

ALTERNATE ROUTES
A Critical Review

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Alternate Routes is a multi-disciplinary journal published annually by graduate students in the Department of Sociology and Anthropology at Carleton University in Ottawa. It is not, however, restricted to work from students at Carleton. We are interested in receiving papers written by graduate students (or co-authored with faculty) in any university. Editorial emphasis is on provocative analysis of contemporary issues and we particularly welcome papers dealing with debates within Canadian society. The theme of volume 7, to be published in 1984 is *Class and Ethnicity*.

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EDITORIAL STATEMENT

The papers in this special issue reflect both the diversity of perspectives which have been applied to feminist issues and the wide range of substantive problems being addressed.

Armstrong and Armstrong examine quantitative data collection by Statistics Canada. They argue that the conceptualizations and operationalizations employed reflect male bias. The authors suggest changes to remedy this bias, and in addition to this, emphasize the need for a greater use of qualitative techniques.

In a second paper, written from a psychoanalytic perspective, Hamilton contributes to the ongoing feminist debate on the oppression of women by capitalism and patriarchy.

Saunders focuses on the roles of women during different stages of post revolutionary China. She argues that since revolution is an engineered process, the status of women is to some extent, determined by those who have the power to direct this process.

Morris examines the history, structure and operation of the National Action Committee on the Status of Women (NAC). Rather than simply endorsing the popular view that the organization is elitist and ineffective, the author stresses the structural constraints which prevent it from realising its goal of representing all women.

In the last contribution, Bourgeault deals with the subjugation of native (Indian and Half-breed) women in northern and western Canada since the development of the fur trade. He emphasizes that an analysis of the racial, colonial and class divisions which came into being is crucial for our understanding of the process of oppression of native women.

BIOGRAPHICAL SKETCHES

Hugh Armstrong obtained his B.A. (political science and history) and his M.A. (sociology) from Carleton University. His Ph.D. thesis was recently 'deposited' at the Université de Montréal. He now teaches sociology and humanities at Vanier College, Montreal. Most of his research is conducted with Pat Armstrong on women and work. Their book, A Working Majority: What Women Must Do for Pay, was published earlier this year and they are at present revising The Double Ghetto: Canadian Women and Their Segregated Work, first published in 1978. He is a manuscript editor for Studies in Political Economy.

Pat Armstrong obtained her B.A. (sociology) from the University of Toronto and her M.A. (Canadian studies) from Carleton University. Her M.A. thesis formed the basis of The Double Ghetto. She now teaches sociology and women's studies at Vanier College, Montreal and is a Ph.D. candidate in sociology at Carleton University. Her thesis is on women and the economic crisis. She has been on the executive of the Canadian Sociology and Anthropology Association and is now on the editorial boards of Perception and of Australia/Canada Studies.

Ron Bourgeault currently works for the Association of Metis and Non-status Indians of Saskatchewan (AMNSIS) and the Gabriel Dumont Institute of Native Studies and Applied Research, Regina, Saskatchewan. His current research deals with the modern history of the Indian and Metis of western and northern Canada.

Roberta Hamilton received her B.A. (sociology) from Carleton University in 1963 and her M.A. from Concordia University in 1975. She is now completing a doctoral thesis in humanities at Concordia University and has just been appointed assistant professor in the Faculty of Arts and Sciences at Queen's University. She is the author of The Liberation of Women: a Study in Patriarchy and Capitalism.

Cerise Morris worked for several years as an activist in the women's movement in Montreal, co-ordinating a women's centre and focussing on women's issues in social work practice. Her graduate work was done at McGill University where she obtained a MSW in 1971 and a Ph.D. (sociology) in 1982. Her research interest is in how the demands and issues of feminism get translated into policy.

Eileen Saunders is presently employed as an assistant professor in the School of Journalism, at Carleton University. She obtained her M.A. at Queen's and recently completed her Ph.D. (in sociology) at Carleton University. Her doctoral dissertation was entitled Feminist Theory and Socialist Revolution.



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A Critical Review Vol. 6, 1983

Contents

Pat and Hugh Armstrong	1
Beyond Numbers: Problems with Quantitative Data	
Roberta Hamilton	41
The Collusion with Patriarchy: a Psychoanalytic Account	
Eileen Saunders	61
Socialist Feminist Theory: The Issue of Revolution	
Cerise Morris	87
Pressuring the Canadian State for Women's Rights: the Role of the National Action Committee on the Status of Women	
Ron Bourgeault	109
The Development of Capitalism and the Subjugation of Native Women in Northern Canada	



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Beyond Numbers: Problems with Quantitative Data

Pat and Hugh Armstrong

Using Statistics Canada as an example, the authors argue that statistical data collection must be sex-conscious where it is now sex-blind. It must take the different work, location, bodies and experiences of women and men into account.

The theoretical assumptions behind the numbers must be examined from the perspective of women; the claim to truth and the monopoly of fact challenged. Supported by examples from interviews conducted by them for other research, the authors go on to argue that qualitative techniques can expose the holes in, as well as complement and check, the data collected by more quantitative means.

Introduction

As C. Wright Mills pointed out many years ago, "Social research of any kind is advanced by ideas; it is only disciplined by fact" (1959:71). Ideas, particularly the systematic organization of ideas into theory, are, however, too often forgotten in social research. Facts are frequently identified with numbers and numbers with neutrality or, even, truth. This is especially the case when the numbers are collected by a state agency such as Statistics Canada.

In this paper, we argue that numbers, and the methodology used to gather them, cannot and should not, be separated from their social context, nor from the ideas that direct their selection. Moreover, numbers cannot be viewed as the sole, nor even necessarily the most accurate and relevant kind of fact. The inadequacy of numbers for a full understanding of the position of women is camouflaged by reference to "scientific" methodology, by the adoption of non-sexist language, by the use of similar questions for both sexes and by the tabulation, according to sex, of most data. But for the most part, women and men do different work, in different places, for different pay. Given this segregation, as well as the different reproductive capacities of the sexes, many questions are women's questions, many answers are women's answers, many categories are women's categories, many omissions primarily affect women.

From this perspective, we begin with a critical examination of Statistics Canada, the chief source of the numbers so often taken as the facts. Explicit and, more often, implicit assumptions are built into the collection and tabulation of these data, assumptions which may serve to conceal or to distort important aspects of

women's work. Moreover, some information which is crucial for understanding the nature and conditions of women's work is inaccessible to, or lost from, quantitative measures, however carefully structured the questions and explicit the ideas. Building on this critique of Statistics Canada in particular and quantitative approaches in general, we go on to suggest how qualitative techniques can expand and correct our view of women's work, complementing and acting as a check upon information gathered by quantitative means. In conclusion, we recommend, first, that more funds be allocated to theory development, that is, to the ideas which advance social science research. Secondly, we recommend that a thorough examination of the assumptions, methodology and presentation of data by Statistics Canada be initiated from the perspective of women, with a recognition of the sex-segregated nature of women's work. Finally, financial support should be directed towards research which goes beyond surveys and the limited data available from Statistics Canada to connect these with the qualitative aspects of women's work, to the nature and conditions of their jobs in and out of the labour force. In what follows, examples from Statistics Canada are used only to illustrate the argument. A comprehensive and systematic examination of this important agency's approach still needs to be done.

Assumptions and Concepts

According to Mills (1959:67), all empirical research involves "a choice as to what is most real." But the basis of these choices, the theoretical assumptions inherent in the collection and tabulation of data, are often obscure, sometimes even to the

statisticians themselves. As John Irvine, Ian Miles and Jeff Evans (1979:5) explain in their introduction to Demystifying Social Statistics:

It is not enough, however, merely to make the case that statistical data cannot be interpreted without reference to their underlying theoretical assumptions. All data, whether produced in the course of academic research or by state bureaucracies, are structured by the conceptual framework that is applied as well as by the technical instruments used in their production. It is the precise nature of these practical and theoretical commitments that needs investigating for each set of data.

While the technical instruments are usually clearly described in Statistics Canada material, the theoretical commitments are seldom discussed. Few publications explore the assumptions behind the research or the specific selection of questions, responses and techniques of analysis.[1] This alone suggests a perspective which considers its theoretical approaches unimportant or absent, its methods scientific, and its numbers objective reflections of reality. As a result, it is not always a simple task to determine what is being measured and why, let alone what is being ignored and for what reasons.

Explicit statements outlining theoretical approaches are rare but an examination of concepts and how they are operationalised does reveal some of the assumptions behind the data. For women, probably the most obvious example is the definition of work:

It includes working for wages, salary, tips or commission, working in their own business, farm or professional practice, or working without pay in a family business or farm owned or operated by a relative in the same household. "Work" excludes housework or other work around the house, and volunteer work (Statistics Canada, 1982a:17).

What Statistics Canada is interested in counting is not all the ways people spend their days or their energy, not how they survive on a daily basis, not how food gets to their tables, nor even how they improve

their standard of living. On the other hand, interest is not limited to paid employment, to work that brings individuals money income. Rather, the focus of concern is work which results directly in profit and exchange. As the Guide to Labour Force Survey Data explains:

The concepts of employment and unemployment are derived from the concept of the supply of labour as a factor of production measured over a short interval of time. The production referred to is in turn defined as those goods and services included in the National Accounts (Statistics Canada, 1979:15).

The interests served are not those of women, since the work most women do at home for their families, as well as the important volunteer work they do in hospitals, schools, playgrounds and a wide variety of other institutions disappears.

This is not to suggest that counting housework or volunteer work would change the nature of that work. That they are not considered reflects the perspective of Statistics Canada. The omission indicates that there are assumptions behind the data, assumptions which produce a picture that excludes much of the work most women do and dramatically underestimates the labour involved in daily survival.

Less obvious than the assumptions about the kind of work that counts are the assumptions related to the structure of families. When collecting data on households, Statistics Canada seems to assume that each household has one person primarily responsible for financial support, that this person is normally male if there is a man in the house and that women by themselves have the babies. Here too, the concern seems to be with the connection of the household to the economy outside the home rather than with what happens within this domain.

Largely in response to feminist protests, Statistics Canada has dropped the term "Head of the Household" and replaced it with "Person 1". For the 1981 Census, respondents were instructed to:

Choose one of the following as Person 1:

- either the husband or wife in any married couple living here
- either partner in a common-law relationship
- the parent, where one parent only lives with his or her never-married son(s) or daughter(s) of any age

If none of the above applies, choose any adult member of this household.

But in spite of the introduction of non-sexist terminology, little change in the data was anticipated. Indeed, alterations in other sections of the Census helped ensure that this would be the case.

According to the 1981 Census Dictionary:

In 1981, the criterion for determining family type was changed. A new question was added to the census questionnaire to determine a person responsible for paying the rent, or mortgage, or taxes, or electricity, and is used to identify primary and secondary families. In previous censuses, the primary family was defined as the family of the head of the household. While we anticipate that in the majority of cases the person responsible for household payments will also be considered as the household reference person (Person 1), this will not always be the case (Statistics Canada, 1982a:63).

Research in the United States (Vickery, 1979) and in Canada (Armstrong and Armstrong, 1983) suggests that the income of employed women who live with men pays for food, clothing and services rather than shelter and energy. Thus, the criteria selected to determine the family maintainer favour men, even though the actual amount allocated for mortgages, taxes and electricity may be lower than that spent on food (Canada Department of Finance, 1981:13). The primary family, then, becomes another way of getting men back as the head of the household.

Men's headship is further reinforced by the decision to record only one family maintainer. If respondents write in that these expenses are jointly paid, one will be selected by the statistician. Maintenance, the Census assumes, cannot be shared. According to a Statistics Canada spokesperson, it is not possible to obtain the financial contributions and expenditures of each member of the household

because "household income is not important data." Not important for whom? Once again, it is women's contribution which is the most likely to disappear.

One aspect of the household, however, does seem to be recorded for women alone. Census question number 37 asks:

For WOMEN [emphasis in the original] who are married or have ever been married: How many children were EVER born to you?

Furthermore, according to the 1981 Census Dictionary, "Childless families refers to those families where the wife has reported that no children were ever born to her" (Statistics Canada, 1982a:62). Biological reproduction does require male participation. Marriage is not required for conception. Yet the Census records the fertility of ever-married women only. While women always know how many babies they produce and while some men may be in doubt, the lack of male precision hardly seems large enough to warrant their exclusion from these parenting records. In the absence of a clear justification for this approach, it is tempting to assume that women's childrearing responsibilities — the social extension of biological reality — are the focus of concern. However, given that some men retain alone the responsibility for their children and given that some never-married women also keep their children, the data obscure actual child care arrangements.

The same is true of the practice of counting only never-married children living at home.[2] Divorced and separated offspring may, however, be returning to their parents' homes, seeking financial and emotional support as well as babysitting and other family care services. Failing to record these dependencies, like the omission of data on the financial and work contributions of each member, hides the actual

economic relationship within the family. It also conceals the additional work such dependencies may mean for women. Moreover, given the growing unemployment and inflated housing costs facing young people, it seems plausible that more and more young marrieds will be looking to their parents for financial support and for accommodation. Statistics Canada seems ready to provide little assistance in monitoring these growing dependencies.

The conceptualisation and operationalisation of work, maintenance, and fertility illustrate the importance of assumptions to findings, of choices to the selection of facts. The development of the problem, of the hypothesis, takes place at least as much before the information is collected as after Statistics Canada publishes its numbers. However, in the absence of explicit theoretical justification for these choices, it is possible only to speculate about the theoretical framework guiding the data collection. Consequently, debate has focused on the techniques, which are explicit, rather than on the hypotheses, which are obscure. But, as E.P. Thompson (1978:231) said of historical research, scientific investigation "consists in a dialogue between concept and evidence." When one half of the dialogue is missing, it is difficult to evaluate the results. In Canada, theoretical work has been divorced from, and has taken second place to, empirical research. Both suffer in isolation. The theoretical assumptions behind the data should be brought to light for examination and the development of theory should be strongly supported as legitimate social science work.

Collection of Data

The methods used to gather data both reflect the assumptions behind the research and affect the information collected. Techniques

cannot be fully evaluated nor understood outside the social and economic structure or their particular historical period. Who is interviewed, how they are interviewed, the information sought, the alternative responses offered and the consequences of the answers are all significant factors in the production of statistics. Here, too, choices are necessary and the choices have important consequences for our view of women's work as is shown below. The point, of course, is not to argue that everything is relative; it is not to deny the existence of the 'real' world in some phenomenological sense. Rather, it is to advocate theoretically-informed and sceptical caution in the use of data as we, quite reasonably, seek more reliable knowledge about the world.

1. Deskilling

Harry Braverman (1974), in his perceptive analysis of work in the twentieth century, describes how the pursuit of profit has encouraged the separation of manual and mental labour as well as the progressive deskilling of both white collar and blue collar jobs. In these times of government restraint, a similar process seems to be taking place in the collection of statistics. Many of the tasks are simplified to allow their completion by untrained persons. While the Labour Force Survey continues to employ trained enumerators, the Census now depends heavily upon self-enumeration. However, as Statistics Canada (1980a:14) points out in the Social Concepts Directory, "The questions are usually phrased to be suitable for self-enumeration for a reasonably well-educated respondent." The assumption of "reasonably well-educated" respondents can be made neither about the population covered by the Census nor about those included in the more comprehensive questions of the 1/5 sample. Not only does this procedure encourage the simplification, and perhaps

even the omission of important questions, it also means that errors in the interpretation and responses to questions are much more likely. Those many women who have not had the opportunity to learn to read and write one of our major languages cannot be sure that they are counted in (and many of those who have, in previous censuses, earned money administering the questionnaire are counted out of those paid jobs).

2. Restraining Legislation

Even if the respondents clearly comprehend the questions, they may be unwilling to expose their position to government scrutiny, in spite of assurances about confidentiality. According to the women we interviewed, a range of government programmes and regulations discourage them from reporting their employment and earnings (Armstrong and Armstrong, 1983). For example, veterans' allowances, disability pensions and welfare payments set a low maximum on family income. Reporting employment and pay often means, then, a reduction in much needed benefits. Low maximum earnings set for day care subsidies have a similar effect. For those relatively low-income families, the effective tax rate on paid employment may well be 100 per cent. And the income tax regulation which sets a low maximum on the amount a spouse may earn and still be claimed as a deduction also frightens some away from declaring their employment to any government representative conducting a survey. Employers may discourage their employees from reporting income, wishing to evade regulations and contributions to government programmes. Rules related to contributory plans such as unemployment insurance and Canada/Quebec Pension also encourage women to hide their employment, sacrificing their future and current protection in order to take home a little more money at the end of the week. Many of these people are

unwilling to take the chance on promises of secrecy. That such factors can have a significant effect on data collection has not been entirely ignored by Statistics Canada. The 1981 Census Dictionary (Statistics Canada, 1982a:13) notes that tax changes allowing for the deduction of spouse's wages as expenses "may have changed the status of some self-employed persons from 'without paid help' to 'with paid help' if they decided to pay wages to their spouses." Few of those disappearing from and appearing in the unpaid spouse category are male.

That this hidden economy, this invisible workforce, is composed primarily of women is, of course, difficult to prove. Our research suggests, however, that many of them are women who do hairdressing or typing at home, look after children in their own or other people's houses, scrub floors and do errands for pay, sew baby clothes and stick labels on bottles, or sell their sexual services on the street. It seems likely, then, that labour force data fail to capture many of the women who work for pay, especially those who are employed in the lowest paid and least protected work.

Employers as well as individuals may be influenced in their responses by government regulations. For example, the Statistics Canada monthly publication Employment, Earnings and Hours which provides the current information in this area, is based on employers' answers to survey questions. But laws related to minimum wages and equal pay, to hours and overtime, to piece rates and benefits may discourage some employers from accurately filling in the blanks. It should also be noted that the survey includes only those establishments with twenty or more employees. Since many women are employed in smaller workplaces, this information may not only count some women inaccurately but also exclude entirely many of those in the lowest paid jobs.

3. Sampling

Financial and geographical considerations frequently make sampling techniques necessary. However, important data can be lost through the choice of sample over comprehensive methods, or through the choice of a small sample size. When many people are in a category, they are accurately picked up by sampling techniques but the method is much less precise when few people fit into the group. With women highly concentrated in some occupations and industries and virtually absent from others, the use of samples in collecting labour force data in both the monthly surveys and the 1981 Census means that some women will not show up in non-traditional occupations and industries, because the estimates are unreliable. The female electricians in Prince Edward Island, for example, are extremely unlikely to become visible, although the female professors in Ontario have a better chance.

4. Machine Processing

When large numbers of responses must be processed quickly, the tendency is to rely on those questions and responses which can be read by machine and easily categorised into neat tables. As C. Wright Mills (1959:57) pointed out, "The kinds of problems that will be taken up and the way in which they are formulated are quite severely limited by The Scientific Method. Methodology, in short, seems to determine the problems." It is difficult, of course, to tell what is left out as a result of being difficult to measure numerically, or to determine the extent to which questions are structured by methodological as against theoretical considerations. But the two kinds of consideration are clearly linked, and the consequence is that we miss out on some important issues. For example, the absence of questions on the labour

process is perhaps a result of both theoretical and technical considerations. The absence of statistics on the nature and conditions of work influences our understanding of the employment situation of women since it is on the shop floor, and in the bank, the restaurant, the hospital and the grocery store that sex segregation and inequality become reality.

5. The Wording of Questions

Statistics Canada argues in its Social Concepts Directory, that "The key consideration to be borne foremost in mind, when constructing questions, is the viewpoint of the respondent with the needs of the survey sponsor in the background" (1980a:15). While the viewpoint of the respondent is certainly important, sponsor needs are seldom explicitly revealed to those using the data. Moreover, it is not simply the viewpoint of the respondent which should be thought about but also the structural constraints influencing the answers. In developing the wording of questions, more than their clarity, brevity and simplicity should be considered; sex segregation of work should also be taken into account.

The Census asked, for example: "Last week, how many hours did you work (not including housework or other work around the house)?" Our research suggests that such questions are answered in a variety of ways, depending upon the nature and conditions of the work. Women who work part-time frequently have short daily hours of steady work, with few if any paid breaks. The hours they report working are fully spent at the desk, behind the counter or on the line. With few, if any, paid holidays, the days per week they report may also not be comparable to those with full-time jobs. Moreover, those who work in non-unionised

establishments often work without breaks, have short lunch periods and stay late to finish up. Yet they calculate their hours from when they are required to be at work until the formal quitting time. Not only are they not paid overtime, but they do not view these extra minutes as time on the job. Finally, those who work in homes as domestics, babysitters, cleaners and piece workers normally have very long, but inaccurately recorded, hours.

The point, of course, is that these part-time, non-unionised and/or home workers are disproportionately women. The recorded sex differences in hours worked are only in part the result of actual differences. They also reflect the way in which the question is asked and answered. To ignore the sex segregation of the labour force is to produce faulty data on issues such as hours worked.

6. Excluded Questions

It is not only the questions that are asked but the ones that are not asked which should be considered in light of women's structural segregation in and out of the market. For instance, the monthly survey of Employment, Earnings and Hours requests information on the total number of female employees as well as the proportion that are wage and salary earners. Employers are not questioned, however, on how much they pay these female wage and salary workers. Nor are they asked about turnover rates, about which people leave which jobs after what period of time for what reasons. Once again, it is women who are most concerned about revealing wage differentials. It is women who are accused (in the absence of evidence) of having high turnover rates resulting from their low level of commitment to their paid jobs.

While people are asked about their formal education, they are not

asked about their skills. In assuming competence can be measured by formal certification, Statistics Canada fails to measure the actual skills people employ in their jobs. Women's skills, in particular, disappear because as one woman explained to us about the requirements of her job, "It's what every woman knows how to do." Furthermore, the absence of such a question means that there is no real assessment of the resources available for coping with the new micro-electronic technology. Because these skills are new and constantly changing, many are learned on the job and cannot, therefore, be measured by questions on formal education. And many more women are learning how to use this equipment on the job than are acquiring these skills in credit courses.

Although fringe benefits are an increasingly important part of workers' incomes, the sex differences in this field are virtually ignored by Statistics Canada. Various factors — such as the ineligibility of some part-time, salaried and young workers, not to mention the wage and salary basis of most benefits — may mean that female employees receive fewer rewards in this area as well. Yet the monthly survey reported in Employment, Earnings and Hours does not cover fringe benefits. And between 1967 and 1975 several surveys of labour costs in various industries were conducted and then jointly published by Statistics Canada and the Department of Labour, but with no data on the benefits by sex. Finally, only in Saskatchewan are workers' compensation records published by sex of claimants, and these figures indicate significantly lower claims for women (Statistics Canada, 1980b:27). In part because Statistics Canada produces so little information on occupational health and safety, it is difficult to learn just why this is the case.

The failure to ask a question about relatives requiring special

care has a similar effect. Information is collected on the number and ages of children but not on aging grandparents or disabled younger people who make up part of the "personal or family responsibilities" fulfilled by women as part of the invisible work that reduces their labour force participation. In general, by not asking these questions, and by not collecting information by sex, significant aspects of women's, and men's, work are hidden from view.

7. Selecting Alternative Responses

The data are not only conditioned by the questions asked, or not asked, but also by the choices of response that are offered. In the Census question on major source of income, for instance, one choice was "working for wages, salaries, tips or commissions." That Statistics Canada asks employers answering their monthly survey to distinguish between wage and salary earners clearly indicates that these differences are seen to be significant, yet they disappear from the Census, from what is supposed to be the more complete source of information. Workers may well be concentrated by sex into each of these categories, but this is impossible to tell, given the choices offered.

Perhaps the problem is more obvious in another possible response to this question. The "other income from government sources" choice includes, "alimony, child support, periodic support from persons not in the household, net income from roomers and boarders, non-investment income such as retirement income from abroad, scholarships, etc." (Statistics Canada, 1982a:24). By lumping together these diverse sources, Statistics Canada does not facilitate the analysis of income sources by sex and occupation.

In not offering technological change as a reason for leaving last

job, the Labour Force Survey is missing the opportunity to monitor the effect of micro-technology on employment. Since the research to date (eg. Menzies, 1981) suggests that women will be hit first and most, omitting this alternative conceals important factors influencing female labour force work.

8. Denying History

If the purpose is to understand what is happening to women today and what will happen to them in the future, it is necessary to examine the changes that have been taking place, to take an historical perspective that exposes the factors influencing these changes. But Statistics Canada makes such analysis difficult by failing to ask historical questions and by changing questions or categories.

Few historical questions can be found in the Census. In the questionnaire distributed to the 1/5 sample, those designated "Person 1" are asked how long they have lived in their current dwelling. Everyone is asked where they lived five years ago. Ever-married women are asked how many children were ever born to them. Labour force information is collected only for the last year or at most for the last year and a half, and job search for the last four weeks. For personal history, then, the only information available from the Census is ever-married women's life-long fertility, most people's residence change from five years ago, and some people's recent labour force experience.

Nor does the monthly Labour Force Survey collect much historical data, although some occasional publications do look at labour force activity over time. For example, in 1976 Statistics Canada published Earnings and Work Histories of the 1972 Canadian Labour Force. Based on the 1973 Survey of Consumer Finances, the study reported data on male

and female earnings differentials and work history between 1967 and 1972. Respondents to the sample were asked what their main activity was while not working for periods of one year or more, with "kept house, raised children" as one possible answer. They were not asked why they left their last job. The analysis of the data suggests that the higher turnover and lower wages reported for women were related to their decision to stay home with the house and children, to their choice of dropping out of the labour force to do their unpaid women's work. Yet, since most women continue to do the housework and child care work whether or not they have paid employment, it seems unlikely that many women without a paid job would not be mainly keeping house and raising children. With the rare historical investigations based on such questions and alternative responses, it is difficult to find out what is happening to women over time and what factors influence these patterns.

Little, if any, information is available on the historical impact of new technologies, particularly of the micro-electronic technology now so important to women's work. Nor is it possible, from Statistics Canada data, to examine the effect over time of different kinds of work on the health of men and women. It is also extremely difficult to relate alterations in the resources and structure of families to labour force changes. If the data followed some families, recording the hours, duration, type and wages of work for both spouses and for children, as well as their health situation, their skills and their reasons for entering or leaving specific jobs, it might be possible to understand the factors structuring people of different ages and sexes into and out of labour force jobs. Without such information, any explanation is necessarily partial and superficial, focused on individuals outside their historical, familial and even much of their economic context.

Changes in the collection and categorization of data also make historical investigation difficult. Of course, the alterations may reflect primarily changes that are taking place in the labour force. This was the case, for example, in the separation of file clerks and receptionists from the secretarial category and in the new definition of part-time work (a reduction in weekly hours from less than 35 to less than 30). In other cases, the changes may result in part from new government policies and programmes. For farm workers, (Statistics Canada, 1982a:12):

The data between 1971 and 1981 may not be strictly comparable because of small changes in definitions. Females who were unpaid family workers, worked as farm labourers and did less than 20 hours of unpaid work a week were excluded from the labour force according to the 1971 definitions. These persons are now included in the employed labour force. Due to changes in the tax laws and Census procedures, some persons formerly identified as unpaid family workers may now be classified as paid workers. The tax changes permitted for the first time, in the 1980 tax year, the deduction of a spouse's wages as expenses. This may have resulted in some changes in the status from unpaid family workers to paid workers. As well, Census editing of this category was more stringent in 1981.

Some alterations, such as the switch from "Head of household" to "Person 1," may be related to pressure from feminist groups. But some changes seem unrelated to any of these concerns. For example, the Census Dictionary reports that:

In all the 1981 tables on "Occupation Based on the 1980 Classification", the 1971 "Not stated" category will no longer appear. This category has been redistributed by imputation into new "imputed groups" within each minor group (Statistics Canada, 1982a:37).

Since clerical employees, part-time workers, unpaid employed spouses, workers with unstated occupations and people not heading households are usually women, these new definitions and categories primarily affect the analysis of women's work. Whatever the reasons for the changes, the need for historically comparable data should be a central concern. In

explaining the objectives of the Labour Force Survey Revision Project, Statistics Canada (1977:19) indicated an awareness of the problem, noting a

...demand for new information on the dynamic aspects of the labour force to supplement the monthly "snapshots" the new survey provides, much more information is required on the gross movements between various labour force categories each month, along with somewhat longer term longitudinal data covering the six month period over which the respondents are surveyed.

The problem is, however, far from solved.

9. Comparing Data Sources

The problem of comparable data is not confined to history. Many government agencies and departments collect statistics but the definitions, categories, responses, techniques, time periods and tabulations are often different, making comparisons difficult. Even within Statistics Canada, these differences sometimes exist. While Statistics Canada is working to eliminate these discrepancies, some do remain, obscuring the actual situation of women at work. For example:

For the Unemployed and the not in the labour force groups, data from the Labour Force Survey refer to the last job held by persons who have worked in the last five years. Since no question is asked on the most important activities or duties in the job held, as in the Census, the Labour Force Survey may classify more persons to the "Managerial" group on the basis of job titles than would be the case with the Census (Statistics Canada, 1982a:37).

While the numbers are probably not large, the discrepancy makes comparison difficult. And once again, it is most likely women who are the extra persons classified by the Labour Force Survey into the managerial group, since they are the ones most likely to have jobs that are labelled managerial but whose actual tasks would place them lower on the hierarchy of Census occupational categories.

Tabulation of Data

Not only the collection but also the tabulation of data can influence the view of women at work. As Statistics Canada points out in its Guide to Labour Force Survey Data (1979:13) "virtually any combination of questionnaire values can be cross-tabulated on request, subject to a 'reliability' criterion which is related strictly to the sampling variability and size of the estimate." However, such extra tabulations often cost money, limiting their access to those with research funds. And of course, the information available for tabulation is restricted by the problems with data collection cited above. Furthermore, the tabulations that are published, since they are the most accessible, are the most widely used, especially by the media. Thus, although most information is now collected by sex and could be tabulated for men and women, the published compilations form the basis for most of the public commentary on women as well as much of the research. These tabulations therefore deserve particular attention for the view of women they present.

Tabulations may both reflect and confirm assumptions about women. The proposed tables on census families to be drawn from the 1981 Census are a case in point. According to Statistics Canada's Products and Services of the 1981 Census of Canada (1982b:32-36), tables will be published on husband-wife families in private households by the wife's age and highest level of schooling. These are the only listed tables on husband-wife families in private households which use the wife's characteristics as the basis for compilation. Data will be tabulated for these households by both the husband's and wife's highest level of schooling, labour force activity and age. The rest of the tables for these households will be compiled primarily on the basis of the husband/parent's characteristics. In particular, this is the case for

the income data which will be tabulated by husband/parent's age, highest level of schooling, work activity and period of immigration. That income tables are not based on the wife's characteristics indicates a particular view of women's place as well as reinforcing the perspective which sees the economic contribution of wives as secondary. Perhaps their childbearing and childrearing responsibilities account for the concern about their age and schooling.

The categories used in tables also influence the perception of women's work. The Labour Force Survey's "managerial, professional, etc." category, for example, lumps together laboratory technicians and neurosurgeons, library technicians and full professors, managers of small shops and senior executives from General Motors.[3] The wide differences in power and pay, as well as the sex segregation, disappear. Indeed, the growth in the proportion of women in this category has helped to create the false impression that there has been a significant improvement in the position of women.

In publishing tables by occupation and industry separately, the Labour Force Survey data also creates the impression that women have been moving into prestigious management jobs and into traditional male fields such as construction work. Cross-tabulations of industry and occupation data indicate, however, that, in 1980, three-quarters (74.8%) of female managers worked in the service industries while less than half (42.8%) of the male managers were employed there. In the construction industry, less than ten per cent (9.3%) of the women actually did construction work; over seventy per cent of the women employed in that industry held clerical jobs (Armstrong and Armstrong, 1983: Tables 3 and 10). When such cross-tabulations are unpublished, segregation is camouflaged. Furthermore, change may be suggested where little has, in

fact, taken place.

Theory and Methodology in Quantitative Research

Counting women in means much more than including a question on sex and tabulating the results separately for women and men. It requires not only an awareness that people come in two sexes but, also, a recognition that the experiences of women and men are segregated in many ways, that policies, programmes, concepts and questions have a differential impact on women and men, that some questions are women's questions while others ignore or denigrate their contribution. The intention here is not to attack Statistics Canada. Indeed, it should be noted that Statistics Canada has been willing to alter some concepts to bring them more in line with the actual contributions of women and men. Note, for example, its abandonment of the Census policy permitting respondent's paternal ancestry only to be recorded. Nor is the intention to draw up a shopping list of changes required in established techniques. The examples provided here are designed merely to illustrate problems with its methodology and thus to indicate that official data collection and the funding of research need to be re-examined if women's work is to be counted in.

But to begin such a re-examination, it is necessary to start with theory, with the systematic organization of ideas, both because theory is the major way of advancing our understanding and because methodology is inseparable from the perspective which guides the choice of what is real. The assumptions behind the data should be drawn out for critical appraisal. However concretely the questions surrounding the collection and tabulation of statistical information are posed, the methodological answers must be theoretically informed if they are to be useful. In

order for statistical information to be improved, theoretical work, as well as theoretically informed methodological work, must be undertaken. This in turn entails that theoretical work be financially supported. In particular, problems of deskilling, restraining legislation, sampling, machine readability, the wording and avoidance of specific questions, the selection of possible response choices, the denial of history, the comparability of data sources, and the choices about what to tabulate and what tabulations to publish need to be examined from a theoretical perspective which takes the sexual division of labour into account. And that theoretical perspective itself needs to be refined.

No matter how finely tuned and sex conscious the theory and techniques are, however, some information will continue to evade quantitative approaches, whether based on sample or universal surveys. Some of the information collected through such methods, no matter how carefully the questionnaires are structured and the data collected and tabulated, may create an inaccurate view of women's work. At best, such techniques can produce only a partial picture of the daily working lives of Canadian women. Quantitative data miss, and may misrepresent, many aspects of women's experiences in and out of the labour force. In the final section of this paper, we draw on material and lessons learned from lengthy interviews conducted with women in working class jobs to argue that qualitative data are at least as important as quantitative data in developing an accurate view of women's work.

Qualitative Research

From Horace Miner's 1939 study of a French Canadian parish to Meg Luxton's 1980 examination of women's work in the home, qualitative research has provided valuable insights into women's daily experiences.

Such studies are rare, however, in part because they are expensive and time-consuming, but mainly because they are considered somehow less legitimate than statistical analysis. As a recent letter to the public from the 1981 Census Manager makes clear, Statistics Canada views itself as producing "facts," profiles which are "useful, convenient, complete." And many social scientists would agree that these facts, these numbers, are more reliable and accurate than data collected from lengthy hours spent and conversations with women in Flin Flon. But the bias in favour of 'hard' data is seldom based on a rigorous comparison of the findings of quantitative methods with those of qualitative research, or of their value in explaining or predicting women's actions. Nor is the bias often based on respondents' assessment of the accuracy of the facts, on the ability of these facts, in Lillian Rubin's (1976:13) phrase, "to generate an 'aha' experience." Nor is the bias gender-neutral, as Pauline Bart has so eloquently pointed out:

We speak of hard data as being better than soft data, hard science better than soft science, hard money better than soft money. In the fifties, one was criticised for being "soft on communism." This is of course a male sexual metaphor, so since discovering this, I have substituted a metaphor based on female sexual experience and refer to wet and dry data (quoted in Roberts, 1981:22).

The bias is not, however, simply a matter of metaphor. It reflects the priority given to the collection of some kinds of data, those which are easily counted, frequently repeated and amenable to statistical analysis. But, as feminists have long made clear, the personal is political. Daily work and family relationships have a profound impact on work activity; physical and social conditions influence ideas and actions. To leave them out -- and many are difficult or impossible to include in sample survey and statistical analysis -- is to create not only huge gaps in the data but, often, inaccurate information as well.

Our experience in interviewing women about the nature and conditions of their work suggests that qualitative research provides a necessary complement to quantitative analysis because it can test the reliability of quantitative data, can collect information not accessible to survey techniques and can indicate areas that should be included in quantitative analysis.[4]

1. Checking the Facts

Keeping questions clear, simple and direct does not necessarily guarantee the accuracy of responses. Because the approaches used in gathering qualitative information take many aspects of the individual's life and relationships into account, and because the less rigid and more informal style of data collection often encourages a more open exchange, these qualitative "facts" can frequently be used to test the results of quantitative research. Interview procedures which are flexible, unstructured or partially structured, and wide ranging, permitting people to offer their own responses and views, frequently draw out quite different information than that collected through highly structured, official sounding questionnaires which allow only machine-readable choices.

In our experience, direct questions may elicit responses which are often contradicted by information gathered through more probing and indirect techniques. For example, when we asked women if they knew of any health dangers in their jobs, some simply said no. Yet, when describing in detail an average day on the job, various work related problems emerged. A clerical worker who uses visual display terminals (VDT's) in a trust company responded negatively to the health question but earlier had told us that during the day, "Sometimes I'll go down to

the lounge and fall asleep, my eyes are so sore." A factory worker who offered a similar response also told us that, with her right foot operating the sewing machine, her right hand adding cloth, and her left hand guiding the material as quickly as possible all day to ensure a survival wage from her piece work job, her arms, feet and legs hurt: "Sometimes when I come home, I can't make more job in my house." Various explanations were offered for this discrepancy. They expect work to hurt, so sore arms, legs, heads and hands may not be defined as health hazards but simply as part of the job. Many of the dangers women face are invisible and have a slow, cumulative effect. Thus, they are less likely to be associated with the job than are the broken toes or burnt hands that men more often suffer. And a few do not want to think about the dangers, because they have to go back there to work tomorrow. Whatever the reasons for these seemingly contradictory responses, they indicate that simple, direct questions will not always reveal the simple truth.

Like the questions on health and safety, those on sexual harassment also suggest that direct questions provide only limited, or inaccurate, pictures of the situation. When we asked women if they had ever been sexually harassed, some had difficulty answering the question — even when examples were given — often, because they had come to accept this behaviour as part of the job. Some defined such treatment as a problem only if they could not resist. One woman offered a very definite no to the question. When reminded, however, that she had said, in describing her work history, "That was something else — if you could keep out of the boss's hands," she explained that she had made it clear to "knock it off." Therefore, she felt "you don't have to write a book about it." Some said it was unlikely, given they worked with women only

or had a lone male boss.

What this evidence suggests is that, if a question on sexual harassment were asked of all employed women, there would probably be an overwhelmingly negative response because of the way women perceive and respond to advances and because many women are segregated into jobs where there are few men to do the harassing. Moreover, if the only answers recorded were those given for this question -- as is the case with most machine-readable questionnaires -- then much of the counter-evidence would disappear.

There are also often quite valid reasons for women to hide information from official government statisticians or from written questionnaires they fill out for the government. When we asked one woman for her age, she requested that the tape recorder be turned off so she could tell us her real age. Her boss, she explained, thought her below retirement age. She could not live without her employment income and thus she could not risk exposure. This woman not only had our assurances that we would not link her age to her name, job or employer, she also lived in a large metropolitan area where any identification was extremely unlikely (as was the possibility that her employer would read a book on work by a couple of sociologists writing for the Canadian Advisory Council on the Status of Women). However, she was not alone. Barely making ends meet, one woman collects a small unemployment insurance cheque, takes in foster children, babysits on weekends and does odd clerical jobs while the children are in school. Although willing to exchange this information over coffee in the kitchen, she made it very clear that, since her survival was at stake, there was no way she would write that information down on a questionnaire. Thus, even on such seemingly straightforward questions as age and employment,

the facts may not be accurate. The qualitative data can help us become more accurate and become more sceptical about the supposedly hard data.

In other cases, the answers given may be literally correct but hide a significantly different reality. One waitress, for instance, is paid the required minimum wage, but her employer then forces her to sign the cheque back to him. The taxes are paid, the law is obeyed to the letter; however, her real income is low and irregular. A similar problem is evident in data on segregation and wage differentials. As one clerical worker explained, the difference in wages can be justified on the basis of different job categories but conceals both segregation and unequal pay:

[There used to be] male accounting clerks. They promoted all those male accounting clerks to management and left the women in accounting, and they hired nothing but women in accounting since. So they're hiring women to work for lower jobs than the men and the excuse is that [the men] have a family. Women don't have families? Plus, when there were men in accounting they always got paid higher than the women and the excuse they use is because they're men. Women don't live any more cheaply than men...It was a pretty sick excuse but to fight it wasn't worth it...The...manager was called in and [we] bluntly asked, "Why are the men getting paid more than us?" We're not saying we're doing any more work but we are equal in work, we should be equal in pay. We know as much, maybe even sometimes more. He said, "If the men are married and if they're not, men always get paid higher." I couldn't believe it! At least find a decent excuse. Don't use that one on me.

Whatever the excuse, such inequality is unlikely to appear in the survey data. Rather, evidence for equality and for conformity to the law is more likely to show up.

These examples are designed to illustrate how qualitative data can be used to check quantitative data. But this methodology can do more than suggest where the figures do not measure what they are supposed to measure. This approach can also indicate where there are holes in the data, where information could be, but is not, collected in

quantitative research.

2. Exposing the Holes

Whole areas of women's lives remain virtually untouched by government and other quantitative research and it would be impossible to do an inventory here. In the course of our interviews, however, many conditions were exposed which could be measured by existing quantitative techniques, and thus serve to illustrate the oft-complementary nature of these approaches. For example, some women indicated that they could not join the company pension plan until they had been with the organization for a specified period of time or until they had reached a certain age. General questions on persons covered by pensions overlook policies like these which have the effect (and perhaps the purpose) of preventing women from adequately protecting themselves in their old age.

The women we interviewed also drew attention to sick pay policies. Simple to measure but seldom enquired about, sick leave is not covered by most labour codes. For many women, "if you sick, you sick." No work means no pay. Given their meagre earnings, most simply cannot miss work if they are ill. "Clerks cough in your face because they can't afford to be sick. I know I do." The significance of workers' health to the transmission of disease was recognized many years ago when special labels were attached to homework goods to warn potential customers that they might spread contagious diseases from workers' homes (Johnson and Johnson, 1982:47). But today, women who are not well may process food, sew clothes, care for other people's children, and serve meals in restaurants because they cannot miss a day's wages. Once again, the interview response indicated an important issue easily measured by quantitative methods but all too often ignored.

Another example of the contribution qualitative research can make to the collection of quantitative data comes from the investigation of procedures for promotion. Many of the women we interviewed told us, "I don't think there's such a thing there as promotion," suggesting that enquiries into women's upward mobility should begin by examining whether or not such movement is possible. Although many people have pointed out that women are often locked into dead end jobs, few have exposed another difficulty mentioned by these women. Some refused promotions because a move to a higher position meant little, if any, increase in power or pay and because it would eliminate the only satisfying aspect of their work — companionship with other women. One woman turned down a promotion because it meant working at night, with more responsibility and virtually no increase in pay. Here too, questions on what rewards are offered by promotion, if promotion is possible, are not difficult to get at through survey techniques but the researcher must first be aware of such possibilities.

In quantitative research, the problems revealed are likely to be technical. In qualitative research, the difficulties exposed are more frequently substantive, suggesting new areas for investigation, ones which are often amenable to quantitative techniques. The examples of pensions, sick pay and promotions serve to indicate some ways qualitative data can improve the collection of facts in quantitative research, and can aid in the selection of what is real.

3. Collecting Data Inaccessible to Quantitative Techniques

Qualitative research can do more than merely indicate ways to improve quantitative techniques. It can provide complementary (or contradictory) information that brings life to the statistics, fills in

the numbers and explores relationships. Moreover, such methods can look at the meanings of experiences in a way that cannot be measured by multiple-choice questionnaires that generate machine-readable answers. They can permit the investigation process to be an exchange which allows those being studied to participate actively in the description and definition of their lives.

How could a survey of worker skills take into account the kind of conscientious performance revealed in a fish packer's description of her work?

For my job, I don't think it requires too much skill. It takes energy. It takes common sense to try to keep doing your work properly so it doesn't slow down production. If you have no interest and no common sense...you know that the bosses are going to stop you and the machine is not going to take it and there you're going to stop production. There are some girls that just don't care. I'm not saying I'm perfect 'cause I'm not and I do lots of blunders myself but I do respect my job. After all, it can do something to your job if you're not going to pack good fish that the public will want to buy, and if the people are not going to buy from the plant that's going to be bad for your job.

Or the pride of a home worker who is paid by the number of skirts she sews?

My sister-in-law says, "I don't know how you work so fast," but I have to do fast. Everything I have to do fast. On Thursday I have 74 skirts. My husband said, "You don't finish this week." I said, "Sure"....and I finish on Friday night.

Or the sound of an office?

The noise level...is unreal because we have...11 phones in a small area. They ring constantly. All of the typewriters going...10 typewriters and usually 4 or 5 more for the casuals...By 3 o'clock, I can't stand it and my nerves are really bad.

Or the reality of working on a line?

Basically, I stand there all day and slash the necks of the chickens. You make one slash up on the skin of the neck and then you cut around the base of the neck so the next person beside you can crop it...The chickens go in front of you on the line and you do every other chicken or whatever. And you stand there for 8 hours on one spot and do it. On a regular day [five people] can do maybe about 30,000 fryers.

Or the dangers that many women face?

One day the propane dryer caught on fire. They never evacuated the plant. They just tried to put the fire out. I think when a propane dryer that size catches on fire, it's a big fire. The plant should have been evacuated. That's my opinion now. And there are people working right by that dryer. If you die, you die. If you don't, you get the work done.

Such things cannot be easily measured, tabulated and fed into a computer for the analysis of statistical relationships.

It is not only descriptions that emerge from qualitative analysis. Often, some of the most important processes at work, some of the most potent forces, are missed in quantitative data collection. For example, the implied threat of firing and the awareness of a huge reserve of women desperately searching for work have a powerful influence on women's performance on the job. According to one clerk:

To get fired from office staff, all you gotta do is look sideways. It's got to the point where everybody knows that you've got to do your work to keep your job. There's always another person ready to take your job.

Close supervision also has an impact that is difficult to measure. A supervisor of proof-readers ...

...used to time us with his stopwatch behind your back...you can imagine what it was like. I came home on Friday night and my husband, he had to give me two good slaps in the face because I was knocking my head on the wall. I wanted to kill the foreman.

The structure of work, too, strongly influences performance, as a chicken slasher explained:

Basically, the reason that you don't make too many mistakes is because one job relies so much on the other. If you don't slash it and if they can't crop it, then it can't be drawn. So you can't miss a chicken because then further down the line they bring it back or they holler, "Hey, what are you doing?" So this pretty well means you stay awake.

These relations with other workers both ensure that the pace is maintained and help women get through the day — that is, if they are permitted to talk:

If you were standing there all day and you wouldn't talk, well you go right bananas...A friend by me, she always says, "For goodness sakes...say something, say something," 'cause it breaks up the time if you have a little conversation. You're not allowed to stand and talk but...you can talk as much as you like as long as your hands go.

Such research can also show that women are not merely passive but actively participate in shaping their working conditions. From the women who adjust the thermostat when the boss is not looking, to the women who develop elaborate strategies to vary their tasks and eliminate boredom, there are many examples of women individually resisting the structure of their work. Women also get together to slow down the line when it is going too fast, or to force changes in their work environment, as was the case in one plant:

When I'm working, it is hot...We don't have ventilation enough. Where I'm working, there are three big fryers and the fat is hot and when that fish strikes the fat, it gives smoke. And there's times when you go in there, you can just about see through the place. Now, we're inhaling this all day. Now, we don't have no ventilation. There's no windows. When you're in there you don't know if it's raining, snowing, hurricane or whatever outside. When you go in, you're there; when you come out, then you see what kind of day it is. They have fans and half the time they are not working for the simple reason that it's the fat that clogs them. We have walked out already and I was the head one on our line too. I told my supervisor, "There's no way I can stand it in there. I'm choking and I cannot stand it. I'm going out 'till it's cleared up." And the girls followed us...They got it fixed the next day.

Although justified by the conditions, this woman was frightened: "My heart pounded like you'd never believe. I hate doing anything like that 'cause I'm scared of getting fired." It was not her sex but her lack of job security that had discouraged this kind of resistance in the past.

Qualitative research can also capture, in a way that is impossible in quantitative investigations, what it is like to be an employed woman. For example, the women we interviewed reported that they were frequently asked to do extra tasks that were unrelated to

their job description but fell into that all too broad category "women's work." As a woman hired to fill mail orders explained, "I hate dusting and cleaning. I don't go to work to do these things. I can do them at home...Yeah, I do it." Most women go home to yet more of these same kinds of tasks:

All I have to say is that a working mother, when she has to work and leave her kids at home, it's pretty hard whether she's married or single. A mother that works and raises a family has to be pretty strong, very strong. I really feel sorry for the mother with the little kids — have to bundle them up in the morning and take them to the day care center and pick them up again at night. I wouldn't go through that again that way. It's too hard.

In our research, we were unable to explore the relationship between home and work in any detail, but the recent case study of an east coast fishing village (Connelly and MacDonald, 1983) clearly illustrates the importance of relating domestic and wage labour to each other and to the wider economic structure. Such relationships and such an integrated approach are missing from quantitative data which usually measure individual activity, for short periods of time, in a restricted context.

And quantitative research misses what technological change means to the workers: "Before, everyone was a typesetter. Now everyone works on a typesetting machine." "I went through tests two years ago and they found out that my hearing is poorer in one ear than the other. When I started there they told me that my hearing was very good." Perhaps even more elusive are the silent, psychological firings that never appear in the statistics. One long-time secretary described how she was refused training on the new electronic equipment, how her job slowly disappeared, how she spent hours at her desk with nothing to do, how she had to stay at her desk in order to get paid and how staying there meant it was difficult to look for alternative work. Finally she quit and was therefore not defined as a victim of the new technology.

Qualitative data are often dismissed as anecdotal, as unscientific, as unrepresentative because they do not include a statistically selected sample of the target population. Researchers often respond to this criticism by resorting to statistical analysis alone or by transforming their information into numbers. Komarovskiy (1962:204), for instance, takes a group of fifty-eight marriages and tells us that "among the older couples...only three per cent of the less-educated husbands" complained that "we have nothing interesting to talk about." Yet, the way our examples resonate in the lives of women suggests that they tap many shared experiences. They may provide not only a fuller, more humane, picture of women's daily lives, but a more accurate one as well.

Conclusion

Theory, statistics and qualitative data are all necessary for rigorous research. Theory guides the selection of the real, the techniques employed to expose it, and the explanations used to understand it. Statistics can help to establish the broad outline of the picture, a picture that can only be fully developed with the aid of qualitative data.

We have argued that, like all methodologies, those of Statistics Canada reflect a perspective, one that better serves the interests of men and the economy than those of women and the home. Available data do not permit a thorough examination of the sex-segregated labour force; they offer little assistance in examining the labour process, health and safety, hiring, promotion, wages and benefits, job security — to mention only a few issues — as they affect women. The priorities of the agency thus allow only a partial, and sometimes distorted, view of

women's work.

We have also argued that statistics are not all they have been cracked up to be. The way data are collected and tabulated, the way questions are asked and not asked, the way government programmes and policies are structured and the way in which history is considered, all influence the data and in the process often leave out and sometimes misrepresent the position of women. Qualitative data, while not free of faults, can provide an effective complement to quantitative techniques, checking the results, suggesting alternative areas and methods for research and filling in the numbers with the actual experiences of women.

What is required is, first, a more thorough evaluation of Statistics Canada from a perspective which acknowledges that, given the sexual division of labour, most structures, processes and programmes have a particular impact on women. Second, more theoretical work should be done to aid this critical evaluation and to promote the development of other ideas. Third, more funding for qualitative research is necessary if we are to understand, and change, what it is like to be a woman in Canada today.

NOTES

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[1] Statistics Canada does explain its methodology but the justification

for particular kinds of techniques rests on the assumption that these are primarily scientific and practical rather than theoretical issues. The tools are not related consistently to the theoretical framework. For example, Statistics Canada's Methodology of the Canadian Labour Force Survey (1977:23) offers the following justification for the use of a stratified sample:

Though the main advantage of stratified sampling is the possible increase in efficiency per unit cost in estimating the population characteristics, stratification also introduces considerable flexibility in the sense that, depending upon the information available, sampling and estimation procedures may differ from stratum to stratum. Further, in a continuous survey like the LFS, stratification provides an added flexibility of updating or redesigning the sample of a specified stratum or groups of strata, without affecting the design in the remaining strata.

See also the tool-kit orientation of Statistics Canada's (1980a) Social Concepts Directory. For a contrary example, however, see Kim Farrell's (1975) article on the impact of Keynesian and post-Keynesian developments in economic theory on labour force survey measures.

- [2] The Census does publish data on additional persons in the household (see, for example, Statistics Canada, 1982c:Table 6) but the nature of this relationship and, particularly, the consequences for the household economy and domestic labour are difficult to determine from such figures. The assumption seems to be that only never-married children are dependent.
- [3] Some LFS occupational data are now available at the minor group (three-digit) level of detail, at which the broad "managerial, professional, etc." category is broken down into 26 distinct occupations. Shortcomings remain, however. This information can be obtained in unpublished form only, and, because of the 'reliability' criterion, as part of only a few, general cross-tabulations.
- [4] The 65 interviews included in our study (Armstrong and Armstrong, 1983) were conducted by 7 researchers selected for their expertise in interviewing techniques, knowledge of feminist issues and familiarity with a particular area of Canada. The interview schedule was designed as an outline of areas to be covered rather than as specific questions to be asked. Interviewers were instructed to gather as much information as possible on each area, to record conversations on tape and to view the work site. We wish to acknowledge the assistance of Sonja Greckol, Sharon Kirsh, Judy Mosoff, Shirley Pettifer and Martha Tracey in the interview stage of the project.

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