Expert Knowledge and the Social Imaginary: The Case of the Montreal Check Census

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The debate provoked by the publication of the 1871 Canadian census findings was an early instance of public attention to social scientific practice. It also raised questions of the "accuracy" of census data, a matter of current interest to social science historians. Dissatisfaction with the 1871 findings led the Montreal City Council to undertake a re-enumeration of the city in 1872. As a comparison of the results shows, the design of a census shapes all aspects of reporting and defines how "population" is configured in the results.

Le débat provoqué par la publication des résultats du recensement canadien de 1871 est un exemple distant de l'intérêt des gens pour la pratique des sciences sociales. Il fut notamment question de l'« exactitude » des données du recensement, un sujet qui intéresse les historiens des sciences sociales d'aujourd'hui. L'insatisfaction à l'égard des données de 1871 amena le conseil municipal de Montréal à recenser la ville à nouveau en 1872. Comme le montre une comparaison des résultats, l'élaboration d'un recensement influe sur le processus de déclaration tout entier et sur le tableau que les résultats brossent de la « population ».

THE DEBATE PROVOKED by the publication of the 1871 Canadian census findings was an early instance of public attention to social scientific practice. While shaped by partisan political considerations, it caused participants, and perhaps a larger reading public, to consider both methods of social inquiry and the meaning of census returns. Census-making was becoming an increasingly visible activity of state and the debate about it spoke to the developing social imaginary of the new dominion. The debate

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¹ On the census and the social imaginary, see Benedict Anderson, Imagined Communities: Reflections on the Origins and Spread of Nationalism, 2nd ed. (London: Verso, 1991).

posed questions about the future: Was Canada a progressive nation, firmly launched on the road to improvement and independence from Britain and the United States? Or was it stagnating? If it seemed to be stagnating, could this not be a false impression created as a result of distortions in the manner of executing the census? Census representations had the potential to identify the nation, to place its component parts in their "true position", but it seemed the power to frame such representations might be susceptible to political manipulation.

The debate around the 1871 census also raised questions of the "accuracy" of census data, a matter currently of interest to social science historians. Dissatisfaction with the findings led to a re-enumeration or "check census" in Montreal under the direction of the City Council in 1872. Particular attention has been paid to the rare instances of second enumerations, such as that in Philadelphia in 1870, as a means for estimating census accuracy. The Montreal check census is another and hitherto unexamined case, one that raises issues that challenge conceptions of census accuracy.

The 1871 Census

The Canadian census of 1871 was by far the most sophisticated and ambitious social scientific enquiry of its time in British North America. On April 3, when more than 2,800 enumerators began taking information on their nine census schedules, they were executing a task for which initial planning had begun almost seven years before. Preliminary efforts had involved the re-mapping of parts of the new dominion and extensive comparative investigations of possible enumeration districts. Census schedules and census-taking practices in other countries had been examined and compared. Central governmental officials, trained over a two-year period, had traversed the country seeking competent regional census managers, and some form of field trial of the census schedules had likely been conducted. The ground had been well prepared for the enumerators, who were equipped with a detailed manual: a prior distribution of summary census schedules had been made so that informants would know the information being sought, and the clergy and press had been enlisted to publicize the enterprise and to encourage co-operation.

The compilation and publication of all the census results extended over a five-year period. The Department of Agriculture and Statistics executed

² An assiduous search has failed to uncover the manuscript returns for 1872. A ward-by-ward comparison of returns, using the City Council's English translation of ward names, is given in Table 1. For the "accuracy" literature, see F. Furstenberg, D. Strong, and A. Crawford, "What Happened When the Census Was Re-Done: An Analysis of the Recount of 1870 in Philadelphia", Sociology and Social Research, vol. 63 (1979), pp. 475-503; more generally, Richard H. Steckel, "The Quality of Census Data for Historical Inquiry: A Research Agenda", Social Science History, vol. 15, no. 4 (1991), pp. 579-599.

a project for the construction of what its deputy minister conceived as a statistical "monument": the reconstruction and collection of all surviving population statistics from the first European invasion to serve as a benchmark for all future investigations. The project, begun in 1865 and completed in 1876, generated a set of population records of which few other national governments could boast.

Parliamentary Debate

Much was expected of the 1871 census well before it was conducted. The international importance of the enumeration was stressed in the parliamentary introduction of the Census Act by the Minister of Agriculture, Christopher Dunkin, in 1870. He proclaimed that "1871 might be emphatically characterized as a Census year" because censuses were to be conducted in many parts of the British Empire and elsewhere and the features of his proposed legislation "might be traced to the legislation of almost every one of these countries". Dunkin emphasized the need to bring Canadian statistical enterprises into line with those abroad and, after outlining the proposed organization of the census, insisted on its importance "not only because our political system was based upon our population, but also because the correctness of our statistical information was of extreme importance, as showing the social character and position of the country".3

Because of the complexity of the undertaking, however, and because Canada did not possess a corps of local government officials to make the enumeration, Dunkin's legislation accorded authority to the Department of Agriculture to frame detailed regulations for the execution of the work. The Liberal opposition pointed to the dangers of "placing too much power in the hands of the Government" in this way. Alexander Mackenzie insisted further that the "personal Census should be taken in one day, to avoid confusion from people changing residence". It seemed to Mackenzie that accuracy in the census was important, both because returns of population were the basis of parliamentary representation and because a demonstration of the "wealth of the country" would make it possible to "encourage emigration". Prime Minister Macdonald affirmed that the census returns would indeed be used "to introduce a measure to change the basis of representation".4

The matter was again taken up in the last week of March 1870. Members debated whether a census should include the names of those temporarily absent with those present in a household (the de jure principle) or whether "the correct principle was to take the names only of those who were actually at each place on a certain night" (the de facto principle), for which the prime minister expressed his own preference.⁵

³ Dominion of Canada, Parliamentary Debates (hereafter Debates), Third Session, 1870, March 8 (Ottawa: Ottawa Times, 1870), pp. 301-302.

⁴ Dominion of Canada, Debates, March 8, 1870, pp. 302-304.

⁵ Dominion of Canada, Debates, March 29, 1870, p. 754.

In amendments to the Census Act proposed in February 1871 in order to extend it to territories outside the Dominion, Dunkin sought to give further authority to his department both to vary the time of the enumeration and to seek additional information at times other than that to be fixed for taking the census. By now it was clear that the Department of Agriculture had settled on a *de jure* census, and Dunkin estimated that most enumerators would finish their work in a period of three weeks at most. However, if errors were to be discovered in an enumeration sub-district, it would be necessary to seek additional information and the amendments he proposed were to allow further enquiries to be made.

Objections were raised by the opposition party to giving such blanket and seemingly secret powers to the Department of Agriculture. William Macdougall claimed it was dangerous to give the minister powers that could be abused in a matter which "was to determine the proportion of representatives". It was particularly important that this census be conducted "open and above board that the people might see and know what was going on".6

Further questions were raised about the conduct of the census even as it was underway. In question period on April 11, 1871, Sir A. T. Galt claimed that "the impression was gaining ground that it was not being taken properly as the schedules were not yet distributed." This was a misunderstanding of the census procedures, replied Dunkin, for the enumerators were taking the information themselves and so no distribution of schedules was called for. Galt objected that the census had not been executed in a day, support for a *de facto* census from the opposition member who had been the government minister responsible for the execution of the 1861 enumeration, thought to have been conducted on that principle.

The degree of understanding of census-making on the part of many members of Parliament seems to have been superficial. The census was seen as an important project, both in its potential effects on the distribution of parliamentary representation and on representations of the country. Even the prime minister seems to have believed that the best kind of census was one conducted on the *de facto* principle, however, because it would count people where they "really were" on a given day, in contrast to a *de jure* census, which would cause what appeared to be an arbitrary location of people.

Official Results

Officials of the federal Department of Agriculture and Statistics expected the 1871 census to indicate that the Canadian population had surpassed 4.3

⁶ Dominion of Canada, Debates, Fourth Session 1871, March 3, 1871, pp. 257-258. By contrast, the Courrier du Canada, March 27, 1871, supported the de jure principle and the fact that there was no date limit to the enumeration: "la chose importante n'est point d'en finir au plus vite, mais de bien faire."

⁷ Dominion of Canada, Debates, April 11, 1871, pp. 1019-1020.

million people, from the 3.1 million enumerated in 1861. Such a figure would not only have vindicated the department's demographic predictions (and its expertise in this still novel science), but would also have been proof positive of the department's successful execution of its mandate to promote immigration. Officials were shocked when the tabulation of returns in 1871 indicated a population of less than 3.5 million. The decennial growth rate for the province of Quebec, at a mere 7.11 per cent, suggested an important out-migration, an alarming state of affairs for the department's ultramontaine deputy minister, Joseph-Charles Taché. Christopher Dunkin resigned the day before the formal submission of census results to the Privy Council.

The ministry was also perplexed. "The census figures have been given to the Privy Council," wrote the agricultural secretary and census co-ordinator, John Lowe, to Taché on October 26, 1871,

and they are dreadfully disappointing. They don't know what to do with them and hesitate to make them public. Many — in fact most — of the old counties show a positive decrease and in many cases a very large one. The increase that there is, is principally in the new counties.8

Charles Tupper, President of the Privy Council, investigated the possibility that the population returns might be the result of compilation errors. In an exhaustive defence of the compilation process, John Lowe insisted that the population from each enumeration sub-district had been compiled independently by two individuals who were prevented from communicating with each other. If their totals agreed upon inspection by a supervisor, they were accepted as accurate. If they disagreed, a third compiler did a recount; if his total corresponded to one of the first two figures, the erring compiler was set to discover his own error. Population subtotals were kept secret by supervisors from compilers, so that "the mode of compiling the figures of the population was of a nature to secure absolute accuracy."9

The Privy Council refused to allow publication until the results were retabulated to disguise the magnitude of the population shortfall. The secretary of agriculture corresponded with at least one of his census commissioners about plans for "preparing the public mind" for the disappointing results, and he had reason to do so. 10 Population totals were sent to newspaper editors on November 7, 1871, and published immediately thereafter. The opposition press, anglophone as well as francophone, greeted the release of the results with incredulity bordering on outrage. In Montreal.

⁸ National Archives, Manuscript Group (hereafter NA MG) 29 E18 3, Lowe to Taché, October 26,

⁹ NA MG29 E18 7, Lowe to Tupper, November 15, 1871.

¹⁰ NA MG29 E18 3, Lowe to Taché, November 2 and 14, 1871; Lowe to G. W. Weaver, November 8, 1871.

La Minerve translated an outspoken editorial from the Toronto Globe which claimed the de jure design was consciously intended by the government to harm the interests of Ontario. The Globe's editor, in a common reaction, pointed to "what everyone knew" about the level of immigration to Ontario, about house construction and the growth of towns, as well as to the contrast anyone could see between the condition of the Upper Canada of 1861 and the Ontario of 1871, to insist that the census return was simply absurd. La Minerve thought the returns of population sufficiently provocative to publish them in a pamphlet edition. 11

Arthur Harvey's Critique

The most systematic attack on the 1871 census was published in the Canadian Monthly and National Review by Arthur Harvey, a former statistical clerk in the Department of Finance who had been involved in compiling census returns for 1861. Before writing, Harvey had consulted John Lowe, the manager of federal census operations, who insisted that Harvey could "rest assured that we have got the true population and that it has been carefully compiled". If there was any error it was one of overenumeration, for the department might "have taken four or five thousand servant girls twice over". Harvey was invited to come to Ottawa to inspect the compilation process if he wished, but, as far as Lowe was concerned, the census results showed that the country had been "deluding itself" on the basis of erroneous returns from the 1861 census.

Harvey was obviously not convinced, and his comment on the 1871 census, a curious mixture of myth-making, chauvinism, and serious social analysis, examined competing census designs critically before demanding a general check census. Harvey began by repeating the myth that the 1861 census "was taken in one day; and the *de facto* population, that is the population actually there, was assigned to each house, village, county, city". The 1871 census, by contrast, counted the people who by right should have been in a locality and hence it was not necessary to execute it in a day, even though a common day was taken as a reference point.

Harvey wrote, chauvinistically, that the *de facto* principle prevailed in northern Europe, "where ... whatever is most practical is best", while the *de jure* principle was favoured by the "Latin peoples" with whom "whatever is logical and theoretically right is sought to be carried out." Of

¹¹ La Minerve, "Le Recensement", November 22, 1871.

¹² Arthur Harvey, "The Canadian Census of 1871", Canadian Monthly and National Review, vol. 1, no. 2 (1872), pp. 97–104. There had been a dispute about his pay; see NA Record Group (hereafter RG) 17, Department of Agriculture Outgoing Correspondence (hereafter A I 2), Evanturel to Provincial Secretary, April 13, 1863, and Campbell to Harvey, April 15, 1863; also RG1 E1 Canada State Book V, p. 247, Executive Council Minute of June 12, 1860; RG1 E13, the Blue Book for 1864; RG19, vols. 2084–2085, warrant of April 16, 1863.

¹³ NA MG29, E18 3, Lowe to Harvey, November 20, 1871.

course, the Minister of Agriculture was a lawyer from Quebec, learned in the Roman law "which there mystifies the unwary litigant" and his deputy minister was "a French Canadian, pur sang". So, claimed Harvey, the census principles were "foreign to the genius of the people of Ontario" and to the other provinces but "cognate to that of the people of Quebec". Worse, the census had been conducted by hordes of "untrained men" and the lengthy period between enumeration and publication of the census results prevented the application of measures of verification. Still, maintained Harvey, such (unnamed) checks as had been applied had shown the census figures to be an underenumeration, and some cities, towns, and villages were "repudiating them with indignation".

Harvey argued that the de jure principle worked best in provinces like Ouebec and Nova Scotia where systems of civil registration were in place. and there the census totals were likely most accurate. Carelessness on the part of enumerators still meant that 6 or 7 per cent of the population had been missed in those two provinces, and in Ontario the error was likely greater. Indeed, Harvey estimated, a correct enumeration would have returned another 300,000 people.

Nonetheless, even an incorrectly conducted census gave "useful indications of social movements to which we should be awake", and first amongst these was the rapid growth of cities caused by the railway boom and the growth of manufacturing. In fact, the de jure principle likely understated the degree of urban growth, wrote Harvey, for it reassigned many city residents to rural areas.

In a reasonably novel analysis, Harvey separated the census returns for counties in both Ontario and Quebec into four categories according to period of settlement and geographical location. He then claimed that most old settled rural areas in Ontario were undergoing slight population increases and those in Quebec were suffering important population declines. The fastest growing parts of these provinces were the newly settled agricultural lands. An important policy question arose for Harvey: if old settled regions were indeed losing population, was it due to a lack of capital for needed improvements? If so, then perhaps public investment in underdraining the land was required. Was it preference for new land? If so, a policy of opening new lands for settlement by railroad construction should be pursued to prevent emigration.

The returns from Quebec were particularly puzzling to Harvey and seemed to call into question established "Malthusian laws". The old counties seemed to have lost 7 per cent of their population, but how could that be when "almost every house, looks like a rabbit warren, for young"? Even if 40,000 men had been killed in the American War, even if thousands had emigrated to New England, it would hardly have made an impact on a population of "such fecundity as that of Quebec".

Harvey had no explanation to offer, but his findings raised the spectre of a far-reaching fertility decline that meant Canadians would be "doomed to

ultimate extinction" and "fundamentally dependent upon immigration". Such a condition would prevent the development of Canadian political independence and cause the country to remain "a mere pigmy beside a giant". If the population figures were in fact accurate, if Canada was "a comparatively stationary instead of a rapidly progressive country", then immediate steps had to be taken to colonize the new land to the northwest. Such a policy would be costly and risky; it was not one to undertake without a better assurance of the accuracy of the census findings.

Thus Harvey returned, in the final sections of his paper, to criticize again the execution of the 1871 census, appealing "to what everyone knew". While governmental officials were certain the census was accurate, he insisted "almost every one of us knows of some persons omitted" from it. And how could it be otherwise? The census-taking system in North America as a whole was full of faults. It attempted too much. It was a discontinuous undertaking: every decade a new group of "unskilled, untried and hastily appointed persons" set out on census work, and people had no memory of any previous census to aid themselves in providing information. "Men of all stations" naturally resented "revealing their private affairs", and the result was that censuses were erroneous. Even the Americans got it wrong, claimed Harvey!

In short, he maintained, the census should be restricted to a count of population. Other information should be sought through a system of civil registration, and the 1871 census results should not be used to decide important policy questions facing the country until they were verified.¹⁴

The Montreal Check Census

In December 1871, Montreal City Council determined to conduct a second census in an effort to correct what a majority of its members saw as the obviously erroneous returns of population provided by the Department of Agriculture and Statistics. The department and its deputy, Joseph-Charles Taché, had been receiving bad press in Montreal before the publication of the 1871 census results. The opposition Gazette, for example, had attacked the department's immigration policy, describing Taché as enjoying an "undisturbed and sleepy incumbency" out of which the Minister of Agriculture, Christopher Dunkin, had not had the decisiveness to awaken him. It was as promising "to post letters on business to the Parish Pump as it would be to send them to the Department over which Mr Taché presides", and in immigration "no practical result can be hoped for from the present managers of the Department."15

When the pro-government Ottawa Times objected to these charges, the Gazette returned with more detail. Much had been looked for from Taché

¹⁴ All citations in the preceding section are taken from Harvey, "The Canadian Census of 1871".

¹⁵ Montreal Gazette, "Immigration", October 3, 1871.

when he was appointed, given that he was a man "of considerable literary culture' and that "statistics were to be specially attended to by him". The Gazette sarcastically noted

the mysterious hints of a good work going on, eventuated at last in a blue book, in which the numbers, nationalities, and salaries of employees of the civil service were stated! This effort at "statistics" seems to have exhausted the genius of the Doctor.

Since that time, he had done nothing, if one discounted rumours about a volume of figures about the country prior to the Conquest. The editor suggested that "to purely literary men this forthcoming marvel of statistical genius, will possibly be of value", but it was of no practical use. "Indeed, the only statistics of any importance with which the country has been favoured since Dr. Taché's appointment have come from another department, that of Finance." Tache's lack of interest in promoting immigration, especially English-speaking immigration, was again assailed. The Montreal Herald claimed that whatever the Department of Agriculture did was "so mysterious that nobody seems to have yet been able" to discover it. In the domain of agricultural statistics, the department had produced no information on its own.¹⁷ These criticisms, especially the Gazette's denigration of literary statistics and statistical monuments, with praise for statistics of "practical value", rehearsed the attacks on de jure and the support for de facto census designs soon to follow.

The 1852 census had reported the population of Montreal to be 57,715; that of 1861 had indicated 90,323. Many people believed the city's growth rate between 1861 and 1871 to have been at least as great as in the preceding decade and looked for a population of as much as 150,000. The 1871 census gave the total as 107,225. La Minerve agitated for a second census and other papers supported the project. It was evident, La Minerve claimed, that the census was seriously defective. There were many cases of notable Montreal families having been omitted, and if the enumerators had been lax in the best known streets, they must have been "moins scrupuleux dans les faubourgs, où il y a une agglomération considérable de population".

Some of the indications of negligence were clearly spurious and stemmed from a misunderstanding of census procedure. For instance, La Minerve repeated again that enumerators had not collected census forms left at people's houses and gave this as an example of incompetence, failing to distinguish the enumeration proper from the information leaflets distributed

¹⁶ Montreal Gazette, "The Department of Agriculture", October 7, 1871, Arthur Harvey had been the Finance Department's statistician.

¹⁷ Montreal Herald and Daily Commercial Gazette, "Agricultural Improvement", December 6, 1871.

before it. 18 Nonetheless, after some debate, a majority of City Council claimed that the "late census of this city has not been taken in such a way as to give general satisfaction" and moved on December 13, 1871, to appoint a committee to consider ways to carry out its own census of population. 19

To bolster the suggestion that the 1871 enumeration was erroneous, La Minerve estimated the city's population by applying multipliers to various indicators. The resulting estimates were all higher than the 1871 return. If one took the number of houses constructed in the decade since 1861 and assumed eight people lived in each, Montreal's population would be 112,323. This was considered a low estimate, however; from the level of water consumption it was evident that there were more people than formerly living in older houses in the city. Using water consumption as a guide, the newspaper continued, there had to be 147,461 people in Montreal. Alternatively, using the increase in the tax rolls, Montreal had 159,962 residents or, using the water tax, 141,563. Again, given that the number of electors had almost doubled in the preceding decade with no change in the conditions of the franchise, Montreal had to have a population of 166,856.

Of course, the paper remarked, "il se peut que ces chiffres ne soient pas d'une précision algébrique," but they certainly showed that the last census could not offer "les garanties d'exactitude à l'égard de la population de Montréal qu'il devrait présenter". A final and absolutely low estimate was then offered: 122,934. *La Minerve* also claimed that a second enumeration conducted in "la petite ville de St. Jean [sur Richelieu?]", whose population was only a few thousand, had discovered over 500 people missed by the federal enumerators.²⁰

A majority of City Council was enthusiastic about the project of a second census and reported that "the people of Montreal were alive to the necessity of putting the city in its true position." Montreal was suffering "materially in many ways from the false presentation" given in the official census, and there were plenty of volunteers willing to do the work of enumeration. Indeed, it was suggested that the city water collectors could distribute census schedules and that these could be collected by the first of February.²¹

The committee that considered the manner of taking the census decided instead that the city assessors were best placed to conduct it. The census was to be a nominal one, conducted on the *de facto* principle and giving

¹⁸ La Minerve, "Le Recensement", December 2, 1871. Taché's old newspaper, Le Courrier du Canada, had taken the trouble to explain the procedures in detail before the enumeration ("Le Recensement", March 27, 1871).

¹⁹ City of Montreal Archives (hereafter CMA), Administration Municipale (hereafter ADM), 2—Conseil Municipal, 2—Procès Verbaux, December 13, 1871, pp. 69–70.

²⁰ La Minerve, "Le recensement de Montreal", December 15, 1871.

²¹ Montreal Herald and Daily Commercial Gazette, December 14, 1871. The mayor seems to have doubted the city had the authority to conduct a second enumeration.

information about sex and religion. Council appropriated \$2,000 for the effort on January 24, 1872.²²

Injunctions to co-operate with enumerators were read from the pulpits of city churches on Sunday, February 4, and the enumeration began on Monday, February 12. Four days later the enumerators reported having taken 18,000 names already and people were said to be co-operating fully. More promising was the statement that "ils ont dû constater que dans plusieurs maisons où ils se sont présentés, les recenseurs du gouvernement n'avaient pas pénétré le printemps dernier." The city, it seemed, would soon be vindicated.

The Department of Agriculture and the Check Census

Events in Montreal were followed closely by John Lowe, who was managing the Department of Agriculture, and by Joseph-Charles Taché, to the extent that a serious illness allowed. Lowe was in regular contact with one of the 1871 census commissioners, George Weaver, a friend and associate, and spent two days in Montreal early in January 1872 conducting a special census enquiry.²⁴

As far as the department was concerned, the 1871 Montreal enumeration had gone smoothly. One enumerator had been replaced for incompetence at an early stage, a commissioner from the business district successfully petitioned for higher pay, and some of the enumerators' books were a bit slow to arrive in Ottawa, but there were no particular problems with the conduct of the census. Indeed, the department had taken the unusual step, while the enumeration was underway, of acquiring copies of the city's *Livre de renvoi* from the Cadastre Office, likely to serve as a check on the thoroughness of the enumeration. George Weaver's expressed concerns about the possibility that compilers might falsify the returns of religious affiliations were assuaged by Lowe, who also supported the claims of George Glackmeyer, brother of the Montreal City Clerk, for a compiler's position.

Lowe contacted Weaver immediately after the appointment of City Council's first census committee, urging him to meet with Dunkin in Montreal to discuss

²² CMA, ADM, 2-Conseil Municipal, 2-Procès Verbaux, January 24, 1872, pp. 94-96; Montreal Gazette, Montreal Herald and Daily Commercial Advertiser, January 25, 1872; La Minerve, January 31, 1872.

²³ La Minerve, "Le Recensement", February 16, 1872.

²⁴ Taché was quite sick throughout the autumn and early winter, afflicted with carbuncles. John Lowe was a Montrealer and he and Weaver were both members of the Mechanics' Institute. The receipts for Lowe's January visit are to be found in NA MG29 E18 3, January (n.d.) 1872.

²⁵ For example, NA RG17 A I 6, Lowe to Curran, June 26, 1871; Lowe to Piché, July 6, 1871; Lowe to Weaver, September 26, 1871; Lowe to Lambe, January 23 and 25, 1872; MG29 E18 3, Lowe (private) to Lambe, December 16, 1871.

²⁶ NA RG17 A I 2, Lowe to Sicotte, April 17, 1871.

²⁷ NA RG17 A I 6, Lowe to Weaver; MG29 E18 3, Lowe to Cartier, June 26, 1871.

census matters. Lowe was eager "to see something done to enquire into the value of the retaking of the St. John's Census". He had suggestions to make about combatting the newspapers' erroneous impressions about the census returns. He wrote to Weaver again just before the second enumeration began, asking especially to be informed of whether the enumerators were to take *names*, noting that "unless they do this, it will be no census." ²⁸

It is likely that Lowe sought to correct the impression that people living in the city had been reassigned elsewhere, and part of his communications with Weaver dealt with this subject. For instance, while Lowe admitted that a "Mr. Rose of 395 Lagauchtere [sic] St." did not appear on the federal census schedules, "all the lunatics belonging to St. Johns in the Asylum" could be shown to be "taken at their own homes in St. Johns" and in any case "there were only 10." 29

As a control on Montreal's enumerators, Lowe instructed Weaver to calculate the average number of people returned per family. The department's records showed "over six to a family" in St. Antoine's Ward, and Weaver was to "take any time; or any means to check this". Weaver's report that the city enumerators were finding fewer large families than had the federal enumerators encouraged Lowe to suggest that the check census would return a lower population, but he remained concerned that the enumeration would not be done fairly. Weaver was instructed both to see that "the additions are not made to give any improper increase to the population" and not to let the city corporation know that he was working for the Department of Agriculture. In the contract of the calculation of the department of Agriculture.

Results of the Check Census

La Minerve scooped the other Montreal newspapers by reporting the results of the check census on March 9, four days before they were officially reported to City Council: "on croit savoir qu'il établit le chiffre de la population, dans l'intérieur des limites de la ville, à 118,000." Four days later the census committee was more precise: 117,865, compared to 107,225 in the 1871 census (Table 1).

The council meeting where this figure was delivered was acrimonious, with councillors denouncing and defending the enumerators. When Councillor Kennedy claimed that the census could not be correct because he himself had not been enumerated, Councillor Loranger reminded him that

²⁸ NA RG17 A I 6, Lowe to Weaver, December 16, 1871; MG29 E18 3, Lowe to Weaver, February 9, 1872. Note that, with some exceptions, only the Ottawa end of these communications survives.

²⁹ NA RG17 A I 6, Lowe to Weaver, December 27, 1871. The reference to "St. John's" is confusing; the correspondence seems clearly to be about Montreal, which had no St. John's Ward. Could Lowe be referring to Jacques Cartier on the outskirts of the city proper or to St-Jean-sur-Richelieu?

³⁰ NA RG17 A I 6, Lowe to Weaver, February 19, 1872.

³¹ NA RG17 A I 6, Lowe to Weaver, February 24, 1872.

³² La Minerve, "Le Recensement", March 9, 1872.

Ward	Population 1871	Population 1872	
East	2,889	3,159	
Centre	1,110	1,412	
West	1,265	1,156	
St. Mary's	13,695	14,983	
St. Antoine	23,925	27,506	
St. Lawrence	13,106	14,410	
St. Louis	14,916	16,452	
St. James	17,680	19,146	
St. Ann's	18,639	19,641	
Total	107,225	117,865	

Table 1 Montreal Population Returns by Ward 1871–1872

Source: Montreal City Council Papers; Parliament of Canada, Sessional Papers.

notices had been printed in the press calling on all heads of families who had been missed to present themselves to be counted. Loranger was then able to show that Kennedy had indeed been returned, but under another name. Loranger noted that several other men who had claimed to have been missed found that they had in fact been reported by someone else. The debate reached its zenith when Alderman Simard cited, as proof that confidence should be placed in the enumerators, the fact that he had himself given them "lists of those living in certain of his houses". Alderman Bastien responded that if Simard's action had been often repeated it "would serve to shake his confidence in the census completely". 33

In any case, City Council's census committee reported that the enumerators had been careful and diligent in their work, and the air went out of the census balloon with a sigh; 117,000 was rather less than 166,000. Still, the committee attempted to put a happy face on the results.

This increase, although falling somewhat short of the expectations that were entertained is not however unwelcome and the impetus which the several large public improvements and interprises [sic] now in Store, are likely to produce, the Citizens may look to the future with confidence and anticipate a still more favorable result in the next decade.34

The official report further softened the low population return by suggesting that another 2,000 heads of families worked in Montreal but lived outside the city limits, representing an addition of perhaps 20,000 people. Still, not all

³³ Montreal Gazette, "City Council"; La Minerve "Rapport du Recensement"; Montreal Herald and Daily Commercial Gazette, "City Council", March 14, 1872.

³⁴ CMA, ADM, 2-Conseil Municipal, 2-Procès Verbaux, March 12 and 13, 1872, pp. 155, 167, 262-263, 272.

members of Council were mollified. As far as Alderman McGavran was concerned, for instance, "Councillor Loranger had rather underestimated the persons living outside the limits who might properly be considered [emphasis added] as forming part of the population of the city." A better estimate, he said, would mean Montreal's population was in fact as much as 160,000.³⁵

McGavran's position notwithstanding, the press, earlier sure that the federal census had been poorly done, now set about reconciling the census results with new accounts of what everyone knew. Montrealers had been entertaining false hopes about the size of the city. "The disappointment respecting the results of our census", editorialized the *Herald*, "is due more to exaggerated expectations than to circumstances inherent in the nature of things," adding that "every one who has had occasion to compare popular calculations with ascertained numbers is aware of the tendency to excessive multiplication, which is always present." Not only were there many people working in the city who lived outside it, but the 1852 and 1861 censuses were probably overenumerations, stated the *Herald*, now echoing the offical line of the Department of Agriculture. In any case, even the American census showed a smaller population than people had expected.³⁶

La Minerve added its own nuance: people were disappointed by the returns because they were in regular contact with others who worked in the city but lived outside its walls. Naturally they believed such people to be Montrealers, but they could not really be counted as such in a census.³⁷

These explanations continued to draw a distinction between what it was supposed everyone knew or experienced on the one hand and official representations based upon social scientific enquiry on the other. They showed in sharp contrast two competing visions of where people belonged, were situated, and could properly be considered to live: a vision based on whom one regularly met or with whom one came in contact, common sense, and memory; and a vision based on placement in terms of administrative boundaries. After the check census, the press in Montreal came to argue that the administrative vision was, if not the only "true" or "accurate" one, at least reasonable in its own terms. The sense people had of who was a Montrealer, this part of the social imaginary, stood in need of correction. The challenge to the social imaginary offered by official social science, the claim that there existed a reality accessible through social scientific enquiry and different from "what everyone knew", is a particularly significant result of the Montreal census controversy.³⁸

³⁵ Montreal Gazette, "City Council", March 14, 1872.

³⁶ Montreal Herald and Daily Commercial Gazette, "Census Taking", March 15, 1872.

³⁷ La Minerve, "Rapport du Recensement", March 14, 1872.

³⁸ I do not suggest a definitive victory for social science. More on the changing historical boundaries of the "knowable community" can be seen in Raymond Williams, *The Country and the City* (Cambridge: Cambridge University Press, 1973).

Contesting the Results

If the City Council and the press in Montreal were able to console themselves both with the discovery of about 10,000 more citizens than the 1871 census had counted and with the belief that thousands more people lived just outside the city limits, the same cannot be said for the Department of Agriculture. A difference of this magnitude was seen by John Lowe and Joseph-Charles Taché as a serious compromise of their census and they expected criticism in Parliament. They refused to accept the results of the check census.

The suggestions made by Lowe's Montreal agent, George Weaver, to account for the different findings were dismissed. Even before Weaver had reported the results, Lowe insisted that the "difference in the mode of taking the Census will not make anything like 10 per cent", if enumerators did their work accurately.³⁹ Weaver managed to get the census results to Lowe by March 1, well before they were presented to City Council, and Lowe and Taché immediately began analyzing them. "The difference of the two modes of taking the Census would not amount in figures to 7,800," Lowe insisted, "and we believe there is exaggeration in the *check* census." Its source was clear:

If you ask simply the question who slept in a house on a given night, those who are temporarily absent will about make up for the strangers temporarily present and the two ends will meet - certainly there w[oul]d not be a difference of nearly 7 per cent. But if the question was asked both ways as you state, the difference might be made.

In other words, if those temporarily absent were counted both where they actually slept on census night and where they usually slept, population returns might be 7 per cent higher than if they were counted in only one of these two places. Lowe instructed Weaver to find some cases in which this kind of double-counting had been done, again urging great secrecy. "Go very quietly to work on this; and don't alarm them. We rely upon your shrewdness and discretion, and it is of immense public importance to expose error in this matter. Never mind any expense.', 40

Weaver was maladroit. He used Lowe's name, to the latter's great chagrin, in an attempt to get more information about the check census. He also proposed an alternative explanation for the census findings: a real increase in population demonstrated by the construction of 1.060 buildings in Montreal in 1871, of which 908 were houses. This was an important departure from the decennial average of 534. "Clap-trap." responded Lowe. demanding that Weaver send a complete copy of the census so that he and Taché could find the errors in it.41

³⁹ NA RG17 A I 6, Lowe to Weaver, February 24, 1872.

⁴⁰ NA RG17 A I 6, Lowe to Weaver, March 1, 1872.

⁴¹ NA RG17 A I 6, Lowe to Weaver, March 6, 1872; see also same to same, April 8, 1872; MG29 E18 7, Weaver's statement of number of houses constructed in Montreal, n.d. 1872.

Past investigations convinced Lowe and Taché that they were on solid ground. As early as January 1865 Taché had denounced the organization and execution of the 1852 and 1861 censuses, instancing, among other things, the practice of systematic double-counting in the latter. As Arthur Harvey prepared his attack on the 1871 census, Lowe sought further support for the proposition that past censuses had given exaggerated results. To estimate the extent of inflation from double-counting, he contacted Thomas White Jr., a Peterborough newspaper publisher, 1861 census commissioner, and author of the statistical compendium An Exhibit of the Progress, Position and Resources of the County of Peterboro'..., based on White's own compilations of 1861 census data. For the county of Peterborough alone, White's figures showed that the official population return of 24,631 would be reduced to 23,249 (by about 5.6 per cent) if casual visitors and transients were counted only once.

In his printed reply to Arthur Harvey, Taché again seized upon double-counting in 1852 and 1861, combined with emigration after the American Civil War, to explain lower-than-expected population totals. "The proof of the double entries exists on the very face of the [1861] schedules and in no concealed form," Taché maintained, and the same exaggerations had been made in 1852.⁴⁴

The department undertook one final defensive effort after the publication of the results of the Montreal census. William Kingston, one of the census clerks, was set to work to reconstruct long-term population growth rates from the huge body of historical material assembled through Taché's plan to publish all past Canadian population statistics. Kingston's report calculated that, if immigration returns for Ontario for the decade since the 1861 census were correct, and if one assumed a manifestly low annual rate of natural increase of 1.5 per cent, there were about 207,000 people missing from Ontario. The document concluded:

It appears evident that the immigration returns were altogether too great; or that the Census of 1861 was too great; or very probably both were in excess of the facts; either way, the result seriously affects the late Census, by exciting anticipations in the public mind that were not, and could not be, obtained.⁴⁵

⁴² NA RG17, vol. 2415, Board of Registration and Statistics, January 18, 1865.

⁴³ NA MG29 E18 3, Lowe to T. White, November 14, 1871; Thomas White Jr., An Exhibit of the Progress, Position and Resources, of the County of Peterboro', Canada West, Based Upon the Census of 1861; Together with a Statement of the Trade of the Town of Peterborough (Peterborough: T. & R. White, Printers, n.d. [1863?]).

⁴⁴ NA Fiche No. 1-3743, Joseph-Charles Taché, "The Canadian Census of 1871. Remarks on Mr. Harvey's Paper published in the February Number of *The Canadian Monthly*".

⁴⁵ NA MG29 E18 7, "Remarks on the recent Census of Ontario and the Immigration Statistics during the decade from 1861 to 1870", marked "Mr Kingston", n.d. 1872.

This study was not needed. While the opposition press continued to blast the department periodically for its slowness in publishing census volumes, the debate over the 1871 census results and methods subsided. Yet there was a hidden casualty: Taché and a group of Montreal doctors had projected a Sanitary Census of major Canadian cities for the summer of 1871. It was delayed by the press of the work of compilation until the summer of 1872 before being abandoned. Among other reasons, the controversy over the Montreal check census likely made the project of a third census unpalatable.

Population Thinking

Debate over the 1871 census methods and findings was an element in both the popularization and the administrative extension of "population thinking". Through the delineation of a constructed object, "the Canadian population", census-making and the debate surrounding it helped configure a domain of governmental intervention, the "social", in which so much work was to be done: a domain the particular object of the social science.

A growing literature connects "population thinking" to fundamental cosmological changes which underlie our present and which sustain visions of a world both governed by chance and eminently susceptible to human control. Some work in this field of "governmentality" is concerned with investigating the ways in which the placement of people and things in populations makes possible various projects and technologies for the government of "life", from insurance and pension schemes to epidemiology. Population is seen here not as a form of existence, but as a normative construction useful for modifying social relations. Such work has framed my interest in the census.⁴⁶

A rather different literature seeks to evaluate the "accuracy" of nineteenth-century censuses, and second enumerations have been seen as particularly instructive. Based on such recounts and other indicators, researchers have concluded that nineteenth-century American censuses underenumerated populations by somewhere between 10 and 20 per cent, although instances of overenumeration are occasionally mentioned.

The Montreal check census could contribute another case in point, but one that tends to call into question earlier findings. The debate over these census results suggests that, if Montreal City Council was correct, the 1871 census underenumerated the city's population by about 7 per cent, considerably less than the literature would lead one to expect. On the other hand, if the

⁴⁶ In this regard see G. Burchell et al., eds., The Foucault Effect: Studies in Governmentality (Chicago: University of Chicago Press, 1991); Georges Canguilhem, The Normal and the Pathological (New York: Zone Books, 1989), especially pp. 77-78; Jacques Donzelot, L'invention du social (Paris: Fayard, 1984); Ian Hacking, The Taming of Chance (Cambridge: Cambridge University Press, 1990).

⁴⁷ For an introduction to this literature, see the special issue of *Social Science History*, vol. 4 (1991), which presents a number of articles on the question.

arguments of the Department of Agriculture are accepted, the City Council's census method involved systematic overcounting and the census of 1871 was essentially "accurate" in its population totals. Furthermore, the censuses of 1852 and 1861, the department argued, had been overenumerations, and another main indicator of population growth, immigration statistics, was unreliable.

The debate over accuracy has tended to focus on the effects of census execution, but to neglect the effects of its design, on census findings. Contributors to the literature commonly treat "population" as a naturally existing object against which the accuracy of censuses can be measured. However, because the exact limits of population remain always to be discovered, measures of accuracy ultimately resolve themselves into measures of coherence, either of enumeration practices within a given census, between different censuses, or between census enumerations and other "indicators" such as city directories and vital statistics.

Both because researchers can never have direct access to a natural object, "population", and thus can never have an invariant standard of measurement, and because census design changes, it would be fallacious to propose that second enumerations such as the Montreal check census or that in Philadelphia in 1870 could serve as measures of the accuracy (the degree of correspondence to the "real" population) of prior enumerations (or vice versa). In fact, like the editor of *La Minerve* with his water taxes, voters lists, and building permits, but also like the modern physicist unable to identify "dimensionless constants", historians and historical sociologists must arbitrate among competing truths. The interesting questions then become: How do differently designed censuses configure social relations as "population"? What practical consequences stem from different configurations? How are such ways of imagining the world connected to social and political projects?

Both *de facto* and *de jure* census procedures discipline enumeration data to configure populations, as participants in the census debate were well aware, but they do so by invoking different conceptions of where people are properly to be situated.⁴⁹ Both methods organize data through conceptions of normality; neither is about counting physical bodies in physical space at a given moment. Both construct imaginary populations by reassigning bodies said to exist to what are considered their normal places. The

⁴⁸ Consider Philip Mirowski, "Looking for Those Natural Numbers: Dimensionless Constants and the Idea of Natural Measurement", Science in Context, vol. 5, no. 1 (1992), pp. 165–188.

⁴⁹ In point of fact, the supposedly de facto Canadian census of 1861 was a mixed de facto and de jure enterprise, as I have shown in Bruce Curtis, "On the Local Construction of Statistical Knowledge: Making up the Census of the Canadas, 1861", Journal of Historical Sociology, vol. 7, no. 4 (1994), pp. 416-434; I have elaborated some of the points which follow here in "Accuracy, Error and Adequacy in Manuscript Census Returns", unpublished paper, Department of Sociology and Anthropology, Carleton University, 1995.

movement of bodies through space usually cannot be registered, either at all or without the "error" of double-counting. Census practices are disciplinary practices, constructing the domain of the social by using techniques of writing and tabulation to tie bodies to administrative spaces. From this point of view, censuses are *always* "accurate".

What does the above discussion mean to scholars who wish to work with manuscript census data? Two things especially: First, one must read manuscript censuses with a clear understanding of principles of census design, for the logic of design shapes all aspects of reporting. The distribution of elements of population, for instance, may vary radically in different census designs, and those engaged in comparative work must attend seriously to such changes. Second, instead of seeking "accuracy" as an approximation to the truth, perhaps it would prove more fruitful to pay attention to censuses as political projects, aimed at establishing useful, potent, or agreeable representations.

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The Bohemian Census of 1651 and the Position of Inmates

SHEILAGH C. OGILVIE MARKUS CERMAN*

To re-Catholicize Bohemia after the Thirty Years' War, the Austrian Habsburgs commissioned, in 1651, a population list according to religious belief, which generated census-type lists for many communities. A research team is constructing and analyzing a database consisting of the 1651 census, the 1654 tax register, the 1680 tax revisitation, and the 1711–1748 Theresian cadaster for five feudal domains of Bohemia. One phenomenon that has been observed in the 1651 census sample is the large population of inmates living in the households of others. The authors use the census itself, village land records, and feudal court minutes to explore alternative explanations for the existence of inmates, including inheritance customs, land scarcity, and feudal dues.

Pour reconvertir la Bohème à la foi catholique après la guerre de Trente Ans, les Habsbourg d'Autriche ordonnèrent en 1651 qu'on dresse une liste des habitants selon leur croyance religieuse, ce qui amena de nombreuses communautés à établir une liste nominative de recensement. Une équipe de recherche est à construire et à analyser une base de données du recensement de 1651, du registre de l'impôt de 1654, de la refonte fiscale de 1680 et du cadastre thérésien de 1711–1748 pour cinq domaines bohémiens sous régime féodal. L'échantillon du recensement de 1651 révèle notamment une forte proportion d'occupants dans les ménages d'autrui. Les auteurs utilisent le recensement lui-même, les registres des bien-fonds des villages et les procès-verbaux des tribunaux féodaux pour trouver d'autres explications à ce phénomène, y compris les modes de succession, la rareté des terres et l'impôt féodal.

TO RE-CATHOLICIZE their Bohemian subjects after the Thirty Years' War, the Austrian Habsburgs commissioned, in 1651, a "population list according to religious belief", the *Soupis poddaných podle víry*. Re-Catholicization had begun during the 1620s, but it was not until 1650, with

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all of Bohemia united under Habsburg rule, that systematic measures could be undertaken. An imperial decree of February 4, 1651, commanded the captains of the circuits (national administrative units) to arrange the religious registration of the entire population.² The decree described precisely how the registration should be done, specifying the possible religious categories and providing four pages of examples.3 The circuit captains conveyed these instructions to the feudal lords who ruled each domain, and they in turn ordered their own administrators (the domain captains) and sub-administrators (the city councils and village bailiffs) to carry out the survey, which they duly did during the months of April, May, and June 1651. Not all domains reacted in time, with the result that the survey was eventually written up for only about 40 per cent of the population (400,000 to 500,000 people). The quality of registration varied widely: some domains simply provided numerical totals of the non-Catholic population, others provided totals of each religious group, while still others followed the instructions closely and handed in true census-like listings. Confronted with these difficulties, the government apparently accepted the failure of the detailed survey, and on June 3, 1651, ordered registration to continue only for the non-Catholic population, particularly those unwilling to convert.⁴ The only calculations the government ever made from the survey consisted of a set of aggregate figures for individual circuits.

Those domains in which registration was carried out according to instructions, however, generated detailed census-like listings. These recorded the population in each town or village by what appear to be residential units. Each individual was listed according to name, age, relationship to household

¹ On Bohemian re-Catholicization, see Anton Gindely, Geschichte der Gegenreformation in Böhmen (Leipzig: Duncker & Humblot, 1894), pp. 103-121, 203-213, 237-241, 260-262; Karl Richter, "Die böhmischen Länder von 1471-1740" in Karl Bosl, ed., Handbuch der Geschichte der böhmischen Länder (Stuttgart: Anton Hiersemann, 1974), vol. 2, pp. 99-412, here pp. 285-289; Karl Hoensch, Geschichte Böhmens (München: Beck, 1987), p. 227. On emigration from Bohemia (estimated at 100,000 during the Thirty Years' War and the post-war re-Catholicization), see Eduard Winter, Die tschechische und die slowakische Emigration in Deutschland im 17. und 18. Jahrhundert (Berlin: Akademie, 1955); and Jean Berenger, "The Austrian Lands: Habsburg Absolutism under Leopold I" in John Miller, ed., Absolutism in Seventeenth-Century Europe (London: Macmillan, 1990), pp. 157-174, here 159-163.

² Correspondence and decrees in Státní Ústřední Archiv Praha (henceforth SÚA), Stará manipulace, Reformace (henceforth SM R), 109/12, especially Karton č. 1982–1985; decree in Karton 1985, sv. 8, fol. 2–24, Imperial Decree, February 4, 1651. See also Anton Blaschka, "Das Trautenauer Untertanenverzeichnis v. J. 1651", Jahrbuch des Deutschen Riesengebirgsvereins, vol. 14 (1925), pp. 110–146, here p. 111; Lenka Matušíková and Alena Pazderová, "Alterszusammensetzung der Kinder im 'Verzeichnis der Untertanen nach dem Glauben vom Jahre 1651", Historická demografie, vol. 17 (1993), pp. 53–63, here pp. 53–55; Eduard Maur, "Problemy demografické struktury Čech v polovině 17. stoleti", Československý časopis historický, vol. 19 (1971), pp. 839–870, here pp. 840–844.

³ SÚA, SM R 109/12, Karton č. 1985, sv. 8, fol. 5-7, Imperial Decree, February 4, 1651.

⁴ SÚA, SM R 109/12, Karton č. 1983, sv. 4, fol. 383-384, letter of the Emperor, June 3, 1651.

head, occupation, legal status, social status, and religious status. Legal status was defined in terms of personal subjection: noble, free, non-subject, and subject (i.e. serf, comprising the vast majority of the population). Social status was defined in essentially economic terms: town burgher (Bürger, mešťán), peasant (Bauer, sedlák), gardener (Gärtner, zahradník), cottager (Häusler, domkář), "crofter" (Chalupner, chalupník), and "inmate" (Hausgenosse, podruh). Religious status was defined in four columns: "Catholic" or "non-Catholic" and, if non-Catholic, then whether there was "hope" or "no hope" of conversion. 5

Three years later, in 1654, the government commissioned a second big survey, the *Berní rula* (tax register).⁶ It recorded the name of each holder of taxable property, the type of holding (a social category assigned by the authorities), total seed sown, productive seed sown, number of livestock, and some craft occupations.⁷ A "reinspection" of the *Berní rula* in 1680 and

- 5 On the 1651 census, see Blaschka, "Das Trautenauer Untertanenverzeichnis"; Anton Blaschka, "Die Bevölkerung Nordostböhmens nach dem Dreißigjährigen Kriege", Jahrbuch des Deutschen Riesengebirgsvereins, vol. 19 (1930), pp. 215-229; Eliška Čáňová, "Složeni domacností v Čechách v roce 1651", Historická demografie, vol. 16 (1992), pp. 63-66; Eliška Čáňová, "Soupis poddaných podle víry a studium historické rodiny", Archivní časopis, vol. 42 (1992), pp. 28-34; Eliška Čáňová, Pavla Horská, and Eduard Maur, "Les listes nominatives de la Bohème, sources de données pour l'histoire sociale et la démographie historique", Annales de démographie historique, vol. 24 (1987), pp. 295-312; Viktor Lug, "Das Einwohnerverzeichnis der Herrschaft Reichenberg aus dem Jahre 1651", Mitteilungen des Vereins für Heimatkunde des Jescken-Iser-Gaues, vol. 26 (1932), pp. 7-12; Matušíková and Pazderová, "Alterszusammensetzung der Kinder"; Maur, "Problemy"; Eduard Maur, "Populační vývoj českých komorních panství po válce třicetileté", Acta Universitatis Carolinae, Philosophica et historica, vol. 3 (1972), pp. 9-80; Ernst Schreiber, Der Elbogner Kreis und seine Enklaven nach dem Dreißigjährigen Kriege (Prague: Verlag der deutschen Gesellschaften der Wissenschaften und Künste, 1935); and the articles collected in Historická demografie, vols. 4 (1970) and 6 (1972). The sources are in SÚA, SM R 109/45 Bech. 22; SM R 109/45 B-H 40; SM R 109/45 Bol. 10, 17; and Státní oblastní archiv Litoměřice, pobočka Děčín (henceforth SOA Děčín), fond Thun-Hohenstein. A complete edition of the 1651 census is currently being prepared, and volumes 1 (Loket circuit), 2 (Boleslav circuit), and 3 (Beroun circuit) have already appeared: Soupis poddaných podle víry. Loketského (Prague: Státní Ústřední Archiv v Praze, 1993); Soupis poddaných podle víry. Boleslavsko (Prague: Státní Ústřední Archiv v Praze, 1994); Soupis poddaných podle víry. Berounsko (Prague: Státní Ústřední Archiv v Praze, 1995).
- 6 This is held in SÚA, Berní rula (henceforth BR), č. 1ff. A summary edition was published as Berní rula. K edici Berní ruly (Prague: Archiv Ministerstvo Vnitra, 1950). On the structure of the 1654 tax register and its 1680 reinspection, see Josef Pekař, České katastry (Prague: Historický Klub, 1932), pp. 4-38; Anton Blaschka, "Die Grafschaft Glatz nach dem Dreißigjährigen Kriege", Jahrbücher des Vereins für Geschichte der Deutschen in Böhmen, vol. 1 (1926), pp. 43-146; Franz A. Slavik, "Böhmens Beschreibung nach dem 30jährigen Kriege", Mitteilungen aus dem Landesarchive des Königreiches Böhmen, vol. 3 (1910), pp. 20-133; Schreiber, Der Elbogner Kreis; Milan Volf, "Hospodářský a sociální obraz Litoměřického kraje podle berní ruly", Sborník archivních prací, vol. 18 (1968), pp. 142-236; Archiv Český, vol. 29 (1913), pp. 260ff.
- 7 The amount of seed is usually reported in *Strich* (covering ca. 0.285 hectares, or in cubic terms 93.587 litres), *Viertel* (ca. 0.07125 ha or 23.396 litres), and *Mass* (ca. 0.018 ha or 5.849 litres). For measures and calculations used in the tax cadaster, see Slavik, "Böhmens Beschreibung", pp. 87–99; and generally Gustav Hofmann, *Metrologická přiručka pro Čechy, Moravu a Slezsko* (Plzeň: Zapadočeské nakladelství, 1984). On the categories of the *Berní rula* of 1654, see *Archiv Český*, vol. 29 (1913), pp. 300ff, 344ff.

the "Theresian cadaster" of 1711 to 1748 used the same categories. These tax registers survive for most circuits of Bohemia. Although the 1654 register lists only those with taxable property, the "holding" in 1654 appears to correspond to the "household" in the 1651 census, enabling researchers to link these records.

The two great registers of the 1650s have long been central sources for Bohemian history. However, they are so detailed and colossal that, without computers, analysis has been limited to simple calculations and local studies. A Czech, Austrian, and British research team has therefore begun to create a database containing the 1651 census, the 1654 tax register, the 1680 "revisitation", and the 1711–1748 Theresian cadaster, for five feudal domains. Characteristics of this sample are shown in Table 1. Project members are using this database to investigate a variety of questions under the general rubric "Bohemian Social Structure, 1650–1800": the determinants of family structure and demographic behaviour; the nature and causes of changing social structure; the "second serfdom" or growth in the institutional powers of the great feudal landlords; "proto-industrialization" or the rise of rural export-industries; the Catholic counter-reformation; and the local effects of the growth of the early modern state.

The data are also generating their own questions. One of them concerns a large group of people identified as *Hausgenossen* (literally, "housefellows") — inmates living in the households of others. As Table 2 shows, these inmates made up 18 per cent of all individuals listed in the sample domains, 27 per cent in the towns, and 16 per cent in rural areas. Many inmates lived in their own conjugal family units — that is, together with a spouse, offspring, or both. These "inmate sub-households" made up no fewer than one-fifth of all households in the sample. Inmates and inmate sub-households were therefore an important feature of Bohemian society in 1651.

Inmates are found in many pre-industrial European populations, but their numbers varied widely across communities and regions. Higher proportions of inmates are generally observed in towns, which is ascribed to urban housing structure and craft labour requirements. Proportions of inmates also varied considerably across different rural areas, however, and here theories diverge. Some emphasize the labour demands of different sorts of rural economy: it is argued that arable farming, vine-growing, and proto-industry generated more inmates, while pastoral agriculture and mixed farming gave

⁸ The 1680 revisitation is held with the *Berní rula* in SÚA BR; the Theresian cadaster, which includes a declaration of demesne land, is held in SÚA, Tereziánský katastr. See Pekař, *České katastry*, pp. 101-142.

⁹ This project, "Social Structures in Bohemia, 1650–1800", has been funded since 1992 by the Austrian Federal Ministry of Science and Research. For further initial results, see Markus Cerman, "Bohemia after the Thirty Years' War: Some Theses on Population Structure, Marriage and Family", Journal of Family History, vol. 19 (1994), pp. 149–175.

Table 1 Characteristics of Sample Domains of Bohemia, 1651-1654

Domain Circuit	No. communities		Nt- bold	·			
		Towns/	No. holdings		No.		
	Circuit	Villages	Markets	Total	Abandoned	inhabitants	Economy
Chýnov	Bechyně	34	1	540	85	1,605	medium-scale agriculture
Děčín	Litoměřice	57	1	1,119	66	7,306	medium-scale agriculture
Frýdlant	Boleslav	38	2	2,031	995	6,973	agriculture,
Liberec	Boleslav	27	1	988	54	6,047	proto-industry
Poděbrady	Bydžov	48	1	866	288	2,441	large-scale agriculture

Source: Soupis poddaných, 1651; Berní rula, 1654.

Table 2 Inmates and Inmate Sub-Households^a in Sample Domains, 1651

Locality	Total population	No. inmates	% inmates	No. main households	No. inmate sub- households	% inmate sub- households
Chýnov domain ^b	1,570	223	14.2	457	90	16.5
Děčín rural	7,061	1,398	19.8	1,164	332	22.2
Frýdlant town	939	170	18.1	189	38	16.7
Nové Město town	428	62	14.5	117	26	18.2
Frýdlant rural	5,808	697	12.0	1,461	209	12.5
Liberec town	1,698	455	26.8	249	93	27.2
Liberec rural	4,321	821	19.0	692	223	24.3
Poděbrady town	628	307	48.9	69	80	53.7
Poděbrady rural	1,774	323	18.2	342	92	21.2
Total urban	3,693	994	26.9	624	237	27.5
Total rural	11,903	1,841	15.5	3,659	856	19.0
Total sample	24,227	4,456	18.4	4,740	1,183	20.0

a) Inmate sub-households are defined as all inmate groups forming conjugal family units.

b) Children under 11–12 years not recorded. Source: Soupis poddaných, 1651.

rise to fewer inmates but more servants.¹⁰ Other theories emphasize inheritance, marriage, and retirement practices: single-heir inheritance, low marriage age, and *inter vivos* property transfers combined with retirement contracts are thought to have given rise to inmates in the form of retired parents and non-inheriting siblings.¹¹ Still other theories emphasize changes in social structure: where dividing peasant holdings or settling on village commons was prohibited, demographic pressure on the land is thought to have created a stratum of inmate sub-households (if landless people were allowed to marry) or unmarried inmates and servants (if marriage was more restricted).¹² How useful are these theories in explaining the Bohemian findings?

One hint as to the possible origins of some of the Bohemian inmates is provided by the almost complete absence of co-resident kin outside the nuclear family. In the domains of Liberec, Frýdlant, and Děčín, for instance, only 1.5 per cent of households contained non-nuclear kin in 1651. This is extraordinarily low, even by northwest European standards, and suggests that some "inmates" were in fact relatives.

Much literature on Bohemian family structure adopts this explanation, emphasizing the youngest-son Bohemian inheritance pattern, which encouraged two practices likely to lead kin to co-reside as inmates. The first was the "retirement contract", whereby parents transferred headship to the heir (customarily the youngest son) in return for various considerations, including the right to dwell as inmates in the "old people's part" of the family house. The second was the *vybiti*, whereby an elder son married but remained in the parental household as an inmate, supplying labour on the holding until the youngest brother was old enough to inherit.¹³

Both practices assume inheritance in the male line. Thus their importance

- 10 See Lutz K. Berkner, "The Stem Family and the Development Cycle of the Peasant Household: An Eighteenth Century Austrian Example", American Historical Review, vol. 77 (1972), pp. 398-417; Michael Mitterauer, "Auswirkungen von Urbanisierung und Frühindustrialisierung auf die Familienverfassung an Beispielen des österreichischen Raums" in Werner Conze, ed., Sozialgeschichte der Familie in der Neuzeit Europas. Neue Forschungen (Stuttgart: Klett, 1976), pp. 53-146. On how rural economy and "ecotype" could influence rural labour organization, see Michael Mitterauer, "Formen ländlicher Familienwirtschaft. Historische Ökotypen und familiale Arbeitsorganisation im österreichischen Raum" in Josef Ehmer and Michael Mitterauer, eds., Familienstruktur und Arbeitsorganisation in ländlichen Gesellschaften (Vienna: Böhlau, 1986), pp. 185-323; and Michael Mitterauer, "Peasant and Non-Peasant Family Forms in Relation to the Physical Environment and the Local Economy", Journal of Family History, vol. 17 (1992), pp. 139-159.
- 11 On Bohemian inheritance, see Vladimir Procházka, Česka poddanská nemovitost v pozemkových knihách 16. a 17. stoleti (Prague: Academia, 1963); Pavla Horská, "Rodinná strategie ve vesnici Záblati na třeboňském panství (1661–1820)", Historická demografie, vol. 17 (1993), pp. 131–152; Kamil Krofta, Dějiny selského stavu (Prague: Academia, 1949); Josef Tlapák, "K některým otázkam poddanské nezakupní držby v Čechách v 16.–18. století", Pravnehistorické studie, vol. 19 (1975).
- 12 A. Kunze, "Vom Bauerndorf zum Weberdorf" in Oberlausitzer Forschungen. Beiträge zur Landesgeschichte (Leipzig: Reuter, 1961), pp. 165-192, here 166ff.
- 13 See Procházka, Česka poddanská nemovitost; Horská, "Rodinná strategie"; Krofta, Dějiny selského stavu; Tlapák, "K některým".

in generating the inmate population can be explored through surname links between inmates and main households. As Table 3 shows, only 9 per cent of inmate sub-households in the Frýdlant countryside and only 20 per cent in the Liberec countryside can have involved retirement contracts in the male line. Only 11 per cent in Frýdlant and 17 per cent in Liberec can have involved vybiti arrangements in the male line. By contrast, 80 per cent of inmate sub-households in the Frýdlant countryside and 63 per cent in the Liberec countryside showed no kin links in the male line with the main household. Clearly, only a small proportion of inmate sub-households can have been created by classic retirement contracts or vybiti arrangements, whereby the youngest — or any — son inherited. A substantial proportion of individual inmates, as well, were unrelated in the male line to the main household, as shown by a study of the domain of Děčín by Markéta Seligová.¹⁴ Inmates were present in 36 per cent of Děčín households in 1651, but only half of all individual inmates shared a surname with the main household. The other half were not, therefore, inmates as a result of inheritance by a son. Although inmates not sharing surnames with the main household may have been relatives in the female line, such arrangements must have resulted from lack of male heirs, discretion in inheritance practices, or forces other than inheritance. 15 It appears, then, that inheritance practices or other kinship ties in the male line were responsible for half of individual inmates in Děčín domain, 37 per cent of inmate sub-households in Liberec domain, and 20 per cent of inmate sub-households in Frýdlant domain. Clearly other factors were responsible for the remainder.

An alternative explanation for the origins of the Bohemian inmate population is advanced in literature on changes in social structure. Arno Kunze, for instance, regards Upper Lusatian and Bohemian inmates as comprising a separate "social stratum" inferior to the cottagers. After recolonization started around 1450, he argues, population growth and landlord engrossment reduced land availability, creating an inmate stratum renting dwellings on peasant holdings. This put pressure on communities to permit inmates to settle as cottagers on the commons. The need for labour led feudal lords and full peasants to permit opening the commons to settlement. Consequently, inmates settled as cottagers, and their numbers declined.¹⁶

The evidence for Frýdlant and Liberec domains supports this account only partially. First, land scarcity here was probably not caused by landlord engrossment. In Frýdlant domain, the number of full peasant holdings re-

¹⁴ Markéta Seligová, "Obyvatelstvo děčínského panství v polovině 17. Století podle věku a rodinného stavu" Historická demografie, vol. 19 (1995).

¹⁵ Similarly low proportions of traceable retirement arrangements are found for inmates in a large sample of early modern Austrian listings: see Thomas Held, "Rural Retirement Arrangements in Seventeenth- to Nineteenth-Century Austria: A Cross-community Analysis", *Journal of Family History*, vol. 7 (1982), pp. 227–252, here p. 239.

¹⁶ Kunze, "Vom Bauerndorf", pp. 166-169, 191.

Table 3 Surname Links between Inmate Sub-Households and Main Households, Frýdlant and Liberec Rural Areas, 1651

	Frýdlant rural	Liberec rural
No. main households	1,461	692
No. inmate sub-households	163	174
% inmate sub-households	11.2%	25.1%
Surname match, sub-household older	15	34
As % of main households	1.0%	4.9%
As % of inmate sub-households	9.2%	19.5%
Surname match, sub-household younger	18	30
As % of main households	1.2%	4.3%
As % of inmate sub-households	11.0%	17.2%
Surname different	130	110
As % of main households	8.9%	15.9%
As % of inmate sub-households	79.8%	63.2%

Source: Soupis poddaných, 1651.

mained stable throughout the sixteenth century, suggesting little engrossment, whether by the small knights or by the large feudal lords. Liberec domain had poor soils unprofitable for demesne farming, and only three new demesne farms were established in this period, one (Harcov, 1591) formed through purchase of a single peasant holding. Land scarcity must have had other causes here. Secondly, in these domains, the proportion of cottagers grew but that of inmates did not clearly decline. In Frýdlant domain, the years between 1564 and 1591 saw the greatest growth in the proportion of cottagers, but also an increase in the proportion of inmates. In Liberec domain, the rise in the proportion of cottagers (sometime after 1591) was accompanied by little apparent change in that of inmates for at least 60 years. Further doubt is cast on the view of inmates as a "social stratum", whose size varied with land scarcity, by the substantial groups of inmates in Bohemia in 1651, despite enormous war mortality and emigration. On the other hand, Frýdlant domain had a lower proportion of inmates than other sample domains in 1651, which is consistent with its relatively early opening of village commons (1564 to 1591) and its large proportion of abandoned holdings in 1654. Findings on the level of the domain, therefore, do not clearly either support or refute the view of inmates as a "social stratum".

Research on the level of individual villages may cast light on this question. Dana Štefanová investigated land transactions in the Frýdlant village of Mildenau (now Luh) to find out whether inmates ever obtained landholdings.¹⁷ Access to land would suggest that inmate status was a "life-

¹⁷ Dana Štefanová, "Mobilita podružské vrstvy. Snaha o její definici", Časopis národního muzca, Ř.A., vol. 164 (1995).

cycle" phase rather than membership in a distinct "social stratum". A total of 40 land transfers were recorded for Mildenau from 1656 to 1672, only half of which were between kin. Of the other 20, five involved people from outside Mildenau, mainly nearby villages. Land was clearly quite transferable between members of different families and even different communities. but did inmates participate in this transfer? Mildenau had 11 inmate subhouseholds in 1651. Four went into exile to escape re-Catholicization, and whether they ever obtained land is unknown. Of the seven remaining, two subsequently did own land. Indeed, both were involved in the same contract: in 1659, a cottage on the commons was sold by Nicol Nicht, listed in 1651 as an inmate aged 46, but now described as a Chalupner (the lowest houseowning social category) and "an old, weak, worn-out man"; the buyer was Christopher Bieberstein, an inmate aged 26 in 1651, by 1659 Nicht's son-inlaw. The other five inmate sub-households of 1651 did not obtain land in Mildenau between 1656 and 1672. An inmate in a neighbouring village later purchased a holding from a Mildenau widow, however, indicating that Mildenau inmates may in turn have obtained holdings in other villages.

These findings, although based on small numbers, show that inmate status was not exclusively either a life-cycle phase or a social stratum. That it had an important life-cycle component is suggested by the mean age of the Mildenau inmate household heads — 29.6 years — and the 48 per cent of all inmates in Frýdlant domain aged 20 to 34 years. However, this did not mean inmates were guaranteed accession to land during their twenties or thirties: of the three inmates recorded in Mildenau land transfers between 1656 and 1672, one was 21, one was 34, and one was between 46 and 54. Moreover, at least five of the eleven original inmate sub-households failed to obtain land in the village over the next 25 years. Inmate status did not indicate lifelong membership in a socio-economic stratum, however. Upward mobility was possible, both within the village and into neighbouring villages, although only for a minority of inmates and only into the next social stratum, the cottagers. Even the few inmates in this single village show considerable heterogeneity, casting doubt on mono-causal explanations.

Further evidence of the heterogeneity of forces creating the Bohemian inmate population is provided by three cases from the *Amtsprotokolle* (feudal court minutes) for Frýdlant domain in the 1650s. In December 1655, Georg Walter from Hainersdorf (now Jindřichovice p. S.) accused his son-in-law of becoming enraged in drunkenness and firing a gun in the "parlour and chamber" he shared with his parents-in-law. The son-in-law presented two excuses. First, a "sickness of the head" made him uncontrolled in his cups. Secondly, his father-in-law "had bequeathed to his other

¹⁸ Sheilagh C. Ogilvie, "Alltagsleben und soziale Institutionen. Ein ethnologischer Blick auf die Mikrostrukturen", paper presented to the Zweites Workshop des Projekts "Soziale Strukturen in Böhmen" (Prague, December 2–4, 1994).

children, but would not give anything to him, and the one annoyance created the other". However, he "was after all a young person, and would improve his ways in future, and live with his father-in-law and mother-inlaw peacefully". The feudal authorities reconciled the household, fined both parties, and imposed an additional fine on the son-in-law because he had fired shots and thrown stones after soldiers quartered in the village.¹⁹

The 1655 court minute does not reveal whether the older or the younger couple constituted the "inmate sub-household". The 1651 census lists Georg Walter, a "gardener" aged 66, heading a household consisting of his wife and 24-year-old son, also Georg. The 1654 tax register lists a "gardener" called Jiržy Walter, with one cow and no land. Either young Georg had taken over the family holding between 1651 and 1654 and his parents had gone to live with their married daughter (a deviation from the classic retirement contract), or old Georg was still in charge of the family holding in 1654 and 1655, but had taken in his married daughter and her husband, and young Georg had died or moved into another household (as dependent rather than head). The son-inlaw's statement that he had not yet received an inheritance suggests that he was the inmate, and old Georg the head of the main household.

Inheritance therefore generated inmate households, but not always in the classic pattern. Bohemian inheritance clearly involved sufficient discretion not only to cause resentment about parents' choices, but also for parents to reside with a non-inheriting son-in-law even when they had "other children", one of them possibly an adult son who had inherited the holding. Moreover, this inmate sub-household had been created not by inheritance itself, but by an unrealized inheritance claim. The relationship thereby established was close but resentful: no arm's-length "lodging arrangement", but one in which the two couples shared "parlour and chamber" and the son-inlaw promised "to live with" his parents-in-law peacefully. Yet the very inheritance links which led to co-residence also created conflict.

Even inmate households apparently resulting from classic inheritance rules could conceal both discretion and conflict. In June 1650, for instance, Hans Keller from Haindorf (now Heinice), was accused by his mother, brother, and brother-in-law of defaulting on payments due on his "inheritancepurchase", violating the retirement contract with his mother, and failing to repay debts to her. Keller disputed the debts, but openly admitted defaulting on the inheritance payments because of "difficult times". Declaring that "he had never greatly desired the holding, his mother and his siblings had talked him into it", he proposed that he return the holding to his mother and

¹⁹ SOA Děčín, Historická Sbírka, Karton 79, Úřední protokol 1655-6, fol. 1v-2r, court minute, November 16, 1655: "d. stuben vnd kamer"; "haubt kranckheit"; "dz er seine anderer Kinder außgesezet, ihme aber nichts geben wolte, eine verdrießlichkeit gebe die ander"; "Wehre auch ein Junger mensch, wolte sich hinführo beßern, vnd mit seinem Schweher vatter vnd Mutter fridlichen leben".

siblings. Both family and feudal authority insisted on his keeping the holding and fulfilling the retirement contract. Ultimately it was agreed that Keller was to pay only half of the original purchase price, but retain the holding and keep up payments strictly.²⁰

On the face of it, Keller's mother was an inmate created by the classic Bohemian inheritance practice, the retirement contract, but behind the classic pattern lay discretion. Keller had to be "persuaded" by his family to accept the inheritance and retirement contract and was now compelled by family and feudal authority to retain them. In practice, inheritance followed neither clear social rules nor parental decree: it was a family decision, requiring persuasion and consent. Moreover, neither accession to a holding nor coresidence with a retired parent was unambiguously desired by potential heirs.

This case also illustrates another characteristic of the inmate population. Between June 1650 and the census of spring 1651, Keller's mother disappeared from both household and village. The only Keller in Haindorf in the 1651 census was Hans himself, a "peasant" aged 32, heading a household with his wife and four sons. Inmate arrangements — even those generated by inheritance — could clearly be ephemeral. Record linkage confirms this: not a single "inmate" mentioned in the Frýdlant feudal court minutes between 1649 and 1655 could be found as an inmate in the 1651 census. Inmates were geographically and socially mobile.

The costs and benefits of this mobility are illustrated in a third feudal court case. In July 1651, Christof Herbig, an inmate from Mildenau, accused a peasant, his son, and other young men from neighbouring Raspenau (now Raspenava) of defamation and assault. Herbig had bought a pound of "spindle-boards" from a board-cutter in Raspenau for five *Kreuzer*. He was supposed to take them to a customer in Görlitz (over the border in Lusatia), but "because of lack of transport could not pick them up so soon". Meanwhile Christof Walter, a peasant from Raspenau, had bought boards from the same board-cutter for only four-and-a-half *Kreuzer*. Informed by another villager, and meeting Walter on the road to Görlitz, Herbig accused him of "an act of villainy", and a fight ensued.²¹

The judgement by the feudal authority strikingly illustrates its attitude toward inmates. Although Herbig was the accuser and had been physically attacked, it was he and not the accused who was punished. The reason was

²⁰ SOA Děčín, Historická Sbírka, Karton 79, Úřední protokol 1649-55, fol. 96r-96v, court minute, June 4, 1650: "schweren Zeiten"; "so hette er auch dz gutt niemalls gros begehret, seine Mutter Undt sein geschwister hätten ihm darzue beredet".

²¹ SOA Děčín, Historická Sbírka, Karton 79, Úřední protokol 1649-55, fol. 155r-155v, court minute, July 31, 1651: "Spindebretter"; "weil Er aber wegen Mangelung der fuhren selbe nit bald abholen Könen"; "ein schelmstück"; "Er aber der herbig nur ein hausgnos vnd mit allerhand Caupleni sich nehret, auch ein gantzes Jahr der Obrigkeit Keine dinste thut, sondern sich nur des Cauplens nehret, da Er sol ein heusel annehmen Könte."

stated explicitly: "Herbig is only an inmate, and earns a living from all sorts of dealing, and also has done no services for the feudal authority for a whole year, but rather earns his living only from dealing, when he should be able to take on a cottager holding." That is, the man himself preferred to live from small-scale trading as an inmate, rather than take an available holding as a cottager. The feudal authority wanted him to take a holding, which would oblige him to do labour services. Given the pressure the authority could exert — as in this case — it is striking how many people remained inmates in Bohemia in 1651. Herbig's reluctance to take a cottager holding, Keller's reluctance to take an available peasant holding, and the pressure exerted by the feudal authority in both cases suggest that one force behind the large percentage of propertyless inmates in Bohemia in 1651 may have been the burden of taxes, rents, and labour services on those with land and houses. In Bohemia under the "second serfdom", not all inmates sought the mixed blessing of holding property.

The pressures that created inmates also made them mobile. In the 1651 census, written up at least a month before this court case, the only individual in the entire domain of Frýdlant who could have been Christof Herbig was a Christof Herwig, a Chalupner (the lowest house-owning social stratum of 1651), heading a childless household in Mildenau with a 22-year-old wife. Of course, Herwig may have been a different individual, but, if so, where was the Christof Herbig of the court case living a month earlier? If he was the same man, it suggests that the boundary between Chalupner (very small cottager) and Hausgenosse (inmate, perhaps sometimes occupying a separate cottage on a peasant's holding rather than separate rooms in a peasant's house) was rather fluid — although clearly for the feudal authority the distinction between Häusler (cottager) and inmate was crucial. The 1654 tax list assigned yet a third designation — "gardener" — to the only Christof Herwig in Mildenau (and the entire domain). The three different socio-economic designations assigned to Christof Herbig/Herwig of Mildenau in the space of four years — "very small cottager" in April-June 1651, "inmate" (and small-scale dealer) in July 1651, and "gardener" (with two cows) in 1654 — reinforce the impression that inmates were highly mobile between occupations and social categories.

What conclusions can we draw about the significant inmate population in mid-seventeenth-century Bohemia? The higher proportion of inmates in towns is consistent with other European findings, but the research to date cannot yet identify precise causes. In the town of Liberec, several inmate sub-households headed by wool-spinners lived in main households headed by woollen-weavers, suggesting that craft labour requirements played a role. For rural areas, prevailing theories variously emphasize labour requirements of different rural activities, inheritance practices, and changing social structure. The analysis is not yet sufficiently advanced to test whether inmate proportions varied with rural economic activities. However, it can offer evidence that the origins of the inmate population were more complicated

than suggested by straightforward theories of inheritance or social structure. According to the inheritance theory, two elements of the youngest-son Bohemian inheritance rule — retirement contracts and *vybiti* — generated inmates in certain life-cycle phases. According to the social structure theory, land scarcity produced a social stratum of inmates. Empirical findings indicate that the forces generating the inmate population were multiple and complex.

Only a minority of inmate households were created by inheritance by sons, as is shown by surname matching. Others were created by the expectation rather than the actuality of inheritance, and in the female rather than the male line. Even those inmate households arising from inheritance in the male line were the result of individual and familial decisions, not general social rules requiring particular residential responses.

Land scarcity probably did help create inmate households, as shown by the low proportion of inmates in severely depopulated Frýdlant, compared to other, somewhat less devastated domains. However, prevailing marriage rules (in particular those allowing landless and houseless people to marry) must have played a crucial role in deciding whether married inmates, rather than celibate servants or emigration, would be the response to land scarcity. Most of Bohemia was depopulated in 1651, yet all sample domains had significant inmate groups. Furthermore, the average youth of the inmate population, its mobility between households, communities, and social designations, and the fact that some inmates did obtain land all suggest that, at least for some, inmate status was a life-cycle phase or an individual strategy, rather than involuntary membership in a social stratum. Finally, the fact that it was possible to prefer existence as an inmate to an available position as a cottager, that family persuasion might be necessary to prevail on a man to take on a peasant holding, and that the feudal authority had to put pressure on men to accept both sorts of holding indicates that feudal taxes, dues, and services made inmate positions preferable to land-holding positions, at least in some respects and for some individuals.

Finally, the analysis of even a handful of village-level documents reveals enormous heterogeneity within the inmate population. Such evidence should prompt us to develop multi-causal explanations for the Bohemian inmate population, which take account of a wider variety of social and economic factors, and to test them thoroughly both within and between villages and domains.