THE UNIVERSITY OF CALGARY

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CLASS AND AUTHORITY:

EFFECTS ON INCOME ATTAINMENT IN CANADA

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A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE

DEGREE OF MASTER OF ARTS

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DEPARTMENT OF SOCIOLOGY

CALGARY, ALBERTA OCTOBER, 1985

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THE UNIVERSITY OF CALGARY

FACULTY OF GRADUATE STUDIES

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ABSTRACT

Research on status and income attainment in Canada has effectively ignored the class theories of Karl Marx and Ralph Dahrendorf. This study attempts to bridge part of the lacuna in Canadian stratification research created by this oversight with an exploration of the relationship authority and the between class, process of income attainment. In addition, these relationships were examined with respect to four subgroups of the Canadian population: Anglophone men/ Anglophone women. Francophone men and Francophone women.

Using data from the Canadian National Mobility Survey conducted in 1972, this study analyzes a revised model of the traditional Blau-Duncan paradigm to include ownership of the means of production and authority in the workplace. The results from a path analysis of the reconstructed model of income attainment suggests that owning the means of production and exercising authority in the workplace have weak, albeit significant, effects on the rates of return to income for Canadian anglophone and francophone men and In addition, it was found that anglophone men tend women. profit from being members of Marx's and Dahrendorf's to capitalist and command classes in terms of receiving higher rates of income returns as compared to those individual's

in the working and obey classes. By comparison, it was also found that anglophone women and francophone men and women are disadvantaged by being members of Marx's and Dahrendorf's capitalist and command classes in terms of receiving much lower rates of income returns as compared to their counterparts in the working and obey classes. These findings thus confirmed the presense of both the prestige and nonprestige dimensions of social stratification in the structure of Canadian society.

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ACKNOWLEDGMENTS

I would like to thank Dr. Richard Wanner, my thesis supervisor, for his continual support, good humour and guidance. My thanks also to Dr. James Frideres and Dr. Jeffrey Jacob for their participation on my thesis committee and for their helpful comments and suggestions. .

DEDICATION

This thesis is dedicated to my family, Pearl, Perry, Tony, Laurie, Lynn and Jodi.

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CHAPTER I

INTRODUCTION

Since its introduction, Blau and Duncan's model of the process of status attainment (1967: 171) has become the foundation for an unprecedented trend in the study and analysis of systems of stratification. More than just a trend, Blau and Duncan's paradigm has become the basis for a plethora of quantitative research on stratification in Canada and the United States, as well as in many other countries. Indeed, the status attainment paradigm has become firmly entrenched as the leading investigatory strategy in which the analysis of the nature, causes, and consequences of structural inequality has been rooted (Crowder, 1974; Featherman, Jones and Hauser, 1975; Wright and Perrone, 1977; Featherman and Hauser, 1978; Horan, 1978; Robinson and Kelley, 1979; Matras, 1980; McRoberts, 1980; Kerckhoff, 1984).(1)

(1) Although the status attainment and the "Wisconsin School" models (See: Sewall, Haller and Portes, 1969; Sewall, Haller and Ohlendorf, 1970; Featherman and Hauser, 1975) have become the dominant orientations in the quantitative research on stratification over the past twenty years, it has not precluded other types of analysis from developing. Recently, an increasing number of studies have been conducted which have developed quantitative models for the analysis of the structural determinants of systems of stratification. For examples of this research see: Beck, Horan and Tolbert, 1978; Clairmont, MacDonald and Wien, 1980;

In recent years, however, critics of Blau and Duncan's analysis have increasingly noted that research on the process of status attainment has effectively "...ignored the existence of nonprestige dimensions of occupational differentiation and stratification". (Horan, 1978: 536). Specifically, critics of the Blau-Duncan paradigm have commented on the notable absence of a number of relevant variables from the analysis of systems of stratification. The relevant variables which they have identified are, in part, derived from Marxian theory and point to the structural aspects of societies or economies as opposed to the emphasis laid on the individual-level variables which make up the status attainment paradigm. Nevertheless, variables based on Marx's theory of class have been specifically excluded from the analysis of status attainment. As Wright and Perrone, in their assessment of the current state of ustratification research, have pointed out:

> Of all the theoretical traditions in sociology, social inequality probably plays the most central role in the Marxist perspective. Yet, quantitative investigations of the causes and consequences of inequality have almost totally ignored Marxian categories ...occupational status or a similar variable is almost always used as the core criterion defining the individuals

Clairmont, Apostle and Kreckel, 1983; Bielby, 1984.

and

Baron

position in the system of stratification. (1977: 32)

Thus, critics of the status attainment research program specifically point to the exclusion of 'Marxian categories' from the quantitative analysis of stratification systems and their contigent processes (Crowder, 1974; . Horan, 1978; Selbee, 1981; Kerckhoff, 1984). In addition, because the Blau-Duncan paradigm has traditionally been set within the context of the functionalist theory of stratification(2) (See: Parsons, 1940; Davis and Moore; 1945), the critics of this type of analysis consequently argue that a serious disjucture has occured between the major theoretical traditions in the study of stratification and the actual empirical-quantitative analysis of systems of stratification (Crowder, 1974; Wriaht and Perrone, 1977; Wesolowski et. al. , 1977; Horan, 1978; Robinsion and Kelley, 1979; Forcese, 1980; Kerckhoff, 1984). In other words, it has been suggested that the omission of variables based on Marx's theories of class and social inequality has

(2) While it has been argued on occassion that research on the process of status attainment is purely an act of "number-crunching" and hence <u>atheoretical</u>, others have subsequently established that status attainment research, contrary to the claims of its staunchest critics, is highly theoretically oriented particularily within the context of the functional theory of stratification. For a more detailed discussion of this issue see: Turrittin, 1974; Horan, 1978; and Kerckhoff, 1984.

resulted in an ever widening gap between the two dominant types of analysis (e.g. theoretical and quantitative). As Wesolowski et. al. (1977) note:(3)

> ...social mobility....and thoughts on class membership and its role in the life-cycle of the individual, have been developing independently of each other. The gap between these two orientations is conspicuous despite the fact that both tend to answer similar questions (Pg. 9).

This gap is distinctly present in the quantitative analysis of the Canadian system of stratification. by John Porter's (1965) seminal analysis of Initiated social inequality in Canada, researchers have mainly been concerned with assessing the overall degree of equality of opportunity and the level of social mobility (Porter, 1965; Clement, 1975; Cuneo and Curtis, 1975; Goyder and Curtis, 1977; Li, 1978; Orstein, 1981; Selbee, 1981; Pineo, 1981; Boyd et. al., 1981; McRoberts and Selbee, 1981). Premising their analysis on Porter's contention that,

> Canada is not a mobility oriented society and has had to rely heavily on skilled and professional immigration to upgrade its labor force in periods of industrial growth...(1965: 43),

⁽³⁾ Wesolowski et. al. (1977) adapted from: Selbee, Kevin. 1981, "Class and Mobility in Canada: An exploratory analysis." Masters Thesis. Ottawa, Canada: Carelton University.

Canadian researchers have sought to confirm the conventioncharacterization of Canada as closed with respect to at mobility and hence, more ascriptive and particularistic than other advanced capitalist societies (Turrittin, 1974; Cuneo and Curtis, 1975; Clement, 1975; Pineo, 1976; Goyder and Curtis, 1977; Li, 1978; McRoberts, 1980; Forcese, 1980; Marchak, 1981; Hunter, 1981; Boyd et. al., 1981). In doing so, these investigations have focussed on the analysis and assessment of the process of educational and occupational status attainment. Thus, despite the central role that Marxist theory has played in the theoretical and descriptive analysis of the Canadian system of stratification (See: Porter, 1965; Blishen, 1970; Johnson, 1972; Clement, 1975; Stevenson, 1977; Cuneo, 1978; Forcese, 1980; Marchak, 1981; Gilbert, 1982; Cuneo, 1983; Hunter, 1984), research on the process of status and income attainment has ignored Marxist theory (e.g. class totally based categories) and their applicability in the Canadian context.

This study, therefore, proposes to fill in part of the gap in Canadian stratification research with an exploration of the relationship between class, as it is defined within Marxist theory, and the process of educational, occupational and income attainment in Canada. Although a number of studies have recently been carried out which incorporate

Marxian categories into their analysis (See for example: Wright and Perrone, 1977; Robinson and Kelley, 1979; Selbee, 1981; Aldrich and Weiss, 1981; Wright et. al., 1982; Robinson, 1984), research efforts to breach this gap still remain few and far between. Furthermore, of the studies which have been carried out, the majority have been concerned with ascertaining the effects of class on the level of social mobility (e.g. the tabular analysis of intergenerational mobility) in Canada and the United States. These studies. examine how variables such as income, education, occupation, gender and race vary in relation to class as it is defined within a derivative Marxian context. This body of research, however, has remained typically small and has been conducted almost completely independant of the analysis of the process of status and income attainment. Only one study, to date, has been conducted which looks at the effects of class in relation to the "...process of stratification" (Blau and Duncan, 1967: 171).

In 1979 Robinson and Kelley published an article, "Class as conceived by Marx and Dahrendorf: Effects on income inequality and politics in the United States and Great Britain", in which they proposed a revision and extension of the dominant Blau-Duncan paradigm of status attainment. Noting that both Marx's and Dahrendorf's

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theories of class and class conflict in industrial society, "...although subject to much theoretical analysis, largely have been ignored in the dominant lines of quantitative research on status attainment...", they suggested that "...the conventional paradigm be extended to include two additional dimensions of stratification"(Robinson and Kelley, 1979: 38). The two dimensions which Robinson and Kelley proposed for inclusion in the conventional model are: Marx's ownership of the means of production and Dahrendorf's exercise of authority in the workplace. By including these two variables in the conventional analysis of status attainment. Robinson and Kelley 'found that the additional variables based on class (ownership of the means and authority increased the variance of production) explained in men's income by nine percent over the original variance explained by the conventional Blau-Duncan model; e.g. twenty percent.

Given the theoretical and methodological importance of Robinson and Kelley's synthesis and findings, it is noteworthy that their research has been completely passed over as a viable alternative to the current analysis of status and income attainment in both Canada and the United States. Thus, this study, will explore the relationship between class and the process of stratification in Canada and will replicate and extend Robinson and Kelley's analysis using a

subset of the data collected in the 1973 Canadian National Mobility Study on Occupational and Educational Change in a Generation. While an exact replication of Robinson and Kelley's analysis is not possible, given the limitations of the Canadian National Mobility Study, the primary focus of this study will be on the analysis of the impact of ownership of the means of production and authority in the workplace, applying Robinson and Kelley's model (see figure 1.1), to the process of income attainment in Canada. In addition, the effects of class and authority on the income attainments of Canadians will be examined with specific attention to the differential effects that language and gender have on Canadian incomes. Previous research on the process of status and income attainment in Canada has provided evidence to the effect that the Canadian process of stratification varies differentially across categories gender (Cuneo and Curtis, 1975; Marsden, Harvey and of Charner, 1975; Boyd and Humphreys, 1980; Goyder, 1981; Boyd et. al. / 1981; Boyd and McRoberts, 1982; Boyd, 1982) and across categories of language (See: Turrittin, 1974; Curtis, 1975; Orstein, 1981; Goyder, 1981; Cuneo and Boyd et. al., 1981). These studies have suggested that the process of stratification differs across categories of

gender (e.g. the Blau-Duncan paradigm)(4) such that the rates of return which men and women receive for their educational attainments are higher for men than for women. Similarily, it has been suggested that the process of status attainment also varies by language such that the rates of . return for the ascribed and achieved educational respondents will characteristics of be higher for anglophones than for francophones. In addition, the literature on Canadian income attainments indicates that the process of income attainment is similar in that the process is also differentially affected by gender and language. In particular, it has been suggested that the educational and occupational returns in terms of income will be higher for men than for women (Goyder, 1981; Boyd and Humphreys, 1980; McRoberts, 1980) and higher for anglophones than for francophones (Goyder, 1981).

(4) Throughout the status attainment literature a number of terms are employed to refer to the set of causal relationships depicted in the traditional Blau-Duncan paradigm. These terms include: educational attainment, occupational attainment, income attainment, status attainment, and the process of stratification. While Blau and Duncan, themselves, refer to their model as "The Process of Stratification" (1967:171), each of the terms presented above are variously used throughout the literature to describe the model of attainment which is being described and analyzed. One final note, the process of stratification and the process of status attainment are used synonomously throughout the literature in this area.

Figure 1.1: Extension of the Blau-Duncan Paradigm to include Ownership of the Means of Production and Authority in the Workplace for Canada, Adapted from: Robert V. Robinson and Jonathan Kelley, 1979, "Class as conceived by Marx and Dahrendorf: Effects on Income Inequality in the United States and Great Britain." <u>American Sociological Review</u>, 44:38-58.



However, when these relationships are examined within the context of Robinson and Kelley's analysis it is found the relationship between class and the process of that income attainment, as it varies across categories of gender is somewhat different. A number of studies dealing with the analysis of Marxist class categories have indicated that the relationship between gender and income changes when a class variable (e.g. one based on Marx's theory of class structure) is included in the analysis (Wright and Perrone, 1977; Robinson and Kelley, 1979; Wright et. al., 1982). Specifically, these studies have suggested that the inclusion of a Marxist class variable changes the relationship such that "...controlling the means of production and exercising authority both substanincome" tially increase а man's (Robinson and Kelley, 1979: 47). However, while this relationship is significant with respect to men's incomes, when this model is expanded to incorporate women's incomes it is found that class and authority do not effect the rates of return for women's income (Robinson and Kelley, 1979: 49). Thus, it is expected that the relationship between the class/authority variables and the process of status attainment will vary significantly by gender. It is also expected that, consistent with literature on Canadian income/status attainment, language (French/English) will

differentially effect the relationship between the class/authority and prior and achieved characteristics of respondent's on their income attainments.

To summarize, the purpose of this study is three-fold. First, it will attempt to fill in a portion of the gap in the theoretical and quantitative analysis of stratification in Canada. In doing so, this study, secondly, will replicate Robinson and Kelley's (1979) analysis using data from the Canadian National Mobility Study (1973). Finally, this analysis will explore these relationships with respect to two dominant features of Canadian process of stratifica-Specifically, the effects of class and authority tion. will be examined in relation to income attainment in Canada as it varies differentially by gender and by language. In order to examine the effects of gender and language in relation to the revised model, this analysis will, therefore, be conducted within the context of four subsamples of the Canadian population. The subsamples to be included are: francophone men and women and anglophone men and women. An analysis of income attainment will be conducted for each in order to compare and contrast the differential effects that language and gender have on the process of class and status attainment as they are related to income in Canada.

CHAPTER II

CLASS AND INCOME ATTAINMENT IN CANADA: A Review of the Literature.

Introduction:

A summary overview of the literature on the Canadian system of stratification suggests that it is one of the most widely researched topics in Canadian sociology. Indeed, this research area has been the subject of a vast number of investigations from a variety of theoretical and " methodological orientations. The literature in this area can be sub-divided into two broad categories: (1) the quantiative analysis of the process of status and income attainment in Canada; and (2) the theoretical, qualitative or descriptive analysis of social inequality and stratification in Canada. While both types of analysis are equally important, the main focus of research on the Canadian system of stratification has been on the former type; e.g. the quantitative analysis of stratification in Canada. As suggested in chapter one, the quantitative analysis of the Canadian system of stratification has generally been conducted within the context of Blau and Duncan's paradigm of status attainment. Thus, the majority of research in

this area has focussed on the analysis of the process of status attainment. However, in recent years a number of studies have been conducted which examine the process of income attainment in Canada. Therefore, the following review of the stratification literature in Canada will focus on (1) The analysis of status attainment and (2) The analysis of income attainment in Canada. In addition, this review will include a discussion of the literature on the quantitative analysis of class in Canada.

The Analysis of Status and Income Attainment in Canada.

The Blau-Duncan paradigm examines the process of stratification within the context of the individual's life-cycle and proposes a multivariate causal model which links an individual's current occupational status to the prior socioeconomic status of the family of orientation (e.g. father's occupational and educational status) and the individual's subsequent achieved statuses (e.g. the individual's educational and first job achievements) (Blau and Duncan, 1967; Duncan and Featherman, 1972; Li, 1978; Horan, 1978; Boyd and Humphreys, 1980; Boyd et. al., 1981; Boyd, 1982; Kerckhoff, 1984). Blau and Duncan's path model of the process of educational and occupational attainment has been the basis for the majority of the research

conducted in Canada for the past fifteen years. Specifically, this type of research has attempted to determine and ascertain the nature and extent of the effects that (1) family background (See: Turrittin, 1974; Cuneo and 1975; Curtis, Goyder and Curtis, 1977; McRoberts, 1980; Ornstien, 1981; Pineo, 1981; Boyd et. al., 1981; McRoberts and Selbee, 1981; 1982), Boyd, (2) Language (See: Turrittin, 1974; Cuneo and Curtis, 1975; Ornstien, 1981; Goyder 1981; Boyd et. al., 1981), (3) gender (See: Cuneo and Curtis, 1975; Marsden, Harvey and Charner, 1975; Boyd and Humphreys, 1980, Goyder, 1981; Boyd et. al., 1981; Boyd and McRoberts, 1982; Boyd. 1982) and (4) ethnicity or ethnic origin (See: Li, 1978; Ornstien, 1981; Goyder, 1981; Boyd et. al., 1981) have on the process of educational and occupational status attainment in Canadian society.

In addition to the body of statification studies which have focussed on and maintained the integrity of Blau and Duncan's original design, a substantial number of other studies have been carried out which attempt to elaborate , and extend the established parameters of the basic model of status attainment (Alexander, Eckland and Griffin, 1975; McRoberts, 1975 and 1980; Matras, 1980; Boyd et. al., 1981; Kerckhoff, 1984). Of particular interest to this discussion are studies which those have provided for а

more importantly, an extension of the replication and, original paradigm to an analysis of income attainment (See for example: Duncan and Featherman, 1972; Featherman and Hauser, 1978; McRoberts, 1980; Boyd a nd Humphreys, 1980; Ornstien, 1981; Goyder, 1981; Boyd and McRoberts, 1982). Essentially, this research has shown that, consistent with the findings on occupational attainment, the variable with the largest effect in terms of the process of income attainment is education. That is, the direct and indirect effects of education on income produce the largests returns in terms of the income attainment process. While Blau and Duncan's paradigm, and its related variants, has instigated and resulted in a proliferation of research in the United States, its effect on Canadian stratification research has been of a much smaller magnitude by comparison; particularily with respect to the income attainment in Canada (Cuneo and analysis of Curtis, 1975; Marsden, Harvey and Charner, 1975; Li, 1978; McRoberts, 1980; Orstien, 1981; Goyder, 1981; Boyd et. al., 1981). Specifically, to date, only three studies have been published in the Canadian literature on stratification which deal exclusively with the quantitative analysis of income attainment in Canada. Focussing on the issue of income inequality, McRoberts (1980), Boyd and Humphreys (1980) and Goyder (1981) have estimated a number

of income attainment models for Canadian wage-earners using Blau and Duncan's framework for the analysis of educational and occupational status attainment.

summarize this research, both Goyder (1981) and Τo McRoberts (1980) estimate models for the process of income attainment in Canada which are similar to that estimated by Featherman and Hauser in their 1978 modification of the standard Blau-Duncan (1967) paradigm. In particular, Goyder (1981) focusses his analysis on income differences between the sexes and suggests, among other things, that the differential rate of return in income between men and women in Canada is due to differences in the way in which income related characteristics are translated into incomes. Goyder argues that "...women are disadvantaged, compared to males, in how socioeconomic characteristics are utilized in the income attainment process, and it shows that the small benefit which women derive from having slightly higher education and first and current job statuses does not overcome this disadvantage" (Boyd and Humphreys, 1980: 406).

McRoberts (1980), in comparison, estimates a similar model of income attainment looking at males only. Basically, his findings indicate that the single most important predictor of income for males is education. McRoberts (1980) further suggests that education has the strongest

total and direct effects, as well as having nontrivial indirect effects, on income (1980: 495). In addition, he finds that the effects of family background on income operate totally via their effect on the son's educational attainment (McRoberts, 1980: 495).

Boyd and Humphreys (1980), on the other hand, estimate somewhat different model of income attainment. а "Incorporating various measures of labour market segmentation in their models of income attainment..." (1980: 403). Boyd and Humphreys examine the effects of gender on the process of income attainment, as it varies across the core and periphery sectors of the Canadian economy. Overall, their findings are consistent with the existing research on income attainment in Canada. However, with respect to labour-market location, they report that their data displayed two distinctive features. First, they suggest that their findings indicate that there are significant income differences across the core and periphery sectors of the Canadian economy in terms of income and socioeconomic characteristics, where the differences are greater for female workers than for male workers (1980: 408). Secondly, they find "...evidence that income characteristics are differentially evaluated relevant[.] across core and periphery sectors, but only for female workers" (1980: 408).

To summarize, these studies suggest that income is highly dependant upon and related to the ascribed and achieved statuses of Canadians. Furthermore, income has not only been shown to be significantly related to 'the process of stratification' in Canada, the income attainment process has also been shown to be different for anglophone and francophone men and women (Goyder, 1981; Boyd and Humphreys, 1980). However, despite the contribution of these studies to the existing body of stratification research on income inequality in Canadian society, an increasing proportion of studies have emphasized that a number of additional dimensions in the process of stratification have been overlooked in the analysis of North American society.

Class in Canada: The quantitative analysis of Marxist categories.

Although it is commonly argued that class, as it is defined in the Marxian sense of the word (e.g. economic ownership or ownership of productive property) is a "major status dimension" (Curtis and Scott, 1979: 12,24) of the Canadian system of social stratification, it has been almost completely ignored in any quantitative assessment of social inequality in Canada. More often than not, Marxist

class categories have remained at a conceptual level of, analysis and have therefore been relegated to theoretical descriptive discussions of Canadian society (For. and example: Porter, 1965; Blishen, 1970; Johnson, 1972; Clement, 1975; Stevenson, 1977; Cuneo, 1978; Forcese, 1980; Marchak, 1981; Gilbert, 1982; Cuneo, 1983; Hunter, 1981). Thus, the gap between the quantitative analysis and the theoretical analysis of systems of stratification, as noted in chapter one, has remained relatively unbroached within the Canadian research setting. Indeed, few attempts have been made to cross this boundary and only one study has been carried out which specifically incorporates a class variable, based on a derivative Marxian definition of ownership of the means of production, 'into a quantitative analysis of the Canadian system of stratification.

Kevin Selbee (1981) introduces a Marxian class variable into his analysis of mobility in Canada. Noting that "...the exclusion of property-ownership from studies of mobility may be one of the most important flaws in the conventional approach..." (1981: 3), Selbee applies a set of Marxian class categories to Canadian occupational data in order to determine the extent of class mobility in Canadian society. Relying on Giddens' (1973) discussion of the process of 'class structuration' or formation as a guideline for his operationalization of his class variable,

Selbee identifies the following <u>class locations</u> as present in the Canadian system of stratification: (1) The bourgeoisie, (2) The petite bourgeoisie, (3) The service class, (4) The intermediate class, and (5) The proletariat (1981: 34). He further makes the distinction that the first two class locations are representative of a Marxian category based on ownership of productive property and the last three locations are synonomous with nonownership of the means of production (1981: 36).

Using these <u>class</u> <u>based</u> categories, Selbee focusses his analysis on "...the mediate structuration of classes in reflected in the . Canada as patterns of inter-class mobility" (1981: 119). Selbee finds that the service and working classes display a high propensity for mediate structuration. That is, the service and working classes are in a process of "closure" in which they will become relatively stable and homogeneous with respect to size and content. On the other hand, Selbee finds that "...the intermediate and small capitalist classes do not appear to possess great potential for structuration" (1981: 125). Rather, the intermediate and small capitalist classes represent transition routes through which movement to other classes occurs. Thus, Selbee concludes that Canadian society can be characterized as being "...composed of two stable groups, one at each end of the class or occupational

structure" (1981: 125) and that there is a high degree of mobility between these two groups.

Selbee's research demonstrates that "class location", as defined by Giddens (1973), is both a substantively and empirically important dimension in the analysis of the Canadian system of stratification. However, although he argues that his paradigm is consistent with the traditional Marxian conceptualization of class (e.g. ownership/ nonownership of productive property) Selbee operationalizes his model of class on the basis of the conventional socioeconomic classification of occupations. In defining the five class locations which he identifies as present in Canadian society, Selbee has employed Pineo, Porter and McRoberts¹ 1971 census socioeconomic classification of occupations. Thus, Selbee's analysis is, at least in part, still highly dependant upon the traditional analysis of the status/prestige dimensions.of the Canadian system of stratification. This dependance on occupational classifications as the basis on which a set of class categories is constructed reduces the range of applicability of Selbee's analysis in terms of a strictly Marxain classification. However, despite this flaw, Selbee's research is unique in that it represents the first attempt to incorporate a derivative Marxian definition of class into a quantitative analysis of the Canadian system of stratification.

Canadian Stratification Research: An overview.

number of observations can be derived Α from this survey of the research literature on social stratification and social inequality in Canada. First, it has been noted that Blau and Duncan's path analytic model of the process of stratification has become the dominant research strategy used in the analysis of the Canadian system of stratification. As such then, this research strategy has resulted in a huge body of literature consisting of the quantitative analysis of the process of status attainment. Secondly. the emphasis on the analysis of educational and occupational attainment has resulted in the exclusion of a number of dimensions from the quantitative analysis of the Canadian system of stratification. Specifically, both the income and class dimensions of Canadian society have been relatively unexplored with respect to the analysis of stratification. However, of the studies which have been carried out, it has been found that income is highly related to the ascribed and achieved statuses of Canadians and that this relationship varies differentially by gender and language. Finally, with respect to analysis of class in Canada, it has been observed that little has been done to breach the gap between the quantitative and theoretical analysis of stratification. Only one study, to date/ has been

conducted which attempts to incorporate distinctly Marxian categories into the quantitative analysis of mobility in Canada. However, given its dependance upon the conventional classification of occupation as the basis on which class was operationalized, this study still falls short of providing a definitive analysis of class in Canada. Therefore, in order to construct a set of class categories based on a strictly Marxian definition of ownership and authority, this study now turns to the traditional conceptualization of class as it presented in Marx's and Dahrendorf's theories of social stratification.

CHAPTER III

MARXIST CLASS CATEGORIES: Theoretical Background

Introduction:

The following chapter consists of a review of the various theoretical perspectives which will form the basis of the subsequent empirical analysis of class and its* role in the process of income attainment in Canada. The major issue to be addressed here is, as Marx proposed in Capital, Volume III: "What makes a class?"(1894: 1026). In addressing this issue, two specific class models will be reviewed with respect to the way in which the concept of class has been defined and operationalized in each of the models examined. In addition, Robinson and Kelley's quantitative analysis of class and authority will be briefly reviewed with a specific emphasis on the way in which they have defined and operationalized Marx's and Dahrendorf's paradigms. The remainder of this chapter therefore will consist of a discussion and review of the following paradigms of class: (1) Marx's model of class and class conflict in capitalist societies; (2) Dahrendorf's model of class and class conflict in industrial societies; and
(3) Robinson and Kelley's "Synthesis"(5) of class, authority and income attainment. Finally, various aspects of each model will be singled out in terms of their correspondence to Robinson and Kelley's analysis and in terms of the suggested replication of their model in this study.

Marx's Model of Class and Class Conflict: (6)

For Marx, 'what constituted a class' was its position within the social relations of production. That is, Marx suggested that individuals in society constitute a class only insofar as they share a common position or relationship to the prevailing mode of production. Thus, for Marx the starting point of any class analysis was the identification of the social relations of production within any society at a particular point in history.

Within the context of capitalist society (e.g. the

- (5) This termonology is, in fact, Robinson and Kelley's. Robinson and Kelley refer to their model of class, authority and the process of income attainment as a 'synthesis' of both the theoretical, Marxian, and empirical-quantitative (Blau and Duncan) traditions in the study and analysis of systems of stratification.
- (6) Given the proposal of this study, only the main elements which are pertinent to both Marx's and Dahrendorf's definitions of class are covered in the following discussion of their theories of social class. Thus, although the following discussion is not comprehensive, it is complete with respect to presenting the key features of both Marx's and Dahrendorf's arguments.

capitalist mode of production) Marx identified three criteria in which the social relations of production were rooted: (1) ownership of the means of production; (2) the purchase of the labor power of others; and (3) the sale of one's own labor power. It was on the basis of these three criteria that Marx distinguished the three great classes of capitalist society:

> The owners of mere labor-power, the owners of capital, and the landowners, whose respective sources of income are wages, profit, and of land, or in other words, wage-laborers, capitalists, and landowners,(7) form the three great classes of modern society based on the capitalist mode of production (Marx, 1894: 1026).

Thus, Marx identified three classes which he suggested were characteristic of societies based on the capitalist mode of production: (1) <u>Capitalists</u> who own their own means of production, purchase the labor power of others and who do not sell their own labor power; (2) <u>Proletariate</u> or wage-laborers who neither own the means of production or

(7) In addition, Marx pointed out that with the development of the capitalist mode of production, the class of landowners would eventually be absorbed, along with a number of other intermediate classes, into the petite bourgeoisie (Marx, 1847: 57-79). The other classes which Marx identified as being in a state of transition and which would be absorbed into the proletariat when capitalism approached its appex include: the land-owner and peasants (1852: 320), the small trades people shopkeepers, handicrafts and farmers (1847: 70).

purchase the labor power of others but who sell their own labor power; and (3) Petite Bourgeoisie who own their own means of production but who neither purchase the labor of others or sell their own labor power. power Marx however, cautions us that as societies develop into more advanced stages of the capitalist mode of production, the petite bourgeoisie, accompanied by a number of other intermediate/transitional classes, would diminish in size and eventually be absorbed into the class of wage-laborers, otherwise known as the proletariat (Marx, 1847: 70-71). Thus, according to Marx, societies based on the capitalist mode of production would be characterized by two diametrically opposed classes: the capitalists and the proletariat (Marx, 1894: 1026).

Given this schema, opponents of the Marxist view of class have noted that the three suggested criteria are not strictly applicable in the analysis of modern capitalist societies. As Wright and Perrone argue:

> For many purposes, especially for the analysis of mid-nineteenth century capitalism, these were probably adequate criteria, at least as a first approximation; for the analysis of contemporary capitalism, they need some important extensions (Wright and Perrone, 1977: 33).

Specifically, the 'important extensions' to which Wright and Perrone refer are based on the argument that the

development of the modern corporation (e.g. the modern mode of capitalist production) has been such that the ownership and control of the modern corporation has been separated. Suggesting that the managerial and supervisory classes contain characteristics of both wage-laborers and capitalists within them, critiques of the traditional Marxist schema argue that the managerial group represents a distinct class in modern capitalist society and thus should be treated separately from both the class of capitalists and the class of wage-laborers.(8)

On the other hand, others, in agreement with Robinson and Kelly, have argued that:

> Marx's criterion of ownership of the means of production may reasonably be expanded to include all forms of control of the means of production, whether they stem from legal ownership or formal control (Robinson and Kelley, 1979: 39).

In other words, it has been argued, as Robinson and Kelley have suggested, that no distinction should be made between the capitalist classes and the class of managing directors because, in effect, the class of managers and supervisors receive essentially the same benefits as those who actually own the means of production (Robinson and Kelley,

(8) For a more detailed discussion of this debate see: Dahrendorf, 1959; Poulantzas, 1975; Wright and Perrone, 1979; and Wright et. al., 1982.

1979: 39). Hence, for the purposes of this study (e.g. the replication of Robinson and Kelley's model) those individuals who do not own the means of production but who control the means of production (e.g. who sell their labor power to the capitalist) will be included in the capitalist class category. In addition, those who own their own means of production and who neither sell their own labor power or purchase the labor power of others (e.g. small capitalists or the petite bourgeoisie) will also be included in the the capitalist class category.

Finally, Marx sets forth an additional criterion for the determination of a class. Often refered to as the subjective dimension of his class analysis, Marx proposed that classes can only be defined in relation to one another. That 'is, Marx argues that class relations under capitalist mode of production the are necessarily exploitive. It is through the exploitation of the wage-laborer by the capitalist which transforms the working class from a class-in-itself to a class-for-itself (Marx, 1852). Moreover, it is this exploitive relationship which forms the basis for the growth of class antagonisms and class conflict. Thus, in Marx's usage, capitalists form a class only to the extent that they exist in relation to another class, the proletariat, and that that relationship is necessarily antagonistic (Marx, 1847: 71).

Dahrendorf's Model of Class and Class Conflict:

According to Dahrendorf, classes were not to be viewed as economic groupings. Rather, classes were to be seen as:

> social conflict groups, the determination of which can be found in the participation in or exclusion from the exercise of authority within any imperatively coordinated association (Dahrendorf, 1959: 138).

In agreement with Wright and Perrone's critique of Marx Dahrendorf suggested that Marx's model (e.g. ownership versus nonownership of the means of production) ."...loses its analytical value as soon as legal ownership and factual control are separated" (1959: 136). Given this observation, Dahrendorf subsequently argued that any effective succession of Marx's theory would have to eliminate the problem entailed in the economic basis of Marx's model. That is, Dahrendorf suggested that, because of both the definitional and analytical problems that Marx's model poses in terms of handling the issues of the separation and control of the means of production. Marx's classification based on ownership and nonownership needed to be replaced by different criterion of class formation. The criterion which Dahrendorf suggested should be used to replace Marx's classification was whether or not an indi-

vidual within the hierarchical organization of work exercised authority. Hence, for Dahrendorf it was authority relations, not class relations, which formed the basis of class conflict. Thus, as Dahrendorf (1959) explains in, <u>Class and Class Conflict in Industrial Society</u>,

> ...we shall not confine the notion of authority to the control of the means of production, but consider it as a type of social relations analytically independent of economic conditions. The authority structure of entire societies as well as particular institutional orders within societies (such as industry) is, in terms of the theory here advanced, the structural determinant of class formation and class conflict. The specific type of change of social structures caused by social classes and their conflicts is ultimately the result of the differential distribution of positions of authority societies and their institutional in orders. Control over the means of production is but a special case of authority, and the connection of control with legal property an incidental of the phenomenon industrializing societies of Europe and the United Classes are tied neither to States. private property nor to industry or economic structures in general, but as an element of social structure and a factor effecting change they are as universal as the determinant, namely, authority and its distribution itself. On the basis of a concept of class defined by relations of authority, a theory can be formulated which accounts for the facts described by Marx as well as for the changed reality of post-capitalist society (Pg. 136-137).

For Dahrendorf, the development of the separation of ownership and control meant that Marx's model was no longer useful for the analysis of modern industrial society. In place, he suggested a theory of class based on two its primary reconceptualizations of Marx's original paradigm. First, Dahrendorf suggested that the notion of society as rooted in the social relations of production should be eliminated and replace with the "more generalized" view that society consisted of "imperatively coordinated associations" which are rooted in authority relations. Following directly from this, first premise, Dahrendorf argued that "authority relations" should be the central defining factor in any analysis of class and class conflict in post-capitalist societies.

Basically there are two kinds of authority relations which are present in all imperatively coordinated associa-The tions. first type of authority relation which Dahrendorf identified was that of the exercise of authority This category of authority relation was over others. referred to by Dahrendorf as the "domination" or "superordinate" group or class. The second type of authority relation identified by Dahrendorf, was that of the exclusion from authority. This category consists of individuals who are subjected to authority but have none themselves. Hence, the Dahrendorf used to term that

describe this class or group was "subjection" or "subordination".

Finally, Dahrendorf suggests that relations of domination and subjection always involve conflicting interests, with the domination class having an interest in maintaining the status quo and the subjection class having an interest in changing the status quo. However, inasmuch as their interests are latent, these classes are seen to consist of "quasi-groups" with interests which have not been overtly identified. Only once a certain set of conditions have been met (e.g. social, political and technical) can Dahrendorf's classes be viewed as consisting of coherently "structured groups" with manifest, outward, interests in changing or preserving the existing structure of authority relations. It is at this point in time that class conflict becomes apparent and is said to present within society.

Thus, to summarize, Dahrendorf's model of class is "...concerned with the systematic explanation of that particular form of structure-changing-conflict which is carried on by aggregates or groups growing out of the authority structure of social organizations" (Dahrendorf, 1959: 152). The authority structure to which Dahrendorf refers consists of two classes(9) or groups of individuals

(9) Although Dahrendorf debates the usefulness of the concept of class (See: 1959, pages 201-205) he finally

who hold positions within social organizations based on their relationship to the exercise of or exclusion from authority. Although Dahrendorf uses a variety of terms to refer to these two groups, the ones which he most frequently employs are: domination and subjection. In keeping with Robinson and Kelley's classification and in order to maintain a degree of terminological simplicity, this study will operationalize Dahrendorf's model of authority relations in the same way that Robinson and Kelley have done (1979: 39-40). Thus, in place of Dahrendorf's categories of domination and subjection, this study will use the following terms: (1) The Command Class: this class refers to those who exercise authority over others and is equivalent to Dahrendorf's domination class; (2) The Obey Class: this class refers to those who do not exercise authority over others but are subjected to the authority of others, in Dahrendorf's terms this is the subjection class.

concludes that both the terms 'class' and 'group' may be used interchangably. However, he does offer a cautionary note that the concept of class should not be used in an economic (Marxian) sense. Rather, according to Dahrendorf: "...the term 'class' signifies conflict groups that are generated by the differential distribution of authority in imperatively coordinated associations" (1959: 204).

Marx and Dahrendorf: Compared and Contrasted.

Both Marx and Dahrendorf have been guided in their studies by a common interest in the analysis of class and class conflict in industrial societies. While Dahrendorf uses Marx's theory of class as a framework in the development of his model, the conclusions which he derives from his analysis of class and class conflict in industrial society are considerably different from those derived by In the main, Marx's and Dahrendorf's paradigms Marx. differ in two major ways. First, their models differ in that they identified contrasting factors which exist at the base of class formation and conflict in industrial society. For Marx, what was important was the social relations arising out of ownership of productive property within any single mode of production. Thus, Marx's model emphasized the ownership and, as previously suggested, the control dimension of the hierarchical position of individuals in the workplace. On the other hand, Dahendorf identified authority relations as the basis upon which classes form. and interact. Thus, Dahrendorf focussed on whether or not the individual exercised authority in the workplace.

The second way in which these two models differ arises as a direct result of the first. Both Marx's and Dahrendorf's models are derived on the basis of very

different definitions of class which are, themselves, the product of examining differing aspects of the organizational hierarchy in society. In Marx's schema the emphasis is ownership and control, hence, the dichotomous categorization of class into capitalists and workers. For Dahrendorf, emphasizing authority relations results in a dichotomous classification based on whether and individual exercises or does not exercise authority over others in the workplace. Thus, while Dahrendorf's model consists of two opposing classes (e.g. the command class and the obey class) the model that he proposes identifies different class boundaries from that of Marx's model.

As can be seen in table 3.1. Marx's distinction between capitalists and wage-laborers becomes obscurred within Dahrendorf's command class. At the same time, however, Dahrendorf's distinction between the command and obey class is lost within Marx's worker class (e.g. wage-laborer or proletariat). While each defines a marginal class (e.g. the petite bourgeoisie for Marx and the classless for Dahrendorf) they suggest that these classes are inconsequential in terms of the actual formation of classes and their ensuing conflicts.

Table 3.1: Operationalization of Class and Authority as Defined by Marx and Dahrendorf.

	AUTHORITY IN TH	E WORKPLACE
Ownership of the Means of Production	Exercises Authority Over Others	Does Not Exercise Authority Over Others
PANEL A: MARX'S MODEL		······································
Owns the Means of Production (e.g. No Supervisor or Employer)	CAPTIALIST	PETITE BOURGEOISIE
Does Not Own the Means of Production (e.g. Has Supervisor or Employer)	WAGE-LABORER*	PROLETARIAT (Wage-Laborer)
PANEL B: DAHRENDORF'S MODEL	*******	
Owns the Means of Production (e.g. No Supervisor or Employer)	COMMAND CLASS	CLASSLESS
Does Not Own the Means of Production (e.g. Has Supervisor or Employer)	COMMAND CLASS	OBEY CLASS

*Managerial Class according to Wright and Perrone's (1977) definition.

Thus despite their similarities, Marx's and Dahrendorf's models focus on very different aspects of the process of class formation and class conflict. As such then, this study concurs with Robinson and Kelley's assessment of Marx and Dahrendorf that:

> ...Marx's and Dahrendorf's models are statistically as well as theoretically distinct and that they usually have independent, and sometimes quite different, effects on the various dependent variables (1979: 40).

Summary and Conclusions: Robinson and Kelley's Synthesis.

As previously indicated, Robinson and Kelley have developed a model of income attainment which specifically incorporates two additional variables based on Marx's and Dahrendorf's theories of class and class conflict in industrial societies. The intention of the following discussion, however, is not to review Robinson and Kelley's theoretical arguments, as they are consistent with those presented previously in this chapter. Rather, the intention of the following discussion is to summarize the theoretical orientations presented thus far and to formalize the operational definitions of class and authority to be used in this study. In addition, any possible deviations of this analysis, as a result of the absense of a number of variables in the Canadian National Mobility

Study, from Robinson and Kelley's analysis will also be noted.

It has been argued in this chapter that, despite the similarities between their theories. Marx's and Dahrendorf's models are both conceptually as well as statistically distinct. The main evidence for this supposition derives primarily from Robinson and Kelley's study with some support deriving from Wright and Perrone's (1977) analysis of "Marxist Class Categories and Income Inequality". Premising their analysis on the same observation that Robinson and Kelley have made that there is a prominent gap between the theoretical and quantitative analysis of stratification systems, Wright and Perrone proposed a preliminary operationalization of Marx's class categories. In doing so, they derived three classes, workers, managers and employers, and examined the interactions between them and standard the variables used predicting income in (e.g. education, occupational status and age). Their findings indicated that "...there is a substantial interaction between class position and the income returns to education; within categories, however, there are no differences between race and sex groups in the returns to education" (1977: 32).

While Wright and Perrone's study does deviate in a number of respects from Robinson and Kelley's analysis, it

does provide evidence that class, as it is defined within a Marxian relational perspective, is an important predictor of income. The major difference between the two studies is that, while Wright and Perrone include a class category based on the ownership versus control debate (e.g. a managerial class) Robinson and Kelley do not. Robinson and Kelley argue that it is not necessary to include such a category for two reasons. First, they suggest that Marx's criterion of ownership encompasses all forms of control and therefore those who control but do not own the means of production should be included in the capitalist class (1979: 39). The second reason for the exclusion of a managerial class, is the inclusion of Dahrendorf's concept of authority in the model. Robinson and Kelley argue that "Wright and Perrone's classification should be regarded as one way of combining the traditional Marxian model with Dahrendorf's model based on authority" (1979: 40). Hence, employing Wright and Perrone's model in conjunction with Dahrendorf's model merely serves to provide an unnecessary overlap in the analysis of class and income attainment. Thus, this study proposes the following operational definition of Marx's class categories: (1) The Capitalist Class - referring to those who both own and/or control the means production, includes managers and supervisors, who do of not sell their own labor power and who purchase the labor

power of others. (2) The Wage-Laborer Class - referring to those who neither own or control the means of production but who do sell their own labor power to the capitalist; and (3) The Petite Bougeoisie - referring to those who own or control the means of production and who do not sell their own labor power and who usually purchase the labor power of very limited number of others (e.g. those who own small businesses, shops, etc.).

In addition to Marx's model, this study proposes a dichotomous classification of Dahrendorf's model of authority (e.g. the command and obey classes) based on an individuals relationship to the exercise of authority in the workplace. This operationalization is somewhat different from that used by Robinson and Kelley. In the first instance, Robinson and Kelley do propose a model based on a dichomization of authority into command and obey classes. However, they continue on to argue that:

> ... not only the capitalists and superwill be paid more visors than nonsupervisory employes ...but also second line supervisors will be that paid more than first line supervisors (and so on up the hierarchy) (Robinson and Kelley, 1979: 43).

Thus, in presenting this argument, Robinson and Kelley have proposed that Dahrendorf's model can be "improved" upon by introducing a schema which is more sensitive to the

hierarchical distribution of authority in the workplace. Suggesting that their modification of Dahrendorf's model represents a <u>continuous</u> version of authority, Robinson and Kelley procede to break Dahrendorf's command class down into two additional classes, the upper command class and the lower command class. The lower command class consists of those individuals who supervise only nonsupervisory employees and the upper command class consists of those who supervise the lower command class.

In addition, Robinson and Kelley also note that their model is not consistent with Dahrendorf's explicit specification that "authority does not permit the construction of a scale" (1959: 171) and therefore cannot be represented as a continuous measure. Despite Dahrendorf's adamance about the nominal nature of authority, Robinson and Kelley argue that "...authority is better conceptualized as a matter of degree and that Dahrendorf's theory should be modified to distinguish..." (1979: 45) between levels of the command class.

Given these two operationalizations of authority, this study will maintain Dahrendorf's original model over Robinson and Kelley's "improved model". While Robinson and Kelley's model lends itself to a more sensitive analysis of authority and its relationship to income attainment, Dahrendorf's model will be employed because of the absense

of continuous measure а of authority in the Canadian National Mobility Study. Thus, this study proposes the following operational definition of authority, in the workplace: (1) The Command Class - referring to that group individuals who supervise or exercise authority over of others and who may or may not be subject to the authority of others; (2) The Obey Class - referring to that group of individuals who are subjected to others authority but exercise none themselves; and (3) The Classless - referring to those who neither exercise authority in the workplace or are subjected to the authority of others.

Thus, to summarize, this review of the theoretical literature on stratification and the previous review of the quantitative analysis of stratification (see chapter two) has indicated that there is a need for an integrated approach to the study and analysis of stratification systems. The following chapters therefore, will attempt such an integration by presenting a modified version of Robinson and Kelley's model and analysis and by testing it for its applicability within the context of Canadian society. CHAPTER IV

DATA AND METHODOLOGY

As previously noted, the primary goal of this study is to initiate an inquiry into the nature and extent of the effects that ownership and authority have on the Canadian process of income attainment. While previous research has the sequentially interrelated processes of focussed on background status (e.g. father's educational and occupational status) and current status (e.g. education, occupation and income) the present analysis will address the following questions: (1), What is the nature and strength of the relationship between ownership of the means of production and authority in the workplace in Canada? (2) To what extent do these factors, ownership and authority, affect the process of income attainment in Canada? (3) What effects (e.g. direct and indirect) do ownership and authority have on income via an individual's background and current statuses. (4) What are their implications for the process of income attainment in Canada? In addressing these issues this study will conduct a number of analysis using varying statistical methods. The present chapter, therefore, will consist of a review and discussion of the data to be used, definition of the variables, and the

statistical methods to be employed in the analysis of the impact of ownership and authority on the process of income attainment in Canada.

The Canadian National Mobility Study.(10)

The data to be employed in this study consists of a subset of the Canadian National Mobility Study which was conducted in 1973 by a team of six Canadian sociologists. This survey, which was patterned on the basis of the 1962 1973 American studies on occupational changes in a and Duncan, 1967; generation (See: Blau and Featherman and Hauser, 1978), was funded by a Canada Council research and was gathered in cooperation with Statistics grant, Canada through a self-enumerated questionnaire which was dropped off and picked up in conjunction with the July 1973 Monthly Labour Force Survey. Consisting of social, economic and demographic information, data was collected for 44,867 noninsititutionaliized men and women age 18 and over (For more detailed information see: Boyd et. al., 1985).

The Canadian National Mobility Study is a complex

(10) The following discussion of the Canadian National Mobility Study and the measures derived from it relies heavily upon the following sources: Selbee, 1980; McRoberts, 1980; Boyd and Humphreys, 1980; Boyd et. al., 1985.

multistage (stratified) areal probability sample designed to generate detailed information for Canada as a whole, as well as for each of provinces separately. This particular sampling strategy is designed to ensure that differing units in the population are equally represented in the sample collected; in this case the units identified are the provinces. However, this technique results in varying sampling rates, thus biasing the sample test statistics. In order to adjust for the resultant sampling variability and the bias in the null hypothesis tests a complex procedure of weighting was designed and applied to the Canadian National Mobility Study by Statistics Canada in order to correct for the varying sampling rates in age, sex and portion rural or urban. In addition, because this weighting procedure results in an upward adjustment in the sampling frequencies, concommitant with the census sample (e.g. in the millions), the data were subsequently downweighted by the research team so that reliable and accurate tests of significance could be calculated which could be meaningfully be interpreted. The sum total of the weighting procedure resulted in a design factor of .57. Although this discussion relies heavily upon the works of those cited previously, a specific and detailed description of the data collection, field procedures, sampling techniques. and weighting procedures is reported in Boyd

et. al. 1985.

Although a total of nearly 45,000 cases were collected, the following analysis investigates the income attainments of a more restrictive population, namely, anglophone and francophone men and women aged 18-64 who were in the July 1973 labor force, who responded to questions concerning their class position and their place within the occupational hierarchy of the workplace. In addition, those respondents and their fathers who indicated that they were in farming occupations were excluded from the analysis as previous research in the literature has indicated that the occupational and income attainment experiences of this sub-group of the Canadian population differ enough from that of those in other occupational categories to warrant a separate analysis - (See: Porter, 1965; Blau ~ and Duncan, 1967; Wright and Perrone, 1977). Also, the proposed analysis includes controls for a number of factors which are thought to be highly related to and thus confound the results of any analysis of income attainment (See: Blau-Duncan, 1967; Featherman and Hauser, 1978; Boyd and Humphreys, 1980; McRoberts, 1980). These factors include age, work experience (accompanied by a squared component in order to capture any nonlinearity) and employment status as indexed by the average number of hours worked per week of the individuals who participated in the

These controlling factors were included for a survey. number of reasons. First, and most importantly, they allow for greater comparability of the subsamples to be examine while holding constant the type of labor force involvement and experience, both factors which are thought to affect and women in particular, and men anlophones and francophones differentially (See: Boyd and Humphreys, 1980; Góyder, 1981; Boyd et. al., 1981; Boyd and McRoberts, 1982). Secondly, there is a high rate of non-response and selectivity bias in response rates to current occupation guestion for women and for francophones in self-employment, part-time work, and their reported income from employment which is accentuated when considered in conjunction with the key discriminating variables of ownership and authority. In addition, further controls for ethnicity and area of residence were excluded from the analysis in order to preserve the already reduced sample size achieved by including the controls discussed above. This was . done primarily in order to ensure that reliable estimates could be obtained in the calculation of the test statistics for the models.

The Variables: Operational Definitions.

outlined in chapter one, the variables to be As included in the following analysis consist of: respondents class position, respondents authority, respondents education, respondents occupational status, respondents income, father's class position, father's occupational status, and father's education. In addition to this set of primary variables, a number of secondary variables are introduced into the models in order to control for their effects on the primary variables. These variables include: age, gender, language, work experience and it's squared component, and number of hours worked per week. While the main focus of this section will be on the primary variables noted above, the secondary variables will briefly be discussed and defined.

<u>Class</u> and <u>Authority</u>. As noted in chapter three, Marx's concept of class was operationally defined on the basis of two criteria: ownership of productive property and sale of one's labor power. These definitional specifications resulted in a three-fold classificatory schema consisting of: (1) Capitalists - those who both own and/or control the means of production but do not sell their own labor power; (2) Wage-laborers - those who neither own or

and (3) Petite Bourgeoisie - those who do not power; control the means of production and who do not sell their own labor power. Class position was determined for both respondents and their father's on the basis of the answers to the following question: "In this job(11) are (were) you working?" Responses to this question were coded into three (0) Worked for others for wages, salary or categories: commission; (1) Owner, incorporated; and (2) Owner, unincoporated. Within the context of this study, these categories were then dummy coded such that wage-laborers were coded as the left out category (0) and capitalists, consisting of a composite of the two remaining categories, were coded 1. Furthermore, distinguishing the petite bourgeoisie (or classless group in Dahrendorf's terminology) from the other classes resulted in no additional variance explained in income (12) therefore this category was excluded from any of the further analysis conducted onthe effects of ownership and authority in Canada. In addition, a problem of a high rate of nonresponse was encountered for this item, particularily for women and for

(11) In a previously related question, respondent's were asked to identify what kind of work they did or what their occupation was.

(12) In fact, once the effect of farmers had been taken out of the analysis, this category reduced dramatically in size and thus became inconsequential to the remainder of the analysis.

francophones. This was thought to have resulted from an apparent typographical error in the questionnaire design in which if the respondent answered the previous question on occupation they were to bypass the following question on whether or not, in that occupation, they owned or worked for someone else, thus producing a high degree of missing cases. However, because this was the only item which was measured for both the respondents and their fathers, it was decided that the reduced rate of response to this question was within acceptable limits and therefore it was included in the analysis.

Following the definitional outlines in chapter three, Dahrendorf's concept of authority in the workplace was operationalized as such: (1) Command Class - consisting of those individuals who supervise or exercise authority over others and who may or may not be subjected to the authority of others; (2) Obey Class - consisting of those who are subjected to the authority of others but exercise none themselves; (3) The Classless - consisting of those who neither exercise authority or are subjected to the authority of others. Authority position was determined on the basis of an item asking respondents to identify the people that the respondent employed or had working under them. A fixed response item, the choices available to the respondent included: none, 1 to 5 people, 6 to 10 people, 11 to

20 people, 21 or more people working under them. Within the context of this study, this item was then used to create two new variables, each a derivative of the original The first item constructed resulted from recoding item_ the original authority variable to the midpoint of each category so that a metric equivalent of each category could be obtained. The categories were recoded as such: none=0, 1-5=3, 6-10=8, 11-20=15, and 21 or more=25. Given Dahrendorf's strict interpretation of authority as a nominal concept (e.g. you either have authority or you don't) a second item was constructed by dummy conding the original item such that one category was assigned a 1, referring to the Command Class, and the other a O, referring to the Obey Class, the left out category. This was done by grouping all the categories in which the respondents identified that they supervised one or more people into the Command Class and all those who did not supervise anyone into the Obey Class. In addition, a similar methodological problem in questionnaire design was encountered for this item as well. Specifically, the way in which the question was formulated was such that if the respondent answered the preceding question on occupational status and if they owned business or farm, or were a manager or supervisor, they were to answer this question. This produced a situation where, if the respondent <u>did not</u> own a buisness or farm, or

if they <u>did not</u> manage or supervise someone, they were to go to the next question. This resulted in a high rate of non-response to this item. However, this difficulty was resolved by a series of recodes which placed those individuals who had reported their occupational status but did not respond to this item into the category which contained those individuals who did not supervise or manage anyone, and by coding those individuals who did not respond to either question as missing cases. Finally, while this variable was measured for respondents father's, it applied only for those whose father's had owned or operated a farm. As previously indicated, because farmers represent a distinct group in the Canadian populace, it was decided to excluded them from the analysis, hence rendering the authority item for respondents father's irrelevant to the present analysis. It was therefore decided that this item should be dropped from the analysis as well.

<u>The Blau-Duncan Variables</u>. In general, the minimum number of variables used to construct a model of income attainment, based on Blau and Duncan's original model, include: father's occupational status, respondent's occupational status, father's education, respondent's education, and income.

Two different measures of occupational status were employed in the analysis for both respondent's and their

father's: The Blishen-McRoberts (1976) socioeconomic scale and the Pineo-Porter-McRoberts (1977) occupational classification. The Blishen-McRoberts scale consists of scores based on the regression of occupational prestige rankings on education and income measures, using data from the 1971 census. These scores range from a low of 14 to a high of 75 (For more detailed information see: Blishen and McRoberts, 1976).

Both father's occupational status and respondent's occupational status were coded using the Blishen-McRoberts socioeconomic scale and were included in the models to be tested. The additional measure based the on Pineo-Porter-McRoberts occupational classification which reorganizes occupational data into a set of sixteen categories defined by type of occupation and skill criteria, was used in order to exclude the farming and farm laborer classifications from the analysis of the models.

Both father's education and respondent's education were ascertained by two items in the questionnaire. The items used are: What is the highest level of education that you have completed? and What was your parents highest level of education? The fixed response to these items were identical and include: No formal schooling (0). Some Elementary School (3). Finished Elementary School (6). Some Academic High School (9). Finished Academic High School

(12), Some Vocational or Technical High School (9), Finished Vocational or Technical High School (12), Some Post Secondary Trade School (14), Finished Post Secondary Trade School (14), Some Nursing, Teaching, Junior College, Technical or University (14), Finished Nusing, Teaching, Junior College, or Technical School (14), Finished University, B.A. or Diploma (16), and Finished University, M.A., Ph.D., or Professional Degree (20). In addition, a second item was available in the Canadian Mobility Study which asked: How many years altogether were you in school? Both items were used in constructing a composite variable which consisted of the approximate metric equivalent for each category in the first item; these values are indicated in the brackets above.

The Canadian National Mobility Study provides for two items which measure income. The first item asked, "What was your income (before taxes) from employment during 1972? (include wages, salaries, tips, commissions, etc.)". The second item asked, "During 1972, what was your total personal income (before taxes) from all sources (include interest, dividends, rents, recieved, pensions, youth allowances, welfare, etc.)?". It was decided that income from employment provided a more accurate, conservative and reliable measure of the respondent's income and therefore the first item was used as a measure of the dependent

variable in the models to be examined. This item was originally classified into 20 categories, ranging from no income to \$20,000 or over, and for the purposes of use in this study was recoded to the midpoint of each category in order to convert it to its approximate metric equivalent (except for the highest open ended category which was estimated at \$25,000).

<u>The Secondary Variables</u>. In addition to the variables already identified, a number of other variables were also included in order to control for their effects which previous research has indicated would confound the results of the present analysis (See: Porter, 1965; Blau and Duncan, 1967; Featherman and Hauser, 1978). These variables include: work experience, age, work experience-squared, and number of hours worked per week. Also included were sex and linguistic orientation, which were used in order to sub-divide the total sample into the four subgroups proposed to be examined.

Age was measured by asking the respondent's to report their actual age in years and then was coded as such. Only those individuals who were in the labor force were chosen to be included in this study therefore only those individuals between the ages of 18 and 64 were selected for inclusion in the proposed analysis. The rationale for this decision was based on previous evidence suggesting that

those under the age of 18 and over the age of 64 tend not to be in the labor force and therefore tend to bias the results of the analysis of occupational and incóme attainment (See: Blau and Duncan, 1967; Featherman and Hauser, 1978; Boyd et. al., 1981).

Work experience is defined as the total number of years in the work force, and was measured by constructing a new variable which consisted of scores derived by subtracting the respondent's total number of years of education from their age. In addition, previous research has indicated that work experience is related to income in a curvilinear fashion, thus a squared term was introduced into the analysis in order to adjust for this factor (Blau and Duncan, 1967; Featherman and Hauser, 1978).

Number of hours worked per week was measured by asking respondent's to indicated how many hours they worked in the week preceding the survey. obtaining scores ranging from O This variable was introduced into the analysis in to 70. order to control for the effects of part-time and full-time work on the variables included in the model. This was done in order to ensure comparability in the separate analysis of anglophone and francophone men and women/ since a disproportionate number of women who worked did so only part time (See: Boyd and Humphrey's, 1980; McRoberts, 1980).

Finally, the sample was divided into four subsamples based on gender and language and separate analysis were conducted on each group. Language was measured by the item, "What is the language which you first learned to speak?" This item consisted of nine categories and respondents were asked to check the appropriate response. Only those individuals who fell into the first two categories, English and French, were chosen for inclusion in this study.

Statistical Methods

The models to be estimated for each of the subsamples identified will be estimated by ordinary least sqaures (OLS) regression methods. These assume that the relations amoung the variables are, or are approximately, linear and additive. Previous research has indicated that this a reasonable assumption for the variables used in the Blau-Duncan model (See: Duncan and Featherman, 1972). In addition, where nonlinearities were encountered they were adjusted for by the inclusion of powered terms (e.g. work experience-squared) and interaction terms involving ownership and authority in order to ensure that the linearity additiveness and of the proposed models has been maintained.

The proposed model of class, authority and the process of income attainment was estimated using two types of statistical methods. The two methods, which were estimated using ordinary least squares regression methods, include: Path analysis and Dummy variable regression. Path analysis method for studying and determing the is а direct and indirect effects of variables which are hypothesized to be causally related (See: Pedhazur, 1973). Thus a series of regressions are performed on the variables in order to produce path coefficients for each of the causal associations depicted in a model which has been formulated on the basis of theoretical considerations (For a more detailed explanation of path analysis see: Pedhazur, 1973).

In addition, because of the dichotomous nature of the key discriminating variables in this study, ownership and authority, a second type of analysis was adopted in which both the class and the authority variables were dummy coded and a regression analysis was conducted which included all possible two-way interactions of class and authority with the other variables in the model. Specifically, income was regressed on respondent's class (e.g. ownership), respondents authority, respondents occupational status, respondents education, respondents work experience and work experience-squared, respondents labor force status, father's class, father's occupational status, and father's

education.

. This second analysis was conducted in order to determine if there was a significant improvement in the fit of model including authority and ownership over the the traditional Blau-Duncan model. The increment in the proportion of variance explained by ownership and authority over the Blau-Duncan model was assessed by means of a Chow-test (1960) applied to each of the subsamples included in this study. The Chow-test (1960) consists of estimating series of models composed of, in this case, the Blau-Duncan variables, the model including the Blau-Duncan variables plus ownership and authority (e.g. the main effects model), and finally the model containing all the suggested variables, including a set of multiplicative terms constructed in order to capture the interactions of ownership and authority with all the other variables in the model. An F-test for the difference in R-squared between the model containing all possible interactions, the main effects model, and the Blau-Duncan model is calculated in order to determine the overall difference in slopes. In addition, an F-test associated with the interaction slopes provides a test for each variable in the model. The results of both types of analysis are reported in the following chapter along with a brief overview of the Canadian class structure.
CHAPTER V

CLASS, AUTHORITY, AND INCOME ATTAINMENT: An analysis of the Class Structure in Canada.

pointed out in chapter As on.e / status attainment research in Canada, and in other countries, has focussed primarily on ascertaining the degree of equality of opportunity or the openness of Canadian society. At the epicentre of this research has been the question of whether an achievement oriented society or not. Canada is As indicated in both the literature review and the overview of the theoretical orientations attached to stratification research, evidence has been presented which supports both positions. However, whereas the quantitative research has tended to support the thesis that Canada is primarily an achievement oriented society, qualitative research or the theoretical investigation of the system of stratification in Canada has tended to support the contention that Canadian society is based on a process of social ascription and occupational inheritance. It is this debate which this thesis has proposed to examine and at least in part, attempt to resolve by applying Robinson and Kelley's (1979) composite model of class, authority and income attainment the Canadian National Mobility Study data. to Thus, the

proposed model to be tested, as shown in figure 1.1 (chapter one), consists of an extension of the Blau-Duncan model to include measures of both the concept of Marx's ownership of the means of production and Dahrendorf's authority in the workplace. As previously indicated, the aim of the present chapter, then, is to answer the following questions: (1) What is the nature and strength of the relationship between ownership of the means of production and authority in the workplace in Canada? (2) To what extent do these factors, ownership and authority, effect the rates of return for income across categories of gender and language? (3) Do ownership and authority significantly add to the variance already explained by the Blau-Duncan model? (4) Does the proposed extension of the Blau-Duncan model provide a better fit to the data for anglophone and francophone men and women in Canada? In addressing these questions, this chapter will focus on the results from a path analysis of the model proposed in chapter one. Beginning with a brief overview of the Class Structure in socioeconomic characteristics Canada and the of the to be included, an analysis and discussion of subsamples the impact that Marx's and Dahrendorf's models have on the process of income attainment in Canada is then presented. Finally, each of the models for anglophone and francophone men and women will be examined in terms of the additional

variance explained by ownership and authority over the basic model of income attainment in Canada.

Socioeconomic Characteristics.

Table 5.1 consists of means and proportions for the socieconomic characteristics for anglophone and francophone men and women. Table 5.2 contains means and standard deviations for Income from employment, 1972, by Ownership and Authority; again, for each of the subsamples included in this study. Finally, table 5.3 presents the mean Blishen-McRoberts Socioeconomic Status scores by Ownership of the means of production and Authority in workplace for each of the subsamples as well. Although this analysis is imprecise by nature, it does allow for a preliminary examination and assessment of the nature and type of relationships existing in the data and to make comparisons across categories of class and authority for each of the subsamples.

Table 5.1 indicates a number of disparities across language, which become further pronounced when gender is controlled for. While anglophone men and women generally tend to have similar, although not exactly equivalent, background statuses in terms of their educational and occupational statuses and their father's educational and occupational statuses, women tend to score higher on each of these characteristics by an average of .4 points. In addition, 'a similar observation can be made for the francophone men and women included in this study. While anglophone women tend to have higher educational and occupational statuses than their male counterparts, the gap and women doubles with women between francophone men scoring on average a full point higher in terms of their educational and occupational statuses.

In addition to the traditional Blau-Duncan variables, the means for age, work experience and hours worked per week have also been estimated and reported in table 5.1. When comparisons are made across categories of gender and language for these characteristics an interesting reversal in the previously noted trend is observed. That is, for each of these characteristics, men tend to score higher than women, regardless of their language orientation. In other words, the men included in these subsamples, regardless of language, tend to be older, have been in the workforce longer, and tend to be employed in full-time positions (e.g. as indexed by the number of hours worked per week) than either francophone or anglophone women. Finally, all of these observations become even more pronounced when like-gender comparisons across categories of language are examined.

Table 5.1: Means for Selected Socioeconomic Characteristics and Proportions of Ownership/Non-Ownership and Authority/ No Authority for Anglophone and Francophone Men and Women, aged 18 to 64, in the 1972 Canadian Labor Force, in Non-Farming Occupations.

Socioeconomic	Anglo	phone .	Francophone	
Characteristics	Men	Women	Men	Women
Respondent's Education	11.50	11.95	9.87	10.91
Respondent's Occupational Status*	46.53	46.79	43.45	44.30
Farher's Education	8.09	8.43	5.60	6.41
Father's Occupational Status*	41.16	41.76	37.88	38.92
Respondent's Age	36.80	35.58	35.90	32.91
Respondent's Work Experience	25.28	23.57	. 26.05	22.03
Number of Hours Respondent Worked per Week, 1972	35.70	28.21	29.87	24.92
Income from Employment, 1972	9211.21	4552.63	7561.69	4286.57
Ownership of the Means " of Production:				·· . .·
Ownership Non-Ownership	.11 .89	.04 .96	.12 .88	.08 .92
Authority in the Workplace:				
Authority No Authority	.22 .78	.08 .92	.14 .86	.05 .95
Number of Cases	4759.00	2463.00	2259.00	1078.00

* As measured by the Blishen-McRoberts (1976) Socioeconomic Scale.

able	5.2:	Means and Standard Deviations for Income from Employment,
		1972, by Ownership of the Means of Production and Authority
		in the Workplace for Anglophone and Francophone Men and
		Women, aged 18 to 64, in the Canadian Labor Force, in
		Non-Farming Occupations.

	OWNERSHI	P OF THE MEANS O	OF PRODUCTION
•	Worker	Capitalist	Total for
Subgroup	Class	Class	Population
ANGLOPHONE MEN:			
Mean	9,471,87	12,212,58	9,759,09
Standard Deviation	4,911,16	7,950,74	5: 376, 13
Number of Cases	2,823	330	3,154
ANGLOPHONE WOMEN:			
Mean	5,951.17	4,022.08	5,009.58
Standard Deviation	3,132.11	3,203.59	3,140.35
Number of Cases	1,274	54	1,328
FRANCOPHONE MEN:			
Mean	7,790.24	9,152.75	7,949.66
Standard Deviation	4,463.78	6,110.27	4,703.84
Number of Cases	1,104	146	1,250
FRANCOPHONE WOMEN:			
Mean	4,641.33	3,980.51	4,597.42
Standard Deviation	2,434.30	3,462.80	2,516.30
Number of Cases	448	32	480

	AUTHORITY IN THE WORKPLACE		
	Obey	Command	Total 'for
Subgroup	Class	Class	Population
			١
ANGLOPHONE MEN:			5
Mean	8,520.28	12,955.18	9,503.59
Standard Deviation	4,468.33	6,138.84	5,223.13
Number of Cases	3,128	891	4,019
ANGLOPHONE WOMEN:			
Mean	4,702.08	6,953.75	4,893.11
Standard Deviation	2,899.98	3,529.46	3,023.32
Number of Cases	1,670	155	1,825
FRANCOPHONE MEN:			
Mean	7,280.08	11,607.98	7,898.34
Standard Deviation	4,031.19	5,834.95	4,590.14
Number of Cases	1,479	246	1,725
FRANCOPHONE WOMEN:			
Mean	4,504.89	5,726.61	4,561.72
Standard Deviation	2,492.79	3,548.27	2,561.30
Number of Cases	705	34	740

Anglophone men and women tend to have had higher educational and occupational statuses, have had father's with higher educational and occupational statuses, tend to be older, in the labor force longer, and work more hours per week than their francophone counterparts.

The last observation, and perhaps the most striking, is the enormous difference which occurs in income (1972) across gender categories, regardless of linguistic orientation. Although these data do not directly address the issue, it can tentatively be suggested that the way in which background and current statuses are translated into income attainments varies substantially across both gender and language, with the greatest disparities occurring between men and women. In other words, both francophone and anglophone men earn, on average, aprroxiamtely \$4,000 dollars more than either of their female counterparts, despite their lower background statuses as indexed by their scores on the basic Blau-Duncan variables. In addition, as table 5.2 demonstrates, income not only varies by gender language, it varies substantially by ownership and and authority as well. Of interest here are the changes in mean income across categories of class and authority for each of the subsamples. Perhaps the most notable observation to be made from table 5.2 is the disparity in mean for capitalists and workers across categories of income

gender. Specifically, the mean income for both anplophone and francophone men who are capitalists is higher than for those who are workers (e.g. capitalist tend on average to earn approximately \$2,000 dollars more than workers) while anglophone and francophone women who are capitalists tend to have a lower mean income than if they are workers (e.g. women capitalist tend on average to earn approximately \$1,200 dollars less than women who are members of the working class by Marx's definition). On the other hand, when income is broken down by authority it is found that, consistent with Dahrendorf's model, those in the Command Class have higher mean incomes than those in the Obey While the difference in mean income between the Class. command and obey classes is seen to be quite consistent across language groups, the observation of greatest interest points to the differences across categories of gender. That is, the greatest disparities in mean income occur between men and women, regardless of their language background. Men, on average, earn approximately \$2,600 dollars more income than women. While little difference in income is observed between anglophone and francophone men, it should be noted that francophone women benefit less by being in the command class than do their anglophone counterparts; e.g. anglophone women who are in Dahrendorf's command class make \$1,000 dollars in mean income more than

do francophone Thus, while the way in which an women. individuals background and current statuses are translated into income differ substantially according to language and gender, they also vary by class and authority. In other words, the findings presented thus far seem to suggest that not only does income vary across categories of language and gender, which would be expected given the findings of previous research (See: Boyd et. al., 1981; Boyd, 1982; Boyd and McRoberts, 1982; McRoberts, 1985), but it varies across Marx's categories of class and Dahrendorf's categories of authority as well.

Although table 5.1 includes proportions for those in the capitalist, working, command and obey classes for anglophone and francophone men and women, table 5.3 presents a more detail description of the Canadian class structure in terms of the cross-classification of Marx's and Dahrendorf's models set forth in chapter three. Table 5.3 consists of the mean Blishen-McRoberts Socioeconomic Status scores by Ownership of the means of production and Authority in the workplace. In addition, percentage of the total population in each cell is given, generating estimates for the size of each of Marx's and Dahrendorf's classes. Thus the following discussion of the class structure in Canada will be derived from table 5.3; supported by the findings in table 5.1 and table 5.2.

The Canadian Class Structure.

Within the Marxian orientation it is expected that the class structure would consist of a small upper class (e.g. those who own the means of production-the capitalists) and a much larger lower class (e.g. those who do not own the means of production-the workers). As indicated by the percentage of the total population given in the parenthesis in each cell of table 5_{-3} , this expectation is born out by the data. Table 5.3 demonstrates that the Canadian class structure is comprised of 7.4 percent of the anglophone men and 6.9 percent of the francophone men falling into Marx's capitalist class, while 88.7 percent of the anglophone men and 87.3 percent of the francophone men fall into the working class. The remaining 3.9 percent of the anglophone men and 5.9 percent of the francophone men fall into the marginal group defined by Marx as the petite bourgeoisie and by Dahrendorf as the classless. In addition these class distinctions become further differentiated when the data for women, both francophone and anglophone, are considered. Anglophone women are approximately five times less likely to be in Marx's capitalist class, slightly more likely to be in the working class and equally as likely to be members of the petite bourgeoisie than anglophone men.

Table 5.3: Mean Blishen-McRoberts (1976) Socioeconomic Status Scores by Ownership of the Means of Production and Authority in the Workplace for Anglophone and Francophone Men and Women, aged 18 to 64, in the 1972 Canadian Labor Force, in Non-Farming Occupations.*

ANGLOPHONE MEN

ANGLOPHONE WOMEN

	AUTHORITY IN THE WORKPLACE		
OWNERSHIP OF THE	Command	Cbey	TOTAL
MEANS OF PRODUCTION	Class	Class	
Capitalist Class	52.94	42.49	49.37 ^a
	(7.40)	(3.90)	(11.30)
	56.06	44.53	47.23 ^a
Worker Class	(21.00)	(67.60)	(88.70)
TOTAL	55.25 ^b	44.42 ^b	47.46
	(28.50)	(71.50)	(100.00)
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	AUTHORITY IN THE WORKPLACE		.•
OWNERSHIP OF THE	Command	Obey	TOTAI.
MEANS OF PRODUCTION	Class	Class	
Capitalist Class	45.79	44.09	44.74 ^a
	(1.60)	(2.70)	(4.30)
Worker Class	56.05	46.50	47.46 ^a
	(9.70)	(86.00)	(95.70)
TOTAL	54.59 ^{b°°}	46.43 ^b	47.34
	(11.30)	(88.70)	(100.00)

.....continued on next page

Table 5.3: (continued)

FRANCOPHONE MEN

FRANCOPHONE WOMEN

	AUTHORITY IN THE WORKPLACE		
OWNERSHIP OF THE	Command	Obey	TOTAL
MEANS OF PRODUCTION	Class	Class	
Capitalist Class	47.04	41.79	44.63 ^a
	(6.90)	(5.90)	(12.70)
Worker Class	57.03 (12.00)	41.40 (75.20) _.	43.49 ^a (87.30)
TOTAL	53.38 ^b	41.43 ^b	43.63
	(18.90)	(81.10)	(100.00)

	AUTHORITY IN THE WORKPLACE		
OWNERSHIP OF THE	Command	Obey	TOTAL
MEANS OF PRODUCTION	Class	Class	
Capitalist Class	43.86	40.02	41.38 ^a
	(2.70)	(4.90)	(7.60)
Worker Class	54.53	43.77	44.25 ^a
	(4.40)	(88.10)	(92.40)
TOTAL	50.40 ^b	43.58 ^b	44.04
	(7.10)	(92.90)	(100.00)

* Percentage of total population for each category is given in parentheses.

^{.a} Total as measured within Marx's paradigm of Class.

^b Total as measured within Dahrendorf's paradigm of Authority.

Francophone women, on the other hand, are approximately three times less likely to be members of Marx's capitalist class and as with anglophone women, slightly more likely to be workers and equally as likely to be members of the petite bourgeoisie than francophone men.

In addition, perhaps the most interesting observation to be made from table 5.3 is that, whereas a high degree of consistency is maintained across language categories for men in terms of their relative proportion in the population for each of Marx's categories, there does appear to be a substantial difference in the proportion of women in each of Marx's classes across categories of language. That is, francophone women are twice as likely to be members of Marx's capitalist class, as well as the petite bourgeoisie, and slightly less likely to be workers than their anglophone counterparts.

comparison, according to Dahrendorf, the upper By class would be larger and the lower class would be correspondingly smaller. As indicated in table 5.3, the command class, by Dahrendorf's definition, consists of 28.5 percent of the anglophone men/ 11.3 percent of the anglophone women, 18.9 percent of the francophone men and 7.1 of the francophone women included in this sample. The obey class, on the other hand, consists of 67.6 percent of the anglophone men, 86.0 percent of the anglophone women,

75.2 percent of the francophone men and 88.1 percent of the francophone women in the Canadian Mobility Study. In addition, looking across categories of gender, it is noted that both francophone and anglophone men are approximately one and one-half times more likely to be members of Dahrendorf's command class than their female counterparts. The same observation is born out when the proportion of the command class is examined across categories of language. That is, anglophones, regardless of their sex, are one and one-half times more likely to be members of the command class than are francophones. Thus, while these data seem to suggest evidence of direct discrimination as indicated by the disparities across and within categories of both gender and language (See: Boyd and Humphrey's, 1980; McRoberts, 1985), the data do not speak directly to this issue, therefore further conjecture would be tentative at best.

In reference to the suggestion in chapter three that Marx's and Dahrendorf's models are conceptually as well as empirically distinct, and hence do not overlap, the findings presented in table 5.3 would seem to confirm this supposition. While a modest overlap is observed between class position as defined by Marx and by Dahrendorf for anglophone men and women, confirming this proposition, a much larger degree of overlap is observed for francophone

men and women. That is, while 25 percent of the anglophone men and 14 percent of the anglophone women in Dahrendorf's command class are capitalists by Marx's definition, 36 the francophone men and percent of 38 percent of the francophone women in the command class are captialists within Marx's paradigm. These results would seem to suggest that while the indirect effects of class via authority on income will be negligible for anglophone men and women, the effects of class on income for francophone men and women as mediated through authority will be substantially larger. However, this issue remains to be tested in the subsequent path analysis and therefore will be discussed later on in this chapter.

Finally, neither ownership of the means of production or authority is closely related to the respondents occupational status. Looking at the mean Blishen-McRoberts Socioeconomic Status score reported in each cell of table 5.3, no systematic variation is noted for either of the gender or language subgroups; with the exception of men. anglophone Anglophone men who both own their own means of production and exercise authority in the workplace have a mean occupational status score of 52.9. which is higher than any of the other subsamples included here. For all of the other categories a high degree of consistency is diplayed, regardless of gender or language.

To briefly summarize the findings to this point, it has been found that, consistent with previous research. findings (Blau and Duncan, 1967; Boyd and Humphrey's, 1980; Boyd et. al., 1981; McRoberts, 1985), the Blau-Duncan variables as they are defined in the process of income attainment, varies both systematically and differentially by gender and by language. In other words, these data would seem to suggest that the way in which one's background characteristics and current status are translated in terms of the their rates of return to income, varies across categories of gender and across categories of language such that men benifit more from lower background statuses (e.g. educational and occupational achievements) than do women. However, the data and analysis presented thus far do no directly address this issue, hence, these conclusions should be viewed as tentative. In addition, it was found that women tend to not have been in the Canadian workforce as long, tend to work in part-time employment positions, and tend to be younger than their male counterparts. It was then suggested that the outstanding differences in income may have, resulted from this disparity in the background characteristics for men and women; with tentative suggestion that the income differences observed may also be due to some form of discrimination on the basis of sex.

A description of the Canadian class structure was presented and it was found that, in general, the observed structure was consistent with what would be expected given Marx's and Dahrendorf's separate conceptualizations of class position. As with the Blau-Duncan model, it was found that both Marx's and Dahrendorf's models vary by both gender and language as well. Moreover, while a minor correlation was observed between class and authority on occupational status for anglophone men and women, as would be expected, a much higher correlation was found for francophone men and women suggesting that the effects of class and authority on income are not independent of one another. Finally, table 5.2 demonstrated that income does vary substantially by an individual's class position as well as by their position within the hierarchical organization of work. The most interesting finding here was the difference in mean income for anglophone and francophone women across categories of class. Women who are members of Marx's capitalist class make lower mean incomes than if they were members of Marx's class of wage-laborers. On the other hand, it was found that women who exercise authority. terms of Dahrendorf's conceptualization, earn higher in mean incomes than women who have no authority.

The results of the analysis presented thus far tend to support the proposition that both class and authority are

related to the process of income attainment in Canada. While these findings, in general, are consistent with previous research, given the lack of precision of this type of analysis (e.g. means and cross-classificatory analysis) exact determination of the contribution of Marx's and an Dahrendorf's models to the explanation of the process of income attainment in Canada requires that the ownership and authority variables be included in the standard model of income attainment and that a path analysis be conducted. Path analysis is a method which allows for an identification of the pattern of direct and indirect effects present in a set of variables which are hypothesized to be causally related to one another. The model to be analyzed was presented in chapter one and consists of an extension of the Blau-Duncan paradigm to include ownership of the means of production and authority in the workplace. This model was estimated for each of the subsamples, anglophone and francophone men and women, for those individuals who were aged 18-64, in the July 1973 labor force and who were in non-farming occupations. The results of the separate path analysis are reported in figures 5.1, 5.2, 5.3, and 5.4. The specific questions to be addressed by the path analysis include: (1) What is the direct effect of authority and ownership on income? (2) Do ownership and authority have an idirect effect on income via their effects on the other

variables in the Blau-Duncan model? (3) Are the effects of ownership and authority different across categories of gender and language?

OWNERSHIP, AVIHORITY AND INCOME ATTAINMENT: A Path Analysis.

As demonstrated by the R-squared reported with each of the models (e.g. the r-squared for the structural equation including income), the fit of the model including ownership authority is quite good, with 41 percent of the and variance explained in anglophone men's incomes, 31 percent explained for anglophone women, 41 percent explained for francophone men and 33 percent of the variance explained in francophone women's incomes (See: figures 5.1 to 5.4 difference in the variance explained inclusively). The between the men's and women's model is what would be expected and has been documented in previous research.(13) Thus, despite the lower proportions of variance explained in the women's models, the general conclusion is that the model extended to include ownership and authority provides

(13) Specifically, as Boyd et. al. (1981) have suggested, the lower percentage in variance explained for the women's models may be due to dissimilar male-female occupational distributions which are further accentuated when father-daughter occupational distributions are examined (For more detail see: Boyd and McRoberts, 1982).

a good fit to the data for both anglophone and francophone men and women.

Foccussing initially on the pattern of relationships within each of the models for anglophone and francophone men and women, the initial observation to be made from. figures 5.1, 5.2, 5.3, and 5.4 is that for all of the models, educational attainment is the single most important determinant of income. Looking only at the Blau-Duncan variables for anglophone and francophone men, education is clearly the key mediating factor through which the effects of the background characteristics are seen to operate on income. Thus, education has the strongest total effect on income in each of the models, indicating that it clearly plays a central role both in the determination of income and in the effect of socieconomic background on income. In addition to its direct effects, education exerts nontrivial indirect effects through occupational status in all of the models estimated. Furthermore, for each of the subsamples the direct. effects between education and occupational status and between occupational status and income prove to be the strongest and the largest.

Figure 5.1: Path Analysis of the Revised Blau-Duncan Paradigm of Income Attainment to include Ownership of the Means of Production and Authority in the Workplace. For Anglophone Men, aged 18 to 64, in the 1972 Canadian Labor Force, in Non-Farming Occupations.**



- ** Correlations less than .2 are not shown and paths which are not statistically significant are omitted from the model. Variables shown in brackets are not available in the Canadian National Mobility data set. Dummy Variables defined as follows: Ownership of the Means of Production, 1 if Owner, 0 if Otherwise; Authority in the Workplace, 1 if Supervised or Employed One or More People, 0 if Otherwise.
- * Correlations significant at the .05 level or greater.

Figure 5.2: Path Analysis of the Revised Blau-Duncan Paradigm of Income Attainment to include Ownership of the Means of Production and Authority in the Workplace. For Anglophone Women, aged 18 to 64, in the 1972 Canadian Labor Force, in Non-Farming Occupations.**



- ** Correlations less than .2 are not shown and paths which are not statistically significant are omitted from the model. Variables shown in brackets are not available in the Canadian National Mobility data set. Dummy Variables defined as follows: Ownership of the Means of Production, 1 if Owner, 0 if Otherwise; Authority in the Workplace, 1 if Supervised or Employed One or More People, 0 if Otherwise.
- * Correlations significant at the .05 level or greater.





** Correlations less than .2 are not shown and paths which are not statistically significant are omitted from the model. Variables shown in brackets are not available in the Canadian National Mobility data set. Dummy Variables defined as follows: Ownership of the Means of Production, 1 if Owner, 0 if Otherwise; Authority in the Workplace, 1 if Supervised or Employed One or More People, 0 if Otherwise.

* Correlations significant at the .05 level or greater.

Figure 5.4: Path Analysis of the Revised Blau-Duncan Paradigm of Income Attainment to include Ownership of the Means of Production and Authority in the Workplace. For Francophone Women, aged 18 to 64, in the 1972 Canadian Labor Force, in Non-Farming Occupations.**



- ** Correlations less than .2 are not shown and paths which are not statistically significant are omitted from the model. Variables shown in brackets are not available in the Canadian National Mobility data set. Dummy Variables defined as follows: Ownership of the Means of Production, 1 if Owner, 0 if Otherwise; Authority in the Workplace, 1 if Supervised or Employed One or More People, 0 if Otherwise.
- * Correlations significant at the .05 level or greater.

Since the Blau-Duncan paradigm is well established in the empirical literature, and the results of the present analysis are highly consistent with this literature, it is therefore appropriate that the analysis of the effects of the Blau-Duncan variables are only briefly discussed. Given that the specific research interest of this study is to examine the effects of authority and ownership on income, the remainder of the discussion in this chapter will focus on the effects of these two variables.

In comparison to the Blau-Duncan variables, both ownership and authority exert the weakest direct effects on income in each of the models for anglophone and francophone men and women. Despite the weakness of the effects of these variables, both owning the means of production and exercising authority in the workplace have a significant effect on income in all but the subsamples containing francophone women. The path coefficients(14) for the

(14) In path analysis, the path coefficient is equivalent to the standardized regression coefficient; e.g. the beta-weight. However, path analytic models may also be described using the unstandardized regression coefficient; e.g. path regression coefficients. In addigiven the nature of this research in that it tion to compare across categories of gender and seeks across categories of language, only the path regression coefficients may be used to make such compari-Thus, the beta's or path coefficients presented sons. above should only be viewed in terms of the magnitude of the effects within each model; as opposed to across the models for anglophone and francophone men and women. For further information

models containing anglophone men and women show that both ownership of the means of production (beta=.04 for -.09 for anglophone men and anglophone women) and exercising authority (beta=.14 for anglophone men and 11 for anglophone women) have a significant effect on income the .01 level of significance or greater. However, at neither ownership (beta=.02 for francophone men and .06 for francophone women) or authority (beta=.11 for francophone women) have significant effects for the francophone models; only the authority variable for the model containing francophone men is significant at the .001 level. In addition, in all the models except for francophone women, authority (beta=-.06 for anglophone men/ -.09 for anglophone women. .19 for francophone men and .11 for francophone women) has significant direct effects on occuoational status at the .05 level of significance or Moreover, in all of the models estimated occupagreater. tional status exerts the single strongest direct effect on income; significant at greater than .001 level of significance.

Moving one step further to look at the indirect effects of ownership and authority on income via occupa-

see: Pedhazur, 1973:577-633 (e.g. path analysis), and 247-251 (e.g. on the use of standardized versus unstandardized regression coefficients).

tional status, a number of observations can be made. In all of the models examined, the effects of ownership and authority on income via occupational status make up at least half of their total effects on income, indicating that the indirect effects of ownership and authority via occupational status are nontrivial. In addition, for each of the subsamples, both in terms of its direct effects and its indirect effects on income, authority in the workplace clearly dominates the models, as opposed to ownership which consistently exerts extremely weak direct and indirect effects on income. In fact, the magnitude of the effects of ownership in all of the subsamples except for francophone women, in which case it exerts a comparable effect.

Finally, in reference to the effect of father's ownership on income, it is noted that its effect is almost totally mediated through the respondent's ownership. Furthermore, in all of the models the direct effect of father's ownership on their children's ownership (beta=.21for anglophone men, .11 for anglophone women, .25 for francophone men, .11 for francophone women) is significant at at least the .05 level of significance.

In attempting to draw together these results, the main conclusion to be derived is that both ownership and authority, directly and indirectly, have a significant

effect on one's rates of return to income. Perhaps the most interesting observation to be made from this data has to do with the sign changes in the path coefficients between ownership and income for francophone men and women and anglophone women. Thus, while both ownership and authority provide a higher rate of return in terms of income for anglophone men, for both anglophone and francophone women as well as for francophone men owning the means of production decreases the rates of return to income. On the other hand, exercising authority in the workplace consistently increases one's rate of return to income, as opposed to not exercising authority, across all of the subsamples examined here. Specifically, for anglophone men, those who own the means of production earn approximately \$800 dollars additional income from employment over those who do not own the means of production, while those who exercise authority earn approximately \$1,800 dollars additional income from employment over those who do not exercise authority. For anglophone women, owning the means of production reduces one's income from employment by about \$1,400 dollars in comparison to those do not own the means of production, while those who who exercise authority earn approximately \$1,300 dollars over those who do not exercise authority in the workplace. Similarily, for francophone men and women, owning the means

of production again serves to reduce one's income from employment by \$200 dollars for francophone men and \$600 dollars for francophone women in comparison to those men and women who do not own the means of production, while exercising authority in the workplace provides an additional \$2,000 dollars for francophone men and \$900 dollars for francophone women over those who do not exercise authority in the workplace.

Comparing across categories of gender and language, the most striking difference to be noted is derived from whether one owns the means of production or not. For example, while owning the means of production increases ones rates of return in terms of income as compared to not owning the means of production for anglophone men, for all of the other subsamples it decreases the rates of return to income. On the other hand, exercising authority in the workplace increases the rates of return to income, as opposed to not exercising authority, consistently across all of the subsamples included in the analysis. Furthermore, exercising authority, as opposed to not exercising authority, produces similar rates of return for anglophone men and women and francophone men. The most noticable difference in the rates of return to income from exercising authority in the workplace occur between francophone men and women, with a mean difference in the rate of return to

income of \$1,100 dollars; as compared to the mean difference for anglophone men and women of \$500 dollars.

To briefly summarize, it was found that both owning the means of production and exercising authority in the workplace have 'a significant, although weak, effect on income in all the subsamples considered here. In addition, it was also found that both ownership and authority have nontrivial indirect effects on income via their relationship to occupational status, again for all of the models. Finally, through an examination of the path regression coefficients (e.g. the unstandardized regression coefficients) it was observed that in general, anglophone men benefit from owning the means of production, as opposed to not owning the means of production. However, anglophone women as well as francophone men and women who own the means of production tend to recieve lower rates of return to income than those who do not own the means of production (e.g. Marx's class of wage-laborers). By comparison, it was consistently found that those individuals who exercise authority over others in the workplace recieve higher rates return in income over those who do not exercise of authority in the workplace. Finally, as indexed by the respective R-squares, each of the models estimated for the subsamples were generally found to provide a 'good-fit' to the data. However, the model which was estimated was

just-identified, meaning that all possible paths were estimated. Thus, as Pedhazur (1973) suggests, a direct test of the overall fit of the model is not possible because when all paths are estimated the correlation matrix will always be perfectly reproduced, indicating a perfect fit of the model to the data. While the R-square for each of the models provides a general indication as to the goodness of fit, it is not a direct test of the fit of the model. Therefore, given that the specific research interest here is to assess whether ownership and authority. significantly add to the already established Blau-Duncan model or not, a series of multivariate models were estimated and a Chow test (1960) for the difference in the slopes between capitalists and workers and between the command class and the obey class was calculated for each of the subsamples. The overall difference in slopes was indicated by an F-test for the difference in R-squared between the model, including interactions, the model containing only main effects, and the Blau-Duncan model; while the t-tests associated with the interaction slopes provide separate tests for each variable.

The Impact of Class and Authority on Income Attainment.

Tables 5.4 and 5.5 present the results of the F-test for the increment in R-squared as well as the additional percentage of variance explained by ownership and authority for each of the subsamples. (15) In addition, tables 5.6, 5.7, 5.8 and 5.9 present the unstandardized regression equations for the models containing: (1) Only the main effects (e.g. the Blau-Duncan variables; (2) The Blau-Duncan variables plus ownership and authority); (3) The full model, containing all the variables plus all possible interactions of ownership and authority. Finally, table 5.10 consists of the standardized regression coefficients for the interactions in the full model for each of the subsamples examined here. While the increment in R-square of interest here is the one between the main effects model and the Blau-Duncan model, the increment between the full model and the Blau-Duncan model will also

(15) It should be noted that in the models for francophone women a high degree of multicollinearity was observed. That is, all of the independent variables were highly correlated with one another. Multicollinearity results in imprecise estimation of the regression coefficients, adverse effects on the standard has errors of the regression coefficients thus biasing their tests of statistical significance and the confidence intervals (Pedhazur, 1973). Therefore, the results for the sample containing francophone women should be viewed with a high degree of skepticism and interpreted cautiously.

be briefly examined.

For all of the subsamples, adding Marx's ownership of the means of production to the Blau-Duncan model explains less than one percent additional variance in income from employment, while adding authority in Dahrendorf's original dichotomous form adds a comparable amount of variance explained for francophone (.24 percent) and anglophone (.82 percent) women and increases the variance explained for anglophone (1.9 percent) and francophone (1.7 percents) men by almost two percent. In addition, including a continuous measure of authority explains one and one-half times more variance for anglophone men (2.9 percent) and women (1.1 percent) and three times more variance for francophone men (4.7 percent), while for francophone women it explains less of the variance in income, than the dichotomous version of authority. Furthermore, in the seaprate models for both the continuous and dichotomous versions of authority and the Blau-Duncan variables, authority is the single most important determinant of income;(16)

(16) As a result of the previously noted problem of multicollinearity, the standardized partial regression coefficients for francophone women had values exceeding 1.0/ therefore rendering them uninterpretable and meaningless. Hence, the results for francophone women have been excluded from the above discussion.

Table	5.4:	The Increment in the Percentage of Variance Explained by
		Class and Authority Over the Traditional Blau-Duncan Model
		of Income Attainment for Anglophone Men and Women, aged 18
		to 64, in the 1972 Canadian Labor Force, in Non-Farming
		Occupations.*

	ANGLOPH	ONE .
	MEN	WOMEN
PANEL A: PERCENTAGE OF VARIANCE EXPLAINED, R-SQUARED.	· ·	
Model 1: Baseline Model - Minimum Blau- Duncan Model, includes: Respondent's education, occupational status and work experience, father's education and occupational status.	<u>38.84 %**</u> (F=199.21)	<u>28.58 %**</u> (F= 51.01)
PANEL B: ADDITIONAL PERCENTAGE OF VARIANCE EXPLAINED BY ADDING THE FOLLOWING VARIABLES TO THE BASELINE MODEL.		
Model 2: Ownership of the Means of Production.	<u>.15 %**</u> (F= 6.25)	.80 %** (F= 11.53)
Model 3: Exercise of Authority in the Workplace (dichotomous).	<u> 1.94 %**</u> (F= 82.06)	.82 %** (F= 11.86)
Model 4: Exercise of Authority in	<u>2.97 %**</u> (F=128.23)	1.11 %** (F= 16.10)
Model 5: Main Effects Model for Authority (dichotomous) and Ownership.		<u> </u>
Model 6: Main Effects Model for Authority (continuous) and Ownership.	3.35 %** (F= 72.75)	<u> </u>
Model 7: Full Model for all possible nonlinearities and interactions of Ownership and Authority (dichotomous)	5.09 %** (F= 8.32)	<u> </u>
Model 8: Full Model for all possible nonlinearities and interactions of Ownership and Authority (continuous)	<u>6.52 %**</u> (F= 9.02)	<u> </u>
	N=2,519	N=1,029

* Full Model for Anglophone Women, dichotomous version of Authority, excludes the interaction terms for Class by Work Experience-squared, Father's Class by Authority and Authority by Work Experience-squared.

**F-Ratio significant at the .05 level or greater.

Table 5.5: The Increment in the Percentage of Variance Explained by Class and Authority Over the Traditional Blau-Duncan Model of Income Attainment for Francophone Men and Women, aged 18 to 64, in the 1972 Canadian Labor Force, in Non-Farming Occupations.*

	FRANCOPHONE	
	MEN	WOMEN
PANEL A: PERCENTAGE OF VARIANCE EXPLAINED, R-SQUARED.		
Model 1: Baseline Model - Minimum Blau- Duncan Model, includes: Respondent's education, occupational status and work experience, father's education and occupational status.	<u> </u>	<u>33.03 %**</u> (F= 19.29)
PANEL B: ADDITIONAL PERCENTAGE OF VARIANCE EXPLAINED BY ADDING THE FOLLOWING VARIABLES TO THE BASELINE MODEL.		
Model 2: Ownership of the Means of Production.	.02 % (F= .25)	.30 % (F= 1.38)
Model 3: Exercise of Authority in the Workplace (dichotomous).	<u> </u>	.24 % (F= 1.09)
Model 4: Exercise of Authority in the Workplace (continuous).	<u>4.68 %**</u> (F= 74.75)	<u>.17 %</u> (F= .81)
Model 5: Main Effects Model for Authority (dichotomous) and Ownership.	<u> 1.73 %**</u> (F= 13.08)	.53 % (F= 1.23)
Model 6: Main Effects Model for Authority (continuous) and Ownership.	<u>4.68 %**</u> (F= 37.33)	<u>.39 %</u> (F= .90)
Model 7: Full Model for all possible nonlinearities and interactions of Ownership and Authority (dichotomous)	<u> </u>	<u>53.90 %**</u> (F= 88.11)
Model 8: Full Model for all possible nonlinearities and interactions of Ownership and Authority (continuous)	<u> 8.68 %**</u> (F= 4.23)	<u>25.30 %**</u> (F= 13.15)
	N= 899	N= 318

* Full Model for Francophone Women, dichotomous version of Authority, excludes both Class and Authority interactions with work experiencesquared; continuous version excludes Authority and Class Interactions with hours worked per week and work experience (squared).

**F-Ratio significant at the .05 level or greater.

a standardized partial regression example, it has For coefficient of -.32 for anglophone men, -.33 for anglophone women and -_94 for francophone men, while occupational status, the next most important variable, has a coefficient of .24 for anglophone men. .39 for anglophone women and .28 for francophone men. When both ownership and authority are added 'to the Blau-Duncan model (e.g. the full model) they variance explained by 5.1 percent for the increase anglophone men, 3.3 percent for anglophone women, 6.6 francophone men and 53.9 percent for for percent francophone women. Finally, as was previously observed, in all of the models estimated, when ownership and authority are added to the Blau-Duncan variables, they significantly increase the proportion of variance explained in income That is, the increment in over the base-line model. R-squared for the full model containing all the variables plus all the interactions of ownership and authority over (e.g. the Blau-Duncan model) was the base-line model statistically significant at the .01 level or greater for each of the subsamples in this study. In addition, the increment in R-squared for the full model over the main effects model, was significant at the .01 level; again for each of the subsamples.
Table 5.6: Unstandardized Partial Regression Coefficients for the Full Model Containing Ownership of the Means of Production and Authority in the Workplace; including All Possible Nonlinearities and Interactions of Ownership and Authority. Anglophone Men, aged 18 to 64, in the 1972 Canadian Labor Force, in Non-Farming Occupations.

MODEL DESCRIPTIONS:	BLAU AND DUNCAN	MAIN EFFECTS	, FULL MODEL ,
Education Occupational Status Father's Occupational Status Father's Ownership of the Means of Production Father's Education Hours Worked in Reference Week Work Experience Work Experience-Squared Intercept R-SQUARED Authority in the Workplace	354.43* 121.91* 11.17 635.43* - 9.97 4.09 558.35* - 7.77* - 8873.79 .38835**	323.26* 109.27* 9.77 360.78 - 5.38 - 1.14 523.73* - 7.35*	308.62* 90.43* 78 - 103.82 25.46 - 4.51 510.54* - 7.10*
Ownership of the Means of Production Intercept R-SOUARED		702.77* - 7618.32	- 2525.17
Ownership x Education Ownership x Occupational Status Ownership x Father's Occupational Status Ownership x Father's Ownership Ownership x Father's Education Ownership x Hours Worked per Week Ownership x Work Experience Ownership x Work Experience-Squared Authority x Education Authority x Occupational Status Authority x Father's Occupational Stauts Authority x Father's Ownership Authority x Father's Education Authority x Father's Education Authority x Hours Worked per Week Authority x Work Experience Authority x Work Experience Authority x Work Experience	·		- 280.82* 146.97* 51.27* 1767.74* 15.50 - 3.27. - 157.99 1.19 105.52 27.90 13.86 336.44 - 110.65* 18.35 170.92* - 2.28 - 6084.01
R-SQUARED			.43921**
Df ₁ /Df ₂	199.21 8/2510	173.74 10/2508	75.07 26/2492
NUMBER OF CASES	2519	2519	2519

* T-test for the regression coefficients significant at the .05 level or greater

**F-Test for the R-square's significant at the .05 level or greater.

Table 5.7: Unstandardized Partial Regression Coefficients for the Full Model Containing Ownership of the Means of Production and Authority in the Workplace; including All Possible Nonlinearities and Interactions of Ownership and Authority. Anglophone Women, aged 18 to 64, in the 1972 Canadian Labor Force, in Non-Farming Occupations.

MODEL DESCRIPTIONS:	BLAU AND DUNCAN	MAIN EFFECTS	FULL MODEL
Education Occupational Status Father's Occupational Status Father's Ownership of the	175.29* 105.62* 14.92*	178.35*´ 98.50* 14.41*	149.58* 103.42* 8.84
Means of Production Father's Education Hours Worked in Reference Week Work Experience Work Experience-Squared Intercept	- 139.16 5.40 8.60 128.35* - 1.70* - 5145.59	- 79.70 6.49 8.91 124.13* - 1.62*	- 49.49 27.18 10.41* 122.80* - 1.64*
R-SQUARED	.28576**		
Authority in the Workplace Ownership of the Means of Production Intercept		1205.35* - 1384.46* - 4855.74	- 3622.91 - 402.86
R-SQUARED		.30197**	
Ownership x Education Ownership x Occupational Status Ownership x Father's Occupational Status Ownership x Father's Ownership Ownership x Father's Education Ownership x Hours Worked per Week Ownership x Work Experience Ownership x Work Experience-Squared Authority x Education Authority x Occupational Status Authority x Father's Occupational Status Authority x Father's Ownership Authority x Father's Education Authority x Hours Worked per Week Authority x Work Experience Authority x Work Experience Authority x Work Experience Authority x Work Experience-Squared Intercept			145.28 - 87.22* 79.34* - 2017.67* - 232.13* - 4.95 14.87 XXXXXXX 341.17* 5.06 15.65 XXXXXXX - 96.52 - 12.03 21.83 XXXXXXX - 4688.51
R-SQUARED			.31843**
F-TEST Df ₁ /Df ₂	51.01 8/1020	44.04 10/1018	20.41 23/1005
NUMBER OF CASES	1029	1029	1029

* T-test for the regression coefficients significant at the .05 level or greater.

**F-test for the R-square's significant at the .05 level or greater. .XX Too few cases for reliable estimates.

Table 5.8: Unstandardized Partial Regression Coefficients for the Full Model Containing Ownership of the Means of Production and Authority in the Workplace; including All Possible Nonlinearities and Interactions of Ownership and Authority. Francophone Men, aged 18 to 64, in the 1972 Canadian Labor Force, in Non-Farming Occupations.

MODEL DESCRIPTIONS:	BLAU AND DUNCAN	MAIN EFFECTS,	FULL MODEL
Education Occupational Status Father's Occupational Status Father's Ownership of the	273.60* 121.94* 17.32	261.55* 111.25* 15.74	263.89* 94.99* - 20.63
Means of Production Father's Education Hours Worked in Reference Week Work Experience Work Experience-Squared Intercept	- 410.99 38.16 3.92 478.47* - 6.27* - 8354.88	- 539.69 , 30.82 3.27 451.56* - 5.91*	398.59 48.19 3.64 446.00 - 5.65
R-SQUARED	.39685**		
Authority in the Workplace Ownership of the Means of Production Intercept		1884.47* - 202.21 - 7481.01	- 1225.47* 3123.53
R-SQUARED		.41411**	
Ownership x Education Ownership x Occupational Status Ownership x Father's Occupational Status Ownership x Father's Ownership Ownership x Father's Education Ownership x Hours Worked per Week Ownership x Work Experience Ownership x Work Experience-Squared Authority x Education Authority x Occupational Status Authority x Father's Occupational Status Authority x Father's Ownership Authority x Father's Education Authority x Hours Worked per Week Authority x Work Experience Authority x Work Experience Authority x Work Experience Authority x Work Experience-Squared Intercept	· .		- 32.28 84.63* 130.60* 206.76 - 368.25* - 36.77* - 553.99* 7.80* 30.91 75.20* 107.60* - 168.13 - 10.93 23.52 369.99* - 6.17* - 5694.94
R-SQUARED			.46298**
F-TEST Df ₁ /Df ₂	73.20 8/ 890	62.77 10/ 888	28.92 26/ 872
NUMBER OF CASES -	899	899	899

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* T-test for the regression coefficients significant at the .05 level or greater. **F-test for the R-square's significant at the .05 level or greater.

Table 5.9: Unstandardized Partial Regression Coefficients for the Full Model Containing Ownership of the Means of Production and Authority in the Workplace; including All Possible Nonlinearities and Interactions of Ownership and Authority. Francophone Women, aged 18 to 64, in the 1972 Canadian Labor Force, in Non-Farming Occupations.

MODEL DESCRIPTIONS:	BLAU AND DUNCAN	MAIN EFFECTS	FULL MODEL
Education Occupational Status Father's Occupational Status Father's Ownership of the	229.21* 72.99* 13.46	229.20* 70.75* 13.73	- 94.80* 139.96* 24.88
Means of Production Father's Education Hours Worked in Reference Week Work Experience Work Experience-Squared Intercept	- 70.27 - 3.12 - 9.46 86.04* 79 - 3070.42	- 57.68 - 2.72 - 8.53 90.24* 86	- *857.01* - 34.38* 44.56* 553.41* - 10.56*
R-SQUARED	.33303**	*	
Authority in the Workplace Ownership of the Means of Production Intercept		865.50 - 610.89 - 3050.19	-17368.35* 31600.01*
R-SQUARED		.33835**	
Ownership x Education Ownership x Occupational Status Ownership x Father's Occupational Status Ownership x Father's Ownership Ownership x Father's Education Ownership x Hours Worked per Week Ownership x Work Experience Ownership x Work Experience-Squared Authority x Education Authority x Father's Occupational Status Authority x Father's Ownership Authority x Father's Education Authority x Father's Education Authority x Hours Worked per Week Authority x Work Experience Authority x Work Experience	•	· ·	134.78 - 575.77* - 127.94* 12744.16* 439.04* - ,454.63* - ,454.63* - ,75.93* xxxxxxxx 6477.62*. - 2464.35* - 698.83* - 49511.39* 1969.01* 610.56* 2963.35 xxxxxxxx - 7590.24*
R-SQUARED			.87198**
F-TEST Df ₁ /Df ₂	19.29 8/ 309	15.70 10/ 307	83.15 24/ 293
NUMBER OF CASES	318	318	318

* T-test for the regression coefficients significant at the .05 level or greater. **F-test for the R-square's significant at the .05 level or greater. ^{XX}Too few cases for reliable estimates.

The Chow test (1960) for differences in the slopes for anglophone men and women for capitalists and workers and for the command and obey classes, indicated that they are significantly different at the .05 level or greater.(17) In the anglophone male model, all of the difference is for the slopes associated with the class interaction with educational attainment (beta = -.23) and occupational status (beta=.46) and for the authority interactions with father's educational attainment (beta=.12) and occupational status (beta=.13). As indicated in table 5.10, the interaction of class with occupational status is the most important coefficient in the full model for anglophone men. For the models for anglophone women the difference in the slopes can be attributed to the class interactions with occupational status (beta= -.27) and father's occupational status (beta=.24) and for the authority interaction with educational attainment (beta=.42). In the full model for and lophone women, as opposed to men, the most important interaction is the interaction between authority and educational attainment.

(17) It should be noted that when interaction terms are introduced into the analysis a high degree of multicollinearity between the main variables and their interactions is produced. Therefore, any interpretation of the results presented above should be done with caution; keeping in mind that the regression coefficients for the interaction terms and respective null hypothesis tests will be attenuated.

Table 5.10:	Standardized Partial Regression Coefficients for the Interactions
	of Ownership of the Means of Production and Authority in the
	Workplace with the Blau-Duncan Variables; For Anglophone and
	Francophone Men and Women, aged 18 to 64, in the 1972 Canadian
	Labor Force, in Non-Farming Occupations.

· ·	ANG	LOPHONE	FRANCOPHONE	
· ,	MEN	WOMEN	MEN	WOMEN
Ownership with Education	23*	.13	03	.14
Ownership with Occupational Status	.46*	27*	.29*	-2.34*
Ownership with Father's Occupational Status	.14*	•24*	.40*	51*
Ownership Ownership	· . 07*	07*	.01	.75*
Education	.01	15*	20*	.28*
per Week	01	01	13*	-2.05*
Experience	3 0	.03	-1.25*	24*
Experience-Squared	.09	xxxx	.70*	xxxx
Authority with Education Authority with Occupational	.12	. 42	.03	6.29*
Status Authority with Father's	.13	.03	.31*	-9.43*
Occupational Status Authority with Father's	.05	.06	• 38*	-2.12*
Ownership ' Authority with Father's	• .02	xxxx	01	-2.24*
Education Authority with Hours Worked per Week Authority with Work Experience Authority with Work Experience-Squared	09*	09	01	1.11*
	.06	04	.07	1.91*
	.41*	.05	.84	6.79*
	22	XXXX	53*	xxxx
R-SQUARE	.43921**	.31843**	.46298**	··· . 87198** [·]
F-TEST Df ₁ /Df ₂	75.0669 26/2492	20.4143 23/1005	28.9147 26/ 872	83.1520 24/ 293
NUMBER OF CASES	2519	1029	899	318
-				

* T-test for the regression coefficients significant at the .05 level or greater. **F-test for the R-square's significant at the .05 level or greater.

^{XX}Too few cases for reliable estimates.

All of the difference in the slopes for the models estimated for francophone men is associated with the class interactions with occupational status (beta=.29), father's occupational status (beta=.40) and father's educational status (beta= -.20) and for the authority interactions with occupational status (beta=.31) and father's occupational status (beta=.38). Thus, for francophone men, the interactions of class with father's occupational status and authority with father's occupational status prove to be the important coefficients in the full model. most Finally, estimation of the model for francophone women again the proved to be problematic. While all the difference in the slopes can be attributed to nearly all of the interactions of class and authority, because of the previously noted problem of multicollinearity and the smallness of the sample for francophone women, these results were thought to be unreliable and therefore are not discussed here.

Finally, the t-tests associated with the interaction slopes indicate that all the interactions noted above are significant at the .05 level or greater. The discussion of the interaction effects indicates that the relationships between income and occupational status, father's occupational status, in particular, vary significantly across levels of class and across levels of authority for all of the subsamples included in this study. However, given that

the specific research interest of this study was to determine whether the inclusion of class and authority adds significantly to the Blau-Duncan model or not, further analysis of the interactions in the full model does not serve any purpose in terms of the research question investigated in this thesis.

To briefly summarize, the results of the analyses conducted in this chapter indicate that both ownership of the means of production and authority in the workplace are key dimensions in the Canadian process of income attainment. While it was found that both dimensions exert weak direct and indirect effects in terms of their rates of return to income, it was concommitantly found that these effects were consistently significant at the .05 level or greater. Furthermore, when the fit of the model containing ownership and authority was tested over the base-line Blau-Duncan model, it was found that Robinson and Kelley's extension of the traditional paradigm of income attainment provided a better fit to the data, despite the relatively minor increment in the proportion of variance explained by the revised model. Finally, in addition to significantly adding to the proportion of variance by the traditional model, the interactions of class and authority also proved to be significant. However, a detailed analysis of the pattern of the interactions of class and authority with the

basic Blau-Duncan variables was not present here `as any further discussion would be peripheral to the research question proposed in this thesis. Therefore, one proposal for future research in this area would include a detailed investigation and analysis the pattern of interactions uncovered in this study.

vered in this study.

CHAPTER VI

SUMMARY AND CONCLUSIONS: Blau and Duncan Revised

Dominated by the traditional conceptualization of the Canadian system of stratification as consisting of a set of interrelated processes deriving from an individual's educational, occcupational and income attainments, Canadian quantitative research has generally ignored the existence of two nonprestige dimensions of the hierarchical organization of work. These dimensions include Marx's ownership of the means of production and Dahrendorf's exercise of authority in the workplace. Only one study to date has been conducted which attempts to integrate both the ascriptive dimension and the achievement dimension of social stratification into one comprehensive model. In 1979. Robinson and Kelley developed a composite model of the income attainment paradigm and two conflict oriented models of class. Referring to their model as a "synthesis" Marx's, Dahrendorf's and Blau and of Duncan's models, Robinson and Kelley proceded to test their model using data from the United States and Great Britain. As discussed elsewhere in this thesis, Robinson and Kelley found that their extension of the Blau-Duncan model to included Marx's ownership of means of production and Dahrendorf's authority

in the workplace substantially increased the explanatory power of the traditional paradigm of income attainment in the United States and Great Britain.

Premised on Robinson and Kelley's research, this study proposed to approach and narrow the qap in Canadian quantitative research by developing and testing a similarily revised model of income attainment in Canada. As such then, many of the assumptions, hypothesis and questions asked in this thesis have been directly modelled on the basis of Robinson and Kelley's analysis. However, given that the composition of the Canadian population is somewhat different from that of the United States, certain departures from Robinson and Kelley's study were called for. Specifically, while the model used in this thesis is patterned on the basis of the model suggested by Robinson and Kelley, within the limitations of the Canadian National Mobility Study, the subgroups of the Canadian population chosen for analysis were slightly different. The data from the Canadian National Mobility Study were broken down into four subgroups consisting of anglophone and francophone men and women and an anlysis of class and the process of income attainment was conducted on each separately. While the findings of each of the separate analysis for each of the subgroups were presented and discussed in the previous chapter, the remainder of this chapter will present a brief

synopsis of the findings and suggest possibilities for future research in this area.

Class and Income Attainment

In congruence with previous research in both Canada and the United States, the initial findings based on a preliminary analysis of the socieconomic characteristics and class structure of Canadian society suggested that the process of income attainment varies systematically and differentially across categories of gender and language in Canada. Thus as was expected, the way in which an individual's background and current educational and occupational statuses, in terms of the basic Blau-Duncan model, are translated into rates of return to income varies for each of the subsamples included here, e.g. anglophone and francophone men and women. Moreover, the variation observed in the rates of return to income were such that anglophone men tend to benefit more from having lower background and current statuses than do anglophone women, francophone men, or francophone women.

A description of the class structure in Canada was presented in conjunction with the analysis of the socieconomic characteristics discussed above and it was found that, in general, the observed class structure was consistent with what would be expected given Marx's and Dahrendorf's conceptualizations. However, given the proportions of the Canadian population represented in the capitalist, worker, command and obey classes, it should be noted that the observed class structure for Canada was smaller than the class structure reported for the United States by Robinson and Kelley; for each category of class and authority. While direct comparisons across Canada and the United States cannot be made, given the different samples, these findings would seem to suggest that Canada is indeed a more closed and ascriptively oriented society than the United States (See: Porter, 1965). Thus, while this conclusion is tentative, it does lend support to the central proposition of this thesis that the analysis of the Canadian system of stratification must be conducted within the context of both the theoretical and quantitative orientations discussed in the first three chapters of this thesis.

The above conclusion was further substantiated when an analysis of the way in which income varies by ownership and authority was carried out. It was found that income does, indeed, vary quite markedly across categories of class and authority such that the effect of owning the means of production and exercising authority in the workplace manifested iteself in terms of producing higher mean

individuals who incomes for those fell into these categories. Furthermore, not only did income vary by class authority, but the noted differences in mean income and were also subject to variation by gender and language. While the analysis presented in table 5.3 was too primitive to state any firm conclusions, these findings did suggest that the impact of ownership and authority on the process income attainment in Canada does vary substantially of depending upon one's language orientation and upon one's gender. In order to generate more precise estimates of the pattern of correlations and the impact of ownership and authority on the process of income attainment for anglophone and francophone men and women 'in Canada, this study then implemented a path analysis of the model proposed in chapter one and the results were presented and discussed in chapter five.

The results from the path analysis of class, authority and the process of income attainment indicated that owning the means of production and exercising authority in the workplace, in fact, have weak, although significant, effects on the rates of return to income for Canadian anglophone and francophone men and women. In addition, it was found that class and authority have nontrivial indirect effects on income via their relationship to occupational status. Finally, it was observed that both owning produc-

tive property and exercising authority have a differential process of impact on the income attainment in Canada depending upon an indivdual's gender and language orienta-While the specific nature of these relationships tion. were presented in chapter five, to briefly reiterate, it was found that anglophone men tend to profit from being members of Marx's and Dahrendorf's capitalist and command classes in terms of recieving higher rates of income returns as compared to those individual's in the working obey classes. On the other hand, it was also found and that anglophone women and francophone men and women are disadvantaged by being members of Marx's and Dahrendorf's capitalist and command classes in terms of recieving much lower rates of return to income as compared to their counterparts in the working and obey classes. In metric terms, anglophone women, francophone men and francophone women seem to lose just under \$1,400, \$200, and \$600 dollars respectively by being capitalists while anglophone men, in contrast, gain almost \$2,000 dollars by owning their own means of production. Futhermore, the differences in terms of the large rewards which accrue to anglophone men as opposed to the small nonexistent rewards which anglophone women and francophone men and women receive from owning their own means of production and exercising authority are striking and significant. Finally, in accord with

Robinson and Kelley's findings, these results are not what would be expected given Marx's or Dahrendorf's predictions. Regardless of one's sex or language orientation, capitalists and those who supervise others will benefit tremedously from their positions in the class structure in terms of their income attainments than those who do not own productive property or who are members of the obey class.

Previous research on gender and language differences income attainment in Canada in has shown that women consistently earn less than their male counterparts (Boyd Humphrey's, 1980; and Boyd et.al., 1981; Boyd and McRoberts, 1982). Similarily, it has been shown that francophones consistently earn less than their anglophone counterparts as well (McRoberts, 1985). In addition, further research has indicated that women and francophones, regardless of their gender, are less likely to be capitalists and less likely to hold high-ranking supervisory positions within the hierarchical organization of work (Porter, 1965; Clement, 1975), Furthermore, it has also been suggested that both women and francophones tend to be overrespresented in less well paid jobs and less desirable occupations (Boyd and Humphreys, 1980; Boyd and McRoberts, 1982; McRoberts, 1985). Finally, it has been observed that the occupations which make up the upper classes in Marx's and Dahrendorf's schemas differ`substan-

tially by gender (Robinson and Kelley, 1979) and by language (McRoberts, 1985). Thus, one possible explanation for the findings presented here and in chapter five is that the process by which ownership of productive property and the exercise of authority in the workplace are converted into earnings may be due to differences between men and women and between anglophones and francophones in terms of their occupational distribution and in terms of their work histories or backgrounds.

One final implication of these findings may be that the observed differences in income are due in part to the fact that anglophone women, francophone men and francophone women tend control smaller, less profitable buisnesses. In other words, as opposed to anglophone men, both anglophone women and francophones, regardless of their sex, tend not to fall into Marx's capitalist class or Dahrendorf's command class, rather, they tend to fall into the class that Marx termed petite bourgeoisie and that Dahrendorf defined as the classless. That is, in terms of describing class structure for anglophone women and francophone the men and women, perhaps it is is more appropriate to view these individuals not as capitalists in the Marxian sense, but rather, as small capitalist or members of petite bourgeoisie (e.g. small business owners, artisians, etc.).

Thus, while these tentative conclusions suggest the

need for further research, they do substantiate and lend support to the central proposition in this thesis, that both ownership and authority represent key dimensions in the Canadian process of stratification and should be included in the quantitative analysis of the system of stratification in Canada. Finally, while these findings are interesting in and of themselves, they do not directly address the question of focal concern in this thesis. The overriding purpose of this thesis was to assess the improvement in the fit of the model proposed by Robinson and Kelley over the traditional Blau-Duncan paradigm of income attainment within the context of Canadian society. As such then, a dummy variable regression was conducted on the data for each of the subsamples and the results were reported in chapter five. To briefly review, it was found that for anglophone men and women both ownership of the means of production and the exercise of authority in the workplace significantly added to the proportion of variance explained by the traditional Blau-Duncan model. However, despite being significant at the .05 level or greater, the actual improvement in terms of additional variance explained was small. In addition, when the model was tested as to its goodness of fit for - francophone men, it found that only execising authority proved to be was significant; adding just under two percent more of the

variance explained in income by the base-line model. Finally, given a number of methodological problems (see chapter five) in the data and analysis for francophone women, it was decided that this aspect of the analysis of the data for francophone women should be excluded. Therefore, any conclusions to be drawn about francophone women are generalized from the results of the analysis of the data for the other subgroups included in this study.

In addition to examining the increment in the R-square of the main effects model over the basic Blau-Duncan model, a full model containing all possible nonlinearities and interactions of class and authority was also included. It was subsequently found that the additional variance explained in income by the full model over the main effects model (e.g. the model containing no interactions or multiplicative terms) and the basic Blau-Duncan model was significant as well as substantial across all levels of the Canadian population. Thus the extension of the Blau-Duncan paradigm of income attainment to include class and authority, plus all possible two-way interactions, explained an additional five, four and seven percent of the variance in anglohpone men's, anglophone women's and francophone men's incomes respectively. Futhermore, given that a number of significant interactions of class and authority with the Blau-Duncan variables were uncovered,

and given the specific interest of this study, a further analysis of the interaction effects was not conducted. Rather, because the central question proposed in this study was addressed by the analysis of the differences in the slopes between the main effects model and the base-line model, a more detailed analysis of the interaction effects was left to the task of future research.

A Revised Model of Income Attainment in Canada: Implications for future research.

In conclusion, this study has presented the findings from several separate analysis conducted on data for Canadian anglophone and francophone men and women. The separate conclusions generated by each of the analysis suggest that, as hypothesized, both owning the means of production and exercising authority in the workplace are key elements in the Canadian process of stratification. More importantly, owning the means of production and exercising authority in the workplace significantly affect the process of income attainment in Canada. While Marx's and Dahrendorf's models, on their owne suffer from inadequacies in terms of describing modern industrial societies (See: Wright and Perrone, 1977; Robinson and Kelley, 1979; Wright et. al., 1982), this does not preclude

the fact that the failings of their models do not necessitate the outright rejection of their models in terms of integrating them into the quantitative analysis of the Canadian and American systems of stratification. Rather, the findings from this and from Robinson and Kelley's study indicate that class position as defined by Marx and as conceptualized by Dahrendorf is a real phenomena within any system of stratification and therefore cannot be simply 'passed-over' in terms of the quantitative analysis of the process of educational, occupational and income attainment. To quote Robinson (1979):

> The revolution may not have occurred but ownership of the means of production continues to exert a powerful influence on the life styles and life chances of Similarily, men. the authority structure may differ in some ways from Dahrendorf's conceptualization of it but a more complex analysis founded in the logic of his formulation has been shown to be theoretically both and empirically fruitful (Robinson, 1979:141-142).

While the findings from this study represent only a small part of the research that has yet to be completed in this area, they do confirm the presence of both the prestige and nonprestige dimensions in the structure of Canadian society. As such then, the findings presented in this thesis call for further research in this area. In particular, an analysis of the effects of occupational status and educational attainments on the process of income attainment as it varies by ownership and authority is central and provides one possibility for future research. In addition, given the differences in the process of income attainment for anglophone and francophone men and women in Canada, further analysis of the effects of ownership and authority on the process of stratification in Canada as it varies by gender and by language is called for as well.

Finally, it must be reemphasized that the quantitative analysis of the Canadian system of stratification must take steps toward an integrated approach to the study of the process of educational, occupational and income attainments. One way of achieving the proposed integration is. as Robinson and Kelley (1979) suggest, to view the Canadian system of stratification as actually consisting of two sub-systems; one a status system based on educational, occupational and income attainments and the other a class system rooted in ownership of the means of production and authority in the workplace. Thus, like Robinson and Kelley, it is suggested that any future quantitative analysis of the Canadian system of stratification which excludes the non-presitige dimension of class and authority is both unwise and unnecessary and hence, should be avoided. Rather, as has been attempted in this study, steps should be taken in future analyses to include both

dimensions of Canadian society, allowing for a more comprehensive explanation and description of the system of social stratification existant in Canada.

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