: 1901 Census of Canada, seven-city sample (see text).

Table 5
Census Estimates of Average Wages in the Manufacturing Sector, 1901

	Manufacturing census schedule		Personal census schedule	
	Number	Average income	Number	Average income
Male	241,976	$365	226,001	$403
Female	66,371	$180	49,662	$193
Total	308,347	$324	275,663	$365

Source: "Wage Earners by Occupation", *Census and Statistics, Bulletin 1*, Ottawa, 1907, p. xxviii.

Of the 17,339 who reported an occupation, 81.9 per cent reported their earnings in column 26 (see Table 4). The reason for missing information in the earnings column is identical to that for finding no information in the "months worked" columns: those who did not report earnings tended to be people of least immediate concern to enumerators — employers, people working on their own account, or people "living on own means". Only 7 per cent of those with stated occupations who defined themselves as employees failed to state their earnings. By contrast, 52 per cent of non-employees (employers and those working on their own account) did not report earnings.

How valid are the data on earnings reported in the personal census schedules?[30] Tests for such validity are difficult to devise. In 1907 the federal government published a summary of earnings by occupation drawn from the 1901 personal census returns. In the introduction to that bulletin, comparisons were made to income figures generated from the 1901 manufacturing

30 Some use had been made of these data by D. A. Muise, "The Industrial Context of Inequality: Female Participation in Nova Scotia's Paid Labour Force, 1871–1921", *Acadiensis*, vol. 20, no. 2 (Spring 1991), pp. 3–31. See also "Wage-Earners by Occupations", *Census and Statistics Bulletin 1*, Ottawa, 1907.

schedule. On the basis of such comparison the author concluded that "the individual records of wage-earnings taken by enumerators were not only short as regards the number of employees, but also that employees of the better classes were recorded probably in undue proportion"[31] (see Table 5).

At first glance these conclusions seem persuasive. Personal censuses, after all, are notorious for their under-reporting, especially of economically and socially disadvantaged individuals. Moreover the manufacturing schedules deliberately ignored most workplaces which employed fewer than five people. It may well be that those employed in the "factory system of manufacture" received lower wages than those traditional craft-workers employed in hand trades in small shops.

There are, however, other realities ignored in the above analysis that may account for the disparity between employee numbers and average earnings reported in the manufacturing schedule and those reported in the personal schedule. In fact the disjuncture may be more apparent than real. The data generated for the manufacturing schedule differed not only in terms of unit of analysis, but also in the manner of collection. The enumerators who compiled the manufacturing schedules contacted only the owners of workshops which employed five or more individuals. Individual workers were not contacted. Owners provided information on total annual wages and on the total number of people who worked for them over the course of the year.[32] The compilers of the Postal Census of Manufacturers in 1916 recognized one problem with this procedure. After careful analysis they concluded that asking employers to state the total number of employees during the year "tended to increase somewhat the number of employees recorded, as manufacturers ... tended to make their returns for the period of full activity". Asking for number of employees during each month of the year corrected this bias, which the Postal Census compilers estimated at about 12 per cent.[33]

One must, of course, set against this overestimate provided by the manufacturers the fact that employees in most shops with fewer than five workers were not included in the manufacturing schedules and were, at least potentially, caught in the personal schedule. In 1891 those employed in small workshops represented 26.4 per cent of all manufacturing employees. In 1916 they represented under 7 per cent.[34] We can provide no exact estimate of the 1901 ratio, but 20 per cent employed in workshops with fewer than five workers would seem reasonable.

Before concluding that the personal schedules did indeed undercount

31 "Wage-Earners by Occupation", *Census and Statistics Bulletin 1*, p. xxviii.

32 *Fourth Census of Canada, 1901, Instructions to Officers*, Ottawa, January 1901, pp. 26–28.

33 *Postal Census of Manufacturers of Canada, 1916*, Ottawa 1917, p. xi.

34 *Fourth Census of Canada 1901, Manufactures*, Ottawa, 1905, p. lxv; *Postal Census of Manufacturers of Canada*, p. ix.

employees in the manufacturing sector, we must consider one further significant point. Employers provided an estimate of workers who laboured for them, but in 1901 occupational pluralism was common. Turnover rates in factories were high. Workers sought and found other jobs when laid off from their primary trade. Our analysis of responses on work duration indicates that many workers with a clearly seasonal occupation reported working a full 12 months in the year. We infer, therefore, that they found work supplementary to their primary occupation. Very likely, then, the manufacturing schedule returns suffer from some degree of double-counting.

This point also has particular relevance to the apparent discrepancy in average income rates as reported in the two schedules. The manufacturing schedule reported average rates for employment in a particular factory. Yet, given high turnover rates and occupational pluralism, those averages would tend to understate the real income of many workers. The personal schedule, which reported total income information provided by the individual worker, is not subject to the same problem and is, therefore, a more satisfactory measurement of an employee's yearly earnings.

It is true, however, that workers in small handicraft establishments tended, on average, to earn more than workers who toiled in shops of five or more employees. In our seven-city sample employees in the manufacturing sector who worked in factories averaged $379 per year and those manufacturing employees who did not averaged $461 per year. This suggests that the erosion of the traditional artisan did come at a high cost to such workers and their families. It also suggests that comparing personal and manufacturing census wage rates is akin to comparing apples and oranges. A better comparison is that between the income of only factory workers and the income figures provided in the manufacturing schedules, broken down by city (see Table 6).

Our census sample yields a higher proportion of women than do the data calculated from the manufacturing returns and thus contributes towards lowering the overall average income.[35] Yet the data in Table 6 surely confirm the substance of our argument thus far. The difference in wage rates between the two categories of men can be comfortably attributed to the problem inherent in the manufacturing enumeration. Total earnings were underestimated even as total wage earners were overestimated.

There is then no compelling reason to suspect significant undercounting of manufacturing employees in the personal relative to the manufacturing census. There is good reason to believe that the income information is more satisfactory in the former than in the latter. Moreover, the manufacturing schedule data are available only in aggregated form, most often expressed as averages. They are, in other words, in a form not suitable for providing

35 This probably reflects the movement of women to cities in search of work; thus the provincial average would understate the city averages.

Table 6 Average Annual Income from Manufacturing Census and Five-City Sample, 1901

	Manufacturing schedule[a]		Five-city census sample[b]	
	Number	Average income	Number	Average income
Male	39,533	$403	3,172	$429
Female	10,662	$212	1,061	$224
Total	50,195	$362	4,233	$378

a) City figures for male and female were calculated from the Manufacturing Census in the following way. It was assumed that the proportion of male and female workers in the city was the same as that published in the returns for that city's province. Wage income for total workers was only available in the published returns for five of the seven cities in our sample: Victoria, Winnipeg, Hamilton, Montreal, and Halifax.

b) These figures represent all employees who said they worked in factories and were not in our professional and managerial occupation categories.

Source: 1901 Census of Canada, vol. 3, pp. 160–161, 168–171, 184–187, 232–237; five-city sample (see text).

answers to the questions many would wish to ask. The disaggregated information provided in the nominal-level census returns is in a form capable of meeting more diverse analytical demands. Viewed from a wider perspective it is certainly true that the personal census enumerators missed many more workers in the lower than in the higher income cohorts. Nonetheless, the personal schedules appear to provide the best available work and income data for the period under review. In some significant cases, that census provides more than a static portrait of a moment frozen in time. Unlike those in the 1891 census, many questions relating to work and wages required answers covering a year's experience. No single or combination of historical sources can provide an exact replica of past behaviour. Nevertheless we feel confident in stating that, when carefully used, the 1901 nominal-level census returns, along with other qualitative and routinely generated sources, can provide more satisfactory answers to questions concerning the employment, income, and living standards of urban Canadians at the turn of the twentieth century than any other source known to us.

Where does this leave us in defining the work force? The complexity of this census allows for more than one definition, depending on one's purposes. One could define the work force merely as those with stated occupations (the work force would then be 42 per cent of the population of these cities taken together). On the other hand, the labour force could consist of all those with occupations plus those without stated occupations who did have an employment status (other than retired). If one's purpose is to analyze earnings or unemployment, then these definitions of work force are of limited usefulness, since earnings and employment duration were deliberately under-reported for employers and the self-employed. The analysis of

unemployment must focus on wage earners, and this was intentional. The assumption that unemployment or under-employment was a characteristic of wage earners was structured into the census itself.

This structuring does not negate the value of the source. In the seven cities in our sample, only 79 per cent of those who reported information on months worked said that they had worked for a full 12 months in the year. There were 1,415 individuals who said that they had worked for less than nine months. These were people who told enumerators — and future historians — that they were chronically under-employed. Their answers and their identities were ignored in the published census volumes. They may not constitute all of those who suffered chronic unemployment, but today we have no hesitation about making such a category and putting in it those people who said that they should be there. A sensitive use of the census will allow us to recover voices rarely heard in their own time.[36]

36 We accept, of course, that many voices will remain mute, given underenumeration. See Richard H. Steckel, "The Quality of Census Data for Historical Inquiry: A Research Agenda", *Social Science History*, vol. 15, no. 4 (Winter 1991).

APPENDIX A: Headings on the Population Schedule of the 1901 Canadian Census

Personal Description								Citizenship, Nationality and Religion					
Name of each person in family or household on 31st March, 1901	Sex	Colour	Relationship to head of family or household	Single married widowed or divorced	Month and date of birth	Year of birth	Age at last birthday	Country or place of birth (If in Canada specify Province or Territory, and add "r" or "u" for rural or urban, as the case may be)	Year of Immigration to Canada	Year of naturalization	Racial or Tribal origin	Nationality	Religion

Principal Profession or Trade					Wage Earner						Education and Language of each person five years of age and over					
Profession, occupation, trade or means of living of each person. (If person has retired from profession or trade, add "r" for retired)	Living on own means	Employer	Employee	Working on own account	Working at trade in factory or in home (Specify by "f" for factory and "h" for home, or both, as the case may be)	Months employed at Trade in factory	Months employed at trade in home	Months employed in other occupations than trade in factory or home	Earnings from occupation or trade $	Extra earnings. (From other than chief occupation or trade) $	Months at school in year	Can read	Can write	Can speak English	Can speak French	Mother tongue (If spoken)