ATTITUDINAL MILITANCY

ATTITUDINAL MILITANCY IN A CANADIAN POSTAL PLANT

by

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A dissertation Submitted to the School of Graduate Studies in Partial Fulfilment of the

Requirements

for the Degree

Doctor of Philosophy

McMaster University

DOCTOR OF PHILOSOPHY (1995) McMASTER UNIVERSITY

(Sociology) Hamilton, Ontario

TITLE: Attitudinal Militancy in A Canadian Postal Plant

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NUMBER OF PAGES: viii, 237

ABSTRACT

One tenet of labour process theory is the contention that, when confronted by degraded work, people will resist through militant behaviour or in other ways. However, that "resistance hypothesis" has been tested rarely.

Canadian postal workers have manifested some considerable militancy, for instance through legal and wildcat strikes and through frequent recourse to the grievance mechanism. Too, their work has been subjected to technological change often pointed to as a prime example of job degradation. But not all aspects of postal work have been subjected to technological change.

Thus, postal workers constitute a test of the "resistance hypothesis:" if degraded work provokes militancy, then ceteris paribus postal workers involved in automated work will be more militant than those who are not.

In this study, a group of postal workers employed in "Cancity" in 1985-6 (N=152) were surveyed regarding their attitudes and experiences. Factor analytic techniques were used to construct a scale of attitudinal militancy, and hierarchical set analysis -- summarised using dummy variable path coefficients -- was used to examine the causal links between this outcome and logically prior factors, including job degradation, employment history, and achieved and ascribed statuses including sex.

The results indicate that job degradation does have an impact on attitudinal militancy, but that this impact is modest at best, and weakens as other influences are taken into account.

ACKNOWLEDGEMENTS

Thanks are due first to the men and women of the Cancity postal plant who participated in this study with little thought of advantage to themselves.

Thanks are also extended to the Cancity local President of the Canadian Union of Postal Workers, who generously allowed me access to the membership and secured the co-operation of the local Union executive. The District Manager and managerial staff of Canada Post in Cancity were co-operative as well, and I thank them, too.

My graduate work was funded in part by the Ontario Graduate Scholarships, the Social Sciences and Humanities Research Council of Canada, and the School of Graduate Studies at McMaster University. I am grateful.

In conducting the research, I relied heavily on the advice and good sense of the late and missed Dr. Alfred Hunter -- who explained factor analysis to me again and again -- and Dr. Jack Richardson, whose expertise in organizational behaviour was a great help. Neither was formally on my supervisory committee, and so they did not "owe" these services to me.

My committee, of course, was very helpful, too: I needed Dr. Roy Hornosty's theoretical sophistication, Dr. Peter Pineo's methodological expertise, and Dr. Barbara Carroll's knowledge of quantitative methods and of organizations. Above all, however, was the importance of the committee chair, the late Dr. Robert Blumstock, whose ideas, humour, and friendship were unfailing. We will miss him.

And my wife, Gail Coulas, walked me through gender issues, helped guide my investigation, and corrected my errors, all without divorcing me.

With all of this assistance, I have still done some original work: the errors, which belong to me alone.

DEDICATION

To my wife, Gail Coulas, and our children, Adam and Anne.

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CHAPTER ONE: INTRODUCTION

i. General Statement

This dissertation is a report of research conducted in 1985 and subsequently on militancy among postal workers at the Mail Processing Plant (MPP) in Cancity, Ontario. Also called "the Main" or Station A, the MPP there served a population of well over a million people in the city and its environs.

From 1974 until the present, postal work in Cancity has undergone profound technological change. Likewise, the Post Office has been the setting for fractious labour conflict -- from 1965 until the present -- of which the Cancity operation has had its share.

While militant behaviour among postal workers began a bit before technological change was contemplated, many observers[1] and participants[2] have suggested that the latter caused intensification of the former. However, as I shall argue in this chapter, the links between technological change and militancy are not well understood in sociology; this dissertation is aimed at exploring and clarifying those links. I propose to examine the effects of "job degradation" on workers' attitudes and perceptions, specifically on their willingness to engage in direct collective action like strikes in an effort to protest their circumstances. This willingness is attitudinal militancy.

In this introductory chapter I will establish the utility of the research outlined below for the discipline by describing the gap in theory which exists, and by showing how this study can reduce that gap.

The research was framed as an empirical application of the "resistance hypothesis," derived from labour process theory (or LPT). In brief, the resistance hypothesis is an assertion that militancy is a product of workers' collective response to their degraded or deskilled working

conditions; so, all else being equal, those workers whose work is most degraded will be most militant; and the more workers' skill (i.e. control over the labour process) is eroded or threatened, the more likely are they to select militancy as an option. Militancy is therefore related to technological change: in labour process theory, that such change is instituted by management primarily to wrest control of the labour process from workers[a].

Workers fight this change, using the collective means at hand. In Canada, Rinehart[3] and Clement[4] are probably the best-known proponents of this hypothesis, but it is a subtheme in many analyses.[5]

ii. Labour Process as a Critique

As the dominant perspective in the sociology of work at present,[6] labour process theory will receive considerable attention below. But the perspective is difficult to encapsulate theoretically since, as Heron and Storey[7] point out, there is no "one single" labour process; each must, therefore, be conte-plated with due regard to time and place. Indeed, Armstrong[8] complains that "the term ['labour process'] has lost all semblance of definition and become no more than a synonym for 'work.'"

Nevertheless, there are certain themes which can be identified as basic within LPT; among these is the fact that LPT is a critical approach, aimed at debunking the more breathless

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[a] For our purposes in this dissertation, the statement applies regardless of whether the work in question is in the public or the private domain, whether it is remunerated or unremunerated, whether the skills brought to bear are acknowledged by others or unacknowledged, and whether the work is so-called "men's work" or "women's work."

Note also that, while technological change may occur for a number of reasons, these "other" reasons are outside the purview of labour process analysis: if LPT is distinctive at all, it is because of its focus on the "frontier of control." see Pahl, R. E. (ed.) 1989 On Work (Oxford: Basil Blackwell), especially pp. 167-174.

claims of so-called mainstream sociology. Therefore, we will begin by discussing that "mainstream" in more depth.

This approach divides the labour force into two kinds of people, according to their orientations to work; these orientations are often thought to be derived from prior experiences and socialization.[9]

Workers may be extrinsically-motivated, in which case they view their work as of comparatively little importance in their lives, and seek from it only instrumental rewards (like pay and benefits) which enable them to devote their attention to what they do find important; their families, for instance. Such workers typically make small "human-capital" investments; that is, they do not devote much energy to education and training, and they devote the minimum resources to their jobs consistent with norms stipulating the "effort bargain".

By contrast, intrinsically-motivated workers do value work for itself, rather than as a means to an end; they seek self-actualization -- challenge, fulfilment -- from it. In consequence, they are prepared to make large human capital investments.

Most workers, the perspective maintains, are extrinsically motivated: problems like militancy arise when these workers are dissatisfied by the instrumental rewards offered by their work; when intrinsically-motivated workers find their aspirations blocked by, say, occupational segregation by sex or ethnicity; or when rapid change introduces instability, strain, and anomie into the system. Hence the "mainstream" is concerned with the "open-ness" of status attainment networks,[10] how they mesh with technological and other change,[11] and the logic by which such change occurs.[12]

When derived from this tradition, research on militancy divides militant behaviour into that which is aimed at securing instrumentally-derived objectives (and which is increasingly institutionalized in character); and a residual category of activism which is not instrumental and/or is not institutionalized.

Thus, studies of groups in action, including studies of militant behaviour, tend to be cast in such a way as to emphasize the group's orderliness, its subjection to leadership, its conformity to longstanding norms and values; each of these in turn is understood to be subject to structural constraints. If the group's members are granted any level of autonomy at all, then emphasis is placed on rational calculation.

Otherwise, if a group's action is not understood as governed by any of these, then it is (often explicitly) portrayed as the action of a "mob". In other words, analysis of rank-and-file actions or behaviours usually admits of only two possibilities: either the sentiments aroused in participants are logical -- that is, they lead to action which has some chance of efficacy -- or they are "illogical," being counter-productive in some way. Studies of the Post Office[13] tend to view labour conflict therein as falling within the "illogical" category, the traditional province of theories of collective behaviour.

When militancy is seen as sensible, then the researcher's task is to penetrate beyond the ostensible chaos of the activity, so as to discover the rules within. Goldthorpe et al[14]., for example, treat an upsurge in strike activity among the subjects of the Affluent Worker as

> a situation in which workers feel a strong sense of grievance over pay and are anxious to press their claims, but only in ways designed to cause the minimum loss of earnings [emphasis added][15].

In a sense, this view is consistent with Lenin's treatment of trade unionism, although Lenin is not usually thought of as a mainstream analyst. Yet, in What is to be Done?,[16] he argues that the labour movement was incapable of inculcating in the proletariat anything more than "trade-union consciousness," an essentially meliorative disposition which -- without the guidance of the Party -- was no threat to the bourgeois order.

Lenin's view, like Simmel's, allows for the possibility of conflict which is not disruptive to the status quo. Simmel[17] on the whole agrees with Marx's economic analysis, and with the idea that intergroup conflict is useful for enhancing in group awareness and solidarity; but he also suggests that conflict can be integrative, and that the more clearly specified the divergence of interests, the more likely it is that violent conflict can become but one among an array of tactics available for the achievement of goals. Thus, conflict may not "feed on itself" in an escalating cycle, but may instead become routinized and institutionalized.

Since avenues for negotiation and co-optation do exist, failure to use them is treated as irrational. Direct action by the rank-and-file is supposed to stiffen resistance by the powerful. Since the powerful are, after all, powerful, direct action is doomed from the start.

Thus, for instance, Michels'[18] discourse on the "iron law of oligarchy" shifts the locus of conflict from classes to status groups: Michels argues that a host of organizational factors combine to remove the leaders of any and all groups -- including unions -- from identification with the masses into an elite mould. Leaders of nominally contending groups, in consequence, are engaged in a sterile, formal exercise; not just routinized, but stripped of all real meaning, for the real conflict occurs between all leaders and all masses. The masses are always at a disadvan-

tage, since they are unable to mobilize the resources available to elites; even if they do win, they merely substitute a new elite for the old one.

C. Wright Mills and Ralf Dahrendorff[19] both accepted this formulation. Dahrendorff incorporates Burnham's[20] "managerial revolution" thesis, asserting that control of an organization often is separated from, and more important than, mere ownership of the forces of production. Control is vested in enterprise management, which is organized according to bureaucratic principles: thus, power is not monopolised but graduated and limited to specific spheres. Conflict occurs between those with relatively more power and those with relatively less; in order to make some headway in this war of all against all, conflicts have become institutionalized, and restricted to particular arenas. There is unregulated conflict between "classes" (as Dahrendorff calls them) too, but it is of relatively minor importance. And, while society is continually in flux, the conflict endemic to it is not destabilising. Collective bargaining, the institutionalized form of industrial conflict, plays an important role in maintaining equilibrium: it diverts energy away from more confrontational tactics and -- by providing a forum for discussion -- helps to improve relations between managers and managed.[21]

Mills' New Men of Power is less celebratory of institutionalization, but his argument is similar: unions, he claims, have been coopted into the institutional economy of capitalism.

Mills argues that there are four stages to the life cycle of unionism: in the first, unions come into being as a mechanism by which to counterbalance corporate power. But corporations see unions as a threat, and combine to meet that threat, leading to industry-wide bargaining and the further centralization of both managerial/proprietorial and union organizations. That in turn leads to state intervention, producing a new emphasis on political questions. Here, union leaders

find themselves out of their league, for they are concerned with immediately practical matters; yet, if they do not begin to cope with these longer-term issues, they will lose the gains they have won to date.

As a result, unionists become part of the political economy, a liaison between workers and owners. They function as a provider of labour; their task is to deliver a disciplined work force, purged of malcontents. In return for a "junior partnership" in the management of enterprise, unions guarantee success in "the management of discontent".[22]

The approach received substantive support from Ross and Hartman.[23] Like Dahrendorff and Mills, Ross and Hartman's Changing Patterns of Industrial Conflict suggested that unions were undergoing a worldwide process of growing political and social integration. Using data from fifteen countries from 1900-1956, Ross and Hartman calculated the ratio of workers involved in strikes compared to all unionized workers and the ratio of workers involved in strikes to total days lost (the "membership involvement ratio" and the "strike duration ratio" respectively). These they related to a variety of societal factors; but on the whole, they concluded that they were witnessing "the withering away of the strike".

That was a consequence of the institutionalization of industrial conflict. Employers had become more sophisticated and less confrontational over time; unions themselves had turned to the political arena to win concessions, devoting comparatively little time and energy to disputes on the plant floor. These efforts had paid off, in that the state had become more important both as regulator and as employer.

The "withering" of the strike -- the progressive decline in strike frequency, duration, and "intensity" or violence -- was a function of the growing stability and legal/cultural legitimacy of

the labour movement (particularly in countries with a labour party), as well as of government intervention in the resolution of employment disputes, in the setting of wages and terms of employment, indeed in every aspect of the employer-employee relationship. Thus, the withering of the strike was an outgrowth of the "modernity" of the society, an issue taken up by Kerr et al.[24] in Industrialism and Industrial Man as the proposition that conflict of all sorts declines as industrialization consolidates.

But, again, none of this is meant to suggest that militancy was expected to disappear. Rather, the argument was that militancy was to be construed as mere bargaining. It was not a vehicle for class awareness, but a tactical, instrumental device, because -- to use Giddens' term -- social structures in capitalism are "insulating:" the economic realm is separated from the political. As a result, "peaceful collective bargaining has become the standard form of conflict[25]," a form disturbed only by the occasional outbreak of wildcat strikes, an outbreak which is inexplicable from this perspective.

Thus, Michels' work is echoed in Mann's description of an apparent near-riot during a British strike as little more than a stage show, useful in drawing attention to a union's demands, but otherwise contrived and dispassionate.[26] After all, as Dubin points out,

> As collective bargaining becomes an established feature of our society both sides come to recognize that each conflict-created disorder is inevitably succeeded by a re-established order and that permanently disruptive disorder may materially impede the resolution of the conflict.[27]

In other words, unbounded industrial conflict is not sensible, since it impairs both parties' ability to achieve their goals. Indeed, even among those who see industrial conflict as rooted in rank-and-file attitudes,

> the point remains that industrial conflict which is largely restricted to economic issues can go together with a strong awareness on the part of workers of their interdependence with their employer and of the possibility of mutually beneficial "accommodation". Indeed such a co-existence of conflict and co-operation we would see as implicit in any economic association. [28]

Collective bargaining, then, ostensibly provides the mechanisms by which a normative system regulating industrial conflict will emerge. It helps ensure that conflict remains within acceptable bounds and encourages dispassionate evaluation of goals and means by both labour and management.[29] Therefore, strike activity should decline over time, as the structures available to resolve conflicts became more sophisticated.

iii: Strikes Challenge Mainstream Rationalism

However, a corollary of this central tenet that institutionalized collective bargaining is adaptive collective behaviour[30] is that noninstitutionalized industrial conflict cannot be explained or understood.

Yet the "withering away of the strike" was a short-lived phenomenon. That fact led to analyses using some variant of Durkheim's anomie theory, suggesting that the "pathology" observed was a consequence of the failure of normative structures to keep up with social change. Sometimes called the industrial relations approach, it owed its origins to a Royal Commission set up by the British government to investigate the increase in strike frequency experienced in

that country in the 1960's.[31] The Donovan Commission asserted that the prevalence of industry-wide bargaining in Britain had led to a kind of cultural lag: the formal mechanisms of conflict resolution had failed to acknowledge the ad hoc, day-to-day arrangements by which unions and managers coexisted at the local level; in particular, the industrial relations system did not make allowance for the increase in employees' power which had developed and the new, consultative relationship it required. The result was that central authorities had lost their usefulness as norm-making bodies; in their absence, there was no system in place to develop norms.

Anomie resulted, and situational norms had to be developed on the spot (Turner and Killian, 1972). That could engender chaos -- the familiar "milling process" of Blumerian theory -- or it could serve to further enhance the power of purely local leaders, such as shop stewards.[32]

An alternative is to suggest that militant people are in the main no different from others, except that they have been confronted with circumstances which allowed for the emphasis of some forms of behaviour over others. McCarthy and Zald's[33] "resource mobilization" approach is an example. They assert that discontent or deprivation sufficient to prompt a social movement is a constant in virtually any social setting. Researchers who focus on the "merits" or "precipitating factors" of collective action are misguided; they should concentrate instead on the different social and economic costs of collective action to potential participants, as well as on the abilities of various actors to absorb these costs.

There are instances where some workers will be unavailable for militancy because of powerful inhibitory socialization, while others will lack the resources to take militant action. Others will be denied the opportunity to be militant, regardless of how oppressive their working

conditions might be, because of their placement in the secondary labour market or because the business cycle makes militant action too costly.

In its earliest manifestations, radical sociology focused on these inhibiting factors.

Marx's and Engels' interest in militant trade unionism waned quickly: as Hyman[34] notes, "their attention to this question [of the role of trade unions in promoting revolutionary social change] is remarkably slight; and their most detailed discussion is to be found in their earliest works". In The Manifesto, for instance, trade unionism is depicted as in itself a threat to capitalism -- but that "optimistic tradition" (the term is Hyman's) was to be modified over time into one more like Lenin's and Michels'.

In essence, Marx and Engels viewed the trade unions almost as retrogressive forces insofar as they were -- temporarily -- successful at ameliorating working conditions and at resisting the downward movement of real wages: they were "fighting with effects, but not with the causes of those effects;... applying palliatives [sic], but not curing the malady".[35]

Rather, the virtue of unions lies in the development of praxis. In the daily grind of negotiations, strikes, lockouts, workers learn the skills necessary for effective combination -- but they also learn just where capital draws the line between an acceptable concession and a "non-negotiable issue," so that the inescapable conclusion is that no lasting improvement in their lot is possible under capitalism:

> Now and then the workers are victorious, but only for a time. The real fruit of their battles lies, not in the immediate results, but in the ever-expanding union of the workers.... It was just this contact that was needed to centralise the numerous local struggles, all of the same character, into one national struggle between classes. But every class struggle is a political struggle.[36]

Even so, Marx and Engels never abandoned their view that, as the army on the field where the battles between proletariat and bourgeoisie were to be fought, the trade union was crucial to the development of class consciousness.

Their discourse on the specifics of union activism, then, blends into the more general analysis of class conflict, one which stresses the importance of praxis and, through it, of class consciousness.

As a result, one strain of the sociology of work treats militancy as a product of explosive sentiments, for which structural conditions provide the preconditions and perhaps the triggering event, but are otherwise not causal. In this view, collective action is emergent; that is, people in groups act in ways they would not if they were alone. It is, therefore, inappropriate to try to explain group actions on the basis of individual ideas and values, however widely shared; genuinely influential phenomena can only be observed in the setting of the group, at the time and in the place that the influence is occurring.

Elements of this kind of thinking can be found in Karl Marx's stress on "consciousness," and particularly in the "explosion of consciousness" approach of Shorter and Tilly. But Smelser's theory of "structural strain," and Davies' "J-curve theory of revolution,"[37] also emphasize the primacy of group motivations and cognitions in producing action.

However, a number of works indicate that "consciousness" does not "explode" in a vacuum: some authors[38] point out that massive labour unrest (of the sort described by Shorter and Tilly[39] for France, or by Reynolds[40] for Canada Post), is preceded by intense organization and agitation efforts from existing political and/or labour groups. Further, the emphasis on consciousness makes of the individual a sort of Skinnerian robot, for whom awareness suddenly

pops into being and, apparently, pops out of existence just as suddenly. When s/he's "conscious," that is, then militant action follows; when that action comes to an end, is s/he "unconscious?"

iv. Growth of Labour Process Analysis: Job degradation

In 1965, Baran and Sweezy published Monopoly Capital. Drawing on the political economy traditions of Marxism, Baran and Sweezy argued that the old "law of falling profit" had been superseded by a "law of rising surplus[41]:" these surpluses had to be absorbed somehow, an inefficient process producing one crisis after another. At the same time, the rate of surplus value must always increase under capitalism.

To maintain such a rate of surplus increase requires an highly disciplined labour force; thus, the work of labour process researchers has dovetailed with a growing mainstream interest[42] in the "strain between the organization's needs and the participant's needs -- between effectiveness, efficiency, and satisfaction,"[43] a strain thought by the mainstream to be characteristic of all industrial societies rather than of capitalism per se. In consequence, every organization allegedly exists as a device for social control, which is pyramidal and naturally coercive.[44]

Harry Braverman's Labour and Monopoly Capital[45] criticizes the mainstream for retaining "the point of view of the management of a refractory work force in a setting of antagonistic social relations,"[46] as if class antagonism were essential to the human condition. He too is concerned with the issue of control, but his concern stands or falls on the premise that only in societies where surplus value is extracted is such control necessary. Like many others, he postulates a basic human need to produce something of value out of nature, to work.[47] Human

work is distinctive because it is "conscious and purposive;" it requires a directing intelligence, for its product exists first within the imagination and only subsequently in "thingly" form.

But while

> ...conception must precede and govern execution,... the idea as conceived by one may be executed by another. The driving force of labour remains human consciousness, but the unity between the two may be broken in the individual and reasserted in the group, the workshop, the community, the society as a whole.[48]

No total separation of conception and execution is ever possible, but it is possible for the preponderance of each element to lodge within antagonistic groups.[49] The person who does the work may bring little of his/her own planning to it, may be unwilling to participate, may be controlled by the technical organization of work: mechanization, perhaps, or Taylorist management.

The result is job degradation. For the worker, labour is rendered dehumanized, alienative and unsatisfying.

But the process of job degradation is ongoing. Since it involves the monopolization of planning and discretion in the hands of industrial engineers and designers, and/or technicians, and/or managers (all of whom operate as proxies for capital), we would expect a couple of consequences:

It should be possible to observe an overall decline in the discretionary component of work as it is actually done (although the formal "requirements" of jobs may have been inflated, or the education and training workers bring to jobs may have increased). This may have proceeded unevenly -- faster for some occupations, slower or even reversed for a few -- but the net effect on work as a whole should be evident.

It should also be possible to identify particular enterprises as involving degraded work. This could be indicated by an increase in closeness of supervision (i.e. of the ratio of managers and supervisors to operatives); by an increase in "staff" functions done by technicians and planners and the like; and/or by an increase in the degree of mechanization of processing operations: the more machinery, the more is conception vested in them and presumably the less remains to workers.

But both possibilities have been called into question. Simon[50] early on proposed that organizations are not "optimising" but "satisficing" entities; further, they are not proactive but reactive in behaviour, seeking minimal disruptions of the internal status quo. Decision makers tend to "let things ride" for as long as possible, until confronted with situations threatening the organization's integrity or its very survival. They then cast about for a solution to the problem -- but they stop the search when they find one that is satisfactory, rather than continuing until the "one best method" is found. By logical extension, then, and contrary to Braverman, March and Simon imply that there is no blind drive towards control, technological change, or anything else.

Freeman and Medoff's[51] study of labour economics, for example[52], has concluded that the net effect of unionization on the costs of a commercial enterprise is zero: trade unions prompt technological change by raising the costs of labour inputs, thereby forcing firms to become more efficient or perish. Thus, as Edwards[53] notes, new strategies for control are devised by capital at particular historical junctures, when labour's activities appear to management to have reached crisis levels.

So, while complex patterns of initiation and reaction between labour and capital are conceivable, Edwards asserts that as a matter of historical fact it is labour which acts and capital which reacts.

Edwards [54] further suggests that the control strategies adopted may fit into one of three ideal-typical categories: in its early stages, capital depended on simple or direct control (still to be found in the secondary labour market), but this form is limited to small enterprises in which a face-to-face relationship between boss and bossed is possible. In larger enterprises, control is either bureaucratic, which entails reliance on the subjects' internalization of legal-rational values and norms; or it is mechanical, in which case control is vested in material technology and the organization of work which surrounds it[b]. Thus, educational credentials are in large part "certificates of trustworthiness" which indicate whether an individual has been sufficiently well-socialized as to be left to control others' work, his/her own work, or none at all.[55]

The implication is that the predominance of any one strategy at a given time may not indicate a difference in the amount of control exercised on workers; a shift from one prevailing mode to any other may well leave the net quantity of externalised control intact for an occupation.

Likewise, the assertion that work as a whole has in fact been degraded over time remains controversial. Certainly old skills and jobs have been eliminated, but new jobs and new skills have emerged[56] which may have maintained or even increased the overall skill content of work.

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[b] In the real world, combinations of these ideal types are most likely.

That reskilling may benefit few workers, or it may not; it may be a short term trend, or it may not.

Global measures of skill -- such as occupational status or mean educational level -- show a continual increase, as workers move from farming and blue-collar occupations into white-collar and professional ones; but these indicators are of little use if the skill content of supposedly higher-level occupations has been degraded.

And there is an additional complication, since skill itself may have no "objective," "concrete,""real" existence, but may be only a social construct and nothing more. Friedson, for one,[57] denies the very existence of skill as a uniform quality, asserting that it is a social trait attributed to occupations more-or-less artificially. Likewise, Larson[58] asserts that skill claims are advanced by occupational groups as a device by which to erect entry barriers against "undesirables" as well as to justify demands for higher pay or prestige. Braverman does not go so far, but he does assert that only a detailed analysis of changes in the actual job content of each occupation can address the question of job degradation. He attempts such an analysis himself, but the undertaking is not systematic, and he is forced to rely on examples instead.

More recently, Myles[59] analysed changes in the educational and task requirements of all jobs listed in the Canadian Classification and Dictionary of Occupations (CCDO). This data indicates a polarization of unskilled and highly-skilled work in the labour force, as predicted by Braverman. However, Myles notes that the expansion of government has led to growth in professional and semi-professional work, producing overall upgrading of skills.

Unfortunately, the CCDO is updated only if a new occupation emerges, or if Statistics Canada or Labour Canada is asked to re-evaluate an existing one. The tendency, therefore, is to

overestimate emerging occupations and undervalue changes in older ones: the description of work done by postal workers (CCDO category 4173), for example, did not alter between 1971 and 1981, despite the mechanization of the job in that period.

With difficulties like these in mind, Littler [60] has sought to specify the concept of skill somewhat more usefully. He argues that three overlapping definitions are available in the literature: skill as a social construct (i.e. as an ideology), skill as the relative absence of routine (i.e. as task range), and skill as control or discretion over the labour process (i.e. as job autonomy). The three do not change in concert: status attainment measures, for instance, are remarkably stable over time and across industrialised cultures[61] despite far-reaching shifts in job content. Likewise, specialization -- that is, a narrower task range -- may indicate what Littler calls a "concentration of skill" rather than deskilling.

Mechanization and automation may or may not result in deskilling, according to Littler's discussion; and while it may be possible, as noted above, to use the learning time or type of knowledge needed as an indicator of skill, there is no guarantee that formal entry requirements reflect them.

We are left then, with a definition of skill as a social construct, one which is perhaps independent of actual content -- although we may use the meanings stated by the workers themselves rather than relying on "reputational" measures (which may be corrupted by outsiders' stereotyped views of what an occupation entails).

v. Skill and gender complexities

The absence of agreement among sociologists on an operational definition of skill is likely to bedevil anyone concerned with job degradation in the Post Office, for what is at issue is whether a shift from a relatively skilled to a relatively unskilled process occurs at the shop floor level. Determining that would entail a capacity to measure skill and to compare different kinds of job content in some meaningful way; and this has yet to be accomplished.

Postal work has certainly changed. Once centred around manual sorting of the mail (a procedure requiring retention of as many as five thousand points of knowledge), it is now dominated by coding (which involves the operation of a keyboard-like device) and machine tending. Whether that change has degraded work in any objective sense is less clear. The transition from manual to mechanical operations has increased the absolute number of tasks in the occupation and increased the amount of discretion postal workers can claim; task range and autonomy are identified by Littler[62] as key elements in absolutist definitions of skill. Similarly, closeness of supervision -- another indicator of degradation[63] -- may not be any greater now than before mechanization. What does seem to be different is not the closeness of supervision but its character; not discretion or task range, but the perceived capacity of individuals to exercise influence through their own actions.

Labour process theory sidesteps the difficulty of specifying degradation according to so-called objective measures. Instead of asking how workers experience their work, the theory simply asserts[64] that any large scale capital expenditure necessarily degrades work.

Postal work, then, "must be" deskilled because it exists in a mechanized environment; the greater a worker's exposure to mechanization, the more deskilled s/he is.[65]

But it may be that whether the mechanization of mail processing does or does not reduce workers' control over their labour is less important for practical concerns than is the widespread belief that it does. That belief has been espoused by union, management, and workers alike, as we shall see.

A further complication revolves around the issue of gender. Historically, Post Office mechanization in Canada was accompanied by feminization and by an upsurge in militant activity. Yet this study will show that women postal workers are not very different -- perhaps somewhat less militant in attitude -- than their male counterparts.

Differences in life style and life chances, structured by gender, have aroused a good deal of interest of late. As perhaps the basic element in individual identity, sex is consequential in a variety of respects. That fact has led some sociologists to develop "gendered analysis."

But, in her Professions and Patriarchy, Witz[66] asserts that "gendered" analyses fail on two counts: "they are static analyses which take the gender of the practitioner as 'already given' and .... they operate with fairly unreconstructed notions of 'women's role' and have no theory of gender relations beyond a basic, taken for granted 'sex role theory.'"

So, even though women do figure prominently in postal work, not everything about them is relevant. This is because gender is a socially-constructed, and therefore fluid category; so is the gendered division of labour[67]. To suggest otherwise is both timeist and biologically determinist, since it equates "female" with "feminine" constructions.

A good deal of gendered analysis does just that, being biologically determinist[68] in its implications, but that orientation can be rejected out of hand. Whatever differences (besides morphology) between the sexes do exist, these cannot account for a basic similarity in attitudinal

militancy (since the magnitude of difference between men and women is rather modest). Moreover, there are instances where women are more militant than their male coworkers, and others -- like this one -- where they are less so. For example, the unionization of some women's occupations, and the growing behavioural militancy exhibited by them, has been well documented[69]. It contrasts sharply with the fragmented "pink collar" occupations like clerical work, where efforts of unionization are only sporadically successful and where collective action has failed dismally. The contrast between these two divergent phenomena is informative: it challenges a conception of women as essentially co-operative or expressive -- whether by nature or through socialization -- and as bringing these attitudes to their paid labour as well.

Instead, some analyses focus on the systematic differences between women's and men's work experiences and circumstances as producing either less or more[70] activism, depending on factors like commitment and size of working group.

Game and Pringle's[71] study of a "whitegoods" (major appliance) factory in Australia found greater militancy among women than men, in contrast to their findings for other sites. They argue, in consequence, that there is no basic tendency towards greater peaceableness on the part of women workers; rather, militancy is contingent on factors relating essentially to job commitment.

Commitment can be enhanced by one of two factors: role embracement and/or external-instrumental compulsion. If women (or men) like their work or at least something about it (like the opportunity to meet coworkers), then "value commitment" is enhanced. On the other hand, if they are "locked into" a job for extrinsic reasons, then they will be unable to exercise "exit-voice" by quitting. "Continuity commitment" is enhanced in the latter situation, but women so

trapped will be forced to take steps to improving their circumstances; to reduce alienation, for instance, through collective action. Game and Pringle go on to suggest that collective action is more likely for women in this case, for they assert that men are by nature more prone to individualized "zero-sum" competition.

By way of contrast, Kanter[72] suggests that women employed in formal organizations tend to exist in "low opportunity structures." These structures do enhance commitment, but they lead to a sense of resignation rather than activism. The women in her study were also collectivist and (in our terminology) grievance-sensitive; but the effect, in a low opportunity structure, is to produce an emphasis on whatever social rewards are available and a consequent condemnation of other women who try to leave the peer group.

Kanter's thesis can be compatible with Game and Pringle's. The former studied an American office; that is a non-unionized setting in a society where the labour movement is in decline. Given the difficulties inherent in collective action under those circumstances, militancy was impracticable and the "opportunity structure" still lower in consequence. We may refine their theses as follows: commitment differs for men and women in that being female entails a comparative paucity of choice, because women's alternatives are limited and constrained (e.g. by their domestic labour). Thus, some occupations are likely to breed greater commitment for the women in it than for their male coworkers.

All else being equal, greater commitment could translate into greater militancy <u>if</u> the "opportunity structure" makes this possible: otherwise, women will display the kind of behaviour Kanter outlines.

If this is the case, then one would expect women's commitment to work to be greatest in those jobs which offered them high extrinsic rewards compared to those generally available to other women. If, at the same time, available intrinsic rewards were low, then women would be pushed towards militancy as an effort to improve a job they can't leave.

vi. The Action Frame of Reference

Thus I intend to test the resistance hypothesis from within the action frame of reference, a paradigm often posed as in direct opposition to LPT.[73] In contrast to the literature on the subject which stresses the "role of organizational and institutional factors"[74] in promoting strike proneness, actionists assert that behaviour in organizations like the Canada Post Corporation (CPC) and the Canadian Union of Postal Workers (CUPW) is not due (solely) to structural determinants, but is a product of the accretion of decisions by individual participants, based on their perceptions of events, their experiences on the job, and their "prior orientations" formed off the job[c]. Of course, some networks or other communications mechanisms must exist if workers are to share those percepts.

A phenomenological adaptation of Weberian sociology to the study of organizations, the action frame of reference takes the concept of social action to such an elevated plane as to lead to a denial of the existence of organizations altogether, except as reification. For present purposes, however, it is extremely useful because it posits the existence of conflict between and

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[c] These "prior orientations" include those formed by the specific experiences of men and women, such as women's experience of domestic labour.

within organizations, acknowledging that each individual within an organization is an actor, a being with motives, values, perceptions and beliefs which are more-or-less unique.

Unique though these feelings may be, they are nevertheless products of the actor's experiences and interactions. Consequently, explanation within the action approach demands an understanding of individual orientations and definitions, without any a priori assumptions about the "passivity of the masses," the efficacy of a "vanguard," or the influence of "leaders".

And yet, for all this insistence on individual agency, it will not be gainsaid that leaders do lead, that people do act in concert, that individuals do find their actions constrained by outside forces over which their own capacity for influence seems minimal. Actionists find themselves in something of a conundrum here: if people perceive their behaviour as externally structured, then it is -- or it might as well be.

If, for instance, people believe that "society" compels them to act in a certain way, or that they must abide by "policy", then they will act in accordance with those beliefs, thereby making them true. There is no possibility that people could be "wrong" about their perceptions, for there is no reliable outside referent to use as a standard of "objective" "knowledge".[75]

Weick[76] avoids the dilemma by adopting a conception of the structure as "enacted environment". A product of human creation, the enacted environment only exists insofar as actors have internalized it; the structure is merely a bunch of "stocks of knowledge" by which to order the perceptible world and make it meaningful to actors.[77] And the regular patterns of interaction (Schutz's "typifications"[78]) which individuals adopt as a consequence of their "acceptance" of institutionalized values and norms are contingent on "the past history and present structure of our society".[79] Hence, practical applications of the action frame of reference,

notably the Affluent Worker series[80], make much of actors' "prior orientations". These are usually discernable from rather traditional sociographic variables: class of origin, sex, and the like. They are alleged to exert a specification effect on current organizational experience. Actionists tend to give current experience surprisingly little attention in their empirical work).[81]

Action theorists assert that competing interpretations of the situation are common. They may arise from a sort of cognitive dissonance between dominant "meaning sets" and perceived reality, which would then be encoded by charismatic leaders; or they may be random (i.e. unexplained); or they may be intersubjective "imports". In any case, ego must communicate diverging meanings to alter, who will compare them with other inputs, assess their value, and respond accordingly. Of course, whose definitions will be "'made to stick'"[82] is then a function of who has the power. The idea is that social closure can be accomplished by setting limits on the meanings from among which individuals can select,[83] so that legitimacy is ensured.[84]

The point of all this is that action on a picket line, as anywhere else, is a product of a series of individual decisions: to "go along" with a proposed course, to reject it and do nothing, or to initiate an action of one's own. These decisions may be influenced by a leader's authority -- but the very acknowledgement of such influence is a personal decision.

This study of militancy in Canada Post Corporation is based on the point made above, in contrast to works which assume or imply passivity and/or uniformity of behaviour among people acting collectively (for both deny individuals the capacity to choose). For that reason, it was necessary to get data from a goodly number of subjects, beyond the capacity of a lone researcher in fieldwork. Hence, a survey is a valid research instrument.

It is especially useful in contexts like this one where the "purpose" or "goal" of a phenomenon like militancy is not at issue. Functionalists, especially in the 1960's[85], understood militant collective behaviour in terms of actors' mental states, so that they responded to, say, "relative deprivation.[86]" The problem with these approaches is that they fail to explain why "the most frustrated members of society are not the only people who fight for radical change.[87]"

Thus, more modern approaches begin with the assumption that almost everyone is so "deprived" or "frustrated" that s/he could join a militant social movement -- but not everyone does[88]. A focus on specific grievances in the Post Office, for instance, inevitably leads to a sterile debate over whether workers' militant behaviour is "justified;" whether they "won" or "lost" a particular conflict.

A wildcat or "unofficial" strike, for example, is at first glance still a strike; a form, that is, of industrial conflict not very far removed from the official variety although it may well lack some of the organizational traits of the latter. But in the institutional perspective already discussed, it is a different breed of cat altogether; for a wildcat is an instance where a number of people have stepped outside the normative system all at the same time. To an institutionalist, this mass deviance must be incomprehensible.

A more reasonable procedure, then, involves accepting individuals' militancy as appropriate for them. If that is done, the question to be asked shifts from "why is this person or group militant?" to "why are these others not militant?" That is the stance adopted in this work.

Labour process theory explains the increase in open industrial conflict a bit differently from the institutional approach. It holds that capital seeks to maximize its own discretionary power and therefore to minimize labours'. In practice, this has been taken to mean[89] that most

work will be "deskilled" or "degraded," that there will be considerable pressure -- from capital, resisted by labour[90] -- to enhance hierarchical control through alterations in technique. This occurs because capital needs to maintain a "rising rate of surplus".[91] For instance, Cuneo[92] shows that real wages for Canadian industrial workers have more than tripled in the last half-century or so; but by his calculations the "rate of surplus value" extracted from them has increased more than a thousand-fold in the same period.

vii. Outline of the work

This work consists of eight chapters, including this Introduction.

Chapter 2 is a theoretical outline of the issue of worker militancy in its attitudinal dimension.

Chapters 3 and 4 relate to the design of the study. In Chapter 3, we examine the creation of a scalar measure of attitudinal militancy using factor analysis; Chapter 4 in turn deals with the difficulties presented to survey analysis by the need -- mandated by both labour process theory and action research -- to consider the combined impacts of a large number of variables on a rather small population. Hierarchical set analysis is proposed as one technique for dealing with the problem.

Chapter 5 likewise defers to labour process theory by discussing the task content with which postal workers are confronted. It advances the argument that mechanized postal work is indeed degraded compared both to the manual forms which preceded it and to contemporary manual survivals.

Chapters 6 and 7 constitute the data analysis. In Chapter 6, we look at the influence of gender on postal workers' experiences and attitudes, reaching many of the same conclusions already presented by Julie White in her book Mail and Female.

Chapter 7 revolves around the central "task-militancy" relationship, and is therefore the core of the work. Also considered are the impact of "orientations" -- stemming from ascriptive and achieved traits (other than sex and gender), as well as on-the-job events -- on postal workers' perceptions;

In these three chapters, I advance the proposition that militancy is a product of a complex of inter-related factors, of which objective job degradation is a significant but not hugely important element. Further, although this conclusion must be more tentative, I suggest that actionists are mistaken in their focus on "prior (i.e. off-the-job) orientations" as informing on-the-job attitudes. Rather, these data suggest that it is individuals' histories as workers which are most influential. Thus, Chapter 8 draws conclusions from these results.

Finally, there is are three Appendices. Appendix I concerns the ethnography which was done as an addendum to the survey research, since that ethnography is the basis for Chapter 5; and since information and quotations from that ethnography are included throughout this work. Appendix II, by contrast, relates to the technical aspects involved in deriving the scale of militancy which has been used as a dependent variable; for instance, the kinds of factor analysis employed. And Appendix III is a breakdown of sociographic variables in the study.

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CHAPTER TWO: MILITANCY IN THEORY

This chapter contains an outline of previous treatments concerned with indicators of attitudinal worker militancy. As such, there is necessarily consideration of theoretical treatments of worker militancy. Before we can move on, however, we need to outline exactly who is to be discussed.

i. The Survey

This report was developed from a hand-distributed mailback survey which was circulated to all full-status CUPW members (that is, full- and part-time employees) working as coders, sorters, or sweepers in Cancity's Main Postal Plant and Bulk Mail Facility during October and November of 1985 (follow-up took place in May of 1986). Because I was concerned with the effects of automation on militancy, letter carriers, casual employees, management and support staff were excluded from the survey.

At that time, Canada Post had 964 employees in Cancity and environs, of whom 926 were unionized[1]. Some 350 were employed in the bargaining unit covered by CUPW; however,

TABLE 2.1 Postal Workers in Cancity

Coder-sorter-sweeper (P.O.4)	Full-Time	241	
	Part-time	47	
	SUBTOTAL	288	
Assigned to Sales & Delivery		(60)[2]	
Absent (8.2%[3])		(24)	
On Leave (5%)		(14)	
	TOTAL		190

because some of these were casual employees -- who are not full-fledged union members -- the number of CUPW members in the bargaining unit is 330[4]; of these, 16% are employed part-time (about 21% of the 350 in the bargaining unit are part-time or casual employees, close to the limits imposed by collective agreement[5]). Of that 330, 60 were not employed in Mail Processing, but in Sales & Delivery as "wicket clerks:[6]" this group, together with the 44 full- and part-time mail handlers who work on the loading docks, is excluded from consideration[a]. Finally, those in the bargaining unit who were absent or on "leave" (maternity leave, sick leave, education leave, etc.) are also not included.

The target group, therefore, numbered 190: of these, 152 (80%) submitted usable responses[b]. Women made up 61% of respondents; average level of seniority was 9 years; and median education level was 12 years.

The object of the exercise was to learn a bit about militancy. This is a term which is often used in sociology without much being done to specify its meaning; as a result, most measures are imprecise and most indicators are of dubious utility.

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[a] Even though the central interest of this study was traditional versus mechanized mail sorting -- so that wicket clerks and handlers are not necessary to the survey results -- I was not averse to studying them. But the questionnaires were circulated by shop stewards and other union officials, so that coverage depended a) on the presence of a CUPW official in the work group; and b) on that official's commitment to the project.

For those two reasons, coverage of wicket clerks and handlers -- both of whom are off to one side, so to speak, in postal operations -- was spotty. The few returns from handlers (4) and wicket clerks (10) which did creep in were excluded from analysis.

[b] In cases, I received questionnaires with more than half the questions unanswered. So, those 3 questionnaires were destroyed.

ii. Traditional Measures of Militancy

Militancy can be conceived as internalized labour conflict: a set of attitudes and predispositions which foster what Batstone et al.[7] call a "mobilization of bias in favour of strikes," or in favour of other collective activity which is self-consciously at variance with the needs of the organization as defined by management. It is, therefore, a product of the interaction of elements of individuals' natures, as produced by a mix of early socialization; and of forces outside of them. As with other areas in sociology, the question of whether it is the internal or the external elements which are decisive has yet to be answered.[8]

Militancy is, then, a state of mind which usually (not always) manifests itself in strikes or other kinds of collective, confrontational behaviour. Our concern is with individual attitudes governing collective militant behaviour, not with the behaviour itself: we will, therefore, concentrate on the collectivity formed by workers rather than on those who hold formal power in union or in management; power-holders will be considered only insofar as they determine the messages which get through to rank-and-file workers and on which these workers base their decisions.

Collectivities have power to the extent that they can achieve "social closure," which involves the capacity to deny valued social resources to others. Workers are one form of collectivity, and militant behaviour is one device available in a struggle over domination at work. Workers may be militant in order to maintain exclusionary control over work, but it is not often the case that they have such control in the first place: decisions on who to exclude are "management rights." But some formal influence over hiring, firing, layoffs and the like have

been wrested from management -- "usurped" is the technical term -- by postal workers' representatives over time.[9]

But social closure is a process, not an end state. Workers' control over labour can be eroded. If it is, then the expressive rewards associated with work decline; in this sense, degraded work is alienated work.[10]

It is not just the rewards associated with work which dims in this circumstance. The political power of individual workers at the workplace will also decline, as management declares their work to be highly routinized and to call for little training, and workers lack the control over areas of uncertainty[11] which could be used to make another label stick. Workers are, therefore, easily substitutable one for another; in consequence, they are likely candidates for pay cuts or other rollbacks and/or for replacement by others (strikebreakers, for instance).

Degradation, then, affects militancy for two reasons: it heightens workers' discontent;[12] and, by reducing workers' individual power, it promotes recourse to collective power structures like unions. As James Rinehart[13] puts it

> "...workers never passively surrendered to the exploitative and alienative nature of industrial life.... Expressions of discontent included spontaneous walkouts, work stoppages in the plant, restriction of output, industrial sabotage, insubordination, and simple refusals to show up at work on holidays and the day after payday."

This, Rinehart states, is militancy, and he goes on to assert that militancy increases or decreases in pace with economic or other fluctuations. But the passage highlights the difficulties which arise when militancy is equated with behaviour rather than with a "mobilization of bias in favour of strikes"[14] or other collective action. All of the actions Rinehart lists -- and probably a

good many more -- are indeed manifestations of militancy, but not of militancy alone; moreover, there are serious problems of measurement associated with each.

Absenteeism, for example, is sometimes a coordinated activity used as a bargaining tool, as in the "blue flu" of police strikes. Often, it is an individualistic action undertaken to avoid unpleasant work. But sometimes people are absent from work because they really do get sick, even on "holidays and the day after payday."

In Canada Post at the time of this study, absenteeism was defined by management as a serious problem which affected profitability and efficiency.[15] Post Office figures indicated that absenteeism was about double the national norm in the major centres of Toronto and Montreal, declining gradually toward that norm as one moved into the nation's peripheral regions. Some of this no doubt reflects resistance[16] -- postal workers do occasionally engage in "sickouts," for instance. Some may also be simple inflation of figures.[17] But if, as Lowe and Northcott[18] have suggested, mechanized postal work causes stress, and stress -- for a variety of reasons -- causes illness, then it makes sense that workers in the busiest and most automated facilities (that is, in Toronto and Montreal) should be absent more often than others. To accept that high rates of absenteeism indicate militancy is to impose a meaning on the phenomenon which may not be justified. Since absenteeism might or might not indicate militancy, and since we cannot know one way or the other, absenteeism is a poor indicator of militancy.

Likewise, restriction of output, sabotage and insubordination are very much in the eye of the beholder. The first can be labelled "a fair day's work for the money," the second an "accident," the third the "exercise of free speech." As with absenteeism, it is generally management which declares these forms of "resistance" to be taking place, so that use of them as indicators of

militancy implies acceptance of management's agenda. I took care, therefore, to exclude these from the definition used herein.

If these traditional, indirect indicators are inadequate as measures, then it may be that more direct ones, like strike frequency, will do. But these variables are subject to failings of their own, as we shall see.

iii. Direct Indicators

Direct indicators of militancy can be justified on the basis of face validity. For instance, the number and kind of grievances filed is not subject to the same criticisms as are more indirect indicators like absenteeism. Indeed, grievances have been used by Gonnsen,[19] who did a content analysis of grievances filed at a Canadian Major Area Postal Plant (or MAPP[c]).

However, Gonnsen found that a relatively few persons tended to file the bulk of grievances. These were generally appeals against the imposition of disciplinary penalties. Grievers, he concluded, tended to be those who were "working the system;" using the procedure to avoid penalties for absenteeism or for "dogging it."

Grievances must be sponsored by a Union official, and so they are dependent on union policies and procedures. Stewart-Patterson[20] reports that, under the presidency of Joe Davidson, CUPW provided subtle clues to management about which grievances it was prepared to treat seriously, and which it saw as holding little merit. By contrast, CUPW instituted a policy in the

[c] MAPP's are larger and still more mechanized processing centres than the Cancity plant

mid-70's of urging "members to grieve all contract violations, including those often settled locally by informal negotiations on the shop floor."[21] The appearance was of a labour force which suddenly became more militant. Since this roughly coincided with the introduction of mechanization, that is a plausible interpretation; but it may be an artifact of a shift in strategy by the Union executive, rather than of any change in the workers.

Finally, strike frequency may seem to be an unambiguous measure of militancy, although since it does not include all the forms of behaviour which are militant, it is a conservative measure at best. But extensive research on a number of societies[22] shows that strike frequency is very much a consequence of large-scale socioeconomic trends. For instance, strike frequency in Canada was low during the Depression and following the recession of 1981; it climbed during the comparative prosperity which followed both events. Postal strikes followed the same pattern for the later period: does this mean that postal workers were militant, became non-militant, and are becoming militant once again?

An event is a strike only if it conforms to a precise legal definition, and only if it is reported as such -- again, usually by management. This is not problematic in the case of regular "official" strikes -- under the Canada Labour Code, generally restricted to those which occur at the expiration of a collective agreement and following a prolonged mediation process. Such phenomena are easy to observe, and there is ready agreement that they are indeed strikes. But illegal (or "wildcat") strikes are not so easily classified. The Canadian government reports (in aggregate) all strikes and lockouts of at least one-half day's duration, and involving at least ten person-days time "lost" in total "that come to the attention of Labour Canada." Further, Labour Canada publishes individual summaries of every strike or lockout (again, assuming it is reported

to them or in the press) affecting one hundred or more workers directly or indirectly.[23] The Department admits that there is, therefore, greater precision in the reporting of official rather than wildcat strikes: one consequence of this is that "... the traditional importance of money questions as the cause of strikes may be considerably exaggerated[24]."

As Batstone et al.[25] point out, strikes are the subject of "rulings" by management. If management is interested in classifying a work stoppage as something other than a strike, then it can probably make its definition hold; especially if the occurrence does not involve a walkout -- that is, if it is a slowdown, a sitdown, a sickout, or an overtime ban.

Indeed, the very existence of detailed records on strikes may reflect a concern with a "labour relations problem" which becomes a self-fulfilling prophecy: the definition of labour relations as a problem leads to the creation of techniques by which to measure the extent of the problem more precisely. Since similar techniques are not employed in enterprises (or, for that matter, by countries) which do not claim that problem, efforts at comparison could be fruitless.

Canada, for instance, is reputedly[26] more strike-prone than the US, even taking into account the lower level of unionization there. However, the US government collects statistics only on those strikes which involve more than a thousand workers. The tendency, then, is for American figures to understate the extent of strike activity, but by how much is unclear.

Comparisons between enterprises within a single country are also difficult, for each organization has a culture[27] which may define strikes differently. Within the single auto plant studied by Batstone et al,[28] even the internal definitions of a strike varied from time to time, depending on management's proximate goals.

Furthermore, in at least one local firm, a wildcat strike is taken as indicative of the inability of frontline management to anticipate and forestall it; it therefore calls forth investigation by Head Office and (possibly) formal sanctions against the managers involved. At this firm, managers are understandably reluctant to report a strike, preferring to attribute any production delay to supply bottlenecks or equipment failure. This is not only out of worry about their own fate, but because a report of a strike brings ponderous labour relations procedures into play which may actually retard the resumption of production.[29] Similarly, Batstone et al. report that the more management at the plant they studied viewed a stoppage or slowdown as over a "legitimate" grievance, the less likely was it to label the event a strike![30]

On the other hand, a "punishment-centred bureaucracy" -- that is, management which has labelled its workforce as deviant, lazy, or unreasonable[31] -- may be tempted to over-report strikes, using them as a cover for problems in production or for managerial incompetence.

In Canada Post, both motivations may have been operative at different times. Prior to Proclamation Day[d], labour relations were identified as the Post Office Department's most pressing problem. Since one sign of a postal strike for the public is an unusual delay in the mail, saying "there have been labour problems" might have presented an attractive scapegoat to blame for any delay or loss of mail, especially if it were actually caused by management's inefficiency.

But the new Canada Post Corporation was supposed to resolve its conflicts with the unions; more recently, workers' recalcitrance (especially absenteeism) has once more been

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[d] August 1, 1981, the day on which the Canada Post Corporation Act, which transformed the old Department into a Crown Corporation, took effect.

identified as the major impediment to postal efficiency. CPC figures certainly reflect these trends: time lost through strikes was highest before Proclamation Day, declined very sharply afterward, and has slowly risen since.[32] On the other hand, Labour Canada's figures indicate no strikes in Canada Post between 1982 and 1985. This could be because the strikes CPC reports do not fall within Labour Canada's definitions, being too small or too short; or it could be because no-one thought to inform the Department about them.

Whether CPC's figures are reliable is anyone's guess. As a matter of fact, whether any organization's strike records are reliable is moot[33]; it's possible that Canada Post never actually experienced unusually high levels of militant behaviour, but only more precise reporting of it.

All of the above-mentioned phenomena are indicative of militancy. However dubious their measurement, however affected by outside influences, it is incredible that postal workers could display high levels of reported absenteeism, low productivity, and frequent strikes and yet not be militant (but, just in case, that possibility will be tested). The main difficulty is that none of these indicate worker militancy alone. Though it may at first glance seem desirable to focus on militant behaviour as more amenable to observation and measurement, those qualities are illusory. Rather, they represent behavioural outcomes of a single underlying factor, one whose manifestation takes a number of forms, now hidden, now open. It is that factor -- militancy as an attitude held by individuals -- which will be investigated.

iv. Attitudinal Militancy

The dependent variable to be used, therefore, will be attitudinal militancy rather than militant behaviour. Attitudinal militancy is defined as a predisposition to accept collective[e], confrontational behaviour of any sort as an appropriate response to a broader range of workplace situations: the more confrontational the behaviour envisioned, the larger the collective base of which one claims membership, and/or the broader the variety of situations to which it is viewed as applying (for the three are necessarily covariant), then the more militant the person. This definition engenders more than a few problems of its own, and will be discussed more fully in the chapter on methods. It does have the virtue of allowing for variation down to the level of the individual: in this analysis, some workers can be more militant than others, even in the same bargaining unit. No such variation is possible using ecological indices of behaviour, which aggregate "militancy" across a group and dole out an equal portion of it to each member. Moreover, this definition allows us to search for relationships between militancy and people's experiences and perceptions instead of seeking to explain it using structural predictors like the business cycle. These, I will argue, do have some relevance to the question, but primarily as factors which people evaluate when deciding whether (and how) to translate their militant attitudes into action.

In every social setting, there are any number of reasonably coherent and more-or-less competing paradigms or meaning systems available to an individual. Insofar as these are "typifications," the individual's membership in a group results in his/her awareness of a distinc-

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[e] "Collective" because a predisposition to accept individual confrontational responses is, necessarily, something other than labour militancy: you can't have a "strike" involving one worker.

tive subset of such meaning systems. In other words, the systems can be identified with groups: Catholics have one set of meanings, for example, Protestants have another, partly overlapping one, and the same holds true for every other religion or denomination.[34]

An organizational culture is similar: "Organizations," say Batstone et al.,[35] "are continually reaffirmed (or changed) by the actions of participants." Here, individuals bring a set of meanings with them from outside the organization (their "prior orientations") and learn another set within the organization, from which they select those meanings which maintain in them a sense of consistency or meaningfulness. In organizations like the Post Office, both union and management are among those who propose definitions of the situation to workers; their dual identity as employees and unionists compels them to take a stand, to select one of these as suitable, and to stick with it. In fact, since each worker occupies a multiplicity of statuses and has a number of "identities" as a result, each constructs an appropriate definition of his/her own. To the extent that it differs widely from that propounded by union and management (i.e. by the wielders of power), an idiosyncratic definition will be "deviant:" isolating, subject to sanction, and difficult to maintain -- but especially difficult to communicate intersubjectively.

Organizational cultures, then, are battles for the hearts-and-minds of workers. Who wins the battle is contingent on who controls the knowledge-base from which workers' definitions are drawn as well as on the rhetoric used or available.[36]

In what follows, we will focus primarily on variations in militancy among individuals within (not between) bargaining groups. I will explore the hypothesis that these are due primarily to differences in the labour process, so that (all else being equal) workers in relatively degraded settings will be that much more militant than others.

Of course, in the social world, all else is never equal. Workers do not work in isolation but are part of a group in a setting and with a history all its own; members of these groups communicate with each other, "contaminating" our results in the process. Moreover, workers have lives and identities off the job as well, which intersect with and shape their experiences at work.

Therefore we will use dummy variable analysis to hold constant and to compare as many of the myriad influences on militancy as can be. Each of the independent variables so analysed has been selected as indicating an influence already identified explicitly or by implication in the literature; but each will be construed in actionist terms, as indicating an element of the respondent's "existence" in the phenomenological sense; hence, each is construed as indicative of an individual's "prior orientation" or on-the-job meaning set in some way.

The analysis thus created involves some sixty independent variables and is rather too cumbersome to use; the variables will therefore be gathered into "blocks" or "sets" for presentation. However, the central issue is the relationship between job degradation and militancy; everything else is, in some sense, a "nuisance variable" whose influence is acknowledged but in which interest is less pronounced.

In the next two chapters, then, we consider a variety of technical aspects relating to the study.

Chapter 3 continues the discussion of attitudinal militancy, this time from a more empiricist stance: the score used to measure respondents' attitudinal militancy is also introduced; but the factor analytic method used to construct that score are discussed in Appendix I.

Chapter 4 deals with the predictor variables used: the employment of dummied variables in "hierarchical set analysis" (HSA), and the sources of error associated with those techniques. The construction of imputed variables using Henry's "dummy variable path coefficients" (DVPC) is proposed as a solution to these problems.

NOTES TO CHAPTER TWO

1 Personal communication from a senior CPC official in Cancity

2 private communication, senior CPC official

3 private communication senior CPC official

4 Personal communication (seniority list posted by CPC in Station A, dated February, 1986)

5 Canada Post Corporation 1986 Agreement between Canada Post Corporation and the Canadian Union of Postal Workers (no data) p. V-1

6 Both the figure of 60 wicket clerks, and the 5% long term leave rate (i e 16 people) are derived from a private communication from a senior official of CPC Cancity

7 Batstone et al , op cit , p 32

8 Batstone, et al op cit , p 1 see also Gary Marx op cit

9. cf Parkin, F. 1979 Marxism and Class Theory A Bourgeois Critique (London Tavistock) 45-98, Murphy, R 1988 Social Closure ((Oxford: Clarendon) Giddens, A 1981 The Class Structure of the Advanced Societies (London Hutchinson) 2nd edition

10 e g Blauner, R 1964 Alienation and Freedom (University of Chicago Press)

11 Crozier, M 1964 The Bureaucratic Phenomenon (London Tavistock), Batstone, et al , op cit

12 Batstone ibid pp 27ff

13 Rinehart, op cit , p 42

14 Batstone, et al , op cit.

15 Canada Post Corporation 1985 Annual Report (Ottawa Supply and Services), private communications with CPC officials in Cancity

16 personal communication of "counselled" worker who declared illness

17 personal communication from senior local CPC official who said absenteeism not a serious problem, alleged CPC HQ had included leaves and LTD in figures, see also "Absenteeism big problem of Post Office" Globe and Mail June 12, 1985 p b1, Canada Post Corporation, op cit , 1985, 1986, 1987

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19 Gonnsen, A. 1981 Labour Conflict in the Canadian Post Office An Investigation of Factors Contributing to its Persistence and Intensity (PhD dissertation State University of New York at Buffalo)

20 Stewart-Patterson, op cit

21 Curtis and Laidlaw, op cit p. 159

22 see above, see also Jackson, op cit for a review

23 Labour Canada 1985 Strikes and Lockouts in Canada (Ottawa Dept of Supply and Services). for US data see Jackson, M Strikes

24. Batstone, et al , op cit p 20

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27 Aldrich, H 1979 Organizations and Environments (Englewood Cliffs NJ Prentice-Hall)

28 Batstone, et al , op cit.

29 see also Batstone et al op cit pp 13ff

30 ibid p 19

31 Gouldner, A 1955 Wildcat Strike (London Routledge and Kegan Paul)

32 Canada Post Corporation 1986 Annual Report (Ottawa Supply and Services)

33 see Batstone, et al., op cit. chapter 1 for a review

34 see Gurwitsch, A 1965 "The phenomenology of perception Perceptual implications" in J Edie (ed) Invitation to Phenomenology: Studies in the Philosophy of Experience (Chicago Quadrangle) pp. 17-29

35 Batstone et al., op cit p 6

36 ibid

CHAPTER THREE: DEFINING THE MILITANCY VARIABLE

i. Previous Research

As already mentioned in this work, the labour process approach would focus on one element of the experience of work as, in the last analysis at least, the determinant of behaviour: ceteris paribus, those exposed to degraded work will be more militant. Of course, other influences besides technology exist; but these are conceived as merely influences on reactions to the central variable, rather than independent effects[1].

Labour process theory maintains that technological change serves to enhance capital's control over the labour process, that overall degradation of the labour process follows technological change, that this degradation is resisted by those who are subject to it. The approach has, of course, changed and developed over time -- in part as a response to criticisms that its focus was obsessively "3M" (male, manual, manufacturing)[2]. This, however, remains essential to LPT; a "labour process theory" which drops discussion of capital, control, degradation, and resistance has changed beyond all recognition, is no longer LPT at all.

The action approach, by contrast, would lead to the conclusion that militancy was a product of the confluence of the whole range of social experience (not a product of contacts with particular technologies) both at work and elsewhere. Actionists make much of the "orientations to work" of subjects -- orientations which are almost always assumed to be logically and causally prior to the work itself, and which are understood to be indicated by sociographic variables. Shaw et al[3]., for instance, found that job attitudes were formed in adolescence, long in advance of any personal contact with the paid employment, and were quite stable over time. By contrast,

Glisson and Durrick's[4] study of the human services industry -- where reported job satisfaction is quite low -- found that no worker trait was a significant predictor of satisfaction.

The action perspective allows one to acknowledge that work may indeed be degraded or dissatisfying, but that is presumed to have little consequence for behaviour: rather, phenomena like militant action are thought to arise from a mismatch between workers' orientations and the rewards the work can provide. Those who want their work to provide a sense of meaning to their lives, for instance, will tend either to avoid highly alienative occupations; or -- should that be impossible -- to alter the terms and conditions of their work so that it can make such provision. This is the premise underlying Freeman and Medoff's[5] discussion of collective "voice:" all workers who are dissatisfied have an "exit" voice available to them (that is, they can quit); but dissatisfied workers who are also committed to their jobs (because of labour market factors or other barriers against seeking alternate employment) must try to obtain some influence over the conditions of labour. That is done through collective organization.

To an actionist, then, it is important to know who is confronted by changes in the labour process, and how those changes are understood by those subject to them.[6] The framework need not be viewed as absolutely inimical to a labour process view, but rather as a supplement and corrective to it, seeking to specify the conditions under which degradation of work will or will not result in a willingness to resist.

Clearly, the composition of the dependent variable, the variable which indicates militancy, is important. It is to that issue we now turn.

Although the behavioural outcomes of militancy -- propensity to strike, for instance -- have been of considerable interest to social scientists, attitudinal militancy remains a vague

concept. Instead, researchers have concentrated on those aspects of the labour scene which are amenable to a model of economic rationality: contract disputes and their relationship to the business cycle[7] or to economic uncertainty[8] (observable relationships which nevertheless remain stubbornly resistant to explanation)[9], for example; but not the 23% of all disputes (at least) which are wildcat strikes[10]. Yet wildcats are presumed to indicate more about rank-and-file attitudes than do contract disputes[11], since they are by law undertaken without union sanction or encouragement; as Batstone et al.[12] point out, reliance on formal negotiations as an object of study tends to overemphasize the economistic elements of labour negotiations.

In much of the literature, attitudinal militancy is treated as an exogenous variable of little intrinsic interest. Thus, Ng's[13] study of wildcat strike propensity at the two-digit Standard Industrial Classification level operationalizes militancy for an industry as the percentage of the labour force which is male and blue collar, and uses it as a residual category to explain wildcats. Since Ng's other categories are "to protest unsafe working conditions," "a reflection of poor union management relations," "to express rank and file dissatisfaction with union bargaining efforts," "to place tactical pressure on management during negotiations," and "because of increased economic activity," the "militancy" category is an "unexplained" one -- nevertheless, it had a significant and positive effect on wildcat frequency.

Similarly, Martin[14] uses the willingness to engage in a long strike for a high wage gain (i.e. a risk measure), as his indicator of militancy. Despite his apparent interest in "predictors of individual propensity to strike," however, he offers no explanation for why some people in his case study were militant and others were not.

ii. A Working Definition

For present purposes, militancy is construed as a precursor of labour conflict, necessary though not sufficient to it. On the other hand, one's experience in a strike surely has some impact on one's militancy as well[15] Since, however, measures of behavioural militancy used in this study referred only to those actions which had occurred in the six months prior to the study, only the latter relationship is tested; following Shirom,[16] the relationship is expected to be a weak one. A militant attitude intervenes between stimulus -- the precipitating event of collective behaviour literature (e.g. Smelser) -- and the actual behaviour selected as a response. Observed outcomes could be affected by a variety of other factors, of course; this is why studies of strike propensity which focus solely on structural conducers like the business cycle or uncertainty in the environment are relatively weak predictors.

Militancy is the willingness on the part of workers to use collective, confrontational and/or extra-institutional behaviour in order to achieve an objective. The current work is one of the few empirical studies of militancy which conceives the phenomenon in precisely these terms, without including a behavioural referent[17]. In what follows, I will examine the operationalization of this concept in some detail.

Militancy is a multidimensional attitude which decomposes into three logically-related sensibilities: worker consciousness, grievance sensitivity, and a confrontational world view.

Worker consciousness[18], the first of these, has been discussed above. It rests on a belief in the divergence of interests between oneself and superordinates at the work place on the one hand, and in the convergence of interests between oneself and fellow workers on the other.

The second concept is "grievance sensitivity[19]." It requires a heightened perception of conditions on the job as in some way inappropriate or unjust: Batstone et al.[20] describe "grievers" -- those possessed of grievance sensitivity -- as rank-and-file opinion leaders or mobilizers.

However, unionism, opposition to capital and grievance sensitivities in themselves are not enough to produce a militant attitude; after all, there are British studies which identify "deferential" class consciousness. Likewise, mere awareness of grievance may lead to hopelessness rather than to a predisposition for action; the action preferred may not be militant (it could, for instance, simply lead to one quitting one's job, the "exit voice" of American industrial relations literature).

The last element of militancy is a "confrontational world view." It entails a definition of grievances as amenable to improvement through the actions of the individual in concert with others similarly placed, and as appropriate subjects for direct action on the job.

To put it in slightly simpler terms: a militant individual must have a sense of injury, a feeling that s/he is in the right over a broader than usual variety of issues; s/he must therefore be prepared[a] either to initiate or at least to "go along with" direct action by peers (and s/he will refuse to "draw the line" at actions which less militant individuals would consider "too much"); and s/he must so define his/her situation that "peers" include (at the minimum) fellow unionists but exclude everyone else.[21]

Each of these three can be conceived as a constructed or "imputed" variable;[22] that is, as a concept underlying any number of variables in an actual research instrument and operation-

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[a] Whether this preparedness eventually produces the behaviour at issue obviously depends on some other factors, such as opportunity.

alized by the researcher's applications of mathematical transformation to the data; intelligence quotients and certain types of occupational prestige scales are examples. But "second-order" (or, for that matter, N-order) constructs are also possible; for instance, one can use occupational prestige rankings as elements in a scale of socioeconomic status. Militancy is such a second-order imputation, being operationalized at yet a higher level of abstraction from grievance sensitivity, worker consciousness, or a confrontational world view.

There is another consideration which should be mentioned as well. None of these imputed variables has been much developed in previous studies, so that the individual researcher cannot refer to a tested and accepted measuring device. Further, as constructs, these variables are not likely to have received much consideration from respondents either. Compared to relatively straightforward questions about age and sex, where the answers are unambiguous and the measures widely understood, any questions tapping a construct variable can be expected to include within it a number of sources of extraneous variation; in other words, any indicator can be expected to be a poor one, for these are subtle and complex phenomena. It is clear, therefore, that militancy cannot be measured directly.

Moreover, subsequent fieldwork confirmed that the word militancy itself carries a pejorative connotation. The opposite of "militant" is "moderate;" and so all the rank-and-file subjects who heard me use the word took exception to it, preferring synonyms like "activist." And finally, the literature had led me to believe that a militant attitude was formed of a congeries of related elements[23].

As it turned out (see Appendix II), factoring extracted five dimensions, the first of which has been used as an indicator of attitudinal militancy. Cronbach's Coefficient Alpha[24] for vari-

ables which loaded significantly on this first dimension was .72. Without anticipating too much the findings reported elsewhere, it is still worth noting the evidence supporting validity of the militancy measure.

As noted earlier, virtually all of the extant literature is agreed on one point: absenteeism, job action like strikes, and union activism (as well as management discipline imposed in retaliation for any of these) are all outcomes of militancy (and of at least one other factor). To the extent that they are, a valid measure of militant attitudes ought to enable one to guess with greater success whether an individual's work history will include these behaviours.

TABLE 3.1: FACTOR MATRIX WITH VARIMAX ROTATION

	Factor					
	1	2	3	4	5	Final Communal-ities
Variable						
A	-.80	.19	.03	-.07	.48	.91
B	.53	-.27	.08	.21	.06	.42
C	-.52	.00	-.14	.07	-.06	.30
D	.49	-.12	.14	.15	-.06	.30
E	-.00	.89	.06	-.04	-.18	.81
F	.34	-.59	.12	-.00	-.21	.52
G	-.15	.48	.01	-.07	.09	.27
H	.08	.17	.81	-.05	-.12	.72
I	.19	.36	.60	.10	.03	.54
J	.16	-.02	.31	.12	-.24	.19
K	.01	-.03	.00	.69	.14	.50
L	-.30	.03	-.11	-.52	.10	.39
M	.15	.15	-.00	-.00	.43	.23
O	-.19	-.02	-.12	-.01	.28	.13
P	.03	.06	.03	-.11	-.18	.05

Figures are rounded

Key:
A: Assessed power of labour (own union + unions generally);
B: Interest in CUPW; C: Expressed willingness to strike;
D: Confrontational world view; E: Job satisfaction, self-rated;
F: Instrumental orientation; G: Would recommend job to others

H: Expressive orientation; I: Worried about technology (job security);
J: Assessed power of capital; K: Major problem facing CPC;
L: Major problem facing CUPW; M: Would take same job again;
N: Class identification; O: Task disliked most

Responses to questions aimed at discovering these behaviours were constructed into an imputed variable called "Timelost" (using techniques to be discussed in Chapter 4): as we shall see, there was quite a lot of time lost reported, but our interest at present lies in a different direction.

Among other data manipulations was one in which Timelost was correlated with militancy. The results are shown in Table 3.2.

Assuming that

a) attitudinal militancy is indeed stable over time, as was already argued, and

b) the Timelost variable is in fact an indicator of behavioural militancy,

then the results shown in Table 3.2 support the use of the militancy score, on the basis of construct validity. They show that, as expected, the correlation involved is quite small -- but it is still highly significant. Thus, the militancy score tells us quite a lot about individuals' responses to a wide range of attitudes.

The dependent variable, therefore, seems quite straightforward, gathering together views about unions, about strikes and other forms of protest, and about the instrumental rewards which these are to acquire.

TABLE 3.2: CORRELATION TEST, "TIME LOST[a]" BY ATTITUDINAL MILITANCY

Variable	Coefficient	Significance
Militancy	.0064	.002

[a] "Timelost" is computed from variables asking respondents how much working time, in shifts, in the previous six months had been spent on strike (or in other job action), on union business, in official discipline (i.e. suspension), or on sick "leave."

NOTES TO CHAPTER THREE

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2. Thompson P 1989 The Nature of Work (Houndsmills, Basingstoke, UK MacMillan) p 5

3 Shaw, B et al 1986 "The dispositional approach to job attitudes A lifetime longitudinal test" Administrative Sciences Quarterly 31 pp 56-77

4. Glisson, C and M. Durrick 1988 "Predictors of job satisfaction and organizational commitment in human services organizations" Administrative Sciences Quarterly 33 pp 61-81

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22 Heise D 1972 "employing nominal variables, induced variable and block variables in path analysis" Sociological Methods and Research 1 2 pp 147-1173

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24 see Traub, R 1994 Reliability for the Social Sciences, Theory and Application (Thousand Oaks, CA Sage) pp 82ff.

CHAPTER FOUR: HIERARCHICAL SET ANALYSIS OF THE PREDICTOR VARIABLES

In Chapter Three, we looked at the development of a dependent variable, based on considerations introduced in Chapter Two. Here, we turn to the predictor or independent variables.

This work is a bit unusual for sociology, in that there are a rather large number of independent variables (57) and a rather small number of cases (152). This introduces a substantial risk of error, as I will show; but weeding out some of the variables was undesirable since the goal of the research is to examine causal links between task and militancy, as mediated or otherwise affected by a host of possible influences. In other words, fewer raw variables reduces the risk of statistical error, but compromises the objective of the research.

Further risk arises because of the particular technique used. Because many of the variables are categorical rather than continuous, it was necessary to use dummied variable analysis (DVA). Although dummying variables is a well-established technique[1], it is not usual to use quite as many dummied categories as was done here, and it produced some problems. DVA raises the risk of error exponentially; reducing that risk requires reducing the effective number of variables in the equations used.

To do that, a series of ten "sets" was constructed, where the original dummied variables were gathered into related groups; the major analyses conducted in subsequent chapters is, therefore, "hierarchical set analysis" (HSA).

Set analysis can be unwieldy, so summary measures using Henry's "dummied variable path coefficients" (DVPC) were employed. These look a bit like the regression coefficients used

in classic path analyses; their employment means that the sets have been treated as "imputed" variables.

This chapter, then, involves an explanation of why DVA is needed; of problems that arise from DVA; and of how set analysis using Henry's DVPC solves those problems. The results are robust enough to justify the steps taken.

i. Dummied Variables

The strategy for building the model of militancy used herein was an elaboration of Shirom's[2] "working model" of union militancy; however, Shirom's interest was in the characteristics of the employing organization and of the local union, and he confined his attention to union officials. Our interest is, by contrast, in the rank-and-file, with a consequent shift in emphasis towards the personal attributes of the respondents (but while retaining interest in some "structural characteristics" of the job as well). Fifty-seven independent variables were included for analysis. All of these were dummy variables, and they were organized into ten "sets," following Cohen and Cohen,[3] on the bases of causal primacy and research relevance.

This was done because a situation in which a large number of independent variables (IV's) are used to describe a small number of cases entails some special considerations:

For one thing, when there are so many variables, it is unwise to follow standard practise and assume the absence of specification effects. It might have turned out, for instance,

TABLE 4.1: RAW VARIABLES RELATED TO SET VARIABLES

Raw Variable Name[b]	Imputed Variable
Current or former CUPW official	**I: Unionism**
Federal political party preference	**II: Solidarity**
Interest in politics	
Socializes with other postal workers	
Believes training programmes inadequate	**III: Job attitudes**
Believes Union does well negotiating over technological change	
Wants to change employment status	
Believes management and workers on same "team"	
Believes job rotation an improvement	
Believes education is appropriate for job	
Works with Group Desk Suite	**IV: Task**
Works with Culler-Facer-Canceller	
Works with Optical Character Reader	
Works with Letter Sorting Machine	
Duties	
Job is machine-paced	**V: Autonomy**
Job is not closely supervised	
Works to an output quota	
Shift	**VI: Cohort variables**
Amount of overtime regularly worked	
Worksite size	
Full-time or Part-time	
Any lost-time injury, past 6 mos.	**VII: Time lost**
Time off for "other" reasons past 6 months	
Time off for union business past 6 months	
Time off due to disciplinary action past 6 months	
Time off due to job action last 6 months	

[b] These are the original, undummied variables. See the "Key" to Table 7.1.

Seniority level	**VIII: Job history**
Post office job has changed	
Has had job eliminated due to technological change	
New job an improvement over old	
Specific job training in weeks	
Education level	**IX: Achieved status**
1st job, Pineo-Porter-McRoberts classification	
Marital status	
Spouse's job, Pineo-Porter-McRoberts classification	
Spouse's union membership	
Children	
Sex	**X: Ascribed status**
Ethnicity	
Birthplace	
1st language	
Religion	
Religiosity	

that militancy increases directly with education among women -- but inversely among men. If specification effects did occur, the difficulty encountered in locating them among so many coefficients might well have proved overwhelming. However, that problem can be avoided if variables are treated as categorical rather than continuous; that is, if dummy variable analysis (DVA) is used.

And, in any event, the current study includes a number of predictor variables which do not bear a natural metric, like respondent's religion and the kind of machinery a respondent works with during his/her shift; while the others -- like amount of overtime worked and education level attained -- could easily be treated as categorical. For those reasons, dummied variable analysis was used throughout this study.

But Blalock[4] shows that dichotomies in particular tend to introduce serious distortions through random error. Dummied variable analysis enormously increases the number of equations required for data analysis and, by extension, the number of null hypotheses to be tested as well. That in turn leads to an unacceptable reduction in the statistical power of each test (Type II error) yet at the same time enhances the risk of investigation-wise (Type I) error beyond tolerable limits.[5]

As dummied variables, it is not possible for these all to vary independently of one another without introducing the heterogenous categories Blalock has warned against. In fact, statistical independence is not desirable: "...regression analysis...only becomes] useful when the independent variables are moderately correlated[6]." And hierarchical set analysis requires that variables within most sets should be conceptually and temporally linked, so that the likelihood of finding high correlations within sets is also increased. But if "...the correlations among independent variables are too high, the problem of multicollinearity arises, and difficulties occur in drawing inferences on the basis of regression estimates[7]." This is because multicollinearity <u>in a sample</u> has the effect of increasing the variability of sample estimates (i.e. of increasing standard error scores).

There is no hard-and-fast rule about how closely linked independent variables must be before correlations become "too high." The problem for us is to determine whether the coefficients produced by dummied variable analysis are meaningful in and of themselves, or whether collinearity renders them suspect.

At the bivariate level, there are correlations between variables (in the set which will be called "achieved traits") strong enough to awaken suspicion. The highest of these are excerpted in Table 4.1 below.

The connections between these variables are readily apparent: one must have a spouse before that spouse can be employed full-time. Whether one's spouse is a union member is partly a function of her/his labour market location: employment status and occupation (e.g. spouse employed in unskilled or semi-skilled manual work).

Likewise, the high partials in the set dealing with "task" are readily understood. Working with the letter sorting machine, the optical character reader, and the culler-facer-canceller all entail similar "feeding" and "sweeping" operations; all are done only at the MPP; and all are considered among the least skilled activities in the coder-sorter-sweeper job classification. Working on one, then, increases the likelihood of working on any.

High interitem scores do not, in and of themselves, constitute multicollinearity; and there are reasons for supposing that the problem does not arise for this study. For one thing, survey (as opposed to aggregate-level) data always introduces some random error, which tends to attenuate correlations; Asher[8] shows that the effects of multicollinearity are far less disturbing when correlations fall below .8; none of the correlations in this study are quite that high.

Most important, however, is the fact that multicollinearity produces suspect sample estimates; high standard errors are not at issue when the data are parameters rather than statistics, as they are taken to be here. Of course, any cross-sectional study is a sample of an infinite universe of time periods[9] -- but to suggest that it is only appropriate to use the term "parameters" when dealing with a population which never changes is to render the term meaningless.

Lewis-Beck[10] suggests a number of clues for identifying multicollinearity: a high R^2 despite insignificant coefficients, or coefficients with unanticipated changes in strength of direction of association as variables are added to the equation. Both of these are evident in the dummied variable analysis reproduced in Chapter 8, but the adjusted R^2's are not all that high, and the changes in sign which occur are among coefficients so weak that random fluctuation is a

TABLE 4.2: SELECTED CORRELATIONS AMONG ACHIEVED TRAITS

Variable	Coefficient	by	MARITAL STATUS
Spouse employed full-time	-.71*	Spouse is skilled	-.24*
Spouse a union member		Spouse supervisor/ technical worker	-.24**
Respondent's 1st job was unskilled/ semiskilled manual[c]	.18**	Spouse unskilled/ semiskilled manual	-.36*
One or two children	-.27*		

Variable	Coefficient	by	SPOUSE EMPLOYED FULL-TIME
Spouse a union member	.71*	Spouse unskilled/ semiskilled manual	.53*
Spouse skilled	.23**	Spouse supervisory/ technical worker	.37*
One or two	.19***		

Variable	Coefficient	by	SPOUSE A UNION MEMBER
Spouse unskilled/ semiskilled manual	.68*	Spouse skilled	.24**

Note * p< 001 ** p<.01 *** p<.05

[c] occupational classifications follow the Pineo-Porter-McRoberts scheme.

TABLE 4.3: LEWIS-BECK'S TEST FOR MULTICOLLINEARITY, SELECTED VARIABLES

Variable Name	Imputed Variable	Adjusted R^2
Uses OCR		.76
Uses LSM		.71
Uses GDS		.74
Uses CFC		.56
Duties		.09
	Task	**.03**
Education not too high		.34
	Job attitudes	**.06**
Former union official		.34
Current union official		.17
	Unionism	**.04**
Loosely supervised		.26
Machine paced		.14
Works to quota		.30
	Autonomy	**.11**
lt5 hrs over-time weekly		.26
10+ hrs over-time weekly		.37
Night shift		.37
Day shift		.42
	Cohort variables	**.09**
Job action in last 6 months		.37
	Time lost	**.05**
Postsecondary education		.37
No high school diploma		.32
1-2 children		.34
3+ children		.33
	Achieved traits	**.08**
Ethnicity		.30
Practising R. Catholic		.28
	Ascribed traits	**.07**

possibility. That procedure was followed for some "suspect" variables (as identified by bivariate correlations in excess of .65 and/or by the "clues" supplied by Lewis-Beck). The results are presented in Table 4.2.

Clearly, multicollinearity is a problem in the dummied variable analysis, even at the core of the analysis in the "task" set. But we have already reviewed reasons for treating the coefficients in the more heterogenous and theoretically less central blocks (like the "achieved" block) with care; multicollinearity simply constitutes one more basis for caution in interpreting the DVA. Table 4.2 clearly shows that better estimates can be obtained by "combin[ing] the collinear variables together into an index or scale."[11]

Solving these problems brings us to the creation of imputed variables using Henry's dummied variable path coefficient (DVPC)[12].

ii. Making Sets with DVPC

The best way to avoid pitfalls like those discussed above is to reduce the number of tests undertaken. That can be done by reducing the number of variables to be examined, perhaps by resisting the temptation to include variables "just in case" they turn out to be significant and instead confining one's attention only to the "best" indicator available. Alternatively, one could drop those variables whose theoretical impact is expected to be slight from the analysis. A mechanical technique for accomplishing these strategies is recommended by Blalock,[13] who argues that any variable which is not significant in zero-order correlation is not likely to yield much to more elaborate analysis. That approach was used in this study,[14] although a rather generous criterion for significance ($p<.10$) was used.

However, any stratagem will come up against the researcher's reluctance to leave data unstudied once it has been obtained. Anyway, eliminating theoretically unimportant variables is of little use in exploration, where the theoretical importance is what is to be discovered. It is particularly useless when research is conducted from within the action frame of reference, where it is the complex of experiences itself which is influential.

Therefore, Cohen and Cohen recommend the construction of hierarchical sets[15] for both "functional" and "structural" reasons.

The structural grounds for set construction are straight-forward: as soon as the research is committed to dummied variable analysis, some form of sets become a necessity. As Cohen and Cohen[16] point out:

> When observations are classified by a research factor G as g mutually exclusive and exhaustive qualitative categories, G is defined as a nominal scale (Stevens, 1951) and can be understood as having g-1 aspects and therefore its complete representation requires a set made up of k_g=g-1 IV's. [authors' emphasis]

Hierarchical set analysis (HSA) is a variant of block-recursive analysis[17] in that relationships among variables in a set are neither stipulated nor tested. In hierarchical set analysis, data are ordered into sets or blocks according to their theoretical and/or causal primacy (in what follows, temporal order was taken as the overriding criterion of primacy, with other considerations entering below it): the statistics produced for those sets which are entered first are the most reliable, with both types of error risk increasing as one moves "away" from the dependent. The idea is to ensure that endogenous independent variables are gathered into small, tightly

conceptualized sets, while exogenous independent variables may be larger and more heterogenous.[d]

The relative unreliability accompanying those equations which are lower in the hierarchy can be excused if the sets contained what Blalock[18] calls "nuisance variables:" those which are not of much interest in and of themselves but which must be included for the sake of thoroughness. It is true that both the direct and indirect effects of these lower-order variables are exceedingly small, so that if a spurious correlation has been adduced, it cannot be other than trivial. But while we need not be concerned overmuch with the effect of particular achieved or ascriptive factors on militancy, their crescive effect is an important indicator of "prior orientation."

It is possible, however, to transform the data contained in each set into an "imputed measure[19]" or scale. This could be done using factor analysis were it not for the extreme departures from normal distribution introduced by dummying variables, and for the existence of high interitem correlations in some sets (which, in factor analytic terminology, produces an ill-conditioned matrix). Instead, a technique summing the standardized correlation coefficients of the dummied variables in each set was used.

For instance, one of the exogenous sets used herein includes a variable combining religion and religiosity (four dummy and one reference category), sex, birthplace, ethnicity and first language (each of which was dichotomized). By including them in a single set one creates an "induced variable." The "variable" thus created has been called "ascriptive status," because

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[d] Cohen and Cohen also suggest that the same procedure be used within sets, by forcing the order of entry of variables. Unfortunately, SPSS did not permit this refinement.

the whole set is presumed to be an indicator of that underlying trait. It is, in other words, ascription which is being examined (indirectly), rather than religion/ religiosity or ethnicity or birthplace or language. Theoretically, this makes some sense, for it is not the effect of specific traits or specific attitudes which are at issue, but the effect of rather more abstract concepts like "job degradation," abstractions whose relation to any concrete indicator is likely to be questionable.

From a methodological stance, the use of a scalar measure is also desirable, notwithstanding the loss of intuitive meaning which can ensue. A scale retains the parsimony of hierarchical set analysis while enhancing interpretability, for there is now only one summary score per set. And imputed variables also reduce the risks of error discussed above.

Heise[20] designed the "sheaf coefficient" for circumstances like these, where a number of measurements are thought to be indicators of a single underlying phenomenon: he describes it as "a single measure of multiple effects." The analogy he draws is to socioeconomic status (SES) scales: the median income and education levels of a respondent's occupation (plus a variety of other attributes, depending on the designer) are combined with occupational prestige to calculate his or her "SES score" in the belief that this score is a summary measure of a respondent's social power[21].[e]

Sheaf coefficients can be computed at any level of abstraction; for example, an SES score (itself an imputed measure) can be combined with a measure of ethnic prestige to produce

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[e] Or possibly the desirability of her/his occupation: one difficulty with such scales is the potential for dispute about validity, about what is actually being measured.

a "second-order imputed variable;" of course, it is up to the researcher to see that these coefficients have some meaning. Heise does stipulate a condition where the coefficient is not meaningful: the sheaf score is valid only if "the unmeasured construct [i.e. the underlying phenomenon] is completely specified by its indicators.[22]" Whether that condition can ever be met in sociology (except in the perfectly trivial sense that a reference category can always be a residual category too), it was not met in this research. Consequently, Heise's technique was eschewed in favour of Henry's[23] "dummy variable path coefficient" or DVPC, a much less demanding measure.

Creating a DVPC involves weighing each dummied category by its regression coefficient and using the weighted numbers as scores which can be "plugged into" subsequent runs. Henry's discussion of the technique does not envision its employment with sets or induced variables, but the extension is a simple one.

As the name implies, the dummied variable path coefficient is designed as a summary for natural source variables like religion which have been dummied; the measure involves weighting each category be its regression coefficient and using the result as a score for presentation; alternatively, that score can be inserted in subsequent runs.

In this analysis, use of the dummied variable path coefficient was extended to all the variables in each set. For example, each variable in the "task" set was computed by summing the coefficients for these scores. The whole set is thereby transformed into an indicator of the underlying characteristic "job degradation," conceived as the degree of exposure to mechanized work and operationalized as any departure from a "typical" (i.e. modal) category. Similar sorts of

assumptions were made about the meanings of each of the other sets employed; these will be discussed at greater length subsequently.

The recursive model presented in the data analysis chapters, therefore, is used as a simplified (for heuristic reasons) special case of the non-recursive one. It represents only one of a number of possible models. It was selected because, of all those attempted, it is the one which produces the best explanation, as indicated by the adjusted R^2 of .58.

We may proceed, then, to the composition of the sets themselves, as outlined in the data analysis chapters.

NOTES TO CHAPTER FOUR

1 see Suits, D 1957 "The use of dummy variables in regression equations" Journal of the American Statistical Association 52. pp 548-551

2 Shirom, A 1977 "Union militancy: Structural and personal determinants" Industrial Relations 16:2 pp.152-162

3. Cohen, J and P. Cohen 1983 Applied Multiple Regression/Correlation Analysis for the Behavioural Sciences (Hillsdale, NJ. Lawrence Erlbaum Associates) second edition

4 Blalock, H 1964 Causal Inferences in Nonexperimental Research (Chapel Hill University of North Carolina Press)

5 Cohen & Cohen, op cit

6 Asher H 1982 Causal Modelling (Beverly Hills, CA Sage) p 50

7 ibid

8 ibid , p 52

9 ibid 51

10 Lewis-Beck, M Applied Regression: An Introduction (Beverly Hills, CA Sage)

11 ibid 52

12 Henry, Frank 1983 "Dummy variable path coefficients" Political Methodology 33 pp 239-248

13 Blalock, op cit

14 data available on request

15 Cohen &Cohen, op cit, ch 4

16 ibid p 134

17. Blalock, cited in Asher, op cit p 56

18. Blalock, H

19 Heise, D 1972 "Employing nominal variables, induced variables, and block variables in path analysis" Sociological Methods and Research 1 2 pp 147-173

20. ibid

21 Featherman, D and R Hauser 1977 Opportunity and Change (New York Academic Press)

22 Heise, op cit p 161

23 Henry, op cit

CHAPTER FIVE: THE PROCESS

This chapter involves an examination of postal work in Cancity: how mail is prepared, processed/sorted, and dispatched. Information contained herein was obtained from Canada Post documents, from my own observations while an employee of Canada Post, and from participant observation conducted in 1986.

The chapter is laid out as follows: First, I discuss how managerial ideology has shifted from a conception of mail processing as a "batch" technology to one of mail processing as "flow" technology. This is consequential in that it affects the kind of work done, and workers' assessment of it, as I shall show; hence, this framework underlies the remainder of the chapter.

Then I outline the process itself, from the point where mail enters the Cancity plant to the point where it leaves. In each case, there is a profile drawn of the techniques and/or machines which are relevant at that stage of the operation; each profile is followed by an assessment of workers' reactions to the process at that stage.

The chapter concludes with a reassessment of the issue of skill in the light of the data provided on the Cancity labour process.

i. Batch or Flow Technology?

On the outside, Cancity's Public Building, which houses the Main Postal Plant, is a massive grey edifice rising six stories in the downtown core. A relic of federal make-work projects in the Depression years (it was built in 1934), it occupies half a block about midway between the city's two railway stations, both now all but derelict. The Post Office uses about two-thirds of the building; the rest is made up of federal government offices. The CPC facility is

broken up into three basic elements: administrative sectors like Personnel and the Area Manager's office, which are scattered through the fourth and sixth floors (at the time, there were also Customer Service offices in another building about a block away); Sales and Delivery, made up of the Letter Carriers' Section on the north half of the fourth floor (and in seven smaller depots throughout the city and environs) and the "wicket area" -- Station A proper (again, there are other postal stations scattered throughout the area, as well as a number of franchised "revenue outlets" in stores) -- on the southeast quarter of the ground floor; and Mail Processing. This last takes up the remainder of the ground floor, with manual sortation sections above it and "flats" (newspapers and oversized mail) and oversized third class mail spilling over into a separate building -- the Bulk Mail Facility -- on Branch Street. The Bulk Mail Facility (BMF) also houses the city's thirty-three mail trucks. In all, close to a thousand people are directly employed by the Cancity area Post Office; of these, about a third are engaged in mail processing and a like number in sales and delivery.

The parts of the Main the public could see, the wicket area, is a genteel fantasy of polished brass work, marbled walls, and gilt ceilings, lovingly maintained by the Department of Public Works (DPW); the postal clerks stand behind brass cages called wickets reminiscent of an old-fashioned bank. Here, the public can buy stamps (there's a Philatelic section here as well), drop off mail, and pick it up from rented post office boxes or from General Delivery. None of this has changed hugely since the building was first opened.

The manner in which mail is processed, however, has changed. Even in the 1930's, the Post Office was experimenting with techniques for mechanizing the flow of mail: the Main still has a vintage facing-cancelling machine from that era, no longer in use but still in working

order. By 1986, the older manual style of "working" the mail occupied a distinctly peripheral place, segregated on upper floors at the Main or in the rented facility on Branch Street, and confined largely to "bad mail."

"Good mail" is machinable mail: properly coded, conforming to postal standards of size, standardization, colour contrast and type fonts. Bad mail lacks these qualities, which is why it must be "worked." Good mail is not worked; it is "processed." That shift in terminology reflects a corresponding change, not only in the labour process which dominates postal operations, but in the managerial ideology surrounding it.

Organizational behaviour research has focused on the varying nature of "inputs" -- the raw material taken from outside the organization's boundaries, whether that be clients, steel, or mail, on which members of the organization do work -- to account for differences in the technology used to process these inputs. Among the best-known of these is Perrow's[1] assertion that technology is structured by

> the number of exceptional features encountered in the work .... [and] the nature of the search process that is undertaken by individuals when exceptions occur. We distinguish two types of search process. The first type involves a search which can be conducted on a logical, analytical basis .... The second ... when the problem is so vague and poorly conceptualized as to make it virtually unanalysable...

In gross terms, Perrow's description leaves us with the familiar item/batch/flow trichotomy. Inputs with a large percentage of exceptional features which call for intuitive solutions to the problems they present (these intuitive solutions being a kind of skill) require item technology, in which each unit of input is treated individually. Those where exceptions are infrequent but not well known can be treated using batch technology, in which the process used to treat

unexceptional cases is highly routinized, while exceptions are segregated out for item treatment. And those where the exceptions are all but unknown and the procedures for dealing with these exceptions are well established can be processed using flow technology.

Whether a given technology will be used depends only partly on whether it can be used. Authors[2] have asserted that, while technology is shaped by raw materials, the "problematics" involved are a limiting, not a determining factor; there are a number of intervening variables which allow organizational Decision makers to exercise "strategic choice[3]" about how work is to be ordered. Among these is the extent to which a given feature of inputs is viewed as a problem; and if so, the perceived severity of that problem. Thus, chemical plants typically use continuous (flow) processing, despite the fact that consequences of a breakdown in production -- a spill, for instance -- are often unknown, and techniques for coping with it undeveloped and/or untried.

Furthermore, large enterprises can exert influence over their environment sufficient to alter the inputs fundamentally.[4] An example of this is efforts by business to make the schools more responsive to business needs, thus changing the kinds of human resources they receive as employees in future[5].

In the Post Office, efforts to alter the nature of source materials have, in the late 80's and early 90's, taken the form of "incentive rates" for large volume mailers and large volume receivers (LVM's and LVR's) to further standardize envelopes so as to make them more easily machinable and/or to "presort" or "precode" mail so as to eliminate one of the processing stages altogether. This combines with punitive rates and much slower delivery times for nonstandard mail to "smooth the flow," reducing the percentage of problem cases which arise.[6]

That happens because the senders of nonstandard mail are effectively discouraged from using Canada Post by the financial penalties imposed and by the perception (largely justified in this respect) that the mail is unreliable. Those who can afford it -- businesses, for instance, who can write off their expenses -- seek alternative streams like couriers, fax machines, or E-mail; the Post Office therefore can take some credit for the information revolution, since without its troubles, a search for other methods of transmitting "mail" might not have seemed so urgent. Private persons do the same -- for them, the major "alternative stream" is the telephone -- or do without. Thus, the proportion of CPC's volume devoted to personal mail like letters, Christmas cards and the like is declining steadily (it stood at about 8% of total volume in 1985[7] but has levelled off since[8]); Canada Post estimates that private households send, on average, 20 items a month through the mail. Most of these are bill payments.[9]

What this means is that postal policy has changed from "clean floor" to "load levelling;" that is, from a goal which dictates that a postal station should be entirely cleared of mail at least once a day, to one which suggests that, to be efficient, the machinery -- and the people who operate it -- should work at capacity all the time.

This entails a shift from viewing the mail in batch terms (each day's mail is a discrete "bundle") to viewing it as a continuous process. That, at least, is how the Corporation's Area Manager, hired away from an oil company, views the process.

> When this machinery was first installed, the Post Office didn't follow through properly. Luckily, there were a lot of "seat-of-their-pants" types who said, "by God, I'm going to make this stuff work. And it did, after a fashion, but it never became a mail stream.
>
> We get a million items a day through here; you have to treat it like a refinery, like oil going through a pipe. It's no accident they hired me away from the _____ Refinery.[10]

But only good mail can flow; bad mail must be treated using batch, or even item, technology. And even good mail flows only during processing; on intake and delivery, it returns to individual or bundle format. Thus, since field work was completed, the Corporation has closed or consolidated those elements of its operations which are not "flow-like" -- out sourcing most postal outlets, freezing delivery levels, and so on. CPC describes this as a focus on its "core business" as a processor of mail.[11]

Not surprisingly, this has had an impact on the type of work available. Wicket staff, for instance, are usually fairly senior and must be well versed in postal regulations; since they handle fairly large amounts of cash, the job is considered to be more responsible than most. These are day jobs, and therefore are classified as "preferred postings" filled by competition.

But the area was always desperately understaffed; most of the wickets were closed permanently, and lineups were interminable. People who worked there talk about meeting the public as both the best and the worst part of the job: good because it adds variety and human contact, but in view of the lineups and postal workers' general unpopularity,[a] it can be a high-conflict setting.

At the time of this study, pilot projects to increase the absolute number of postal workers on days (and thus to increase the percentage) were under way in Calgary and Saskatoon[12]. But also at this time, the Marchment Committee had released its report, among whose recommendations were some which would have the reverse effect.

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[a] I took no measures of postal workers' popularity. However, respondents were unanimous in declaring that they were "hated," "looked down on" and the like by others. All wicket clerks described this as a major source of job stress.

In response, the Corporation's new President had released a five year business plan[13] calling for CPC to retrench and concentrate more heavily on simply moving the mail while shedding most sales and some delivery elements. That was to be accomplished by freezing the number of letter carrier routes and using "Super-mailboxes" (quietly introduced as "cluster boxes" in the US in 1969) while farming out wicket services to private operators in both urban and rural areas.

As a result, and despite the controversial merger of CUPW and LCUC then being sought by management and subsequently achieved[14], it has lately become much harder for a postal worker to get day work. Even in 1985, it was not unusual for postal workers to spend fifteen years on nights or afternoons[15] before getting a day posting; and respondents were well aware of the trend. That helps explain an apparent anomaly in the quantitative results, for while most postal workers did not worry about their own jobs being eliminated as a result of technological change, they still saw job security as the biggest problem facing CUPW. In other words, their concern was not with loss of work or unemployment, but with the gradual erosion of the better jobs in the bargaining unit, leaving only the more monotonous and stressful[16] processing jobs on nights and afternoons. Those jobs were the focus of this study.

ii. Mail Prep

The Postal Station takes up the southeast corner of the main floor; behind it is Mail Prep[aration] with the loading docks behind that, and the Mech[anical] Room occupying the north half of the ground floor, past the ornate lobby with its new security guard station. The machines in these areas are silent for most of the day except at the busiest time of year (the

Christmas season). In the Processing Division, number 3 shift (days) is a "clean up" shift operated with a skeleton crew[17], because mail processing takes place after business hours. Hence, the number 1 shift, the largest and busiest, is afternoons.

The loading docks at the Main are in the southwest corner of the building. There are more below ground, but these are not in use, perhaps because of the dangers posed by carbon monoxide buildup in this area; instead, the area is used for stores, and for parking for senior management; hourly-rated staff have a discount at one of the innumerable private lots nearby.

The above-ground docks which are used are entirely inadequate to the amount of mail which passes through Cancity: 141 million standard-sized letters (called "short-and-longs or S & L's), 29 million oversized letters and magazines ("flats"), and 3 million parcels in fiscal year 84/85[18]. Thus, processing of flats and unaddressed (or oversized addressed) householder mail was shifted to the Branch Street facility, the BMF, in 1979.

Mail arrives in a slow trickle most of the time, with that trickle punctuated by the occasional arrival of LVM's items, an event less common in Cancity than at MAPPs. The trickle swells to a flood in the late afternoon, when a private courier firm called Crown Mail & Delivery Service drops off letters it has collected from area businesses. The "Crown Mail" is followed by Street Letter Box (SLB) and postal station mail in the latter part of the evening; pretty well everything collected is at the Main by 7:30pm. By morning, the despatches (sic) begin to move out: "forward" mail (bound for other areas) in the small hours, "city" mail (local mail) for outlying letter carrier depots by 4:00am, city mail for the relay boxes serviced by carriers out of the Main -- as well as parcels and special mail carried in box vans -- after 6:00 am.

The loading docks and teamways are kept under watch by a security guard whenever they are in use. Otherwise, they are the preserve of mail handlers (PO 2's), a job category deemed among the least skilled at the Post Office. At one time, handlers' wages were considerably below the Post Office norm, but since then there has been wage compression between skill categories; now there is only a few cents' difference between handlers' and clerks' hourly rates.

Mail handling is the least feminised operation among nonsupervisory staff in the Post Office; at the time of this study, there was only one female mail handler, and she was a recent addition to the staff. Though there are towmotors, scissors lifts, and forklifts on the docks -- handlers take a two week course in what's called the theory and practise of this equipment -- much of the work remains brute labour, reminiscent of the days when the handling crew was called the "bull gang." Strains and sprains, the most common sort of injury among postal workers[19], are especially common here, as are reactions to the carbon monoxide which pervades the dock if truckers neglect to shut off their engines. The work comes in cycles according to the ebb and flow of the business day: bouts of intensive activity at receiving and despatch times are punctuated by desultory tidying up and passing time. The handlers have cleared a space on the docks where a single table is surrounded by a wall of lockers; in this "room," they take their breaks and lunches, listen to the radio, play cards and talk. This is the only area in the building where one can find pinup posters; indeed, the physicality and uneven pace of their work, the absence of women, and the isolation and insulation of the crew have combined to make this a male subculture[20] quite distinct from the rest of the Post Office but quite similar to that on other loading docks I've seen.

That makes some sense, because the work done elsewhere in the Post Office is all but unique, having few obvious parallels outside the Corporation; but only the material they move makes handlers any different from other shipper-receivers. They share little in common with their fellows in the CUPW bargaining unit (or, for that matter, in CPC generally), while having much in common with workers in other enterprises. Thus, they keep to themselves -- few answered my questionnaire[b], and I had little success gaining rapport during fieldwork -- saying that they feel "a little separated[21]" from their coworkers and even from their Union:

> After all, we don't rotate like they [i.e. postal clerks] do, and we're not worried about mechanization or job security. All we care about is pay and benefits.[22]

iii. The "Tosh"

Between the teamways and the wicket area is Mail Prep, which houses both the scaled-down "glacis" and the culler-facer-canceller (CFC or Tosh). A glacis is literally a grassy slope on the approach to a fort, where attackers are slowed and separated so that they can be more readily dealt with one by one. The metaphor is apt, for the glacis at the Main is a waist-high, slightly tilted conveyor belt along one side of which are ranged postal clerks while "C-4" carts (trays raised on a wheeled platform) are on the other. A clerk takes the heavy mailbags brought in from receiving, opens the string ties at one end, and empties the bag onto the conveyor by lifting the bottom corners above his/her head. The waiting clerks perform a manual cull of the mail as it moves along the belt, removing elastic bands some mailers use to bundle items together and separating certain kinds of mail (like the distinctive income tax return envelopes) for direct

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[b] And, since they are not essential to the research problem the few who did are excluded from the results.

shipment. They also remove flats, A/O's (autres/others, i.e. parcels which can be delivered by letter carriers), parcels and any other item which is too thick, too thin, too large or too small for the CFC to handle. This is done by throwing the item about four feet across the belt into the appropriate C-4, where yet another clerk hand-cancels the stamps, using an inked wheel on the end of a short metal wand. The action is probably easier on delicate items than the miles of conveyor belts in the MAPP's -- or than the sorting technique which involves throwing parcels ten or fifteen feet into a wire-sided "mailtainer". The mail is moving by quickly, 600,000 items on an average day and 1 million on a busy one[23], so that individual attention is rare; throughout the Post Office, you can find mail lying around machines and sorting cases like confetti, for workers are not to take the time to pick it up until the end of their shifts.

At the end of this belt is the CFC. A Japanese (Toshiba) product, the CFC is state-of-the-art. Using a combination of magnetic readers, photosensitive scanners, digital weigh scales and high speed belts, it fine culls oversized, bent, too-rigid and too-thick letters as well as those containing any metal like staples or paper clips. It segregates precoded mail (denoted by four black bars beside the postage area), Code 1 (metered), Code 2 (stamped) and postage-due mail[c]. It cancels stamps and, sends the mail on its edge along a breakneck roller coaster ride until it winds up faced in one direction for ease of processing, and neatly arranged on a stacker at the machine's far end, where a clerk puts the stacked mail into trays holding about 600 items each, then places the trays onto wagons resembling cafeteria trolleys, which will be pushed to the "buffer" areas. There they wait until ready for processing.

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[c] No-one at Cancity's CPC recognized these terms.

The Tosh is rather like a squat monster. It sits in a room all its own, sucking mail into its maw at the rate of 15,000 to 25,000 items per hour, attended by its acolytes; two postal workers who sweep the stackers and clear jammed items, as well as a maintenance mechanic on permanent standby, a supervisor who spends most of his time recording statistical data, and sometimes a quality checker from Planning, Process and Control.

Working the Tosh is not a popular job: while some postal workers claimed to prefer feeding and sweeping tasks (they exist at every machine) because of the physical activity and pace involved, none made that statement about the Tosh specifically. The feeder who empties the mail bag and the sweeper who takes the stacked letters out of the machine both do heavy work very quickly; the cullers in between must stand slightly stooped over the conveyor belt in a most awkward pose, one where it becomes difficult to toss items of any weight at all into the C-4's. And the machine is noisy. Well within the limits set by the Canada Labour Code, the noise still makes it difficult to converse; there are whirring belts and buzzing stackers, and letters which jam in the equipment set off alarm bells at regular intervals. No-one smiles at the CFC.

Working the Tosh is part of the regular rotation for postal clerks at the Main, but supervisors often find themselves one or two short of a full complement; invariably, they will go up to manual sort on the second floor with the words "I need a body for the Tosh." The person so designated turns from her/his task with an air of resignation; one respondent said,

> What I don't like is, you never get to finish any job. You're always pulled away from it just when you get going and sent to do something else, usually sweeping which I hate.

In Toronto's South Central MAPP, there are eight CFC's, connected to the glacis at the front end and the buffers at both by miles of clanking conveyor belts. On the teamways, employees operate a bag sorter which looks like the luggage carousel at an airport. They read the bag labels to route them (as well as loose parcels) into trays along one of twenty-four conveyor lanes -- SLB collections, processed mail from other plants, LVM mail, and so on. Mailbags are emptied automatically by a bag shakeout machine operated by two employees who also inspect each bag for loose items, and the trays of mail are routed to and from buffers by magnetic codes on their sides.

But in Cancity, beltways are measured in feet, not miles, and items move from one processing stage to another by being pushed there under human power. From Prep, mail is moved along a narrow corridor behind the lobby (and out of sight of the security guard stationed there) to the Mech.. Room, where it may enter the optical character reader (OCR), the coding desks called group desk suites (GDS's), or be taken by the plant's only freight elevator to Manual Sort on the second floor.

iv. Mechanical Sorting

From the CFC, mail can flow along a number of different paths, depending in part how "good" it is, as well as on management's perceptions of staffing requirements, production schedules, and the like: "Some supervisors will send everything through the OCR if they're short of coders and sorters. That means a very high rejection rate, of course, but some of it does get through -- and that takes the pressure off the GDS.[24]" Indeed, that is the standard method used at MAPP's[25]. Alternatively, "we can get everything out of here in about four hours if we take a few short cuts. That makes our numbers look good, but it just slows things down at the other end, 'cause then they have to process it all over again.[26]"

There are, then, a number of subtle variations in routine available to management; usually, however, the path of the mail in Cancity is as follows:

Precoded mail, and mail which bears metered postage or a permit (designating LVM mailings) but is not precoded is presumed to be good mail and is routed to the OCR, under several separate computer "plans.[d]" The OCR scans 8 items per second, using photosensitive cells to search for the distinctive three-character-space-three-character pattern of a postal code along a narrow band on each envelope. If it finds one in a legible font, then it will spray on a bar code made up of fine jets of fluorescent, orange coloured ink -- the ink cost $40.00 per litre -- which can be read by the LSM (letter sorting machine). Rejected items (i.e. those with no codes, improperly positioned codes, or incorrect codes -- the OCR does a crude check of its own "work" -- or codes

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[d] A plan is a computer-programmed sorting sequences, depending on the destination determined at other machinery, the GDS or the OCR.

which are not machine-readable) are trayed and sent to the group desk suite (GDS). Coded letters are shunted into one of 14 stackers, according to general categories of destination, then trayed by the single feeder-sweeper attendant, and sent to the LSM at the other end of the room.

The three LSM's are each almost two stories high. Mail is fed in at one end, "singulated", and carried dangling from a chain above the 288 destination bins arranged in two tiers until it reaches the appropriate one, where it drops into the stacker. Sweepers pull bundles of mail from the stackers, "face" it so that each side of the bundle shows the correct postal code, "tie off" the bundles with elastics or by using a machine, and drop them into the appropriate plastic box (for forward mail) or mailbag (for city mail). Each LSM sorts about 20,000 barcoded letters per hour on one of 14 different plans.

To keep up with the flow, two sweepers must work steadily and quickly; there is a good deal of stooping and stretching. Many expressed considerable pleasure in this kind of work, especially compared to sedentary tasks like coding and sorting: "it keeps you on the go;" or "it makes time go fast" were frequent comments. At the same time, some expressed concern that the work was gradually becoming too demanding, in the face of management reductions in the number of staff who do feeding-and-sweeping at the LSM. And most directed their overall scepticism about the effectiveness of the entire mechanized process at the LSM in particular.

Stories abound about the CFC "eating" mail -- that is, about mail lodging inside the machine until discovered, much the worse for wear, during maintenance days or weeks later -- and there are stories about breakdowns or machine-caused miscodes from the GDS or the OCR -- but when asked to cite specific malfunctions, most postal workers point first to the LSM.

At one time, the LSM would subject mail to "kiting;" items would build up a static electric charge and be repelled by the machine itself, finally wafting down into the wrong bin. That has supposedly been corrected, but sweepers sometimes complain about frequent missorts nevertheless: "Sometimes, you can't find two [correctly routed] letters to face." It's certainly the case that a half dozen or so letters are kited under the LSM in every shift (they're supposed to be fed back into the machine at the end of each run, but are sometimes not discovered for days). As well, if items have been incorrectly coded by the sender, at the GDS or at the OCR, then they will be misrouted by the LSM. And Planning, Process and Control staff suggested that the barcodes could slip out of alignment if not regularly checked and maintained; one maintenance mechanic said "sometimes we're so busy 'putting out fires' that we don't have the time for preventative work." A very senior manager suggested that it was possible for the system to get so "out of whack" that 40% of machined mail would be misrouted; he also denied that this had ever happened during his tenure. Line supervisors declared it impossible.

One can imagine a situation in which LSM's will be dispensed with altogether. Already, newer OCR's in use in the United States have over a hundred destination channels, compared to the 14 at the Main, so that most OCR-compatible mail (70% of the USPS's letter mail is OCR-compatible) can bypass the LSM[27]. Should this happen, then many on the Group Desk Suites would become redundant.

Of all the mechanized components of mail processing, it is the coding desk at which most of them spend their time, and it is the coding desk which they grow to hate. There are two such

"group desk suites" (GDS's) at the Main; like the LSM's, they are a product of IT&T, adapted from machinery in use in Belgium during the 1960's. At the time of their purchase by Canada Post, former IT&T Canada president John Mackay was Deputy Postmaster General; he says they were chosen because they were familiar and proven[28]. But by 1985, the machines were over 10 years old, and the technology on which they were based was almost 30 years old; the GDS's use transistors, the LSM's vacuum tubes.[29]

Each GDS consists of twelve coding desks (hence the name "suite"); but only one at a time is in use except at Christmas. The other constitutes a backup, for the equipment is rather delicate and subject to frequent breakdowns. When one of the desks breaks down, the coder is to remain seated and raise her/his hand like a pupil in school, until a supervisor or maintenance worker responds. That usually happens very quickly, and the required repair takes little time

Mail, usually Code 2 mail or items rejected by the OCR, is fed into the loading stackers at one end of the GDS; coders take turns as feeders and sweepers on the GDS and other machines, but the few veterans who never qualified on the GDS, and casual workers (who are prohibited from working as coders) are employed as feeders and sweepers. The stacked mail is fired like buckshot into a singulating valve and along a beltway across the top of the suite, until it arrives at one of the coding desks, where it backs up 50 items at a time. Individual items then drop down to the eye level of a coder seated at a black, ergonomically designed armless swivel chair. A few pieces fall out or are out of alignment; these the coder removes with the left hand to feed back into the machine later. The worker reads the postal code and types it onto a keyboard, much like a mechanical adding machines'; the keyboard can only be worked right-handed. The keystrokes are translated into a bar code by the machine and sprayed in yellow ink onto the

envelope. The last keystroke signals the machine to whisk the letter away into one of 14 channels like the OCR's, where it will stack up for the letter sorting machine (LSM). At the same time, another letter drops down for coding.

Few postal workers find the GDS very demanding. Indeed, it is an open secret that they typically code far in excess of the 1800 item per hour requirement; sometimes, a coder will set up little races against a suitemate or against herself to see who can do the most; I'm told the record is about 4000 items per hour.

This compares with the USPS standard, where the Burroughs-designed coding desk is integrated into the LSM, so that the two run continuously. There, a mechanical arm feeds letters to be ZIP-coded at the rate of one per second (or 3600 per hour); supervisors use a computer attachment to monitor individual performance -- prohibited to CPC by the union agreement[30], although most workers believe it is done anyway[31] -- to a standard of 95% accuracy, with sanctions from retraining up to dismissal available for those who do not meet the standard.[32]

Generally, then, workers in Cancity easily exceed the theoretical minimum speed on the GDS; in that sense, they are at least as "productive" as their USPS counterparts. But there are a number of structurally-imposed differences. For instance, the GDS and LSM used by the USPS are integrated units, so that a coded item is fed immediately from the former to the latter. Thus, while both services give coders an "eye break" every hour, the GDS at Canada Post stops running for five minutes; in the USPS, the "eye break" consists of ten minutes spent sweeping the attached LSM. There is no other kind of job rotation in the USPS; in fact, each job category is governed by a separate union, making for a proliferation of bargaining units unknown in Canada. Since there are six workers per suite in the USPS setup, the LSM/GDS never stops. Again, the

ZIP Code used by the USPS directs mail only to the nearest major Post Office rather than to the letter carrier route or other delivery point; local ("City") sortation remains a primarily manual process. Under some circumstances,[33] that more labour-intensive technology is actually faster than coding using a GDS. Small differences like these, however, are far outweighed by the fact that the USPS delivers an average of twice as many items per address (and the mail carriers' routes have two or three times as many calls, since carriers ride in right-hand drive Jeeps rather than walking) in accounting for the greater "productivity" per USPS worker identified by Read[34].

From a management perspective, the GDS-LSM sequence of processing mail is counter-productive[35]. It is not, and was never intended to be, a device to speed up the mail. And, even under the labour cost formulae anticipated at the time the system was adopted, expected savings were quite minor; about 10% over the 25 year lifespan of the equipment.[36] Those savings have not been achieved in either country; the "postmaster general's paradox[37]" is the result. This paradox means that as mechanization of the USPS and the CPC have proceeded, the share of costs devoted to labour compensation has increased, not declined.

However, the Post Office did seek to improve those savings by reducing the pay rates of employees who were to be devoted to the mechanized system. After a long struggle, CUPW succeeded in frustrating that plan[38].

v. Manual Sorting

Even though most of the mail which passes through Cancity each day is processed mechanically, most postal workers spend a goodly portion of their work day in "low-tech" or

basically non-mechanized activities. Of course, many of these -- wicket clerks and mail handlers -- were excluded from this analysis, as noted already.

But the statement remains true even for sorters (PO4's in Operations): those employed at the Bulk Mail Facility are simply not in contact with the core (CFC-OCR-GDS-LSM) of the Post Office's mechanization programme. And at the Main Postal Plant, all Mech.. Room workers spend a part of their day in manual sortation as well. The amount varies from about a third to just under a half, depending on the exigencies of the moment -- but, in general, the afternoon shift seems to spend the most time on the machines, the day shift the least.

At each stage in the mechanized operation, some mail is sent to manual sortation: rejected because it is oversized or undersized, because the postal code is absent or is not machine-readable, etc.

In manual sortation, the basic division is according to the size of the item to be worked, whether letters (S&L's), "flats" (O/S) or parcels: letters are sorted on the second floor, parcels on the third, and flats at the Bulk Mail Facility. As well, sorting areas are split between "city" and "forward" sections, with the former handling "outbound" and the latter "inbound" mail (i.e. mail destined for delivery in Cancity and environs). "Special mail" sections -- registered mail, Priority Post, the "US case" etc. -- were scattered around the edges of the second floor. The class of mail had little impact on processing itself, but only on the priority given to it (thus, first class mail was sorted first).

Parcel post represents an exceedingly small component of mail volumes in Cancity; although it occupies a considerable area, it employs few. Here one is more likely to find those senior male employees who do not work the coding desks. They take each parcel and throw it

some distance into a metal "mailtainer" (rather like an oversized playpen) or mailbag which will be taken by truck to its destination.

At the BMF and in manual sort on the second floor, workers stand or sit at their "own" sorting cases; the second floor is divided into local ("City") and distant ("Forward") sorting areas. In all these locations, the pace is comparatively relaxed, because delivery standards relating to "bad" (i.e. manually-processed) mail are less demanding. On afternoons, the pace in "forwards" gets a bit more hectic as despatch deadlines approach; the same is true in "city mail" on nights, for the Post Office long ago abandoned its practise of sending out a second "cleanup" despatch (comprised of local mail which had been missed the first time) to letter carrier depots. Thus, local mail must be ready for the despatch to outlying depots by about 4:30 a.m., to the letter carriers' section on the fourth floor by about 6:00 a.m.; otherwise the carriers will have nothing to do when they arrive for work at 6:30 a.m.

But the Post Office also abandoned its "clean floor" policy -- the notion that there should be no mail left in the processing areas at dawn -- with mechanization; rationalization of the labour process has meant that there is <u>always</u> mail left over, always more to be done for the day shift. Machines -- and workers -- are unproductive when idle, so that CPC has sought to keep them working at a steady pace. If the vagaries of local businesses are such that one area is "backed up" while another nearby has "excess capacity," the CPC will transport machinable mail to the idle centre for "load levelling." A crew of postal workers which works especially fast, will have more mail to sort.

Thus, the pace in manual sortation is pretty steady and appears undemanding. Indeed, there is a mild interservice rivalry between those in "forwards" who argue that despatch dead-

lines make their work more demanding and more variegated, and those in the "city" section who maintain that sorting patterns there are more difficult to learn and more demanding. But the work in all areas appears restful and calm to the outsider.

Manual sortation sections share some features with other kinds of evening and night work: lighting -- especially after exposure to the Mech. Room -- is rather dim; there is usually a radio playing easy listening music somewhere in the background; supervisors are present but unobtrusive; conversation is sporadic. Just as in the GDS, sorters have a quota, but it does not intrude much on their consciousness. "Individual work measurement" is contractually prohibited, and so failure to meet quotas cannot be officially noted by management[e].

This laid-back appearance contrasts sharply with the frenetic pace of sorting at a letter carriers' depot (carriers sort mail from the start of their shift at 6:30 a.m. or 6:45 a.m. until it's "all up," usually before 8:00 a.m.; and sort flats at 1:00 p.m. for delivery next day). Here workers stand on the balls of their feet, rocking from side to side like hyperactive boxers. Mail slides into its slot with a satisfying "thunk!" --sorters place each item softly -- and the air is punctuated with animal imitations, bad jokes, and shouted conversation.

But the faster letter carriers work, the sooner they are done: once they finish sorting, they generally troop off to the lunchroom for an extended coffee break, one of the perks of the job. Postal workers get breaks at set times (no whistles or bells here, though; just a supervisor yelling "Break" through leather lungs); as noted, there is always more mail to sort. This is less true at the BMF, where sorters still work to a "clean floor policy" -- you can always hear one or another

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[e] Management does have the capacity to measure work performance, and many respondents were convinced that it does so and applies indirect, informal sanctions as a result.

of the men proclaim, with heavy innuendo "I'm all up; can't you get yours up?" near the end of the shift.

Carriers' cases are larger than sorters, so they can only be reached by shifting back and forth; but they are also easier in that the demands on memory are less. So a carrier is always in motion while sorting, reaching high and low, up and down; a sorter sits at his or her case, sliding letters into one slot or another, and gazing upward once in awhile, as if beseeching the heavens -- it took me weeks to figure out that these "heavenward" glances meant the sorter was unsure of where a particular item should go, and was checking the sorting chart printed above the case.

So the "sound and fury" of a carrier's sorting compared to a postal workers signifies nothing, being merely a matter of style. As well, the desultory conversation among postal workers is due to their need to consult their memories and avoid distractions; a carrier chats while working; a clerk must talk or work. Indeed, despite the noise in the Mech.. Room, clerks seemed to talk there as much as in the manual sections, perhaps more.

The mail, then, is organized into streams according to its routinized and machine-compatible nature; the "best" of this kind of mail is segregated by the CFC, coded and crudely sorted by the OCR; depending on the "plan" involved, it may or may not need further sorting by the LSM. In this sequence, postal workers are machine tenders: they feed mail into the singulators at one end, sweep it from the stackers at the other, and "bundle it off" for despatch, clear minor jams along the beltways (signified by a ringing bell and flashing light), and report major problems to management. As much as 70% (but more commonly about half) of all the million or so S&L items the Cancity office handles in a day has been processed this way.[39]

The remainder falls into one of two types: it is GDS-compatible (meaning that it is of standard dimensions and has a legible postal code), in which case it follows the CFC-GDS-LSM sequence; or it is not, in which case it is sorted manually. At the GDS, postal workers are machine operators in a modest way; they enter postal codes onto each item with a keyboard-like instrument. But certain kinds of mail are always processed manually. These include parcels which are too large for the mechanized beltways (machines for sorting these items are in use in larger centres like Toronto) and which are therefore sorted on the third floor of the Cancity Postal Plant. Also included in this category are "flats" (magazines and other oversized mail, regardless of class) and A/O's (autres/others; small parcels which can be delivered by letter carrier rather than by truck), which are sorted at the Bulk mail facility; uncoded S/L's regardless of class which are sorted on the second floor of the MPP during workers' regular rotation; and "presorted" mail which can be "flip sorted."

Flip sorted mail is highly standardized; the sender organizes it by postal code, so that all the postal worker needs to do is rifle the letters like a deck of cards, searching for the cut points between codes for one letter carrier route and the next. In Cancity, about 8% of mail is flip sorted; the most notable example is bills sent out by Cancity Hydro every two months. Like the "unaddressed third class" mail (flyers and circulars) which are routed to carriers' routes by weight alone, flip sort mail is "unworked," involving only the most peripheral involvement by Processing and Delivery.

CPC offers incentive rates for those who presort their mail by postal code -- fairly simple with a computerized mailing list -- and for those who precode it using the "black bar" system discussed above. The rates can involve an actual price as little as half that of the ordinary rate

for mail; in 1986, therefore, LVM's like the federal government found it cheaper to use the incentive rate than to offer electronic transmission methods like direct deposit of pension cheques and the like.

And CPC aggressively markets its third class service as a cheap alternative to first or even second class mail. Third class mail is only useable by mass mailers (each mailing must involve at least 5,000 items) who can presort or recode their items. If addressed, it is treated little differently than "good" first class mail, except that there is a more generous delivery schedule and fewer follow-up services like redirection to new addresses.

On the whole, the third class component does not seem to have cannibalized CPC's other business; rather, it has attracted customers away from other forms of advertising -- TV, radio, and newspapers -- because coverage is more individualized and response to the advertisement is calculable (when, for instance, the customer brings in a coupon s/he got[40]). But even a little cannibalization is bad business, because although third class makes up close to 40% of all volume, it provides only 11%[41] of revenue.

Finally, note that the Post Office's delivery performance targets apply only to "good" first-class mail; mail which is at least GDS-compatible. In practise, then, Canada Post sets priorities for mail processing as follows: special mail like Priority Post, and "domestic" first class mail (US origin and US bound mail is treated as domestic), then second, third, and fourth class (parcel post, foreign mail). Within each of these, priorities are set according to machine-compatibility, since that is the kind of mail by which performance is measured . In Cancity, this means that anyone can be pulled from manual sortation to work on the machines -- especially the CFC.

This also means, however, that third class mail, given its lower priority, can be used for "load levelling": held in a buffer zone until a slack point in the mechanized stream is reached, and then brought in for processing. As a result, mail volumes processed mechanically grow slowly but fairly steadily, while volumes "worked" manually decline. With CPC's efforts to "purify the streams" by routing mail to specialized facilities for parcels or letters or admail, we can expect that the old priority-by-class system will be replaced with a priority-by-machinability one within "streams" which exist independently of one another. Cancity's situation, therefore, is probably anomalous, an artefact of the long-delayed construction of newer facilities; and the likelihood of ever again being able to compare "mostly mechanized" with "mostly manual" work within this enterprise declines with each year.

vi. Workers as Critics and Analysts

Mail processing in Cancity, then, involves a considerable range of activities, from the more nearly traditional forms at the BMF, where workers are employed almost exclusively in manual sortation; to the OCR at the Main Postal Plan, where postal workers do little more than "feed" mail in at one end, and "sweep" it from the stackers at the other.

Postal workers interviewed during fieldwork rarely displayed an instrumental mind set in their discussions of mechanization, paying little explicit heed to the threat mechanization might pose to jobs or wages. Instead, they tended to discuss flaws in the machinery as merely examples of fundamental inadequacies in "the system:" it was not so significant, they said, that the machinery is ineffective as it is that management selected it despite its ineffectiveness, and uses it in inappropriate ways. Indeed, workers are also apt to point to what they perceive as improper

organization of the manual operation, even to deviance, so to speak, in their own behaviour, as examples of what they see as managerial ineptitude and indifference to the larger picture. For instance, there is the ubiquitous and possibly apocryphal (since it's been repeated to me by workers from Cancity, Edmonton, Ottawa, and two Toronto MAPP's) tale of the

> worker who punched in one postal code too many one night: for weeks afterwards he sat down each shift and punched in the same code, again and again, until he was fired.[42]

There are a number of similar stories concerning each element of postal work. The point of each telling seems to be that the process itself engenders workers' inefficiency, and noncompliance with organizational norms. Depending on the teller, this might be because workers -- any workers -- would resist the dehumanization they feel ensues, or because no-one could be expected to continue at such tasks without a breakdown of some sort.

Thus, the objective truth of the stories needn't really concern us, still less their content; stories like this have the status of myth, highlighting and serving to legitimize a deeper "feeling state." At the Main, it can be summed up as a sense that "management is more concerned about the numbers than about anything else;" that presenting statistics which cast a favourable light on operations is preferred to actually moving the mail; that employees' welfare is a matter of indifference or outright hostility to management. Postal workers were unanimous in portraying management style at the Main as by turns laissez-faire (in that "you can never find a supervisor around when you need help about something") or craven (in that line supervisors were "afraid" of their superiors' response to unofficial job action and could therefore be coerced into reversing earlier decisions by the threat of a sit down, sickout, or wildcat), as well as capricious (in that

some postal workers, especially those seen as closely tied to the Union, were allowed far more "leeway" than others; while those who thought themselves most reliable were subject to the most pressure).

As one would expect, however, their most common tendency was to discuss the aggressiveness of one or two especially unpopular local supervisors and managers. These were, intriguingly, held up as more extreme cases of a typical managerial attitude; there are also popular supervisors and managers at the Main, but when I asked about these, they were dismissed as exceptional: "yeah, he's one of the good ones. So he won't last." [and, in fact, he didn't].

A number of observers have commented on the combative relationship which exists between workers and line superordinates in the Post Office[43], and some workers in Cancity suggested that what they saw as bizarre decisions made by management were due to a greater interest in hurting workers' interests than in achieving formal goals:

> If they spent more time doing their jobs than thinking up ways to screw the Union maybe things would work better.

or

> We run things around here. We get trouble when they [management] try to throw their weight around.

The same ideas cropped up when discussion centred around health-and-safety issues. As already noted, machinery at the Main puts workers through the same movements again and again. This is especially true at the GDS's, where the thousands of similar hand motions entailed by coding have been linked to the prevalence among postal workers of a variety of "repetitive stress syndrome (RSS)" ailments including tendonitis[44]. Tendonitis is pain and

weakness in the hand, wrist, and forearm; it is caused, according to the CUPW, by the action of coding.

The specific causes of tendonitis are a matter of some dispute; the Union claims it is integral to the labour process; CPC argues that it is caused by a "lazy hand," if a worker rests her wrist against the base of the keyboard, rather than holding it above the keyboards like typist, she will be forced to stretch her fingers unnaturally, and will develop tendonitis in consequence. These different interpretations mean that the CPC does not recognize tendonitis as a "work-related injury"; in this context, it may be worth noting that the British Posts have developed an ergonomic prototype coding suite which allows fingers and thumb to oppose, and therefore supposedly eliminates RSS injuries.

Workers certainly believe that coding, in and of itself, causes tendonitis. Some have also asserted that the noise levels in the Mech. room damage hearing, cause frequent headaches, and stress-induced behavioural changes (see fieldnotes, Lowe & Northcott). At least one believes that the ink used when coding mail contains a known carcinogen; there are complaints about the harsh fluorescent lighting, dust and dirt, carbon monoxide (especially on the loading docks), and so on. Assessment of the validity of these complaints is beyond the scope of a sociological work. The Mech Room <u>is</u> noisy (I found it difficult to remain there much longer than an hour at a time), but coders and sweepers do engage in desultory conversation there -- although they agree that the noise is difficult to tolerate -- and management claims that noise levels are well within the law; any textile mill or steel plant I've been in is far noisier. The lighting <u>seems</u> no brighter than a modern office, the floors and fixtures dingy but not very dirty, the air quality about usual for Cancity.

But workers argue that management's reluctance to release data (on, say, air quality or on the composition of coding ink) is a tacit admission that both are indeed unacceptable. Likewise, the fact that management briefly issued disposable gloves to coders and sweepers who requested them (dropped, I was told by a supervisor, because the CUPW contract provides for a "boot and glove" allowance) was used as evidence that exposure to the ink is dangerous.

These concerns pale, however, beside the widespread condemnation of shiftwork as causing a variety of debilitating, but minor ailments[45]. All of these, but especially shiftwork, were introduced by postal workers to explain the higher-than-average levels of absenteeism exhibited by CUPW members; and therein lies their significance.

The term "absenteeism" implies that workers are off the job for reasons other than those usually considered acceptable by management; they are not <u>really</u> sick, <u>really</u> injured, <u>really</u> in need of compassionate leave, but are merely "playing hooky.[46]"

This can occur at Canada Post because of generous provisions for "casual leave:" up to ten days per year (no more than five consecutive days) without financial penalty or the need for medical certification[47].

Managers and supervisors[f] were convinced that there was widespread "abuse" of these provisions, an abuse they attributed to the presence of a younger workforce no longer possessed of the same work ethic as their elders:

> "In the next few years" one supervisor said, "we'll be retiring the last guys who haven't taken all the leave they're entitled to."

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[f] Senior management identified some supervisors as among the worst offenders.

The average employee took 16.3 days off each year in 1985/86, down from 19.1 days in 1983/4 but still about ten days more than the national average[48]. There was a determined campaign by CPC to reduce absenteeism. It led to the institution of an "Attendance Management Information System[49]," among other things. For instance, workers on nights were entitled to a "rotation day" off every three months, provided they had taken no casual leave prior to that; management was also told to praise workers who had not been absent or late for some time. And supervisors would call workers on casual leave at home, to make sure they were at home, "counsel" -- a euphemism for informally reprimanded -- workers who had taken too much time off, and otherwise seek to sanction absenteeism.

The subject came up again and again among managers; there was little they could say about postal operations without it. When asked to "rate" the quality of local staff, one supervisor said "when they're here, they're great. But they're not here enough."

> Another: "They [workers] just don't understand how much the operation can be disrupted if they don't show. They complain about being pulled off the cases and put on the York?, but that's always because someone decided he didn't want to come to work, and we're left shorthanded."
>
> Another: "You can predict when people will be sick. Before they leave for vacation, when they look out the window and see snow falling, when there's been a wildcat and the mail's backed up."

Some pointed out that "sickouts' were a collective-action tactic, and accused the Union of coordinating absenteeism in the same way, "...just when we're pretty well recovered [from a wildcat strike]."

In short, "management" in respondents' discussions seemed to refer alternately to what subjects saw as the mysterious and devious policy makers at Headquarters in Ottawa, or to crudely antagonistic line supervisors. But in these circumstances, some workers believed that they had to make the best of their situation at the individual level; by taking "mental health holidays," for example, or by "standing up" to management on occasion. Even so, labour relations at this plant were not characterized by militancy on a day-to-day basis.

But too much can be made of this: what's most notable about the Cancity operation is its ordinariness. It has the look and feel of any factory-like setting not of a combat zone. Thus, many workers wore buttons which read "Cancity Post Office. Not the biggest, just the best." Most just showed up for work, did their jobs, and went home. They expressed nostalgia for an earlier time of smoother labour relations and puzzlement over the malaise they saw as dominating CPC. They laughed and talked with supervisors and sometimes even socialized with them after work.[g]

Overt conflict, then, was not routine. But there had been two wildcat strikes at the Main just before I started my fieldwork, and there was some talk of another during this study. When applied to postal work, labour process theory holds[50] that militancy increased as workers sought to resist the erosion of their control over their work. For our purposes, then, there are two issues that arise: first, whether the introduction of machinery to mail processing really was deskilling

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[g] The Post Office has no policy against nepotism, and some postal workers are married to supervisors; one such postal worker, commenting on the rapid rise of new employees from "term casual" to temporary supervisor, said "obviously, I'm sleeping with the wrong manager."

compared to the techniques used before mechanization; and second, whether deskilling of postal work is now so far advanced that both manual and mechanical techniques are equally degraded.

vii. Deskilling and Reskilling

In this research, deskilling was operationalized as equivalent to mechanized work: workers who were more exposed to the mechanized sorting process were deskilled; workers who were less exposed to it were not deskilled. Such an operationalization corresponds to Braverman's[51] rather crude theory.

Braverman equates skill with control over the labour process. As the capacity to plan and organize work is taken away from those who do it and vested in managers, industrial engineers, or machinery, skills become polarized between a highly skilled and autonomous technocracy (the people who design the machinery and/or the labour process) representing capital; and an ever more proletarianized labour force.

This, he adds, is an inevitable process in capitalism; for it is an outcome of capital's efforts to maximize surplus value. As such, any change in the labour process which is initiated from above -- and Braverman does not consider the opposite possibility -- is degrading or deskilling.

But Braverman's ideas can be called into question.

Postal work, as we have seen, has certainly changed. Once centred around manual sortation, it is now dominated by coding and machine-tending, with the remaining manual work decidedly secondary to the core operations. But identifying this change as objectively deskilling is surprisingly problematic. Let us consider the aspects of task range and autonomy as they

apply to postal sorting in order to show that it is only skill as an ideology which is useable herein.

Task range, it will be recalled, subdivides into a knowledge component and a variety component; since most sorters now do sorting and coding and "feeding/sweeping", variety of their work is now greater; and most identify job rotation as an improvement.

But there was considerable variation in what part or what aspect of rotation was most preferred: a goodly number of respondents stated that they preferred mechanized work because it was "challenging," "physically demanding," "makes the time go fast," etc.

And, in field work, subjects often stated that they liked rotation in essence because you would not be stuck at one "boring" task for too long; in other words, that rotation was between several more-or-less equally unpleasant tasks, although each had its advantages and disadvantages:

> I don't think there is anything here [i.e. in Mail Processing] I could stand doing all night every night" [female PO4, nights f.t., late 40's].

Task variety itself has its down side:

> Some of the older sorters talk about how they used to work at "their" case, and sort "their" mail. That does not happen any more and it sounds like it was better [female PO4 afts f.t., age about 30].

And:

> What really bugs me is you'll just get started at something and they'll tell you to drop it and do something else. You never get to finish anything [female PO4, afts. f.t., age mid 30's].

It may be, then, that the ideal would be specialization in a task one can master, with just enough variety to relieve tedium. This relates both to the issue of autonomy, and to the knowledge component of task range. In terms of knowledge, we may note that

> In the days before mechanization, mail was sorted manually by a group of workers who memorized some 10,000 mail distribution points, and recalled it quickly and accurately to sort each piece of mail.... The workers learned the sortation system on their own time.[52]

The first six months of employment was a probationary period, the span between being hired and being tested (i.e. certified competent). Letter carriers -- widely regarded as less skilled -- have the same sort of probationary period in their employment.

During the probationary period, postal workers were employed at their cases during their shifts; for it is possible to sort mail (very slowly) with virtually no training:

> "With the help of fellow workers and a lot of homework, the speed and accuracy of mail sortation was maintained[53]."

But after their shifts, clerks were expected to train themselves at home so that they could pass a speed/accuracy test at the end of their probationary period.[54] This "training," then, was informal and designed to develop a "knack" rather than any very esoteric or distinctive knowledge base: "...it's memory work, that's all; it isn't skilled.[55]"

Thus, CPC has replaced this extended period with a two week formalized training course for manual sortation, a period exactly equal to that used to train coders. It is difficult to assess whether the content of formalized course is equal to that of the older, informal probationary period; but it is clear that clerks are now trained as sorters and coders and feeder/sweepers.

"Objectively," we may wish to view this as skill enhancement, and coding /sweeping/feeding as at least equal to sorting in skills requirements. Let us turn, then, to the idea of autonomy.

Autonomy would seem to have declined, given the fact that there are now proportionately more staff workers (involved in sections like Production, Planning and Control) than was the case in the past.

If we assume that all of these people are doing something, then postal workers now have much less discretion than they did. But that depends on how managerial control is articulated in practise.

"Objectively," we may wish to view this as skill enhancement, but labour process theory provides a different answer; the theory simply asserts[56] that any large scale capital expenditure necessarily degrades work.

Postal work, then, "must be" deskilled because it exists in a mechanized environment; the greater a worker's exposure to mechanization, the more deskilled s/he is.[57]

NOTES TO CHAPTER FIVE

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CHAPTER SIX: GENDER AND ITS EFFECT

At the same time as the Post Office was mechanizing, it was feminizing; historically, Post Office mechanization in Canada was accompanied by feminization and by an upsurge in militant activity, which would seem to belie any conventional wisdom about women's apathy towards unions and militant activity. Yet this study shows that women postal workers are somewhat less militant in attitude than their male counterparts.

The zero-order correlation between sex[a] and militancy in this study is -.1402 ($p=.085$). Although not significant, this correlation does indicate that men are slightly more militant than women When included in dummy variable analysis, the partial correlation becomes a more respectable -.207 ($p<.05$); these figures together indicate that the effect of sex alone on militancy is quite minor, but is heightened somewhat by the differing life experiences of men and women postal workers. For reasons to be discussed below, it was expected that women would be significantly more militant than men in this setting.

In this chapter, therefore, we must ask, not just "what causes women to be less militant;" but "why is there relatively little difference between the two sexes in this regard?"

The same question has been asked for postal work by Julie White[1], and by a number of labour historians[2]. One answer is offered by Frager[3], who asserts that, at least in male-dominated labour unions, "women's issues were systematically subordinated to class issues." That seems to have been the case in CUPW, too.

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[a] Standard sociological usage -- that sex refers to biological divisions into male and female, while gender involves social constructs which don't always match sex precisely (e.g. among transsexuals) -- is followed in this chapter. For more information, see Spencer, M. 1992 Foundations of Modern Sociology (Scarborough: Prentice-Hall) 6/e, pp. 182ff.

i. Male and Female Militancy as Contingent on Commitment

Differences in life style and life chances, structured by gender, have aroused a good deal of interest of late. As perhaps the basic element in individual identity, sex is consequential in a variety of respects.

For example, the unionization of some women's occupations, and the growing behavioural militancy exhibited by them, has been well documented[4]. It contrasts sharply with the fragmented "pink collar" occupations like clerical work, where efforts of unionization are only sporadically successful and where collective action has failed dismally.

The contrast between these two divergent phenomena is informative: it challenges a traditional conception of women as essentially passive, co-operative or expressive -- whether by nature or through socialization -- and bringing these attitudes to their paid labour as well.

Instead, recent analyses focus on the systematic differences between women's and men's work experiences and circumstances as producing either less or more[5] activism, depending on factors like commitments, and size of working group.

Game and Pringle's[6] study of a "whitegoods" (major appliance) factory in Australia found greater militancy among women than men, in contrast to their findings for other sites. They argue, in consequence, that there is no basic tendency towards greater peaceableness on the part of women workers; rather, militancy is contingent on factors relating essentially to job commitment.

Commitment can be enhanced by one of two factors: role embracement and/or external-instrumental compulsion. If women (or men) like their work or at least something about it (like the opportunity to meet coworkers), then "value commitment" is enhanced. On the other hand,

if they are "locked into" a job for extrinsic reasons, then they will be unable to exercise "exit-voice" by quitting. "Continuity commitment" is enhanced in the latter situation, but women so trapped will be forced to take steps to improving their circumstances; to reduce alienation, for instance, through collective action. Game and Pringle go on to suggest that collective action is more likely for women in this case, for they assert that men are by nature more prone to individualized "zero-sum" competition.

By way of contrast, Kanter[7] suggests that women employed in formal organizations tend to exist in "low opportunity structures." These structures do enhance commitment, but they lead to a sense of resignation rather than activism. The women in her study were also collectivist and (in our terminology) grievance-sensitive; but the effect, in a low opportunity structure, is to produce an emphasis on whatever social rewards are available and a consequent condemnation of other women who try to leave the peer group.

Kanter's thesis can be compatible with Game and Pringle's. The former studied an American office; that is a non-unionized setting in a society where the labour movement is in decline. Given the difficulties inherent in collective action under those circumstances, militancy was impracticable and the "opportunity structure" still lower in consequence. We may refine their theses as follows: commitment differs for men and women in that being female entails a comparative paucity of choice, because women's alternatives are limited and constrained (e.g. by their domestic labour). Thus, some occupations are likely to breed greater commitment for the women in it than for their male coworkers.

All else being equal, greater commitment could translate into greater militancy if the "opportunity structure" makes this possible: otherwise, women will display the kind of behaviour Kanter outlines.

If this is the case, then one would expect women's commitment to work to be greatest in those jobs which offered them high extrinsic rewards compared to those generally available to other women. If, at the same time, available intrinsic rewards were low, then women would be pushed towards militancy as an effort to improve a job they can't leave.

If men's commitment were lower -- if, for instance, pay and benefits were not so high (again, compared to other men), then their commitment would be lower too. In consequence, discontented male workers would be more prone to exercise "exit voice" -- to express their displeasure by quitting, for example -- than women. That would effectively remove the most "grievance sensitive" males from the work site, while leaving their female counterparts in place. And, as a result, women would tend to have higher overall levels of militancy in these circumstances.

ii. Assessing the Contingency View

A variety of sociographic variables were introduced in this analysis, in keeping with the actionists' emphasis on factors promoting a "prior orientation" towards one's work. Of these, only respondents' sex proved to be significant: women postal workers in Cancity were somewhat less likely than men to express militant attitudes.

Sex was cast in such a way as to remove the influence of secondary effects, which are related to socially-created gender rather than biologically-determined sex. Factors like educa-

tion and first occupation -- which, of course, do exhibit patterned differences between men and women -- were coded separately and entered in the equation as simultaneous controls. The idea was to get down to the "pure" influences of sex alone on militancy; that is, to those influences which are not covariant with other factors.

In this study, 90% of women respondents describe their work as "well-paid", compared to 76% of men, and 74% list pay and/or benefits as the "best thing" about their jobs, compared to 59% of men. In field work, it was common to hear women say things like "I want to quit, but where else you gonna find the money?"

Women in Canada Post are necessarily committed to it in instrumental terms[b], because it is among the few jobs of its type in the primary labour market. Pay is high, and female postal workers are among the relatively few women who are unionized[8]. Furthermore, employment at the Post Office provides mechanisms like a grievance procedure, a competition structure for preferred positions or for postings, and a ten-year-old Equal Opportunity for Women programme, all of which are generally unavailable to women workers elsewhere in the labour market. This is especially true for part-time employees (27% of women postal workers versus 13% of men); the wages and benefits they enjoy are all but unknown in other part-time work.

In the Cancity Post Office, the wages women receive put them in the top 5% of female wage earners in that city[9]. There are generous paid leave provisions which would be useful to anyone who is a primary caregiver for children. In fact, wages and job security are so high that

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[b] I was unable to obtain reliable data, but managers and supervisors told me that women postal workers' "turnover rate" was substantially lower than men's.

the Cancity Post Office employs qualified teachers, nurses, and social workers as PO4's; all are female.

Even the prevalence of evening and night work can be serendipitous; some women part-time postal workers argued that their work schedules allowed them to be home for the children before and after school, to prepare the evening meal, and to use husbands as "babysitters, which saves a ton of money, believe me." So commitment to the job is high; it is most compelling for lone parents and for workers whose spouse's occupation is seasonal, insecure, or poorly paid.

Indicators of value commitment are less clear. Women postal workers express no more or less job satisfaction than do men on the single-item measure used in this study. Men and women are equally likely to see their work as "boring" (57% of men vs 54% of women, "unpleasant" 15% each) -- but 35% of men compared to 13% of women call the work "pleasant."

So, there is some suggestion that women postal workers are more grievance sensitive than men: More women than men describe the work as "stressful" (37% to 22%), "unsafe" (70% to 11%), "unhealthy" (43% to 35%); and more men describe the work as "clean" (28% of men to 11% of women), and "useful" (44% of men to 35% of women).

Likewise, they agreed with men that the statement "the chances for promotion are good" is untrue -- "unless," as one woman added," you're sleeping with management;" or, in the words of another woman "unless you're a man."

As already stated, if women are dissatisfied with their jobs, and unable to use an "exit voice" to resolve that dissatisfaction, then one would expect militancy to be higher for women than for men. But, again, that is not true at the Cancity Post Office.

At first glance, then, it might appear that an increase in the percentage of workers with less militant attitudes has been accompanied by an increase in militant activity, a phenomenon which could lead us back to an "oligarchical union" explanation, to the idea that an unrepresentative cadre of extremist -- "the element" in management's parlance -- has captured control of the CUPW, and is dragging along a passive majority.

The data demonstrate that union activity, as indicated by current status as a CUPW official, is indeed correlated with militant attitudes. But it is by no means the best predictor, nor is past union activity very useful at all.

Rather, past involvement in conflictual activity of any kind (as strikers, grievers), accompanies current militant attitudes. This is in keeping with Marx's view of unions as functioning to enhance class consciousness, for it suggests that the conflict itself produces a more confrontational world view.

So, women's militancy -- like men's -- must be a consequence of their respective experiences in postal employment. Here, the Union has played a role.

iii. The Union's Impact on Women's Militancy

At the time of this study, women numbered 22,000 of CPC 55,000 employees and 42% of the CUPW bargaining unit. This is a dramatic change from the days before automation, when women made up only 6% of the CUPW membership.[10]

If we define a feminized labour force as one in which women's participation has increased past the half way point of employment in a specific occupation, then the Post Office is

clearly feminizing but not (yet) feminized. However, the mechanized elements of plants like Cancity's are, indeed, feminized: 61% of respondents to this survey were female, for instance.

Men are more heavily concentrated in non-mechanized operations filled by seniority or seen as calling for brute strength. This is especially true if casual workers -- who are forbidden by contract from working as coders, and whose numbers are overwhelmingly female -- are excluded from consideration, as is done in this study.

I will argue, therefore, that women's lower levels of militancy are due to structural factors, to historical circumstances unique to Canada Post, which reduced women's likelihood of strong identification with the Union.

A generation ago, the Post Office Department -- outside its secretarial/clerical correspondents -- was almost exclusively a male preserve: that remains the case in managerial and supervisory positions (especially those who are not in support functions like personnel or marketing), in maintenance and technical roles, and on the loading docks. The major sources of subsequent feminization in Canada Post have been in the growth of clerical positions traditionally staffed by women, and in the addition of female staff to the ranks of postal workers[11].

But, back in the early 1960's, those few women who did work in Operations or in Sales & Delivery were employed as casual staff only; as budgets got tighter, postal management sought a closer match between staffing levels and mail volumes. Since volumes are subject to peaks and troughs on a daily, weekly, monthly, and annual basis, part-time staff were hired to handle the evening rush, while casuals were brought in as needed over weekends, during the upsurge in billings which occurs towards the 30th of each month, and during the Christmas season. Increasingly, therefore, full-time staff became a skeleton crew, the core available to handle the

lowest volumes which occurred. Recourse to part-time and casual workers was fostered after union status for postal workers was achieved, for workers then began to resist line supervisors' age-old practise of sorting mail during busy times.[12]

This was cost-effective for two reasons: first, because no postal workers were "being paid to stand around," as one official put it during fieldwork; and second, because part-timers and casuals were paid much less per hour in any case. At one point, the wage differential was almost 1:3, but the Union has long ago eliminated this differential for part-timers, and substantially reduced it for casuals.

Because of the savings in wages and benefits which could accrue, postal workers began to suspect that management was using two part-timers to replace a full-time position.[13] Then and now, part-time and casual staff were usually women. Women were generally kept from heavy labour (e.g. among the "bull gang" on the loading docks), so that their primary task was to work as sorters. But they were not usually trained in the old "geo" sort. Instead, as casual and part-time staff, women were shunted from one sorting station to another when personnel shortages dictated; they could not, therefore, learn the thousands of points of memory each case required.

Instead, they were trained in the "ABC" sort, in which city mail is initially sorted by the first letter of the street name (Albert Street, Arnold Ave, etc.) rather than by territory, then fine-sorted. The ABC sort is easier to learn than the geo sort, but it requires an additional level of processing before despatch. For that reason, pressure to meet despatch times is increased, and bottlenecks crop up more frequently.

Thus, the ABC sort led to more intensive supervision --quotas of 18,000 items per 8 hour shift (about the same as is actually achieved by coders) were imposed at about this time, and the

testing programmed dropped.[c] A variant of the ABC sort, although not notably successful, was also introduced for forward mail when cities were divided into zones[14]. Thus, by the late 1960's, 60% of mail in major centres like Montreal was being sorted by the ABC technique.

The ABC technique reduces the possibility of missorts, levels sorting speed by removing the advantages imparted by experience, and reduces the "breaking-in period" during which geo sorters must develop their memories and dexterity. It also allows management more flexibility in staffing, as noted above.

It was identified[15] as the most effective processing technique, more effective in fact than the mechanized sorting system then contemplated (and since adopted).

Sorters were then expected to train themselves on their own time,[16] so ABC sorting doesn't save a lot of money on training. Further, it does involve the addition of another stage of processing and therefore requires more personnel. That combined with ongoing increases in volumes to make postal stations very crowded places.

With no capital improvement projects contemplated, working conditions worsened noticeably: ventilation systems were overloaded, sorting floors overcrowded[17].

Of course, postal workers took a dim view of these changes, and many identified them as due to the influx of women into their ranks. A Commission investigating working conditions in the Post Office (the Montpetit Commission) published a Report which carried male workers' complaints that women would lower wages, dilute worker solidarity, and worsen working

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[c] Under this programme, geo sorters were evaluated according to the speed and the accuracy of their work (and, at random intervals, managers would "pull a case" looking for missorts); wage increase depended on passing these tests.

conditions[18]. The Commission's Report dismissed these complaints as nonsense, and -- perhaps influenced by the work of the Status of Women Commission meeting at the same time -- instructed management to begin hiring women in earnest.

In any case, their instructions received further impetus when the Public Service Staff Relations Board certified the CUPW as representing inside postal workers, whether male or female, full or part-time; and yet again when the federal government responded to the Report on the Status of Women by instituting an Equal Opportunity for Women (EOW) programme.

The Union's response was, in the words of Laidlaw and Curtis[19] "extremely ambiguous"; CUPW has consistently argued that all positions in the Post Office should be full-time, and management's use of part-time (still more of casual) employees remains an extremely sore point, strictly limited by contract.

Thus, part-timers were admitted to union membership with the greatest reluctance; they were "associate members" who paid dues, but could not vote, and whose representatives were kept separate from the main Union hierarchy. That situation did not change until 1975, when part-timers achieved full union membership[20]; it persists for casual employees.

By that time, women had made notable inroads into full-time ranks as well. This may have been in part because of the Department's EOW programme. The Post Office had surveyed its employees in 1975, and noted male postal workers' hostility to their women counterparts; the men considered women "too soft" and ready to accept any "bleeding heart contract." Commenting on the survey results, the EOW Coordinator noted in 1978 that management could turn this perception to good use: "If management seizes this opportunity ...by demonstrating now our

concern for women's status ...it may have a beneficial effect, not only in the better utilization of our Human Resources, but in contributing to labour peace."[21]

As soon as women gained the opportunity to enter full-time ranks, then they began to do so; while the numbers of men in the Post Office grew apace after mechanization, the numbers of women grew far faster.[22] This does not seem to have been due to any differential recruitment programme, but rather to a quality women candidates had which men did not (or, as Cockburn[23] suggested, to a failing men had which women did not).

In field work, respondents offered a number of speculative explanations for this, ranging from women's greater capacity for detail work due to smaller finger size, to their greater ability to handle tedium (or "bull") to their greater facility with keyboards of any sort stemming from prior experience in high school typing classes and in clerical work. In this regard, it may be worth noting that the Post Office was not the only occupation which feminized rapidly after the introduction of a keyboard-based machine.[24]

Cynthia Cockburn's Brothers[25] bears on this issue. She observes that some of the "skilled" male LINOTYPE operators were unable (or, she argues, subconsciously unwilling) to master the "unskilled," "female" keyboards. This may be due to a certain embarrassment on the part of the men, who were reluctant to be associated with a "female" task, despite the financial compulsion involved. It certainly, she argues, calls into question the very notion of skill.

Similarly, I encountered a few men who had been utterly unable to adapt to the group desk suite; these -- since the Department had guaranteed that no one would lose his job during the implementation of the new technology[26] -- were relegated to the remaining manual sortation tasks. I also noted in field research that men who were hired after training on -- and passing a

speed/accuracy test -- on the GDS became a condition of employment reported considerable anxiety as a result, even though they were ultimately successful. No women reported such anxiety.

When the Post Office was forced by CUPW to blend "coders" and "sorters" into a single "coder-sorter-sweeper" category, the shelter for male postal workers shrunk considerably; in Cancity, the only position where one can sort exclusively are at theBMF. At the Main, those remaining men who cannot code do not follow the normal job rotation pattern (from coding to sweeping to sorting) but instead bounce between sweeping and sorting.

As early as 1975, the EOW Co-coordinator had stated that "women have had a greater success than men in passing the selection and training process,[27]" although she did not speculate on why that should be the case. But, it is evident from the Coordinator's statement that she did not attribute the feminization of CUPW to any formal programme, but rather to a kind of "natural selection" process. Where such a process has not obtained, the ranks have remained more or less closed to women, despite management programmes.

An Equal Opportunity for Women Programme has been continuously in operation at Canada Post since 1975, and has targeted supervisory and managerial levels as the locus for greatest effort; at the time of this study, the policy was to promote women into management/ supervision at a ratio of 5:1. Canada Post developed training programmes for women and it instructed local managers to seek out female potential candidates and personally advise them to apply for promotion, making it clear that they were more likely to succeed than men at competitions for supervisory/managerial postings; at the same time, it developed special training seminars for women alone, aimed at giving them a "head start" in promotion.[28] Results have

been dismal; in 1986, women made up 8% of supervisory-level employees, compared to 6% in 1980 and 4% in 1977, and 0% of managerial staff[29].

And yet, familiarity with the new technology was a prerequisite to in-house recruitment. As well, the Union established a provision in its contract stipulating that any worker who left the bargaining unit, however briefly, would lose all seniority. This was apparently in response to a concern that the Post Office was using "developmental assignments,[d]" as it calls in-house training, as a device by which to subject workers to intensive resocialization into a "pro-management" stance. But the effect of these procedures and requirements is to make the more junior postal worker an attractive candidate for "development," while making pursuit of a promotion more costly for workers with high seniority. Women tend to have less seniority, and so -- even without affirmative action -- should have experienced both "push" and "pull" forces upward.

It is possible that this rather low "glass ceiling" would have been less obvious had the ranks of postal workers remained more segregated than they now are. As noted, female postal workers entered the Post Office in growing numbers as a consequence of the introduction of the GDS. The original plan was to maintain "coders" as a separate job category, distinct from manual sorting work.

Both CUPW and Canada Post were agreed that coding was "unskilled" work. For the former, this was indicated by the introduction of a new, "skill-based" pay scheme: coders were

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[d] In field work, most subjects were quite cynical about developmental assignments. One woman complained they were only available "if you're pro-management;" several pointed to a recent training for management course which had been given to "thousands of us" despite a cost-cutting programme aimed at downsizing supervisory/managerial ranks by 25%. As noted above, few survey respondents saw prospects for promotion as "good," but women were more likely to view the reasons for this as outright discrimination against them.

ranked PO1, handlers PO2, letter carriers PO3, sorters PO4, and despatchers (a position since eliminated) PO5: pay was graded accordingly.

The Union's position likewise was that postal work had been "degraded"[30] by mechanization. However, if the majority of mail was to be processed mechanically, then the Union feared exclusion more than degradation, and it sought for years to have the PO1 class abolished, and the PO4 category reclassified to a "coder-sorter-sweeper" designation. This was achieved after the "Boycott the Postal Code" campaign of 1975, and women workers leapfrogged several pay grades as a result.[31]

The PO4 classification then embraced two distinct types of staff: older, often male workers who could sort and sweep, but not code; and younger, often female workers who could sort, sweep and code.

Women in the Cancity Post Office have lower seniority than men (13% of male respondents were employed prior to 1965, compared to 1% of females -- $p<.05$) and are more likely to be employed as part-time help (27% vs 13% of males; $p<.05$). Because of this, 55% of women workers are employed on the evening shift (where more part-time work is done) compared to 39% of males; fully 36% of male respondents are employed on days and 25% on nights, versus 28% and 18% respectively for women.

Women are significantly more likely to work on the optical-character-reader (Pearson corr. -.2205, $p=.006$), the letter-sorting-machine (-.1607, $p=.048$) and the group desk suite (-.3095, $p=.001$). Not surprisingly, then, they are more likely to express an opinion about mechanized work -- either a preference (-.2080, $p=.01$) or a dislike (-.2390, $p=.003$) and to state that job rotation is a positive development (-.2005, $p=.013$). But, if women prefer a certain type

of work, it is generally not because of the physical conditions which prevail ("Why prefer conditions" = .2731, p- .001), while if they dislike a task, it is because of those physical conditions ("Why dislike conditions" -.2440, p= .002). Intriguingly, there is no difference between men and women on the "autonomy" dimension; QUOTA, PACING, and SUPERVISION.

Fieldwork, however, suggested that, to a greater degree than men postal workers, women postal workers suffered -- and still suffer -- from anomie, being unable to identify with the norms promoted by any group in Canada Post. As women postal workers have become more experienced with postal work and with unionism, and -- more importantly -- as the Union has shifted from a frankly inimical to a more accommodating stance towards women members, so have women's work-related attitudes begun to converge with men's; a process not yet completed. That is not the only outcome possible, of course; but it was fostered by CUPW's "gender blind" (formal) position: despite its adoption of maternity leave as a bargaining demand in 1981, male and female unionists in CUPW maintained an officially neutral view about women's issues.

White's Mail and Female[32] makes this quite clear: for instance she points out that, despite the fact that close to 42% of CUPW's national membership was female while only 12% of LCUC's was, it was the latter which had a Women's Committee.

iv. Support for the CUPW

Women postal workers, then, view the ranks of management as a male bastion. Clearly, the belief that management discriminates, whether or not it does, is a partial explanation; but that belief must have its origin in some evidence. The evidence available is also clear: there are (almost) no women in management, therefore management (must) discriminate (in some

respect). But the same evidence obtains for the Union above the voluntary level, yet the evaluation there is more charitable: there are (almost) no women in the CUPW's management, therefore the Union is unaware of women's particular needs, or unable to accommodate them. As a matter of fact, women avoid (and are restricted from) both salaried Union work, and Post Office management positions.

We can contrast this with the situation in the US Postal Service (USPS), where recruitment of women to supervisory ranks is much further advanced. This is largely because different tasks in the USPS remain separate job categories (and represented by separate unions). To an extent far greater than here, women managers supervise women workers, in keeping with Glenn & Feldberg's[33] suggestion that women will be used to undertake a mediating role between a feminized workforce and a male executive.

In Canada Post, then, women even more than men, are separated from management -- and thereby "insulated" from managerial ideologies. That being the case, women must either develop their own ideology, individually or collectively; or they must seek out an already-existing alternate.

Sociologists of religion have done some considerable empirical work on this score, in their effort to develop Luckmann's[34] ideas about "invisible religion." The results are mixed, but what is clear is that any belief system -- whether one calls it an "alternate ideology" or an "invisible religion" -- is difficult to construct and maintain in the absence of institutional supports.

The CUPW does present a clear, coherent ideology; one whose acceptance provides immediate institutional support. Hence, women ought to seek out an alternative ideology; and this ought to lead them to be more amenable to the CUPW's views.

We have already enumerated some practical reasons why this should happen. For male postal workers, pay and benefits are good; but there are other jobs elsewhere which offer comparable rewards. For women, this is less likely to be the case. Consequently, turnover is higher among new male postal workers than among females.[35] That is by no means because women perceive postal work as more fulfilling than men do;[36]it is simply a pragmatic decision made because of a lack of reasonable alternatives. If the job, itself, is unsatisfactory, but instrumental considerations preclude seeking other employment, then militancy -- in the sense of collectively striving to improve working conditions -- is an option.

v. Union Solidarity Subordinates Women's Solidarity

But women remain less militant than men. That is because, just as women are unable to identify with management as being "theirs", so too are they separated from the Union.

There are a number of reasons for this. In the past, as described above, gender divisions have served to divide male and female postal workers from each other; and it might be supposed that management would seek to exploit such a split. Too, as Cott puts it "Building [women's group consciousness and solidarity tends to reify the very gender differences the movement seeks to eliminate[37]."

Of necessity, then, the CUPW has tended to downplay women's issues: there is

> an environment of equality and solidarity in which ... women's issues are considered as unnecessary, or even a step backward, by a considerable number of women within the CUPW.[38]

This is by no means true for everyone: at the lower ranks in the Cancity Post Office, women's representation is dramatically greater in the Union than in management: they are Shop Stewards, Health and Safety representatives, convention delegates and so on up to 40% of the total.[39] This means that women do unpaid work for the Union which amounts in one female Steward's estimation to a full-time job in itself, a job done after hours and on weekends.

The same level of representation does not hold true at higher levels of the Union; in 1986, about 17% of National and Regional Officers were women.[40] In that respect, Union and employer are rather similar.

Intriguingly, women in fieldwork, while well aware of this phenomenon, were likely to attribute it to women's qualities, not the Union's: the work entails travel, and therefore, they said, women do not seek it because of an inherent conflict with their "more important" domestic responsibilities.

But, we could reinterpret this to mean that the Union has proven unwilling to accommodate itself to women's special needs, for instance by reducing the travel time required; or even by establishing Women's Committees to inquire into what those special needs might be and how gender equality within CUPW might be attained. This is an attitude exhibited by both male and female union officials.[41]

So, the CUPW does not seek much input on "the woman question," and the near total absence of women at the Union's executive level also means that it does not provide a really

effective role model in this respect either. Indeed, the CPC's Human Rights Co-coordinator told me that the Union resists his efforts at implementing Affirmative Action.[42] The Union, then, addressed women's issues only to the extent that they could be recast as "workers' issues. Maternity leave (won as a paid benefit in 1981) is an example; like education or bereavement leave, it is a benefit which some workers might use someday.

This has an impact on militant attitudes, in so far as these entail a collective orientation· the Union as a whole might not seem to some women postal workers to be fully their union.

Interviews with women postal workers, for instance, revealed none of the concerns with harassment or child care or the larger personal-political dynamic which constitute women's issues; as Frager[43] noted, these were subordinated to class issues.

But, on the other hand, very few women postal workers seem to feel any very pronounced antipathy to the Union because of this. I came across just two who were willing to criticize the CUPW on this score (one dismissed the 1981 campaign for maternity leave as "tokenism;" another argued it was not useful: "most of us are past the point where we'd use it, on purpose anyway.")

Most express considerable solidarity. We can explain this by noting the Union's long-standing efforts to counteract disintegrative forces[44] by submerging all within-group distinctions (including the male-female one) in favour of an ideology defining white and black, francophone and Anglophone, male and female as just "workers" and nothing more.

Historically, the CUPW was organized into divisions which mirrored the Post Office's -- and Canada's -- regional structure; even though CPC has abolished these divisions, they persist in the CUPW. As a result of them, regional officials enjoyed considerable autonomy; then-

President Jean-Claude Parrot's original power base was in the Quebec wing of the Union, and Joe Davidson depicts Parrot's ascension to leadership of the National Union as something of a palace revolt. Likewise, Mr. Parrot has been repeatedly challenged by Mr. Perreau, leader of the Montreal region. The Union has also had difficulty keeping locals "on side," so to speak: wildcat strikes, sometimes in defiance of the National Executive's wishes[45] have been frequent.[46]

In consequence, the Union has sought to redefine local issues as national ones; to change a sit down protesting a particular manager's behaviour into one which symbolizes "management's refusal to honour the collective agreement" for instance. Thus, postal workers in Cancity would normally name particular supervisors and managers as sources of problems and would wax nostalgic for the good old days, when the Postmaster was seen as both more benevolent and more authoritarian. But Union officials would describe changes in managerial ideology and in the labour process as the source of conflict, and tended to pooh-pooh the question of personality.

White's account points to the same phenomenon, an effort to downplay gender-specific concerns, to redefine them as workers' issues. Where convention delegates or others would raise these specific concerns, they would be vigorously opposed as divisive. The sense that giving prominence to women's issues might provoke a male backlash is reasonable. Marty Schreiter, CPC's Human Rights Co-ordinator at the time, stated[47] that to be his experience; and despite the ineffectiveness of CPC's affirmative action programme, it is still the source of considerable resentment among the male postal workers surveyed by Lowe and Northcott in Edmonton [48]

In CUPW, maternity leave, like bereavement or education leave, is just leave; something some members might need some day (in fact, local personnel officials at the time of this study

told me they'd noticed no change in the number of women workers taking leave once the new provisions took effect).

So, the militancy which female postal workers express can be understood as stemming from their identification as postal workers, not as women postal workers. The fact that their levels of militancy are a little lower than men's is due to the CUPW's unwillingness to go beyond this towards addressing specifically female needs.

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CHAPTER SEVEN: DATA ANALYSIS

i. Introduction

In previous chapters, discussion has included the general theoretical premises on which this dissertation is founded, the historical background of the situation under review, and the methods by which analysis was to proceed. There was also a separate discussion of attitudinal militancy and gender.

In what follows, the coding decisions made for each variable, and the logic by which particular variables were grouped into blocks will be addressed. Following that, the results themselves will be examined, in terms of the link between degraded work and militancy for this set of respondents.

Running all of the blocks against militancy produces results which are summarized in Tables 7.11 and 7.12 at the end of the Chapter; each block is discussed in its turn, from Tables 7.1. to 7.10.

If we turn our attention first to the Pearson's R^2 (adjusted to correct for the spurious effect of more variables in the equation), we can get some idea of the efficacy of the model. The model as a whole explains more than half ($R^2 = .575$) the variation in militancy exhibited by respondents; it is both strong and robust. It increases steadily in strength as one adds more blocks to the equation, regardless of the order in which this is done. The largest components of the increase occur when one adds the job experience set (JOB HISTORY & TIME LOST) and the percepts set (SOLIDARITY, UNIONISM, and JOB ATTITUDES).

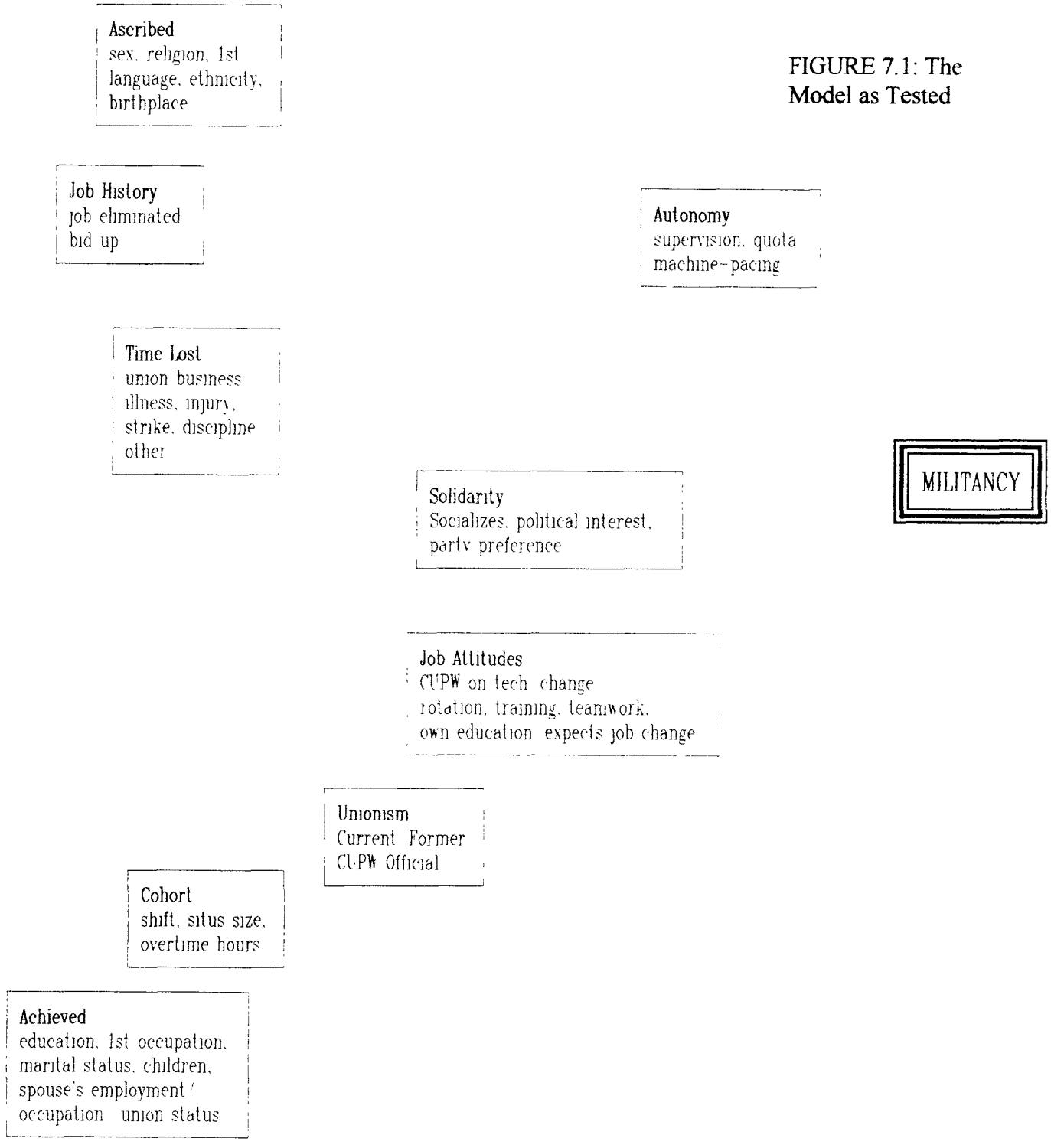

FIGURE 7.1: The Model as Tested

For heuristic reasons and to reduce the potential for error, it was necessary to group variables into "blocks" of data, in so-called "hierarchical set" analysis. Here, the relationships between variables within a set or block are unexamined because they are of little immediate interest, and each block is treated as constituting a variable --Heise refers to these as "imputed variables" -- which represents a single underlying phenomenon; the observed data are "scores."

It would be possible to group data within blocks according to two schemes: first, by gathering conceptually-linked variables into blocks, thereby analysing the effect of, say, worker commitment or alienation on attitudinal militancy. Alternatively, one could order the blocks by time sequence. The former is more satisfactory from a theoretical standpoint, but could involve violation of the canons of logic, since temporal order of occurrence must be primary in a causal analysis. For instance, we can reasonably investigate the possibility that a prior condition like sex influences a current state like militancy, but to suggest the reverse is absurd.

Therefore, the first basis of hierarchical order between sets is temporal, the second conceptual. The difficulties inherent in this hybrid approach are especially clear in the two blocks labelled achieved and ascribed. The concepts them-selves are among the more vague in sociology; here, they are operationalized into blocks which include a number of variables whose relationship is not always evident. From a technical standpoint, however, that is less of a problem in blocks treated as exogenous (as these two are), where it is permissible to design larger and more heterogenous sets -- all the more so since it is operationally necessary to limit

the number of blocks used so as to reduce the risk of error and enhance the power of the tests employed[1].

Blocks which are more closely related (temporally) to the dependent are smaller and conceptually more homogenous.

In this analysis, DVPC was extended to all the variables in each set. For example, each variable in the task set was weighted by its regression coefficient; and a new variable TASK was computed by summing these scores. Likewise, the exogenous set which includes dummied variables combining religion and religiosity (four dummy and one reference category), sex, birthplace, ethnicity, and first language (each dichotomized into one dummy and one reference category) were combined into a single "imputed variable" called ASCRIPTIVE .

The whole set is thereby presumed to be an indicator of the underlying characteristic ascription, conceived as the degree to which ascriptive traits render one more-or-less marginal to the organizational culture, and operationalized as any departure from the "typical" (modal) category. Similar sorts of assumptions were made about the meanings of each of the other sets employed.

Overall, the dummied variable analysis results in an adjusted R^2 of .398; as mentioned above, the hierarchical set analysis improves this to .575. These results offer, at best, qualified support for labour process theory, in that they point to a multicausal explanation of militancy, only one of which can be understood as objective job content. A far better case can be made for labour process theory if it is extended (as some authors do[2]) to include workers' evaluation of job content; in Coburn's[3] terms, "perceived," "subjective' alienation. In other words, to the extent that workers' definition of the situation involves a sense of lost control over their tasks, then they

are militant. These perceptions are sometimes, but not always, grounded in "reality" (i.e. in conditions the researcher identifies as objectively degraded). Further, they are dependent on social context.

These conclusions are clearest in the hierarchical set analysis (HSA), in which Henry's Dummy Variable Path Coefficient (DVPC) was employed to create the imputed variables ASCRIPTIVE, ACHIEVED, JOB HISTORY, TIME LOST, COHORT VARIABLES, TASK, AUTONOMY, JOB ATTITUDES, SOLIDARITY, and UNIONISM. But they are also evident in the dummy variable analysis (DVA), in which Henry's measure was not used.

We have already reviewed at length the reasons why DVA was subject to unacceptable amounts of error; the proof of that contention will be evident in Table 7.11, where the reader will note the very small and insignificant beta coefficients for almost every variable, the occasions on which directions of relationships reverse from positive to negative (for instance, "socializes with coworkers," in the SOLIDARITY block), and the rather large adjusted R^2's obtained despite the paucity of significant effects. All of these are clues that the results are unreliable -- which is of course why HSA was undertaken in the first place.

Nevertheless, the DVA constitutes the best estimates -- because they are the only estimates -- of the "natural" variables that we have. Therefore, in what follows, I will discuss selected factors in the DVA as if they were valid and reliable; but it is the hierarchical set analysis that really matters.

ii: The Labour Process and the Data

It might be useful at this juncture to review the argument on the labour process. When Littler's discussion of skill is applied to mail sorting, it becomes evident that deskilling in this instance could only refer to a decline in control.

Under the older "geo sort" technology, a worker would sort mail at "his/her" case. Each developed familiarity with only one complex of points-of-knowledge, so that there was little if any, movement from this one task to any other. But, since the Union won job rotation for its members, workers will move from a sorting case to the "Tosh" to the group desk suites to the optical character reader to the letter sorting machine. Most contemporary postal workers in Cancity experience greater variety or task range than was once so (and most report that job rotation is a positive development.)

In terms of knowledge or problem-solving ability which workers need to direct to their tasks, the same sort of argument applied. Generally, this quality is indicated by training, and it is alleged that the "geo" sort required six months' training while training on the coding desk requires only two weeks. But geo sorters trained on their own time after work, and were tested after six months. In that time, they developed facility with the case, so that they ended up with greater dexterity and surer recall. Whether the content of this informal training developed knowledge superior to the content of the formalized sessions used by the Post Office currently is moot: Canada Post now spends two weeks in training a worker for manual sortation, too (and many respondents complained that they didn't receive that), which might allow one to infer that six months' "practise" at home equals two weeks "schooling" on the job. Further, there were

many instances of sorters being unable to learn coding, which could suggest that the latter is more difficult than the former (or perhaps that learning it was more resisted[4]).

On the other hand, it might be argued that the repository of the knowledge has changed with the shift from informal to formal training. In the informal system of the past, it was management who set the sortation patterns and the breaks, who designed the cases and practise boards, who assessed the trainees' "skill." It still is -- but the individual no longer controls the pace or technique by which s/he learns.

We can add further support to the argument that mechanized postal work is degraded by asserting that is has entailed workers' loss of control over their work as well as over their training. That idea may be questioned in certain respects; the main issue is whether manual sortation can be said to involve any more control by workers than does mechanized postal work, a problem complicated by the fact that postal workers who do mechanized work rotate between four different kinds of machine: the culler-facer-canceller, the optical character reader, the letter sorting machine, and the group desk suite. In all but the last, workers feed mail into the machinery and empty it out at the other end, so that they are to one degree or another machine tenders. On the group desk suite, workers act as machine operators in a modest sense, a task supposed to involve more skill-- but one which also involves less physical movement and more activity. Despite this, we assume, with CUPW and the bulk of the literature, that mechanization is introduced into the capitalist labour process in order to wrest control from the worker and vest it in management/technicians. Thus, mechanized work is degraded work.

More important, perhaps, is the possibility that what machines one works with is as important as whether one usually works with machines. For that reason, the variables WORKS

WITH LSM, WORKS WITH OCR, WORKS WITH GDS, WORKS WITH CFC were included in the TASK block. The block then becomes analogous to a crosstabulation: are the respondents' duties mostly mechanized and to what sorts of machine technology are they exposed?

The remaining four blocks of independent variables contain variables which are intermediate between TASK and militancy. Nevertheless, methodological considerations necessitated that TASK be entered into the equation first rather than in the logical sequence. This is because we want to test the task-militancy relationship as carefully as possible: if it is entered into the equation first -- instead of in the normal temporal sequence -- then the chances of Type I and Type II error for that central task-militancy link is minimized.

Of necessity, however, such a procedure increases the risk of errors involving both spurious correlation and reduction in power for these others. That does not invalidate these results: they remain the best estimates of relationship available.

The block AUTONOMY is a measure of respondents' perception of the frequency with which supervisors check their work, whether their work is machine-paced, and whether they are required to work to a quota. These assessments do appear to have some basis in observable "reality." People who work on the letter sorting machine, the optical character reader and the culler-facer-canceller see themselves as subject to machine pacing, but as not governed by quotas and as not subject to frequent supervision, but so do people who work on the group desk suite. In fact, those working on the group desk suite are able to pace their work to a greater degree than the others, but the belief to the contrary is in keeping with current thinking on the matter; that is, with the notion that all machine work is machine-paced.

While AUTONOMY and TASK together are indications of the labour process confronting respondents and the other blocks discussed so far represent elements in their prior orientations, the remaining three blocks -- SOLIDARITY, UNIONISM, and JOB ATTITUDES -- are all taken to be outcomes of the experiences already discussed, outcomes which may intervene in the TASK /AUTONOMY/MILITANCY link.

Of these, the block labelled SOLIDARITY is most straightforward. It combines respondent's stated interaction (away from the workplace) with coworkers with her/his level of political interest, and with his or her stated federal party preference. Since 60% of respondents adhere to the New Democratic Party (none of the respondents stated a preference for a fringe party on the left), this block in essence asks whether a respondent does not prefer the NDP and how strong are their feelings on the subject. Intriguingly, party preference and interest in politics are not correlated (P-.379).

These variables together provide an indication of the degree to which attitudes formed at work can be reinforced by exposure to similar attitudes after hours; the object was to place respondents into an open or closed[5] social network. Closed social networks entail a paucity of "weak ties"[6] and lead to relative powerlessness. For instance, Batstone et al[7] found that stewards without external connections to management were likely to have access to less information and were thus unable to influence events except through direct (strike) action.

Finally, the block JOB ATTITUDES contains variables which asked respondents to identify what they liked and did not like about their jobs. Most of these questions were open-ended, and responses were according to whether they met the Corporation's definition of the problems facing postal workers, as derived from an overview of CPC releases.[8] If they did not

conform to such a view, then it was assumed that these respondents were not available for the managerial ideology, and therefore more prone to favour open conflict as an option.

iii: The Analysis

The central relationship to be examined, then, is that between task content and militancy. Content, it will be recalled, was operationalized according to whether respondents work was mostly mechanized or mostly manual, and according to whether respondents reported themselves as working with the letter sorting machine, the optical character reader, the group desk suites (coding suites), and/or the culler-facer-canceller (Toshiba).

Table 7.1: Analysis of Task-relevant Variables, with Controls

Variable		Uses GDS	Uses CFC	Uses OCR	Uses LSM	Duties	Blocks Introduced
	(Null Value)	(No)	(No)	(No)	(No)	(Mechanised)	
STEP							
1	Dummied	-.171	.235#	.202	-.058	.031	-- -- --
	DVPC			**.260***			
2	Dummied	-.134	.219#	122	-.016	-.002	AUTONOMY
	DVPC			**.227***			
3	Dummied	-.092	.163	.124	-.048	-.002	JOB
	DVPC			**.175#**			ATTITUDES
4	Dummied	-.034	.148	.088	-.065	.064	SOLIDARITY
	DVPC			**.130#**			
5	Dummied	-.050	.161	.087	-.065	.061	UNIONISM
	DVPC			**.169***			
6	Dummied	-.048	.126	.063	-.001	.045	COHORT
	DVPC			**.157#**			VARIABLES
7	Dummied	-.001	.089	.040	-.037	.062	TIME LOST
	DVPC			**.172***			
8	Dummied	-.041	.056	.046	-.071	.096	JOB HISTORY
	DVPC			**.218***			
9	Dummied	-.059	.079	-.032	-.082	.063	ACHIEVED
	DVPC			**.126#**			
10	Dummied	-.048	.079	.009	-.089	.056	ASCRIBED
	DVPC			**.143#**			

KEY: *: $p < .01$; #: $p < .05$

Elsewhere, I have shown that one's duties are affected by other factors: postal workers hired after 1974 had to qualify on the group desk suite, which means that those who work on it are slightly more likely to be younger, female, better-educated, and employed on nights or afternoons. Those working on other machinery, or in manual work, are more likely to be senior and male, or part-time.

This is evident in the DVA, where we can see that there is initially a very weak tendency for manual workers to be less militant, a tendency which all but vanishes once perceptions relating to control (autonomy and role embracement) are taken into account. This is because of the systematic variation in sex, education level, seniority and solidarity which exists between manual and nonmanual workers; once these are included in the equation, the relationship reverses, so that manual workers are more militant than nonmanual.

Likewise, those who work with the group desk suite or the letter sorting machine are initially less militant than others; and again this relationship reverses once cohort and other antecedent variables are added to the equation (in the case of working with the group desk suite, it reverses once again when ascriptive traits are controlled, presumably because this holds sex constant).

The variable which describes whether respondents use the culler-face-canceller is the best test of the labour process perspective (at this level) available; the culler-facer-canceller is the most degraded of all the mechanized tasks available, and assignment to it is relatively random -- among everybody, that is, except the night shift, and those employed at the Bulk Mail Facility or in "preferred" occupations. Thus, this variable relates positively (i.e. as predicted by labour process theory) to militancy, and is initially significant ($p<.05$). Since it is difficult to

imagine this work as anything but machine-paced, it is not affected much by the addition of the "autonomy" block, but the relationship is attenuated by subsequent controls; it ends up still positive, but very weak.

However, whether this weakness is real, or simply an artifact of the analytical technique used, is not clear. To make it more clear, we turn to hierarchical set analysis. The use of hierarchical set analysis makes the overall tendency apparent: objective degradation of work in general has a significant, positive effect on militancy. Moderate at first, the relationship declines steadily once other influences are brought into play. That indicates that it is only to the extent that one's task does affect one's perceptions of job content that task has much of a role in determining militancy. But the relationship strengthens slightly when the respondent's status as a union official (past or present) is taken into account, and again when the respondent's job history (resistance and anomie) are controlled; it becomes very weak indeed when adding "prior orientation" (ASCRIPTION and ACHIEVEMENT).

So, perhaps the relationship between objective conditions and militancy is bimodal: weakened to the extent that perceptions of working conditions do not match the "reality," but strengthened in so far as one's personal experiences clarify or highlight the degradation of work which has occurred.

Union officials are exposed to frequent lessons about this relationship, as they take up the cause of other workers, and interact with other CUPW officers; for CUPW is notable for its insistence that working conditions as such be placed on the labour relations agenda. Likewise, any individual whose job history includes strikes, employment prior to mechanization or a change in task (particularly if that change was due to the elimination of the individual's old job)

has had an object lesson in deskilling and resistance one which is bound to raise her/his consciousness.

But that in turn is moderated by the respondent's own history off the job: to the extent that s/he is "marginal" to the work group, "abnormal" in some way, then s/he will be less likely to find a "collective voice," and less likely to be militant.

The set of variables TASK is, as has been already noted, of crucial interest to the HSA component of this study, so much so that conceptual and methodological procedures aimed at minimizing error were directed at this block in particular.

The TASK set is designed to identify how deskilled in "objective" terms, the respondent's current occupational activities are. Deskilled work is taken to be degraded work, in that there has been a removal of discretionary control from the worker, control which is then vested in supervisors, in machinery or in the organization of work, itself. However, as an objective characteristic of work, degradation ought to be independent of workers' perception of it; it affects or even causes their perception (of the closeness of supervision, of the degree machine-pacing present, and of the existence of productivity quotas -- all of which were gathered into the set AUTONOMY), but that perception itself may not be an element of deskilling. That is, respondents may <u>feel</u> that they are subjected to tight control (and, again, be wrong). In either case, those feelings represent "false consciousness;" dubious though that term may be from the action stance, it is the only conclusion possible from the labour process view.

The contribution of task variables to predicting militancy is, however, quite trivial: adjusted R^2 for the DVA group is .036; for the block using hierarchical set analysis, .061. The

difference between the two is attributable solely to the fact that HSA replaces 5 dummied variables with one imputed variable; thus the unadjusted R^2 for both is just .068.

Table 7.2: Analysis of Autonomy-relevant Variables, with Controls

Variable	(Null Value)	Machine Paced (Yes)	Assigned Quota (No)	Less Closely Supervised (Yes)	Blocks Introduced
STEP					
1	See Table 7.1				
2	Dummied	.202#	-.150	-.175*	----------
	DVPC		**.288***		
3	Dummied	.184	-.185#	-.200#	JOB ATTITUDES
	DVPC		**.312***		
4	Dummied	.153*	-.232*	-.225#	SOLIDARITY
	DVPC		**.336***		
5	Dummied	.137	-.229*	-.211	UNIONISM
	DVPC		**.334***		
6	Dummied	.129	-.211*	-.267	COHORT
	DVPC		**.363***		VARIABLES
7	Dummied	.102	-.257*	-.279#	TIME LOST
	DVPC		**.393***		
8	Dummied	.092	-.222*	-.294	JOB HISTORY
	DVPC		**.381***		
9	Dummied	.080	-.245*	-.353*	ACHIEVED
	DVPC		**.418***		
10	Dummied	.095	-.220#	-.333#	ASCRIBED
	DVPC		**.403***		

KEY: *: $p < .01$; #: $p < .05$

The addition of the AUTONOMY group of variables brings the explained variation up from the trivial to the weak (i.e. .10 for the DVA; .136 for the HSA); here, the variables used are rather more robust than in the task group, and the beta coefficients for the imputed variables are strengthened, not weakened, by the addition of controls, especially those relating to nonsubjective factors.

The AUTONOMY group consists of variables aimed at tapping respondents' sense of control over their own work: they are asked whether their work is governed by a quota, whether it is machine-paced, and the frequency with which supervisors check on their work. Each of these contains some ambiguity.

There is a kind of quota in operation at the Post Office, for instance: workers are expected to code 1800 pieces per hour at the group desk suite, to sort two trays of letters per hour (also about 1800 per hour) in most manual sorting stations, and to "clear all mail received" elsewhere. But there is a contractual prohibition against "individual work measurement," so that no formal sanctions can be brought to bear either to encourage conformity or to penalize deviance. In fieldwork, it was evident that many respondents were quite unaware of these "quotas;" those who were could be pardoned for seeing them as suggestions or targets rather than quotas in the usual sense. Thus, there is no significant zero-order correlation between this question and one's duties.

Most respondents did see themselves as subject to fairly infrequent supervision (typically twice per shift or less), but some workers did suggest that they were subject to covert supervi-

sion (being "spied on")[e], as I've already mentioned. My observation was that supervisors were continually in evidence in the Mech. Room, rarely so in manual sortation; but wherever they were, their style was distinctly laissez-faire in most cases.

We can imagine lengthy academic arguments about whether supervision can be both close and unobtrusive -- but it is hardly possible for workers to react to supervision which never intrudes on their awareness. So, if some believe that they are closely supervised, they are; and the converse applies as well. There was, then, no significant zero-order correlation between the supervision question and a respondent's duties.

The dummied variable relating to machine-pacing is more definite: if one works the culler-facer-canceller, the optical character reader, or the letter sorting machine, then one's work is definitely machine-paced. But coders on the group desk suite can work faster or slower, so long as they keep their fingers moving; this is why there is a target output for coders.

Thus, the dummied variable relating to machine-pacing bears an ambiguous relationship to militancy, in keeping with the ambiguous nature of coding; it is the only variable of the three which becomes insignificant once respondents' experience with "resistance" is taken into account; the other two are, if anything, strengthened by the addition of controls.

It would appear, therefore, that one's tendency to identify coding as machine-paced is reduced by cohort influences; but that these same influences lead individuals to see themselves as under supervisors' control even when none is visible, or at least that didn't intrude much on general awareness.

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[e] This is a quite credible belief: postal management has been known to use electronic listening devices in the past.

The beta coefficients for the imputed variable AUTONOMY are moderate when first brought into the equation, but become the strongest in the model once all controls are in place.

The same kinds of ambiguities prevail in the DVA for the variables I've grouped under the rubric JOB ATTITUDES. Most respondents saw their education as inappropriately high for the work they did; few saw it as too low. These few were no less militant than their counterparts, in keeping with Berg's prediction, but the difference between them is far from significant.

Few respondents saw the increased variety offered by job rotation as much of a benefit; in fieldwork, many actually complained of the fragmented working day which rotation entails and expressed a preference for seeing the task--whatever task--through to completion. One asserts that moving from one "boring" task to another's of small importance. However, those who did see rotation as a good thing were more militant than others; perhaps this opinion indicates a support for CUPW's position on the issue, since job rotation is a negotiated "gain." But here again, the influence is small and insignificant.

The "teamwork" question is intriguing. This question was derived from Goldthorpe et al's football team analogy, which the Luton researchers found quite useful. Here it begins as a "significant" influence on militancy, declines in strength until the "resistance" group is entered, and then declines again. It is, therefore, yet another vanishing partial -- but its influence is in the wrong direction. That is, those who agree that the post office is like a football team, with management and workers on the same side are more militant than those who disagree -- and that relationship (which declines when cohort effects are controlled) is strengthened when the respondents' own history of resistance is taken into account.

We can conclude from this that militant workers wish labour relations were smoother than they are and attribute the conflict they see to management -- or rather, to individual manager's behaviour -- rather than to structural conflict engendered by capitalism. While this is not very startling news, it does tend to disconfirm any explanation which relates worker militancy to "consciousness," whether of the explosive variety or otherwise.

The group of variables called JOB ATTITUDES also demonstrates reasonably strong and robust influence on militancy at the imputed variable level. It appears, though, that there is some connection between these variables and those in the "SOLIDARITY" block; hence, JOB ATTITUDES weakens a bit once the other block is introduced.

Table 7.3: Analysis of Job-attitude-relevant Variables, with Controls

Variable (Null Value)	Training Value (Poor)	View of CUPW (Neg)	Expect Career Change (No)	Team Work View (No)	Rotation View (Neg)	Education Level (Too Hi)	Blocks Introduced
STEP							
1	See Table 7.1						
2	See Table 7.2						
3	Dummied	-.179#	-.218*	.132	.211#	.019	-.018	_____
	DVPC			**.402***				
4	Dummied	-.241*	-.177#	.180#	.108	.055	-.029	SOLIDARITY
	DVPC			**.364***				
5	Dummied	-.211*	-.166*	.157#	.108	.066	-.024	UNIONISM
	DVPC			**.344***				
6	Dummied	-.216*	-.161#	.152*	.129	.056	-.016	COHORT
	DVPC			**.353***				VARIABLES
7	Dummied	-.208*	-.170#	.136	.148#	.021	-.004	TIME LOST
	DVPC			**.355***				
8	Dummied	-.246*	-.166#	.130	.114	.033	-.016	JOB HISTORY
	DVPC			**.356***				
9	Dummied	-.298*	-.164#	.161	.104	.046	-.129	ACHIEVED
	DVPC			**.383***				
10	Dummied	-.292*	-.164#	.095	.120	.030	-.083	ASCRIBED
	DVPC			**.355***				

KEY: *: $p < .01$; #: $p < .05$

Table 7.4: Analysis of Solidarity-relevant Variables, with Controls

Variable (Null Value)		Party Preference (NDP)	Interested in Politics (Mod, Hi)	Socializes With Co-workers (No)	Blocks Introduced
STEP					
1	See Table 7.1				
2	See Table 7.2				
3	See Table 7.3				
4	Dummied	-.338*	.118	-.019	----------
	DVPC			**.344***	
5	Dummied	-.319*	.123	-.011	UNIONISM
	DVPC			**.352***	
6	Dummied	-.298*	.133	.041	COHORT
	DVPC			**.337***	VARIABLES
7	Dummied	-.302*	.152#	.054	TIME LOST
	DVPC			**.357***	
8	Dummied	-.319*	.159#	.050	JOB HISTORY
	DVPC			**.381***	
9	Dummied	-.344*	.246#	.071	ACHIEVED
	DVPC			**.376***	
10	Dummied	-.297*	.173	.090	ASCRIBED
	DVPC			**.359***	

KEY: *: $p < .01$; #: $p < .05$

The SOLIDARITY block was designed as an indicator of the degree to which postal workers might treat their job as the basis for a solidary group: did they support class-based politics, were they involved in political affairs, and did they include postal workers in their after-work associations. As such, it is meant to be considered along with JOB ATTITUDES on the one hand, and UNIONISM on the other.

SOLIDARITY is made up of just three variables: the first is political party preference (federal, since Canada Post is governed by federal labour and other law). About two-thirds of respondents identified the New Democratic Party in this question, so responses were dichotomised as "NDP" and "other."

The second variable, level of interest in politics, was dichotomised with "high to moderate" as the null value and "less than moderate" as the other. And respondents who stated that they rarely or never socialized with coworkers formed the null value in the third variable. This last is not very informative: few respondents did socialize with coworkers, and the relationship to militancy is insignificant; it also reverses here and there.

The other two are more promising. People who tend to vote NDP also score significantly higher on militancy than do others; and the greater one's interest in politics, the more likely s/he is to be militant. As an imputed measure, SOLIDARITY is, therefore, pretty strong and quite robust. This would seem to put paid to the "institutionalization" thesis discussed in Chapter One; it is not the case that (attitudinal) militancy declines once workers are able to identify political avenues for dispute channelling.

The next Table indicates the potency of the Union -- and its weakness -- in determining militancy through determining the individual's definition of the situation. As noted in Chapters 1

and 6, the Union's extensive educational and information efforts stress an ideology of "workers consciousness" in which all CUPW members suffer from the same conditions, regardless of "objective" differences in their situation. Thus, one's sense of autonomy is affected by one's task, but hardly determined by it: day shift or night shift, sorters or coders, male or female, there are workers who sense their work as degraded, as battleground. Thus, the correlation coefficient of AUTONOMY increases as the equation is elaborated.

Among these sets, the exception to this general tendency is UNIONISM, i.e. whether workers are (or have been) union officials. Current union officials are significantly more militant than the rank-and-file, while former officials are no different than the pool of workers from which they were drawn and to which they have returned. And, in the HSA, a moderate correlation rapidly declines to triviality. This is informative.

Table 7.5: Analysis of Unionism-relevant Variables, with Controls

Variable		Current CUPW Official	Former CUPW Official	Blocks Introduced
(Null Value)		(No)	(No)	
STEP				
1	See Table 7.1			
2	See Table 7.2			
3	See Table 7.3			
4	See Table 7.4			
5	Dummied	-.144#	-.027	---------
	DVPC		**.140#**	
6	Dummied	-.145#	-.054	COHORT
	DVPC		**.143#**	VARIABLES
7	Dummied	-.124	-.001	TIME LOST
	DVPC		**.119**	
8	Dummied	-.119	-.019	JOB HISTORY
	DVPC		**.129#**	
9	Dummied	-.109	-.029	ACHIEVED
	DVPC		**.130#**	
10	Dummied	-.096	-.016	ASCRIBED
	DVPC		**.112#**	

KEY: *: $p < .01$; #: $p < .05$

During the 1987 strike, I observed an incident in which union officers restrained more zealous picketers, stressing a highly rationalized and formalized normative set, but using argument and persuasion rather than discipline. That the officers were successful in the face of their members' anger was noteworthy; it suggested to me that the Union -- despite its under-representation of women, of regional interests, and the like -- is nevertheless "democratic" rather than "oligarchical" in some respects[f].

True, current status as a union official does indicate greater militancy, as shown in the DVA -- but former unionists are little different from others in their militancy. Fieldwork showed that, on the whole, current officials are a core of long-term leaders who are repeatedly re-elected, often by acclamation. Former leaders, by contrast, have often served only one term, and that usually in a fairly junior position.

So, by extension, the greater militancy of current union officials indicates that they have something members want in their leaders. Thus, members are not passive units trotted out for the occasional display of "our" strength, but thinking beings who look to the Union for information, but who decide on their own.

The low turnout at monthly meetings which the CUPW (like other unions) experiences, the absence of any real contest in elections for steward and other shop floor representatives, the use of delegates rather than an "at large" poll to elect more senior officials, and the tendency for these delegates to re-elect incumbents -- all of this certainly indicates the apathy of the rank-and-

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[f] More persuasive evidence can be found by comparing the CUPW Constitution, which makes careful provision for democracy, with the far more centralized power structure created by the now-defunct Letter Carriers' Union of Canada Constitution. See also D. Stewart-Patterson, op cit., Part Two; and Davidson and Deverell, op cit., passim.

file -- but also its trust. That is, the Union is granted legitimacy because its officers really are able and dedicated, because its activities really do benefit the workforce, because it really is successful.

The same "legal-rational" legitimation was evident in field work. Respondents routinely questioned the motives and integrity of CPC officials, even their presentation of "facts" about costs, volumes, or other basic data -- but even those whose views diverged from those of the Union never challenged its honesty, never blamed it for the troubles they experienced. People who wanted the "truth" about an issue or event always turned to CUPW: to the Newsletters, to Information Bulletins, to informal chats with Union officials. They might agree or disagree with the interpretations thereby received; but they never "delegitimized" the source.

And so, when the Union calls on it members to act, they do. Thus some workers on the picket line in 1987 were almost embarrassed by their presence:

> If my kids see me here [the picketing was being filmed by the local TV news team], boy, will they be surprised. 'You, on a picket line?'
>
> I've never been much for the Union, but this is important.

As Low-Beer[9] points out, action theory holds that current attitudes (and therefore behaviour) are the result of a complex of experience both on and off the job but not limited to one's material relations at work. In that sense, action theory subsumes the degradation of work thesis, holding the level and kind of control to which workers are subject as one among many influences on their perceptions, rather than as the premier force to which workers are subject. The next few blocks, therefore, concern elements of workers' experience at the Post Office.

Two blocks of variables each concern aspects of the respondent's history as a postal worker. The set labelled TIME LOST concerns the amount of working days spent absent due to illness, injury on or off the job, discipline (e.g. suspensions imposed by management), union business, or strikes. There was also a residual category labelled "other" which, judging from the comments a few respondents felt obliged to add, touched on absenteeism in the popular sense: a "day off" taken just before or just after a scheduled vacation, for instance.

Since illness was the implied category, the block TIME LOST reckons departures from the norm which are traditionally taken to reflect or to spark workers' protest. This is readily apparent for the 38 respondents (25%) who had spent some time on strike, the 21 (14%) who had lost working time due to discipline, and the 17 (11%) who had been involved in union business over this period. In addition, a whopping 17% (26) workers stated they'd lost at least one shift due to injury by CPC machinery, and a further 28% (42) that they'd suffered some other type of on-the-job injury such as a fall or a sprain.

Almost half the workforce, then, claim to have been injured at work during the previous six months alone, injured seriously enough to merit some time off in the respondent's judgement. This is far higher than official figures would lead us to believe, and might reasonably lead to a greater resentment of the Post Office on the part of respondents[g]. Similarly, the residual "other" category --which I suspect is largely composed of leave taken for personal business (the "mental health days" of worker parlance) -- can hardly reflect role embracement[10].

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[g] I have no reason to dispute these figures. If they are not true, the fact that such claims are made would still seem to indicate resentment of the Post Office.

Table 7.7: Analysis of Time Lost Variables, with Controls

Variable	Any Injury	Personal Cause	Union Business	Discipline	Job Action	Blocks Introduced
(Null Value)	(No)	(No)	(No)	(No)	(No)	
STEP						
1	See Table 7.1					
2	See Table 7.2					
3	See Table 7.3					
4	See Table 7.4					
5	See Table 7.5					
6	See Table 7.6					
7	Dummied	-.133	-.123	-.065	.046	-.001	--------
	DVPC				**.215***		
8	Dummied	-.130	-.126	-.072	.048	.021	JOB HISTORY
	DVPC				**.210***		
9	Dummied	-.088	-.125	-.096	.007	.074	ACHIEVED
	DVPC				**.177***		
10	Dummied	-.099	-.098	-.140	.082	.071	ASCRIBED
	DVPC				**.198***		

KEY: *: $p < .01$; #: $p > .01 < .05$

Table 7.8: Analysis of Job History Variables, with Controls

Variable	Hired Before Mechan-ization	Has Changed Job at CPC	Job Elim-inated	Change an Improve-ment?	Weeks of Job Training	Blocks Introduced
(Null Value)	(No)	(No)	(No)	(No)	(LE 2 wks)	
STEP						
1	See Table 7.1					
2	See Table 7.2					
3	See Table 7.3					
4	See Table 7.4					
5	See Table 7.5					
6	See Table 7.6					
7	See Table 7.7					
8	168	.063	-.098	-.018	.110	---
	DVPC			**.210***		
9	.188*	.070	-.113	-.046	.105	ACHIEVED
	DVPC			**.144#**		
10	.235	.012	-.143	-.028	.103	ASCRIBED
	DVPC			**.239***		

KEY: *: $p < .01$; #: $p > .01 < .05$

The set called JOB HISTORY asks about changes in the work respondents have done at Canada Post: their years of employment with CPC, whether they have changed tasks through the regular transfer or bidding process (in which interested workers compete for more desirable postings on the basis of seniority) or because their old task was eliminated by reason of technological change or the like. About 38% of workers (58) had changed jobs for the first reason, almost 10% for the second.

The median seniority level for postal workers in this study was ten years. This means that half the study group had joined CPC since 1975; the Cancity Post Office was mechanized in 1974, which would necessarily have led a great many workers to change jobs due to the elimination of their old status caused by technological change.

Not surprisingly, all of those who had voluntarily changed jobs reported that the change was "an improvement," while almost all who had changed jobs involuntarily reported the change made no difference, or made things worse.

It is possible for one worker to experience both types of change; presumably, they picked the one that was most dominant in their range of experience. More senior postal workers, for instance, would be able to recall the "old Post Office." In field work, they spoke nostalgically of the "clean floor policy" which then prevailed, qualitatively different from the load-levelling policy of today (which marks the shift from batch to a flow form of technology, or rather of managerial ideology). They would recall the generally peaceable relations enjoyed with "Mr. D.," the old postmaster now long retired, and even compare the somewhat more laissez-faire (or absentee) approach now used in line supervision unfavourably with the authoritarian style which then prevailed.

Seniority also determines, in large part, the objective conditions of work at Canada Post: senior postal workers are more likely to be employed on the day shift and/or in "preferred" postings (e.g. registration clerk, missort clerk) less affected by mechanization.

Initially, it was expected that this set affects workers' predisposition towards protest, especially in the form of militancy . Those who had changed jobs through bidding were deemed to have taken individual steps to resolve a work problem confronting them, to have exercised a form of "exit-voice," and they would therefore be less likely to choose collective action as a form of redress in future[h]. By contrast, those whose jobs had been eliminated had been cast willy-nilly into a new task. Finding oneself helpless before such an impersonal force might lead one to look more favourably on a collective approach in the future.

Workers employed before mechanization, by contrast, were expected to hold more of a "civil service" ideology than those employed subsequently and hence to be less militant on the whole.

However, the field work conducted subsequent to circulation of this instrument raised another possibility: it may be that this block touches on the experience of anomie at work. If it is true, then those who have experienced the most change, "degrading" or otherwise, at work would be the most militant. The available data from this study seems to support that, since the kind of change experienced seems to have less impact than the amount. In fact, only seniority is significant ($p < .05$) at the "concrete variable" level -- and greater seniority is positively related to

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[h] Presumably, those who had obtained a new position through bidding saw their position as improved. None, however, had obtained a promotion as such, since that would have taken them ought of the CUPW bargaining unit (and this survey).

militancy. Thus, it may be that the direct experience of change is no more important than witnessing it.

The entry of this set into the HSA equation produces a substantial jump in R^2; while it is unwise to identify this as an increase in explanation/prediction, it is nevertheless clear that something is going on. Further, the beta correlations are not vanishing; while moderate, they retain their strength as the equation becomes more elaborate. But the pattern they exhibit indicates that these "objective" facts too are mediated by respondents' interpretations of them, as TASK is by AUTONOMY.

The next block of variables is COHORT VARIABLES, which places workers into distinct social groups or categories, on the basis of the shift on which respondents were employed, the size of their plant or section, the amount of overtime worked, and whether employment is on a full-or part-time basis. The object here was to place respondents into an organizational subculture, relevant because different shifts & plants encounter a variety of differences in exposure to mechanization (and which machinery that exposure concerns), managerial /supervisory styles (and likewise presence and style of union officials) and so on. For instance, management informed me that both of the wildcats which had occurred in the previous year had started in the night shift in the MPP.

Table 7.5: Analysis of Cohort-relevant Variables, with Controls

Variable	Night Shift	Day Shift	Over-Time: Some	Over-Time: Lots	Work-Group Size	Full-Time?	Blocks Introduced
(Null Value)	(No)	(No)	(No)	(No)	(Small)	(No)	
STEP							
1	See Table 7.1						
2	See Table 7.2						
3	See Table 7.3						
4	See Table 7.4						
5	See Table 7.5						
6	Dummied	-.181#	-.044	-.023	.017	-.027 -.112	---------
	DVPC				**.211***		
7	Dummied	-.174#	-.039	-.050	-.015	-.087 -.092	TIME LOST
	DVPC				**.215***		
8	Dummied	-.187#	-.040	-.022	.021	-.091 -.076	JOB HISTORY
	DVPC				**.208***		
9	Dummied	-.195*	-.041	-.077	.052	-.094 -.107	ACHIEVED
	DVPC				**.242***		
10	Dummied	-.153	-.039	-.097	.069	-.091 -.082	ASCRIBED
	DVPC				**.218***		

KEY: *: $p < .01$; #: $p > .01 < .05$

Clearly, these variables also relate to objective grievances: the night shift is less desirable on the whole than days (but many workers prefer it to afternoons, since it is still possible to spend one's evenings with family or friends at home or elsewhere); a larger work group and/or shift may be more anonymous and isolating than a smaller one, perhaps more cohesive one (assuming that one is among the 91% of respondents who found the statement "I like my coworkers" to be somewhat true or very true); and full-time work is more desirable than part-time (since it involves more money and is treated as more nearly-legitimate by CUPW[11].

Some part-time workers I interviewed during field work said that they had been part-timers for as much as twenty-five years. Given the bidding system which prevails, one would expect that these workers (three-quarters are women) could have switched to full-time status had they wished.

As mentioned earlier, some women stated that they preferred part-time work -- done in the evenings -- since it allowed them to be home to see their children to and from school, and since it usually meant that their husbands were available to provide child care. "Anyway," said one, "there's plenty of overtime if you want it."

Opting to take more than average amounts of overtime is often related to economic need -- but for our purposes, the <u>why</u> doesn't matter. Rather, the overtime variable was used as an indicator of how immersed a respondent was in the culture, on the assumption that those who did not conform to the general pattern of behaviour -- as indicated by the median (less than 1 hour per week overtime) -- prevailing over this heavily-politicized aspect of the job were more marginal to the culture of the plant than were others.

Ascriptive traits are those over which the individual has little, if any, control, such as sex or ethnicity. But the term is a flexible one: religion is often assumed to be ascribed, but people do choose to change their religions, and to become more or less religious over time. Likewise, they may successfully "pass" as members of a language group, ethnic or national group or even sex which is not theirs by birth. But these are probably exceptional cases; on the whole we may reasonably conclude that respondents sought to accurately reflect their own perceptions of their ascriptive identity. In any event, the incorrect placement of a particular variable in either of the "ascriptive" or the "achieved" sets does little damage to the overall analysis, since both are treated as exogenous.

Actionists, like Goldthorpe et al[12], assert that ascriptive traits go far towards forming the "prior orientations" one brings to one's job. They are consequential in so far as they lead to distinctive patterns of experience and, thereby, to different complexes of values like "instrumentality" or "expressiveness" relevant to work. Those operating from a Marxist perspective have (at least in recent years) agreed, suggesting that factors like religion, and above all sex[13] exert forces on individuals

Table 7.9: Analysis of Achieved Variables, with Controls

Variable[1]	First Job[1] Variables			Education		Mar-	Spouse
	Semi/un skilled manual	Skilled manual	Tech- nician/ Supervise	Less Than Hs grad	More than Equiv?	ried or	works part-Time?
(Null)	(No)	(No)	(No)	(No)	(No)	(Yes)	(No)
STEP							
1	See Table 7.1						
2	See Table 7.2						
3	See Table 7.3						
4	See Table 7.4						
5	See Table 7.5						
6	See Table 7.6						
7	See Table 7.7						
8	See Table 7.8						
9	-.188	-.029	.135	-.073	.081	-.055	.090
	DVPC			**.256***			
10	-.087	-.001	.129	-.044	.037	-.056	-.027
	DVPC			**.283***			

Variable	Spouse's Job Variables						
	Semi/un skilled manual	Skilled manual	Techn- ician/ Supervise	Union Member?	One or Two Kids?	Three or More Kids?	Block Introd- uced
(Null)	(No)	(No)	(No)	(No)	(No)	(No)	
9	-.049	.096	.041	-.045	-.064	-.028	-----
	DVPC		**.256***				
10	-.034	.076	.077	-.087	-.013	-.037	ASCRIBED
	DVPC		**.283***				

KEY: *: $p < .01$; #: $p > .01 < .05$

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[1] Job classifications are by the Pineo-Porter-McRoberts Categories.

Table 7.10: Analysis of Ascribed Variables, with Controls

Variable	Sex	Eth-nic	Birth Place	First Lang-uage	Religion: Any Rel?	Religion: Moderate RC?	Religion: Religious Prot?	Religion: RC?
(Null)	(Fem)	(Brit)	(Can)	(Eng)	(No)	(No)	(No)	(No)
STEP								
1	See Table 7.1							
2	See Table 7.2							
3	See Table 7.3							
4	See Table 7.4							
5	See Table 7.5							
6	See Table 7.6							
7	See Table 7.7							
8	See Table 7.8							
9	See Table 7.10							
10	-.207#	.019	.099	.052	-.121	.101	.041	-.012
	DVPC		**.237***					

KEY: *: $p < .01$; #: $p > .01 < .05$

independent of their class origins or locations.

Ethnicity, for instance, was addressed by three questions concerning birthplace (province or country; year of arrival in Canada), language first spoken and still understood, and ethnic identification. Each of these was modelled on the 1981 Census questionnaire, and so was very detailed; each also included an open category. Close attention was paid to these variables because of the prominence that ethnicity and region receive in Canadian social analysis.

They are not of themselves very important here.

It turns out that Cancity postal workers are an unexpectedly homogeneous lot: 66% (100) claim British, Irish, or Canadian ethnicity (there were 17 "Canadians"). 86% (130) are Canadian born, 84% (128) spoke English as a first language. The majority are members of "mainstream" or "centrist" religions and only 13% (19) describe themselves as "very religious."

In consequence, as already stated, the ascribed set becomes an indicator of marginality: those who depart from the sociographic norm of the Cancity Post Office (that is, atheists and agnostics, Catholics whether religious or otherwise, very-religious and not-very-religious Protestants, the foreign-born, the non-British and those whose first language is not English[k]) tend to be somewhat more militant. That is true for sex as well, as was shown in Chapter 6: women are the norm in this sample, and men are somewhat more militant.

Pearson correlation coefficients show that only birthplace (.2278 p=.005) bears a significant impact on militancy, in that the Canadian-born are more militant than others -- a direction opposite to the one predicted by the "marginality" thesis given above. But that effect becomes both trivial and insignificant once controls are added.

The cumulative effect of "marginality" as indicated by the HSA, however, is significant, moderately strong, and in the expected direction.

In the ACHIEVED set likewise, education level was coded according to whether respondents had more or less education than the norm (the typical postal worker in this study is a high school graduate). The vast majority of respondents believe their education level is "too high" or "about right" for the work they're doing, and (if they think their education is "too low") they report themselves unworried by this fact. That suggests that education is not relevant to commitment.

On the other hand, Berg[14] has suggested that Americans with education "too high" for their work bring to the job expectations of satisfaction from it which are bound to be disappointed, possibly leading to greater grievance sensitivity. By contrast, Canadian researchers following Bowles & Gintes[15] have argued that those with higher education are socialized into greater acceptance of the dominant idealogy in Canada, including the legitimacy of economic inequality; so that those respondents with post secondary experience might be less grievance-sensitive than others.

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[k] As mentioned in an earlier chapter, the population under study is quite an homogeneous one: there were only Roman Catholics and Protestants among those declaring a religious preference; and there were so few who where not of British origin that only "British" and "non-British" categories could be used.

All of these achieved and ascribed variables together, then, represent the "prior orientations" popular among empirical
actionists.

Current thinking regarding identity gives considerable weight to biological factors like sex; as noted in the previous Chapter, sex does correlate with militancy, although the explanation adduced was primarily cultural. In Chapter Six, the argument was that it was gender (not sex, i.e. nurture not nature) which produced women's lower levels of militancy, and that these levels were moderate in any case.

In terms of the effect of culture, the prevailing thought is likewise that traditional emphasis on formative experiences (primary socialization) is misplaced. Rather, one's identity is formed most strongly by current or recent socialization.[16]

This means that actionists' focus on "prior orientations" (as promoting an instrumental or expressive world view, for instance) is likely to be unprofitable.[17] But that can be overstated. The drive for "nomos" (order or sense) which existentialists propose implies that individuals will make an effort to maintain consistency between their past and current lives, to see their identities as the culmination of formative influences. To the extent to which these formative influences are shared by others (which is what sociographic questions aim to uncover) then there ought to be some convergence between the attitudes of, say, Catholics or women or the university-educated.

In the HSA, prior orientations as indicated by sociography exhibited a moderate correlation with militancy. Since these were the last of the "nuisance" variables brought into play, it cannot be established whether they would decline in strength as factors more contemporaneous with current militancy were brought into play.

Still, it is apparent that ascription and achievement do provide a framework, one which limits to some extent the kinds of experiences one will have, and which therefore does have an impact on militancy. This process was described at some length for sex, the only unblocked variable which had significant impact on militancy; for the remainder, it is worth noting that only the complex of factors which produce an identity has any explanatory value, not identity's components.

The process envisaged is akin to Berger's "circles of social control": the outermost circles are composed of exogenous variables which act on the individual through the mediation of the more immediate ones, providing loose curbs to the range of action. It is quite possible, therefore, that a group which is more heterogeneous in makeup would, for that reason, show a stronger relationship between attitude and antecedents; a stratified sample would make this clearer.

Note, also, that the indistinct character of ascription and achievement is shown in this model, where the value of achievement in predicting militancy is strengthened a bit when ascription is brought into the equation. In an open society, the effect of ascription when controlling for achievement would be nil; similarly, the effect of achievement in a closed society would be zero if ascription were controlled. Canada is neither[18]; and neither is the Cancity Post Office.

Further, note that the contribution of this set to the overall explanation of variation, as suggested by R^2, is slight, again suggesting that "prior orientations" in and of themselves have been the subject of too much attention from actionists.

We can conclude that objective indices, whether sociographic or relating to one's working experiences, are of significant impact in predicting or explaining militant attitudes, but less so than are the attitudes through which those experiences are filtered.

iv: The Results

The central question concerns the relationship between TASK and militancy. If one does degraded or deskilled work at the Cancity Post Office -- that is, if one's job classification involves attending and operating the new machinery -- then one ought to be more militant than others. Initially, the TASK variable does indicate a moderate correlation with militancy, but that declines steadily as other variables are entered; until it borders on the trivial; it is the second weakest component of the equation.

That might have been merely an artifact of the order of entry of variables, but this is not the case here, as is demonstrated by the fact that the same process occurs regardless of sequence. Rather, it appears that TASK is very largely a code for systematic variations in experience and perception: your task in the Post Office predicts your sex, your seniority, your shift and the size of your work group, your education level and to some extent your ethnicity (to the extent that less senior -- younger -- workers have higher educational attainments and more variation in ethnic background because of relatively recent changes in immigration laws) and so on. As blocks containing these variables are added to the equation, the moderate effect of TASK on militancy is revealed as largely spurious: TASK does correlate with militancy, but only moderately.

By contrast, the stronger and more robust effect of awareness, job consciousness -- the AUTONOMY block -- is revealing. It will be recalled that AUTONOMY -- the extent to which respondents believe themselves subject to close supervision, machine-pacing, and formal quotas -- was not strongly correlated (at the zero-order level) with TASK. That phenomenon becomes especially important, for AUTONOMY "steals" power from TASK when it enters the equation; and the blocks in the percepts set "steal" power from AUTONOMY as they are entered in their turn.

In sum then: deskilling has only a moderate influence on worker militancy. Of far greater importance are perceptions of one's work, and of how it fits into the larger political economy, which either converge with the Union's presentation or (less commonly) do not. What matters, then, are not the material conditions in which labour is placed, but the "topspin" these conditions are given, the definition of the situation.

However, as we saw in the discussion of antecedent variables, these definitions are not so much brought to the job as formed there.

Attitudinal militancy is one of a complex of perceptions relating to one's work; and, to a lesser extent, to the world outside it. It both causes and is caused by these other percepts; so-called objective variables are weaker determinants of militancy than are the percepts, and variables relating to the degradation of one's work are among the weakest of all. This lends support to the actionist interpretation, but since antecedent variables are moderately related to

militancy compared to work-related percepts, that support is only qualified. As Low-Beer[19] suggests, actionists would be well advised to give greater weight to the here-and-now, and less to "prior orientations."

TABLE 7 11. Dummied Variable Analysis

			Step #						
1	2	3	4	5	6	7	8	9	10
				- 14	- 15	-.12	-.12	-.11	- 10
				- 03	-.05	- 00	- 02	- 03	- 02
			-.34	-.32	-.30	-.30	- 32	-.34	- 30
			12	.12	.13	.15	16	.25	.17
			-.02	-.01	.04	.05	.05	07	.09
		- 18	- 24	- 21	- 22	-.21	- 25	- 30	- 29
		-.22	- 18	- 17	- 16	- 17	- 17	- 16	- 16
		13	18	16	15	14	.13	16	10
		.21	.11	11	13	15	.11	10	12
		.02	06	07	06	02	03	05	03
		-.02	-.03	- 02	- 02	- 00	- 02	-.13	- 08
- 17	- 13	- 09	- 03	- 05	- 05	- 00	-.04	-.06	- 05
24	.22	16	.15	.16	.13	09	.06	08	08
20	12	12	09	09	06	04	05	03	01
-.06	-.02	-.05	- 06	-.07	- 00	-.04	-.07	-.08	- 09
03	00	00	06	06	05	06	10	06	06
	20	18	.15	.14	13	.10	.10	.08	10
	.15	.19	24	.23	21	.26	22	25	22
	-.18	-.20	-.23	-.21	-.27	-.28	-.29	-.35	- 33
					-.18	- 17	-.19	-.20	- 15
					-.04	- 04	-.04	-.04	-.04
					- 02	- 05	- 02	-.08	-.10
					.02	.02	.02	05	07
					- 03	- 09	- 09	- 09	-.09
					- 11	-.09	-.08	-.11	-.08

- 13	- 13	- 09	- 10
- 12	- 13	- 13	- 10
-.07	-.07	-.10	-.14
05	05	01	.08
- 00	.02	.07	07
	17	.19	24
	.06	07	01
	- 10	- 11	- 14
	- 02	- 05	- 03
	11	11	10
		- 14	- 09
		- 03	- 00
		.14	13
		- 07	- 04
		.08	04
		- 06	- 06
		.09	-.03
		- 05	- 03
		.10	08
		41	08
		- 05	-.09
		- 06	- 01
		-.03	-.04
			- 21
			02
			.10
			.05

									- 12
									10
									.04
									- 01
				R^2					
.07	.15	30	.41	.42	46	.49	52	52	62
				Adjusted R^2					
.04	.10	.23	.33	.34	35	.37	.38	.38	.40
				Standard Error					
91	88	.82	.76	.76	75	74	.74	73	72

all figures rounded * p< 01 # p< 05

TABLE 7.12: Ascriptive, achieved, work experience and attitudinal effects on militancy, ordinary least-squares estimates (standardized coefficients).

UNION-ISM	SOLI-DARY	JOB ATTS	TASK	AUTO-NOMY	COH-ORT	TIME LOST	JOB HIST	ACH-IEVE	ASCR-IBED	ADJUSTED R2
			.260							.061
			.227	.288						.136
		.402	.175#	.312						.288
	.344	.364	.130#	.336						.367
.140#	.352	.344	.169	.334						.403
.143#	.337	.353	.157#	.363	.211					.437
NS	.357	.355	.172	.393	.215	.215				.467
.129#	.367	.356	.218	.381	.208	.210	.210			.488
.130#	.376	.383	.126#	.418	.242	.177	.144	.256		.487
.112#	.359	.355	.143#	.403	.218	.198	.239	.283	.237	.575

All variables are significant (p.>.01), except
#: p.>.05; NS= p.<05.

KEY (brief description).
UNIONISM Current CUPW official, former CUPW official
SOLIDARY Frequency of social contact with other postal workers, interest in politics, political party preference
JOB ATTITUDES: Respondents attitudes towards his/her work
CONTROL. Extent of supervision/machine-pacing; existence of formal quota (self-assessed)
TASK: Mechanized or non-mechanized work, contact with LSM, CFC, OCR, GDS
COHORT: On which shift employed, number in work party, extent of overtime hours worked
JOB HISTORY: changed job through bidding, job lost through elimination
TIME LOST. Time spent on strike, union business, discipline, etc. in previous six months
ACHIEVED: Education level, first occupation's Pineo-Porter McRoberts category, marital status, number of children
ASCRIBED: sex, religion, ethnicity, first language, birthplace

KEY (detailed description).

i: Unionism

A Current CUPW official[1]
B: Former CUPW official

ii Solidarity

C: Federal political part preference (0=NDP; 1=other)
D: Interest in politics (1=low, none)
E: Socializes with other postal workers

iii: Job attitudes

F: Believes training programmes inadequate
G: Believes Union does well negotiating over technological change
H: Wants to change employment status
I: Believes management and workers on same "team"
J: Believes job rotation an improvement

[1] Except where noted, the variables are constructed so that "1" represents a positive or affirmative response.

K: Believes education is appropriate for job

iv: Task

L: Works with Group Desk Suite
M: Works with Culler-Facer-Canceller
N: Works with Optical Character Reader
O: Works with Letter Sorting Machine
P: Duties (1=primarily manual)

v: Autonomy

Q Job is machine-paced
R: Job is not closely supervised
S: Works to an output quota

vi: Cohort variables

T Works night shift
U: Works day shift
V: Works moderate amount of overtime regularly
W. Works large amount of overtime regularly
X Work site size (1=small)
Y. Full-time or Part-time (1= Part-time)

vii Time lost

Z: Any lost-time injury past 6 months
AA Time off for "other" reasons past 6 months
BB: Time off for union business past 6 months
CC Time off due to disciplinary action past 6 months
DD: Time off due to job action last 6 months

viii Job history

EE. Employed before mechanization
FF. Post office job has changed
GG: Has had job eliminated due to technological change
HH: New job an improvement over old
JJ Specific job training (1= less than 2 weeks)

ix Achieved status

KK: 1st job was semi- or unskilled manual[m]
LL: 1st job was skilled
MM: 1st job was supervisory or technical
NN: Less than high school education
OO. Post-secondary education
PP Marital status (1=single, widowed, divorced, etc)
QQ: Spouse's employment status (1=part-time)
RR: Spouse's job is semi- or unskilled manual
SS: Spouse's job is skilled
TT. Spouse's job is supervisory or technical
UU: Spouse is unionized
VV: 1 or 2 children
WW: 3 or more children

x: Ascribed status

XX: Sex (1=male)
YY: Ethnicity (1=not British)
ZZ: Birthplace (1=outside Canada)
A' 1st language (1=not English)
B'. Religion (1=none)

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[m] coded according to Pineo-Porter-McRoberts categories

C'. Catholic, not very religious (1=no)
D' Protestant, not very religious (1=no)
E' Catholic, very or somewhat religious (1=no)

NOTES TO CHAPTER SEVEN

1 Cohen and Cohen op cit

2 Thompson P 1989 The Nature of Work ((Houndmills UK MacMillan) 2nd ed

3 Coburn, D 1981 "Work alienation and well-being" in D Coburn et al (eds) Health and Canadian Society (Toronto, Fitzhenry and Whiteside), first edition, pp 420-437

4 see Cockburn, C 1987 Brothers (London Oxford)

5 Goldberg S 1987 Thinking Sociologically (Belmont CA Wadsworth) pp 98ff

6 Granovetter, M S 1973 "The strength of weak ties" American Journal of Sociology 78 1360-80

7 Batstone, et al, op cit

8 private communications Canada Post Office Department (no date) "Cascade 85 Competition and jobs" (mimeograph); Canada Post Corporation 1985 "5-year business plan" (mimeograph)

9 Low-Beer J 1981 "Cultural determinism technological determinism and the action approach" Research in the Sociology of Work I pp 403-33

10 in Goffman's sense of the term: see Goffman E 1961 Encounters (Indianapolis Bobbs-Merrill)

11 White, Julie op cit

12 Goldthorpe, J et al 1968 The Affluent Worker Industrial Attitudes and Behaviour (Cambridge University Press)

13 e g., see Bartlett, J. 1984 The Oppression of Women Today (London Oxford University Press)

14 Berg, op cit

15 e g Johnson, L 1973 History of the County of Ontario 1618-1875 (Whitby Whitby Historical Society), Wotherspoon, T. (ed) 1987 Political Economy of Canadian Schooling) (Toronto, Methuen)

16 Santrock, J 1991 Adolescence (Dubuque, Iowa, Wm C Brown) fourth ed pp 206ff

17 Low-Beer, David, op cit Goldthorpe, J et al, op cit

18 Boyd Monica et al, 1988 Ascription and Achievement (Toronto McGraw-Hill Ryerson)

19 Low-Beer, J op cit

CHAPTER EIGHT: CONCLUSION

As a result of these investigations, we can safely conclude that "objective" phenomena -- specifically, the "objective" degradation of work posited by labour process theory as the main feature of mechanization of the labour process, but other "objective" factors (such as socio-graphy) as well -- are not primary in determining the degree of resistance, as indicated by attitudinal militancy, workers develop.

On the other hand, "objective" traits of work cannot be dismissed altogether. Such traits as the amount of night work entailed in a job, the extent to which knowledge or decision-making capabilities have been vested in machinery, or the degree of erosion of workers' discretion over the parameters of their task do indeed have the impact on militancy which would be expected from a labour process perspective, (or, for that matter, by the popular wisdom about what makes for a "good" job). Likewise, respondents' sex and other background traits do have some effect; and that is in the direction conventionally predicted.

However, these effects are all rather modest; and they tend to disappear with the intro-duction of more subjective indicators.

Some suggestions for why this should be the case with respondents' sex have already been offered: while there is, of course, a core of sex which is biological and which could reasonably be expected to have some independent influence on percepts, the bulk of the difference between male and female attitudes which shows up on studies like this one is social in origin.

We live now in an age where there are concerted efforts under way to break down the exclusivity of male and female experience, to breach the boundaries of "women's culture" and "men's culture." (Postal workers, who are often women doing work which was for them

"nontraditional" less than a generation ago, are archetypical in this respect.) If that trend continues, so that masculine and feminine cease to be solidary groups, then the ability of an observer to accurately describe a person purely from knowledge of his/her sex will decline precipitously. Thus, it made sense twenty years ago to speak of some labour segments as "male shelters" and others as "female ghettos." While these are not the same as cultures, it is the case -- unless one adopts a sociobiological approach -- that cultures are born from shared experience. If men and women were confined to shelters and ghettos respectively, the bulk of each of their waking days was spent in a sex-segregated group, which could contribute much to the formation of (sub)cultures.

That was then; now wages are slowly converging, deindustrialization proceeds apace, female-dominated occupations like teaching are more tightly unionized then male, and men's unemployment is consistently higher than women's.

With this decline in the consistency of men's and women's background will go a reduction in the observer's ability to infer attitudes on the basis of gender; someday, only the basic, elemental differences (if any) will remain.

That day has yet to arrive: the experience of women postal workers in this study group was, as for the population as a whole, more homogeneous than that of the male minority, this is a logical outcome of what feminist scholarship describes as women's oppression. But the nature of the model used makes it clear that men's and women's attitudes cohere to the extent they do because of aspects of their lives which <u>now</u> tend to revolve around gender, but which need not do so; and which are in fact becoming <u>less</u> gender-specific as time goes on. In future, we will have to take even greater care to distinguish between a respondent's sex and child-care and so on

and on. This need for greater detail will make survey instruments more burdensome than they are currently -- and that bodes ill for the continued utility of survey research.

Just as for sex, so for respondent's task: it was once possible to aver that the kind of person who did degraded work was different than the one who was more autonomous; and that these differences were greater between the two groups than within them.
Thus, there was a difference between the attitudinal militancy of "mechanized" and "manual" postal workers and it was in the expected direction.

But the difference was not all that robust, declining to near-triviality with the addition of control variables. Much of the initial, still moderate, strength of this central relationship was, therefore, an artefact of "locational" factors[1]: mechanization in the Post Office was experienced differently for veteran postal workers, for those hired after it was introduced, and for those for whom an automated process was a fait accompli. True, the union has sought to keep a single meaning-set alive for all postal workers, so that in effect the veteran's perceptions become the dominant definition of the situation. That effort has met with some success, but it has not been total. As a result, attitudinal-militancy varies far more with self-assessed features of respondents' lives than with objective traits.

At first glance, the fact that postal workers who identify their tasks as more degraded -- more machine-paced, more closely supervised, more subject to quotas -- are consistently more prepared to be militant might seem to support a "consciousness" explanation. It would be entirely consistent with labour process theory to assert that degradation of work is the first cause of resistance, but that resistance may manifest itself in a variety of guises (from somatopsychic illness to sabotage to vague feelings of uneasiness[2]) in the absence of consciousness. Aware-

ness of one's degraded circumstances, then, and proper theoretical explanation of them, would be an important intervening variable.

That possibility, outlined in greater detail in Chapter I, does not hold for the current research, because the variables used as indicators of self-respondents' assessed control over work show no significant zero-order correlation with "objective" measures of task. Unless we are willing to introduce the idea that manual workers are falsely conscious of their work as equally degraded as mechanized workers' -- surely an unjustifiable assumption -- then we must accept that one's sense of control over work is only weakly related to work's objective features.

Indeed, just as important as task -- and more robust -- are prior experiences of workers; those which put them into high conflict with management (or, more broadly, with managerial ideology) promote attitudinal militancy regardless of current task. In just the same way, operating as a union official correlates rather well with militancy, at least in part because it engenders such high-conflict situations on a regular basis.

So, a quite different picture of postal militancy emerges. In contrast to the monocausal (however many "mediating factors" one wishes to adduce) perception engendered by a focus on the labour process -- and, mutatis mutandis -- to monocausal emphasis on "prior orientations," including those imbued by biology, we find that militant attitudes are born of a complex set of past experiences both on and off the job, as well as current locational factors. Overlaying all of these are the percepts that people bring to bear on their memories and situation, using these definitions as a filter by which to colour their awareness.

These percepts are not randomly distributed among postal workers -- prior and concurrent orientations develop out of real experience -- but that experience forms a delimiting set, predisposing individuals to a finite range of awareness, rather than determining.

Of course, we cannot say for certain that these results will hold true for others in Canada Post, let alone for the labour force in Canada as a whole. But I have alleged that this study constitutes a "crucial experiment:" if the link between job degradation and militancy is of minor importance here. Only further research will establish the persuasiveness of that allegation --but any effort at replication must be framed in such a way that it allows for multiple outcomes.

Without denigrating fieldwork as a method, the insights and depth it makes possible in exploration do not compensate for its weaknesses in providing for simultaneous controls and falsifiability: given that the labour process approach derives from a critical tradition, it is odd that its proponents rely so heavily on participant observation, examples, and case studies.

And yet, the labour process analyst's insistence on detailed, specific investigations cannot be gainsaid: this study has demonstrated the need for carefully formulated empirical research devoted to actual people in actual work-sites. No summary data, not across industries, or enterprises, or even task groups will allow for any but the most oversocialized conclusions.

Indeed, the outcomes recorded here can be interpreted as a call for the revival of a now moribund aspect of classic organizational theory: the analysis of organizational cultures conceived of as self-aware groupings in which there are consistent valuational and cognitional typifications.

If every person is unique, then every organization -- more, every group no matter how small -- will contain a unique mix of individuals. Each will contain different patterns of

deference and defiance, knowledge and dissemination of knowledge; each will therefore involve at least one (sub)culture composed of individuals who highlight this or that feature of their shared reality.

A formulation like this can be reduced to the assertion that everyone is different; hardly controversial. To the extent that this is so, to the extent that we each preserve a "me nobody knows", sociology cannot be brought to bear. It is only when different people contact and influence each other that our discipline is useful.

Here, at the interactional level, we can begin to make empirically-verifiable statements -- but we must take care not to get beyond our data. On the whole, the more general the statement, the less amenable it is to empirical verification; philosophers and psychologists continue to wrestle with assertions about human nature, with little lasting effect. I propose to leave such efforts to those better qualified: sociologists can contribute by showing what is not human nature.

In this study, I hope to have shown that postal workers, whether or not they work with machines, are not machines themselves. They are not mere victims of their natures; nor are they robots who, when presented with a specific stimulus, make a specific response. Rather, they are sentient beings who continually assess the information they receive and decide whether to "buy" it or not. They are making their own history, albeit not just as they please.

NOTES TO CHAPTER EIGHT

1 Mannheim, Karl 1952 'The problem of generations' in Essays in the Sociology of Knowledge (London Routledge and Kegan Paul)

2 Mills, C. W 1959 The Sociological Imagination (London Oxford University Press) chapter 1

APPENDIX I: FIELDWORK

Two kinds of methods are dealt with in the Appendices: this one concerns the ethnographic techniques used, while Appendix II focuses on the use of factor analysis to construct attitudinal militancy, the dependent variable.

Throughout this dissertation, I have referred to "fieldwork," and have included quotations where relevant. Although this fieldwork did not contradict the more quantitative research which was done, it did supplement it. This appendix concerns the ethnography, especially insofar as it relates to the survey: it includes a short description of the population and outlines possible sources of systematic error stemming from the reversal of the usual research sequence, and reliance on union officials to distribute, but not collect, the instrument itself.

Moreover, this report relates to a specific and narrowly-defined grouping of Canada Post employees in Cancity. In this appendix, we consider those factors which influenced the selection of this population as a fit subject for a study of militancy, and the extent to which the results obtained are generalizable beyond the confines of this case.

i: Site Selection

The study was conceived as a quasi-experiment, meaning that there must be variation within the dependent and the (relevant) independent variables; as well, it must be possible to hold constant and/or control for what Blalock calls "nuisance variables." Nuisance variables are those which are not of direct interest, but which previous theory and research has suggested may have some independent effect on the dependent.

The basic relationship to be tested is between the objective conditions of work and militancy; for as Rinehart[1] notes, labour process theory holds that the relationship between degraded work and resistance to it exists regardless of individuals' awareness of it. It ought to be the case, therefore, that the more degraded the job content, the greater the militancy.

But so restrictive an interpretation is untenable and unreasonable: as already established, militant behaviour is constrained by circumstances including the business cycle, the policies & structures of union and management, and so on. Thus, we must develop a scale of militant attitudes to use as our indicator of workers' willingness to resist. In keeping with the tenets of labour process theory from Braverman in 1974 to Thompson in 1990,[2] this scale was designed for and adapted to the specific setting under analysis.

There is reason to believe (again, as already noted), that this variable does relate directly to militant behaviour as well, so that it has some application to the real world.

The independent variable concerns the degree to which work has been deskilled or degraded; as we saw, this cannot be established objectively with all that much ease; but the Post Office is probably a better setting than most in which to make the attempt.

Finally, the "nuisance variables" are those which relate either to on-the-job experiences and perceptions which do not concern job content as such, or to "off-the-job" experiences in general. Let us turn to those first, and then to the central relationship.

In the previous chapters, I noted that the "action frame of reference" placed considerable emphasis -- according to Low-Beer, undue emphasis -- on so-called "prior orientations." These are alleged to affect individuals' outlook, whether "instrumental" or "expressive," and that in turn affects the nature and amount of militancy they will exhibit. But labour process theory also

acknowledges what might be called "prior orientations" -- especially gender, but also class of origin, ethnicity/religion and other cultural factors as having some independent influence, although perhaps not in the last analysis.[3]

This makes labour process theory more sophisticated and more complex, so that it is necessary to take account of traditional sociographic factors as well as job content.

In other words it was necessary to study a group where degradation had occurred but where it was not total, where the environment was more-or-less constant but contained both more- and less-degraded work, and where variation in elements related to prior orientation was minimized.

In the small centres operated by Canada Post, the work done is almost entirely manual. These centres become fewer each year;[4] the issue in them is not degradation as such but exclusion.[5] In very large centres like Ottawa's Alta Vista Plant or Toronto's South Central Plant, the labour force working on the machinery was created de novo, there is little contact between mechanized and manual sections -- little rotation between them, for instance,[6] and therefore little possibility for workers' communication and comparison. That is, workers cannot assess their own job content, because they cannot compare it to others.

It is only in midsized settings like Cancity's -- also quickly disappearing, as these midsized centres absorb the processing activities of smaller satellites -- that it was possible to find a) a large control group of workers whose activities are all but entirely manual (specialized sorters in the Bulk Mail Facility on Market Street, as well as workers in "preferred" categories -- as they are known in CPC -- like Registration. This group amounts to about half of the entire data set

b) an "experimental group" of workers whose jobs have been mechanized.

It is possible to equate "mechanization" in general with degradation, and to suggest that nonmechanized work is less degraded. Even so, labour process theory's insistence on a detailed examination of job content practically dictates a field research approach, since summary data about the skill, or education necessary to any job is produced by the employer, by government, or by some other suspect organization; hence the oft-noted complaint[7] that labour process theory is little more than a series of case studies.

Thus, the researcher must gain physical access to the work place in order to assess the nature of job content "objectively." Cancity was the only site where access was obtained (which make all of the other considerations in site selection moot.)

Aside from accessibility, though, the Cancity site offered several advantages,

-- it was small enough that an effort to capture the "population" parameters (the population being all those PO4's (clerks) employed in Mail Processing in Cancity at the time of the study) could be made. Large centres would require sampling, and CUPW rules do not permit releasing workers' names or addresses to outsiders.

-- it contained a range of tasks, from those exclusively manual to those primarily mechanized: almost everyone in mechanized work could compare that to his/her non degraded manual work experiences, while those in purely manual tasks served as a sort of control group

-- variables relating to the organizational subculture, like management style and physical setting, are largely held constant (as is true for any case study)

-- as it happens, those "nuisance variables" are also largely held constant, since the group under study varies little in antecedent characteristics (like ethnicity, language and religion) which

might affect "prior orientations." As well, the role of politically-committed activists (which Toronto's management identifies darkly as "the element"[8] seems slight or entirely absent

The Mail Processing operation in Cancity was chosen, therefore, because it offered the "objective" criteria needed: a dramatic and fairly recent change in the technology surrounding the labour process, one which had produced some considerable heterogeneity in job content, while having relatively little impact on the organizational culture.

In every social setting, there are any number of reasonably coherent and more-or-less competing paradigms or meaning systems available to an individual. Insofar as these are "typifications," the individual's membership in a group results in his/her awareness of a distinctive subset of such meaning systems. In other words, the systems can be identified with groups: Catholics have one set of meanings, for example, Protestants have another, partly overlapping one, and the same holds true for every other religion or denomination.[9]

An organizational culture is similar: "Organizations," say Batstone et al.,[10] "are continually reaffirmed (or changed) by the actions of participants." Here, individuals bring a set of meanings with them from outside the organization (their "prior orientations") and learn another set within the organization, from which they select those meanings which maintain in them a sense of consistency or meaningfulness. In organizations like the Post Office, both union and management are among those who propose definitions of the situation to workers; their dual identity as employees and unionists compels them to take a stand, to select one of these as suitable, and to stick with it. In fact, since each worker occupies a multiplicity of statuses and has a number of "identities" as a result, each constructs an appropriate definition of his/her own. To the extent that it differs widely from that propounded by union and management (i.e. by the

wielders of power), an idiosyncratic definition will be "deviant:" isolating, subject to sanction, and difficult to maintain -- but especially difficult to communicate intersubjectively.

Organizational cultures, then, are battles for the hearts-and-minds of workers. Who wins the battle is contingent on who controls the knowledge-base from which workers' definitions are drawn as well as on the rhetoric used or available.[11]

For this reason, I chose to focus primarily on variations in militancy among individuals within (not between) bargaining groups.

However, while these features promote validity, they reduce generalizability. There is no sense in which one can plausibly claim that the workers studied here are representative of the CUPW members as a whole, of CPC employees, still less so of the Canadian paid labour force, or "workers." The respondents may be typical, but they are not representative.

The research can, however, be understood as one more in a series of case studies undertaken in the Sociology of Work, following the crescive approach of labour process theory (albeit without the historicist overtones). Or, more importantly, it can be seen as a variant form of the "crucial experiment," (variant because it is a quasi-experiment), as a self-conscious imitation of the procedure followed by Robert Michels in his Political Parties.

Because of the peculiar situation in which a traditional "skilled" and a mechanized "deskilled" processing stream exist in tandem, the Cancity operation offered a unique opportunity to conduct a sort of crucial experiment:

> The role of the crucial experiment is to enable the scientist to choose among several alternative theories, each of which has previously resisted elimination.2

In this study, it is possible to explore the effect of job degradation/deskilling on workers while holding other variables -- historical and cohort effects -- constant. By slightly shifting focus, it also becomes possible to test the relative importance of technology as such against the effects of factors identified as important in the action tradition: prior orientations and organizational culture. Finally, because it happens that union officials are well represented in the data set, it is possible to test the assumption (so integral to the study of labour conflict as to be frequently unstated) that union officials are "leaders" in terms of militancy, pulling along a comparatively passive membership; or "representatives" whose position makes them little different on this score from the rank-and-file.

To accomplish this, it was necessary to obtain the views of a goodly number of postal workers: it was not possible or desirable to confine the study to a class of formally-identified leaders, as Batstone et al.3 have done in one study ; nor was it
useful to speak to only a few contacts at any location, as ethnography or snowball sampling might have permitted. Instead, I sought to cover a particular group of postal workers as extensively as possible through survey analysis. Whatever depth was sacrificed to obtain sufficient breadth has been compensated for by subsequent participant observation and informal interviews onsite; recourse has also been had to documents dealing with Canada Post and the Canadian Union of Postal Workers, some of them a matter of public record. Efforts to strengthen the reliability of a study through the use of more than one method are called "triangulation" -- but the centrepiece of this work remains the survey.

The questionnaire was distributed by Union officials on the job site; the researcher had no control over who did and did not receive the questionnaire, and no capacity for individual

follow-up. However, the Union did post notices asking workers to complete their questionnaires.

This kind of distribution method was acceptable because, as Goyder and Leiper[12] point out, there has been substantial convergence between nonresponse rates for surveys involving personal interviews (42.1% in 70-79) or personal follow-up (50.5% in 70-79) on the one hand, and nonresponse rates for a questionnaire without follow-up (40.3%) on the other; if anything, the last type enjoys -- ceteris paribus -- a certain advantage over the others.

Goyder & Leiper attribute this convergence to a rise in the value of personal privacy & confidentiality over time; since the mailed questionnaire is less intrusive, resistance to it remains relatively constant. Thus, I was told by a security guard about a year later that my personal requests to individuals to complete the instrument resulted in complaints of "harassment."

The few (10) workers who admitted to me that they had not and would not respond to my questionnaire (supported by reports from a Union official and complaints from another 12 workers who told me they did fill out the questionnaire) reflected two major concerns: the troublesome nature of some of the questions (cited by all of those listed above) as well as the length of time the instrument took to complete; and the uses to which results would be put. Although these data are impressionistic then they do seem to confirm Goyder & Leiper's contention that increasing nonresponse (whether outright refusal or non-response disguised as noncontact) over time is due primarily to "privacy-related" concerns. These have increased because of growing cynicism about the value of guarantees of confidentiality in the face of technology aimed at breaching it, and because of "sensitivity to" privacy invasion" itself.[13]

Thus, few respondents expressed much reticence about expressing their opinions or describing their work; this reflects a "democratic ethos of American [and Canadian] political culture"[14] 1)p.64), wherein individuals have the right to be heard. But many (4 non respondents, 6 respondents) could not understand the reasons for including sociographic data in the questionnaire, and feared that the documents would be turned over to management used to identify them (one women suggested that this could be done by lifting fingerprints off the pages) and then turned against them somehow.

As well, all of the refusers and eight of the respondents argued that the results, even if confidentiality were to be maintained, could be used as a weapon in the class war, as guidelines on how to "manipulate" postal workers (for instance, by using predictors of the demographic profile of nonmilitant workers to direct future hiring policy.[15]

In light of these issues, the response rate of 72% which was obtained represents dizzying success, achieved no doubt because of the special population targeted, the "salience of topic," the sponsorship of the University (combined, perhaps with that of Union and management)[16] and possibly an assessment by respondents that the potential value of the study outweighed its potentially undesirable outcomes.

ii: Outline of the Observation

In addition to the survey, then, I conducted field research: participant observation and onsite informal interviews of postal workers, management, maintenance and support staff. I tried to organize onsite time so that the research mimicked postal workers' own schedules (that is, I would try to "work" "midnights" or "afternoons" at one of the two sites). I also socialized with workers on occasion, and interviewed a few in their homes.

For purposes of comparison, I toured postal operations in Toronto, in Tampa, in Brussels, and in Amsterdam (during trips to these cities). And using snowball sampling, I interviewed postal workers, formal postal workers, letter carriers, unionists and Post Office executives in Toronto, Ottawa (at Headquarters, as the Corporation insists on describing its head office), Lethbridge and Fort MacMurray -- as well as those in Cancity.

This entailed approximately 3,000 hours of field and archival research, including roughly 850 onsite. Although I spent about 60% of onsite time on afternoons, and about 30% on nights, I estimate that I spoke to most of the eligible population at least once, in encounters ranging from 30 minutes to a couple of hours at a time.

However, in contrast to the more usual research cycle[17] in which field study precedes and is the basis for questionnaire design, it was impossible to gain physical access to the plant until after the surveys had been circulated and -- for the most part -- returned. That rather unusual sequence produced some peculiarities in the data collection.

Douglas[18] describes social data-gathering techniques as forming "a continuum ranging from total immersion in natural experience to totally controlled observations and analyses" with field research falling somewhere in the middle and survey research toward the "controlled"

extreme. Similarly, McKennell[19] portrays the ideal research project as beginning with an intuition, proceeding to field research, then to a small-scale pretest, and finally to a "full-bore" survey. There is, then, a subtle shift between "exploratory" and "confirmatory" methods:

> statistical considerations enter only into the analysis stage of the research process, after all data have been collected, and near the beginning when initial plans for the analysis are made...[20]

But data collection is social action[21]: researchers must orient themselves to a greater or less degree to the expected responses of interested parties; parties who are, by the nature of the case, unknown. This alters the research design, constrains it, even brings it to a halt in some instances. One difference between field study and survey is that in the latter observers may not encounter their subjects directly, but only in imagination. By the time (if ever) they actually meet their subjects, the research instrument is already in fixed form; thus, interaction between researcher and subjects is anticipatory, in advance of the research itself, and less amenable to on-the-spot or ad hoc arrangements in consequence[22]. Elaborate pretests are therefore of crucial importance, so that one is able to gain an understanding of the right questions to ask.

In short, it is precisely because of the nature of survey methodology that discovering a setting, negotiating with gatekeepers, and establishing some sort of rapport between researcher and respondent are critical. The time and expense involved in survey research mean that one is often unable to abandon a given setting or approach as unfruitful, as field workers like Humphreys[23] and Polsky[24] are able to do. And because gatekeepers can demand to peruse the research instrument in advance of granting access, the hope of gaining access at all dims; research bargaining is conducted in a market heavily favouring the gatekeeper.

In consequence, the standard procedure in survey research is to commence with an exploratory study[25] akin to the "casing" recommended for participant observers[26]. This facilitates decisions about site selection and makes it possible to refine the research instrument in accord with local conditions. It is especially important in situations like this one, where the size and dimensions of the universe are not exactly known.

That sort of information is usually gathered onsite, and the interview schedule edited as a result: for example, had the ethnic homogeneity of Cancity postal workers (66% of British descent, 84% speaking English as their first language) been known in advance, it might have been possible to adjust the questions dealing with ethnicity or first language on the final document. Moreover, being onsite often enables one to obtain a sampling frame: a union seniority list, for instance. But all that presupposes that one has relatively free access to the setting, which makes contact with gatekeepers virtually inevitable. Contact takes place at a point where the researcher is peculiarly disadvantaged: s/he needs that list and needs access above all, yet has no idea what kind of research bargain can reasonably be struck. And gatekeepers want to see a questionnaire as a first condition of access.

A precondition like that can induce considerable anxiety, for gatekeepers differ from other insiders in that contacts with them are formalized rather than fortuitous[27]; in survey research, both the researcher and a document require approval. It is impossible to remain vague about the goals of the exercise, to stay at the level of generality Bogdan[28] recommends. The possibility that entry may be denied altogether is, therefore, enhanced.

This could be avoided if one confines oneself to relatively disorganized groups[29]: the residents of a city, perhaps, or the habitues of a public washroom (hence the ethnographer's

fascination with the disreputable). Lack of organization means that "chief hosts" are generally absent; the individual must be his or her own gatekeeper, and hasn't the capacity to do more than influence others' granting or withdrawal of cooperation[30]. But formal organizations maintain boundaries between members and others, so that there is necessarily some level of secrecy[a] involved, some distinctive codes (often called the "organizational culture"[31]) to which outsiders are not privy. Gatekeepers exist in large measure to preserve the integrity of that culture; their presence and numbers could well serve as an index of the levels of organizational and member autonomy.

In a formal bureaucracy, the sociologist is a "problem" (in Perrow's[32] sense of the word) and quite possibly an unprecedented one. There may be phalanxes of lawyers, public relations officers, secretaries and other screening devices in place[33], but none are designed to cope with social scientists. Thus -- while a host of opinions about granting access may be offered by the Legal Department, the Research Branch, and the Public Relations Office -- the actual decision to grant entry is likely to be made fairly high up the command chain. This is true of both the enterprise and the union within that enterprise: the Union is presumed to be chiefly interested in protecting its membership, so that access granted by the employer alone is a necessary but not sufficient condition, and cannot be expected to elicit much cooperation from subjects.[34]

Reasoning along these lines, I first contacted the Research Department at the National Headquarters of Canada Post and the lone Research Director of the CUPW. I never received a

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[a] For instance, I was never granted access to aggregate personnel records (gender ratios, absenteeism figures and the like) which I hoped to use to cross check my survey data kept by CPC in Cancity; nor did the CUPW allow me to attend a Union meeting.

written reply from any CPC official, but everyone expressed great interest in the research, a desire to render assistance -- "but we'll need to get approval from Department x." At Canada Post Headquarters, there is a Personnel Department, a Human Rights Co-coordinator, a Labour Relations Department, an Employee Relations Department, Liaison Departments concerned with each of the three largest unions then extant, and no less than three Research Directorates. There were at the time some three thousand employees at Headquarters; I never reached anyone with the authority to clear my research.

CUPW is a much leaner organization; Union Headquarters delivered a flat "no" almost immediately. After only a few months, the First National Vice-President informed me in writing that the Union would be unable to support any research unless it were known from the start to be "furthering members' interests.[35]" Unions are suspicious of outside researchers[36], often with good reason.

But both CUPW and CPC are somewhat decentralized entities where local officials are sometimes able to act independently. In Cancity, I made an appointment with the local Corporate Communications (Public Relations) officer; and he passed me on in short order to the Area Manager. At the same time, I walked into the CUPW office and met the Chief Steward, who told me when the Local President would be in. The President extended full co-operation immediately, although he was constrained by the Union's policy of never releasing a membership list to outsiders. Instead, he proposed that the Union distribute the questionnaire through its officers on the job, with the completed forms to be mailed back directly by respondents. This is what was done, and the Union also posted reminders to staff to complete the questionnaire. However, no

real personal follow-up was possible, since it was impossible to know for certain who had responded and who had not.

Moreover, perhaps because not all CUPW officials in Cancity were equally enthusiastic about the research, there were some problems in getting the questionnaires to postal workers in outlying stations (especially those without a shop steward); hence, coverage of the bargaining unit was uneven. The Bulk Mail Facility and the Main Postal Plant, however, were well represented.

iii: Access and Rapport

Once "access" is gained, rapport becomes problematic: through sheer propinquity, the researcher may become identified as aligned with the gatekeeper; and contacts between researcher and respondent are through the impersonal medium of the questionnaire and covering letter. It is never possible to identify a questionnaire as elements of the natural setting; yet respondents are asked to commit themselves to paper, and to trust that their answers will not be used against them, even though they are aware that some sort of quid pro quo exists between the researcher and powerful persons in the group under study. In this case, the research bargain included -- besides the usual guarantees of respondent confidentiality and protection -- the stipulation that both the Union local and the Area Manager would receive unbound copies of the completed dissertation, with the opportunity to append comments or criticisms to the finished work. Respondents who chose to send in their names and addresses under separate cover were to receive a summary of the findings by return mail.

However, all of these requirements produced a questionnaire which took a little over two hours to wade through; and one which respondents said was intensely personal to the point of offensiveness.

Consequently, I excluded from the research instrument those questions which seemed especially intrusive (family income, friendships, etc). I also dropped questions which were likely to involve more than usual onerousness and therefore error or nonresponse (father's and mother's occupations when respondent was sixteen years old, for instance); still others were simplified (in the case of marital status, to "Married or common law" vs. "other"). This left about half the questionnaire, but it still took over an hour to complete and was extremely demanding. In any case, the instrument tended to select for younger and better-educated postal workers, presumably because they are more comfortable with tedious forms in general and surveys in particular[37]. The rather high response rate (for a Canadian self-administered test)is under the circumstances a tribute to postal workers' patience and interest[38].

NOTES TO APPENDIX I

1 Rinehart, J op cit ch 1

2 Thompson Paul 1990 The Nature of Work (Basingstoke UK MacMillan) 2nd edition

3. Thompson, P. op cit pp 181ff

4. Canadian Union of Postal Workers 1989 Information Bulletin #6 (mimeograph)

5 Brighton Labour Process Group 1977 "The capitalist labour process" Capital and Class 1

6 personal communications

7 e g Thompson, P op cit, ch 1

8 personal communications see also Laidlaw B and B Curtis 1986 "Inside postal workers The labour process, state policy and the workers' response" Labour/Le Travail 18 pp 139-162, and Read, L 1988 The Intelligent Citizen's Guide to the Postal Problem (Ottawa Carleton University Press) ch 7

9 see Gurwitsch A 1965 "The phenomenology of perception Perceptual implications in J Edie (ed) Invitation to Phenomenology, Studies in the Philosophy of Experience (Chicago Quadrangle) pp 17-29

10 Batstone et al, op cit p 6

11 Batstone, et al, op cit

12 Goyder J and J Leiper 1985 "The decline in survey response A social values interpretation Sociology 19(1): 55-71

13 ibid p 61

14 ibid, p. 64

15. see Gouldner, A 1970 The Coming Crisis of Western Sociology (New York Basic Books) p 50

16 see Goyder, J and J. Leiper, op cit p 64

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APPENDIX II: A FACTOR-ANALYTIC STRATEGY FOR MEASURING MILITANCY

i. The Rationale

In the pretest, the scale variable for militancy had been constructed by taking the mean of the standard scores of cases for those items which I had consciously included as tapping the above elements. This method treats a multidimensional condition as unidimensional; perhaps in consequence Cronbach's Alpha, a rather conservative measure of reliability, was .42. But the situation described above -- where guidance from prior research is slight, and in which any single variable, imputed or otherwise, carries within it only a kernel touching on the phenomenon under investigation along with a good deal of extraneous chaff -- is one for which exploratory factor analysis was designed.[1] According to Hunter and Manley[2]

> As a data-driven family of statistical techniques, exploratory factor analysis can be a useful research tool when theory is poorly developed and an investigator seeks to describe in a preliminary way the structure underlying a large set of empirical indicators.... First, it will give us a glimpse of possible general variables underlying these data. Second, if one or more of these variables closely resemble variables identified in the literature..., then it will provide a means to measure them.

As it turned out, factoring extracted five "general variables" or dimensions, the first of which seems to be a straightforward representation of militancy. Cronbach's Alpha for variables which loaded significantly on this first dimension was .72. Referred to hereafter as "militancy," this dimension will form the basis for subsequent analysis.

The militancy variable was constructed by factor analysing virtually every variable even distantly related to the theoretically-defined elements, retaining those which loaded nontrivially on those elements, and applying an alternating least squares[3] technique by which to construct the measure. It was assumed that questions asking respondents' approval or disapproval of militant behaviour like strikes, boycotts and demonstrations would indicate whether they had a confrontational world view. Likewise, questions intended to capture workers' orientation to management on the one hand and other workers on the other should be relevant: if workers saw themselves as in an antagonistic relationship with management (still more so with capital) and as sharing interests and goals with other postal workers (or with the working class), then they were possessed of worker consciousness at least, and possibly even class consciousness. Finally, those who were relatively dissatisfied with the rewards their jobs provide were deemed to be grievance sensitive; and those whose dissatisfaction stemmed from concern with expressive needs should be the more militant.

As the first step in the analysis, then, those variables which, on the basis of face validity, were thought to touch on some aspect of militancy were selected and cleaned. Cleaning involved recoding responses to resemble a scale -- in particular, by recoding nonresponses, on the presumption that nonresponse to an item soliciting opinion indicates indifference, to a middle category along with "don't know," "depends," and the like -- and eliminating those variables which were not approximately normal in distribution.

Next, product-moment correlations were constructed. Not surprisingly, many of the variables were very highly intercorrelated, producing an "ill-conditioned matrix." Since this violates one of the assumptions of factoring, thereby affecting reliability, these variables were

reconstructed into simple scores by summing the individual respondent's coded answer for each item and using the mean response as a new variable. That produced the variables "assessed power of labour", "assessed power of capital", "conflictual global attitudes", "expressive values", and "instrumental values". The first is the mean of two variables I called "Union Power" and "CUPW Power", which asked whether the respondent thought unions in general and CUPW in particular had much too much power, too much power, about the right amount of power, too little power, or much too little power. The second, "assessed power of capital", asked the same question about business in general and about CPC. Each of these variables touches on some aspect of worker consciousness.

The third variable, "conflictual global attitudes", is thought to reflect a confrontational world view. It was derived from three variables which asked whether "wildcat strikes," "boycotts," and "illegal but peaceful protests" respectively), were usually, sometimes, or never justified.

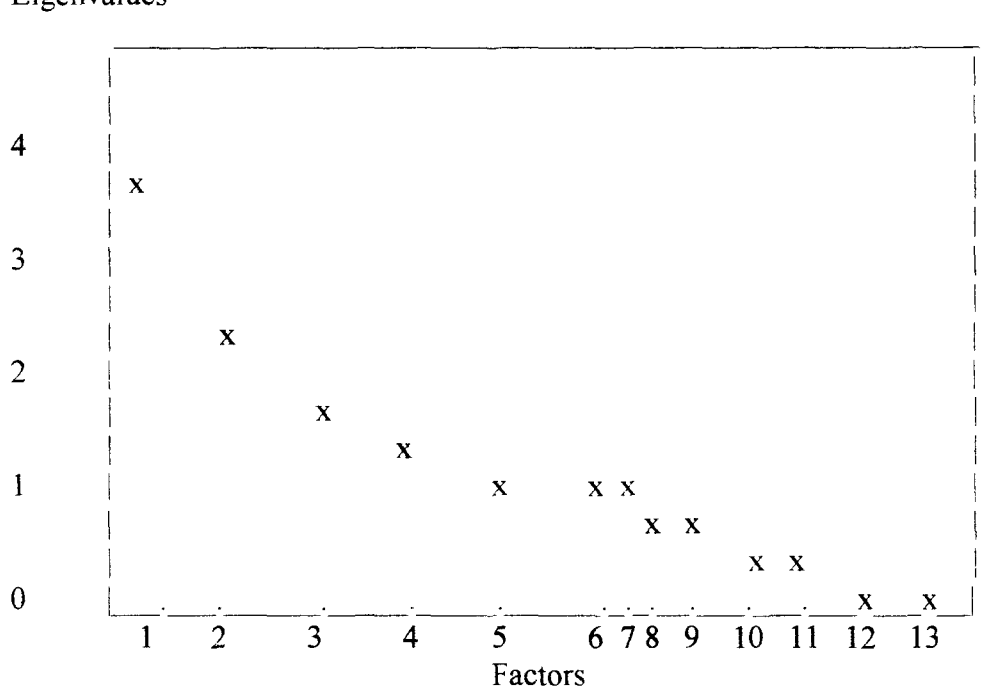
The remaining two constructs represent an effort to tap respondents' grievance sensitivities; their views on the kinds of rewards -- conceptualized according to a straightforward instrumental-expressive dichotomy[4] -- which their work did and which it should provide. The "instrumental values" variable is the mean of subjects' responses to five positive statements about their jobs' security, healthfulness, pay, physical surroundings, and stressfulness. The other is the mean of responses to nine positive statements about promotion prospects, freedom, the interesting nature of the work, the possibility of influencing superiors' decisions about the work, the opportunities for personal development it provides, its suitability to the subject, whether the subject thinks of it as a career, the degree to which it affects life off the job, and the importance

of the work done. Respondents were asked to rate each of the fourteen statements making up "instrumental values" and "expressive values" as very true, somewhat true, neither true nor false, not very true, or not at all true.

In addition to these imputed variables, a few others were included for analysis. Open-ended questions labelled as the variables "major problem facing CPC" and "major problem facing CUPW," for instance, asked the respondent which problems facing the Post Office and the Union respectively were most important; answers which reflected agreement with or support for the Union's agenda were coded low (i e. to the "left" on the scale), while answers which indicated a more pro-management stance were coded high (i.e. "right"). Thus, a low score on these should reflect greater worker consciousness. The same is true in more direct fashion for "respondent's interest in CUPW affairs" and "respondent's self-rated class location."

Grievance sensitivity was to be tapped by "level of concern over technological change" (e.g. over threats to one's own job this may pose). "Would take the same job again", "job satisfaction", and "would recommend the same job to others" are each different measures of job satisfaction, so that they too should be related to grievance sensitivity. "Task most disliked" was another open-ended question which asked respondents to name the job they least liked doing in the Post Office and why; answers were rated according to whether they made reference to degraded work, so that this too reflects grievance sensitivity.

CHART APII.1: SCREE SLOPE OF EIGENVALUES, ALPHA FACTORING



ii. The Resultant Measure

All of these together total fifteen variables to be factored, out of the original fifty. As already noted, five dimensions were extracted by factoring. In part, that is due to an often-noted[5] ambiguity in the appropriate bases for determining the best number of factors to select. On one of these, the "scree test" eigenvalues for each factor are plotted on a graph, and the point at which the curve levels off is determined as the cutoff point: using that technique, the expected three factors would be selected (see Chart APII.1). There is some merit to this interpretation, since the more parsimonious structure is often the more desirable. But the extant research is not sufficiently developed to justify forcing a three factor solution. Moreover, since it was determined in advance that only one of the factors derived would be examined in depth, parsimony should apply to that factor alone rather than to the overall matrix.[6] As well, it might be desirable to have the "purest" and most economical type of data to work with, so that forcing a three-factor solution might well bring in extraneous variables.

Fortunately, the decision was in a sense made by the factor model chosen: Alpha analysis, which carries with it a mechanical prescription for determining the number of factors. Alpha modelling was chosen because, as an initial study, this one can make no claim to having chosen the definitive measures of militancy; rather, the variables used are to be understood as a selection from a potentially infinite range of possibilities.

TABLE APII.2: FACTOR MATRICES

A: Factor correlation matrix

Factor	1	2	3	4	5
1	1.00				
2	-.140	1.00			
3	-.173	.084	1.00		
4	.180	-.159	.077	1.00	
5	.339	.053	-.176	.106	1.00

B: Factor transformation matrix

Factor	1	2	3	4	5
1	.742	-.351	.380	.233	-.356
2	-.011	.698	.425	-.329	-.473
3	.249	.509	.235	.510	.603
4	-.569	-.095	.265	.681	-.364
5	-.250	-.348	.741	-.336	.393

Figures are rounded.

A situation in which one wishes to "generalize from [a] sample of variables to [the] universe[7]" is one for which Alpha was designed; use of Alpha entails inclusion of all those factors whose eigenvalues exceed one.

Initially, it seemed unlikely that the dimensions to be drawn from these data would be orthogonal, so that oblique rotation was used. However, it turns out that between-factor correlations are quite low (see Table APII.1), which means that the choice of rotation becomes a matter of indifference.[8] For that reason, and because the two matrices (pattern and structure) derived from oblique rotations are somewhat cumbersome, orthogonal rotation is presented (Table APII.3). But there is little of substance which distinguishes the two in this case.

TABLE APII.3: FACTOR MATRIX WITH VARIMAX ROTATION

Factor						
	1	2	3	4	5	Final Communalities
Variable						
A	-.80	.19	.03	-.07	.48	.91
B	.53	-.27	.08	.21	.06	.42
C	-.52	.00	-.14	.07	-.06	.30
D	.49	-.12	.14	.15	-.06	.30
E	-.00	.89	.06	-.04	-.18	.81
F	.34	-.59	.12	-.00	-.21	.52
G	-.15	.48	.01	-.07	.09	.27
H	.08	.17	.81	-.05	-.12	.72
I	.19	.36	.60	.10	.03	.54
J	.16	-.02	.31	.12	-.24	.19
K	.01	-.03	.00	.69	.14	.50
L	-.30	.03	-.11	-.52	.10	.39
M	.15	.15	-.00	-.00	.43	.23
O	-.19	-.02	-.12	-.01	.28	.13
P	.03	.06	.03	-.11	-.18	.05

Figures are rounded

TABLE APII.3 (Contd.): FACTOR MATRIX: Key

A Assessed power of labour (own union + unions generally),
B Interest in CUPW, C Expressed willingness to strike,
D: Confrontational world view, E: Job satisfaction, self-rated,
F: Instrumental orientation, G Would recommend job to others
H. Expressive orientation; I. Worried about technology (job security),
J. Assessed power of capital, K: Major problem facing CPC,
L: Major problem facing CUPW; M. Would take same job again,
N Class identification, O Task disliked most

TABLE APII 4 Dummied Variable Analysis

			Step #						
1	2	3	4	5	6	7	8	9	10
				- 14	-.15	- 12	- 12	- 11	- 10
				- 03	-.05	- 00	- 02	- 03	- 02
			-.34	-.32	-.30	-.30	- 32	-.34	- 30
			12	12	13	15	.16	25	17
			-.02	-.01	.04	.05	.05	.07	09
		- 18	- 24	- 21	- 22	- 21	- 25	- 30	- 29
		- 22	- 18	-.17	- 16	- 17	- 17	- 16	- 16
		13	18	16	15	14	13	16	10
		21	11	11	13	15	11	10	12
		02	.06	07	06	02	03	05	03
		-.02	- 03	- 02	- 02	- 00	- 02	- 13	- 08
- 17	- 13	- 09	- 03	- 05	- 05	-.00	- 04	- 06	- 05
24	22	16	.15	16	13	09	06	08	.08
20	12	12	09	09	06	04	.05	03	01
- 06	- 02	- 05	-.06	- 07	- 00	-.04	- 07	- 08	- 09
03	.00	00	06	06	05	06	10	06	06
	.20	18	15	.14	13	10	10	.08	10
	.15	.19	.24	23	21	26	22	25	22
	- 18	-.20	-.23	- 21	-.27	- 28	- 29	-.35	- 33
					- 18	- 17	- 19	- 20	- 15
					-.04	- 04	- 04	- 04	- 04
					- 02	- 05	- 02	- 08	- 10
					02	02	02	05	.07
					- 03	- 09	- 09	- 09	- 09
					-.11	- 09	-.08	- 11	- 08

- 13	-.13	-.09	- 10
- 12	- 13	- 13	- 10
- 07	-.07	-.10	- 14
.05	05	01	.08
-.00	02	07	07
	17	19	24
	.06	.07	01
	- 10	- 11	- 14
	- 02	- 05	- 03
	11	11	10
		- 14	- 09
		-.03	- 00
		14	13
		- 07	- 04
		.08	.04
		- 06	- 06
		09	-.03
		- 05	- 03
		10	08
		41	08
		- 05	- 09
		- 06	- 01
		-.03	- 04
			- 21
			02
			10
			05

									-.12
									10
									04
									- 01
				R^2					
.07	.15	.30	.41	42	.46	49	52	.52	.62
				Adjusted R^2					
.04	.10	.23	.33	.34	.35	.37	.38	.38	.40
				Standard Error					
91	.88	82	76	76	.75	.74	74	73	.72

all figures rounded * p<.01 # p< 05

TABLE APII.5: Ascriptive, achieved, work experience and attitudinal effects on militancy, ordinary least-squares estimates (standardized coefficients).

UNION-ISM	SOLI-DARY	JOB ATTS	TASK	AUTO-NOMY	COH-ORT	TIME LOST	JOB HIST	ACH-IEVE	ASCR-IBED	ADJUSTED R2
			.260							.061
			.227	.288						.136
		.402	.175#	.312						.288
	.344	.364	.130#	.336						.367
.140#	.352	.344	.169	.334						.403
.143#	.337	.353	.157#	.363	.211					.437
NS	.357	.355	.172	.393	.215	.215				.467
.129#	.367	.356	.218	.381	.208	.210	.210			.488
.130#	.376	.383	.126#	.418	.242	.177	.144	.256		.487
.112#	.359	.355	.143#	.403	.218	.198	.239	.283	.237	.575

All variables are significant (p.>.01), except
#: p.>.05; NS= p.<05.

KEY (brief description):

UNIONISM: Current CUPW official, former CUPW official
SOLIDARY Frequency of social contact with other postal workers, interest in politics, political party preference
JOB ATTITUDES Respondents attitudes towards his/her work
CONTROL: Extent of supervision/machine-pacing; existence of formal quota (self-assessed)
TASK Mechanized or non-mechanized work, contact with LSM, CFC, OCR, GDS
COHORT: On which shift employed, number in work party, extent of overtime hours worked
JOB HISTORY changed job through bidding, job lost through elimination
TIME LOST: Time spent on strike, union business, discipline, etc. in previous six months
ACHIEVED Education level, first occupation's Pineo-Porter McRoberts category, marital status, number of children
ASCRIBED. sex, religion, ethnicity, first language, birthplace

KEY (detailed description):

i Unionism

A Current CUPW official[b]
B. Former CUPW official

ii Solidarity

C Federal political part preference (0=NDP, 1=other)
D Interest in politics (1=low, none)
E. Socializes with other postal workers

iii Job attitudes

F: Believes training programmes inadequate
G Believes Union does well negotiating over technological change
H: Wants to change employment status
I. Believes management and workers on same "team"
J: Believes job rotation an improvement
K Believes education is appropriate for job

iv: Task

L Works with Group Desk Suite
M: Works with Culler-Facer-Canceller
N Works with Optical Character Reader
O Works with Letter Sorting Machine
P Duties (1=primarily manual)

v. Autonomy

Q Job is machine-paced
R: Job is not closely supervised
S. Works to an output quota

vi: Cohort variables

T Works night shift
U. Works day shift
V. Works moderate amount of overtime regularly
W: Works large amount of overtime regularly
X Work site size (1=small)
Y: Full-time or Part-time (1= Part-time)

vii Time lost

Z: Any lost-time injury past 6 months
AA Time off for "other" reasons past 6 months
BB Time off for union business past 6 months
CC Time off due to disciplinary action past 6 months
DD: Time off due to job action last 6 months

viii Job history

EE: Employed before mechanization
FF: Post office job has changed
GG: Has had job eliminated due to technological change
HH New job an improvement over old
JJ: Specific job training (1= less than 2 weeks)

ix Achieved status

KK: 1st job was semi- or unskilled manual[c]

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[b] Except where noted, the variables are constructed so that "1" represents a positive or affirmative response.

[c] coded according to Pineo-Porter-McRoberts categories

LL: 1st job was skilled
MM: 1st job was supervisory or technical
NN: Less than high school education
OO: Post-secondary education
PP Marital status (1=single, widowed, divorced, etc)
QQ: Spouse's employment status (1=part-time)
RR Spouse's job is semi- or unskilled manual
SS Spouse's job is skilled
TT Spouse's job is supervisory or technical
UU: Spouse is unionized
VV 1 or 2 children
WW: 3 or more children

x Ascribed status

XX. Sex (1=male)
YY Ethnicity (1=not British)
ZZ Birthplace (1=outside Canada)
A' 1st language (1=not English)
B' Religion (1=none)
C' Catholic, not very religious (1=yes)
D': Protestant, not very religious (1=yes)
E': Catholic, very or somewhat religious (1=yes)

NOTES TO APPENDIX TWO

1 Rummel, R 1970 Applied Factor Analysis (Evanston Ill Northwestern University Press)

2 Hunter A and M Manley, 1986 "On the task content of work" Canadian Review of Sociology and Anthropology 23 1, p. 54

3. see Browne, M 1968 "A comparison of factor-analytic techniques" Psychometrika 18 23-38. Marradi, A 1981 "Factor analysis as an aid in the formation and refinement of empirically useful concepts" in Jackson D and E Borgatta (eds) Factor Analysis and Measurement in Sociological Research (Beverly Hills, CA Sage) pp 26ff

4 Goldthorpe J et al 1968 The Affluent Worker Industrial Attitudes and Behaviour (London Cambridge University Press)

5 e.g Kim J O 1975 "Factor analysis" in J Nie et al (eds) SPSS (New York McGraw-Hill)

6 see Marradi op cit p 36

7 Rummel 1967 op cit p 132 Harmon H 1967 Modern Factor Analysis (University of Chicago Press) rev 2nd ed

8 and see Marradi, op cit pp 37f

Appendix III: Statistical Profile

This is a listing of frequencies and some summary statistics for the participants in this study, as recorded for regression anlysis. In each, the modal case (usually the first listed) was used as the null value for dummying. Note that all figures are rounded.

VARIABLE	VALUE	FREQUENCY	PER CENT
Sex	Female	106	70
Marital Status	Married[a]	93	61
Children	None	57	38
	1-2	56	37
	3 or more	37	24
	No answer	2	1
Birthplace	Canada	130	86
First Language	English	128	84
Ethnicity	British[b]	100	66
Religion/ Religiosity[c]	Religious Catholic	45	30
	Irreligious Catholic	13	9
	Religious Protestant	48	32
	No religion	16	11
Education	Complete High School	52	34
	Some High School	43	28
	Postsecondary	57	38
First Job[d]	Semi/Unskilled clerical	69	45
	Semi/Unskilled manual	46	30
	Skilled manual	16	11
	Supervisory, technical	21	14
Spouse Employed	Yes, full time	81	53
Spouse's Job	Semi/Unskilled manual	37	24
	Skilled manual	16	11
	Supervisory, technical	17	11

[a] Includes commonlaw.

[b] Includes the responses "Irish" and "Canadian "

[c] Very or somewhat religous, versus not very or not at all religious, cross-classified by denomination.

[d] Coded according to the Pineo-Porter-McRoberts categories

Spouse in a union	Yes, not postal union	53	35
	Yes, postal union[e]	24	16
Respondent Full-time	Yes	117	77
Duties	Primarily mechanized	85	56
Works with	...LSM	68	45
	...GDS	72	47
	...OCR	75	49
	...CFC	53	35
Training	3 or more weeks	111	73
Has changed jobs at CPC	No	79	52
	Yes, job eliminated	15	10
	Yes, by bidding	58	38
Overtime hours in average week	Less than 1	60	40
	1-10	51	34
	More than 10	36	24
Shift	Afternoons	64	42
	Days	45	30
	Nights	29	19
	Other/NA	14	9
Workgroup Size	100 or more	115	76
Injuries/Illnesses	From postal Machinery	26	17
	Other on the job	42	28
	Off the job	109	72
Shifts lost through	.. Discipline	21	14
	...Union affairs	17	11
	. Labour action	38	25
	..Other	30	20
Respondent a CUPW Officer	Current	15	10
	Former	33	22
Years employed by Canada Post	(median) 10 years (std dev) 6 6 years (range) 6 months to 34 years		

[e] CUPW, LCUC, APOC, PSAC