CONTROL AND INEQUALITY AT WORK: VARIATIONS, PROCESSES, AND IMPLICATIONS FOR WORKER WELL-BEING

DISSERTATION

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By

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ABSTRACT

For decades, sociologists have sought to explain how firms achieve control over workers’ activities alterations in the labor process. Many have addressed how modes of control have arisen in response to technological innovation, bureaucratic requirements, class conflict, and inter-firm competition among capitalists – usually in manual and mostly male work settings. While revealing a great deal about origins and processes associated with innovations in control techniques, benchmark theories have been less successful in generating concepts equally applicable across time and place – impairing theoretical synthesis and growth. Moreover, they provide limited guidance in developing expectations regarding the implications of control for worker well-being.

Subsequent studies, many of which are based on qualitative research, are helpful in this regard, and have drawn attention to the combined influence that worker control techniques exert on worker outcomes. Data limitations have obstructed the quantitative, comparative research necessary for understanding these relationships. However, a limited body of research provides evidence of systematic variation between the dominant mode of control and worker outcomes associated with alienation, resistance and consent.
Unfortunately, existing research lacks explicit attention to the combined influence of the full range of control techniques present in a given workplace, and their collective influence on worker outcomes.

This study seeks to fill this gap by offering a model incorporating general and combinable concepts and using it to evaluate the implications of control for the worker outcomes. I highlight six key forms of control: direct supervision, automation, task segmentation, rules, career ladders and worker input. Then, I evaluate their separate and combined influence on six outcomes associated with psychological and behavioral responses to work. These include two indicators of alienation (powerlessness and worthlessness), a measure of consent, and three forms of resistance to management (organized opposition, work avoidance, and loathing of management).

I use data culled from the population of English-language, book-length workplace ethnographies to analyze these relationships. These data include 141 work groups in a broad range of occupations, industries, and firm sizes. My analytic approach proceeds in three stages. First, I use logistic regression to measure the effect of each form of control, net of the others, on the odds of each worker outcome. Second, I use qualitative comparative analysis (QCA) to identify packages, or typologies, of control apparent in these work settings, and I examine their implications for dependent variables. Third, I use similar techniques to identify packages of control in settings with work groups of varying class, gender and race composition, and determine their implications for worker well-being.
Results are consistent with expectations, and reveal interesting patterns. First, logistic regression reveals that, consistent with expectations, top-down control techniques, including direct supervision, automation, and task segmentation are generally negative for worker well-being. Cooperative forms of control (career ladders and worker input) are beneficial for worker well-being. The implications of rules are small and contradictory.

Second, combinations of control matter a great deal for worker outcomes. Control configurations representing coercive approaches to directing workers’ activities (those in which most control techniques are primarily top-down, or reflect an absence of cooperative forms of control), are remarkably negative for the range of outcomes associated with worker well-being. Configurations representing persuasive approaches to control (those in which at least half of the control techniques are cooperative, or reflect an absence of top-down control) have the reverse effect.

Third, systematic variation in the nature of control by class, gender and race composition of work groups is apparent, and produces inequality in the experience of work along these lines. Work groups in manual and service occupations and those numerically dominated by women are more subject to coercive approaches to control compared to those in professional occupations and primarily male work groups, respectively. Moreover, persuasive approaches to control apparent among these groups are less uniformly advantageous for worker well-being. A similar pattern is also apparent for work groups that are disproportionately minority compared to those populated primarily by the majority race.
The qualitative ethnographic sources reveal interesting patterns with regard to processes. Avenues for exploring these in future research are presented, along with implications of this study for more general sociological understandings of social inequality.
Dedicated to my parents
I would like to thank Vincent Roscigno for ceaseless support and encouragement throughout my graduate career. Vinnie has spent a considerable amount of time and energy providing formal and informal guidance and nurturing my intellectual and professional growth. His efforts in this regard – along with the example he sets in living out his own professional life – have been extraordinarily valuable to me and will continue to be an enormous influence on my own life and work. I would like to express particular thanks for his guidance during execution of the current study, during which time he helped me to focus my broad theoretical interests into an appropriate theoretical and empirical scope; pointed me toward (and provided technical assistance with) appropriate analytic techniques; advised me on maintenance of theoretical and analytical parsimony; and encouraged me to remain mindful of how this project would translate into future work.

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CHAPTER 1

INTRODUCTION

The capacity and desire to direct oneself in productive labor is a hallmark of the human species. The body and mind have emerged from a process of evolution in which labor and the construction of nature have played a prominent role (Erikson 1990; Marx 1978). Meaningful and satisfying production fulfills human potential, fosters individual development, and promotes a positive self-concept (Hodson 2001a; Kohn and Schooler 1983). Sensations of self-worth, dignity, and “getting somewhere” in life often derive from a sense of pride in accomplishment at work (Kahn 1981).

This process is evident even in the context of organizations, where achieving fosters a sense of accomplishment, validation and social integration, and encourages commitment to the goals of the enterprise (Knights and Willmott 1989). Workers able to construct a sense of dignity at work often serve enthusiastically – doing their best and deriving a great deal of satisfaction and meaning from their contributions (Hodson 2001a; Knights and McCabe 2000). Dedication and effort are evident even when such pursuits seemingly fail to advance workers’ interests. In many such cases, unrewarding work is reconceptualized in ways that advance psychological returns like pride, achievement, and prestige among coworkers (Burawoy 1979).
Yet, organizational settings differ in the degree to which they allow workers to contribute or to derive a sense of accomplishment from their efforts. The consequence is variation in the experience of work with respect to psychological and behavioral needs. Many jobs at least partially satisfy workers’ intrinsic desire for fulfillment and accomplishment at work (Kahn 1981). However, some production arrangements are clearly distressing. Assembly lines, for instance, diminish pride, satisfaction and worker solidarity (Hodson 1996). Oppressive production arrangements routinely undermine workers’ inclinations toward commitment and goodwill and encourage resistance (Gartman 1999; Knights and McCabe 2000; Roscigno and Hodson 2004; Vallas 1987).

Theory and research suggest that workers psychological well-being and behavioral responses to work vary systematically with the nature and degree of worker control (Blauner 1964; Burawoy 1979; Friedman 1977; Hodson 1996). I argue that control mechanisms are consequential for these outcomes because they intervene in the expression of workers’ productive and cooperative impulses. Selected primarily on the basis of profit and efficiency, control arrangements are not always suited to fulfilling human needs, and some appear antithetical to human dignity. Whether control arrangements complement or contradict workers’ own productive orientations has enormous consequence for the psychological experience of work and for workers’ behaviors on the job. It is thus my contention that certain types or combinations of control systematically influence workers’ psychological and behavioral responses to work.

This study investigates how control shapes workers’ psychological well-being and consent or resistance to the organization of production. In other words, what kinds of
control arrangements allow individuals to fulfill their natural work impulse without inner or outer conflict manifested in their psychological or behavioral response to work? Alternatively, which arrangements prompt outcomes indicative of a poor work experience? Further, it explores how these processes vary along lines of class, gender and race, with implications for inequality in the experience of work on these dimensions.

This study contributes to the sociology of work with a cohesive account of the labor process and its implications for the experience of work. However, it also expands sociological understandings of social inequality. Researchers have documented class, gender and race inequality across a number of material and more subjective dimensions, including physical and mental health. In exploring variation in the lived experience of work, especially with regard to fulfillment of human needs, I bring into relief a facet of inequality that has received only a fraction of the attention it deserves.

**Profit Motive and the Evolution of Worker Control**

Workers and firms approach production with different and often competing objectives regarding not only compensation, but also the labor process. Workers’ urge to produce exists apart from the material needs that compel them to work for wages. Likewise, their concerns extend beyond material rewards and often pertain to the nature of work and social relations in the production process. They typically desire employment with a degree of variety, offering intrinsic interest, positive coworker interactions, a potential for meaning and pride (Hodson 2001a; Kahn 1981).

Firms, on the other hand, are primarily concerned with profit. Minimizing financial outlays and maximizing returns to expenditures are crucial in securing revenue
and accumulating wealth, both vital to survival in a highly competitive economic context. An obvious strategy is to curtail labor’s role in the production process, often achieved through the use of technology or production streamlining to eliminate jobs. But profit requires human labor; and temporary economic gains fade once labor saving innovations proliferate and prices fall to reflect the lower cost of production. This strategy becomes increasingly untenable with expansion of the global economy, which requires flexible production arrangements allowing adjustment to rapidly shifting market demands.

An alternative to squeezing workers out of production is squeezing more out of workers for a maximum return on wages paid. Efforts to intensify work often remove the qualities of labor that satisfy workers needs, both in terms of their human inclination to produce and their material requirements for a living wage. Yet capital has greater leverage in setting the terms of employment (Braverman 1974). Despite worker resistance, the rise of the modern industrial economy has been accompanied by heightening worker control as employers deployed their organizational authority and resources to shape or subdue labor (Edwards 1979; Friedman 1977).

Initially, efforts to control workers were achieved with direct supervision by owners or managers (Edwards 1979). With increasing scale of production, many firms implemented Taylorist scientific management, which divided tasks and dictated their execution. This narrowed the scope of work – lowering the cost of labor by eliminating the need for skill (Braverman 1974). This mode of control intensified under Fordist mass production, which was marked by standardization and technological innovations that curbed remaining worker autonomy and increased the pace of work.
But not all types of work, or groups of workers, are equally amenable to these forms of control. They may be unfeasible or unprofitable where production requires creativity, or where workers have effective means to resist shifts in the nature of their work (Kraft 1999; Wallace and Kalleberg 1982; Walsh 1989). Moreover, some firms, such as those in the service and public sectors receive greater returns from lengthy employee tenure than from removal of worker discretion (Baron, Jennings and Dobbin 1988). In the Twentieth Century, worker resistance, turnover costs and state pressures, along with other factors, encouraged some organizations to adopt more rational and less obtrusive control procedures. Many found it necessary to substitute, supplement, or supplant established forms of control with tight networks of rules to bind workers, and align their interests with those of employers (Baron, Dobbin and Jennings 1986; Burawoy 1979; Edwards 1979).

More recently, market-based pressures have demanded further adaptation. Service industries have expanded and goods production is more varied owing to demand for new, custom, and high-quality products (Taplin 1995). Furthermore, firms have sought control over work groups historically enjoying high levels of creativity and self-direction (Kraft 1999). Capital has consequently expanded its repertoire of control mechanisms, modifying existing devices for unique contexts and developing new forms of control where older ones were lacking or outmoded. In a number of cases, this has meant embracing certain varieties of autonomy to enhance firms’ overall control over workers (Friedman 1977).
The Labor Process and Worker Well-Being

Given their intervention between the innate labor impulse and the actual production process, control strategies have considerable import for workers’ quality of life. Work in advanced industrial societies is available mainly in the form of jobs – packages of tasks functional for organizations, but not necessarily reflecting workers’ needs or abilities. Some of these are more successful at tapping the natural production impulse – that is, steering this innate drive in the direction desired without invoking the degree of frustration or dissatisfaction produced in more oppressive types of work. The most fulfilling work helps to satisfy human need without substantial sacrifice of freedom, connection and satisfaction.

Sociology has a long history of theory and research relevant to investigation of the relationship between worker control and worker well-being. The remainder of this chapter addresses the theoretical and empirical underpinnings of this study. In subsequent sections, I describe its classical theoretical foundations in Marxist theory on labor and alienation under capitalism, evolution in the conceptualization and measurement of alienation, elaboration on the labor process, and empirical comparative modeling with attention to behavioral outcomes as well as alienation.

Classical Theoretical Foundations

The first substantial treatment of the implications of production arrangements for worker well-being is found in the writings of Marx (1978), who conceived of two ideal consequences of work: self-objectification and alienation. Self-objectifying labor allows individuals to fulfill their human nature by purposively and consciously reproducing
themselves in construction of the material world. Human production thus differs from that of animals, whose sole intent is physical survival.

Under capitalism, ownership of the means of production determines one’s role in the social relations of production. Individuals lacking access to the means of production are free from feudal obligations to a landlord, and free to negotiate their own living. According to Marx, this freedom amounts to a compulsion to sell labor power to survive, forcing workers to surrender control over their productive efforts. This process obstructs labor’s self-objectifying purpose, as capitalism removes the freedom to produce according to one’s own imagination, needs and desires. In doing so, it reduces work to a means for survival, thus constraining workers’ capacity to gain from their efforts anything beyond what animals achieve.

The result is four forms of alienation, defined by Marx. First, workers are alienated from *the products of their labor*, which come to dominate them with a separate power not under their own control. Second, since they are unable to control their own efforts and express themselves in production, workers are alienated from *themselves*. Third, because workers are not purposively and consciously reproducing themselves in their work, they do not fulfill the nature or function of their species, and are alienated from their *species life*. Finally, because workers confront other people as they confront themselves, alienation from their products, themselves, and their species life alienates workers from *other people*. In other words, workers are so wounded by their alienation that their relations with other people are impaired (Erikson 1990). This sensation is intensified by employers’ command over their labor and by consumers’ enjoyment of
their products (which are independent from, hostile to, and more powerful than workers, and imbue their owners with these same negative attributes) (Marx 1978).

**Evolution of the Concept of Alienation**

The centrality of the relations of production under capitalism gives Marx’s theory of alienation coherence and internal consistency. But because his ideas revolve around the purchase of labor and intrusion in the relationship between the producer and product, Marx does not predict variation in the degree of alienation clearly evident today. Several scholars have extended his theory in this regard. Following Marx, some have distinguished between ideal types of work. Arendt (1959) made a distinction between labor and work – defining as labor work that fulfils biological requirements, and as work, that which satisfies a creative, intrinsic, and specifically human desire or need. Likewise, Schwalbe (1986) defined labor that allows role-taking, problem-solving, means-ends comprehension, and orientation toward one’s own impulses, as natural, and labeled work that denies these experiences as alienating.

Others have incorporated crucial insights of Weber and Durkheim pertaining to bureaucracy and the division of labor respectively for help in predicting variation in alienation. The earliest, most systematic, and theoretically elaborate attempt to employ the insights of Marx, Weber and Durkheim to understand relationships between work and alienation is provided by Blauner (1964), who posited that property relations, bureaucracy, the division of labor, and technology would manifest in distinct forms of alienation, drawn from Seeman’s (1959) subjective measures of the concept.
The division of labor (i.e. subdivided work) was argued to limit responsibility and a sense of purpose, producing *meaninglessness*. Technological form (i.e. craft, machine, assembly line, or continuous process) was hypothesized to shape the experience of *powerlessness* (versus control) in a number of overlapping domains (decision-making, technique, movement, pace, quantity, and pressure). Property relations and bureaucratic rules (versus traditional norms, customs, practices and personal loyalties governing activities) were expected to influence *isolation* from (versus integration with) production goals. Finally, powerlessness, meaninglessness, and isolation were argued to converge in a sense of *self-estrangement*, whereby work becomes a means to survival rather than an end in itself (characterized by an increased awareness of time, detachment and a present/future split – most acute where monotonous work also requires constant attention).

Blauner propelled theory beyond Marx by conceiving of diverse positions in the labor process as producing variation in the degree of alienation. He also laid groundwork for systematic empirical analysis of this relationship in the contemporary workplace – expanding Marx’s theory of alienation by outlining its components in the lived experience of work; and theoretically linking its dimensions to elements of workplace structure, including division of labor, social organization, and technological character. His empirical analysis, however, was extraordinarily narrow in scope. Despite a number of predictions regarding the nature and experience of work, Blauner’s primary empirical concern – and the focus of his conclusion – was technological form. He examined workplaces characterized by his ideal technological types and concluded that alienation
moves along a u-shaped curve along a temporal progression though stages of craft, machine, assembly, and continuous process technologies.

Blauner’s legacy is devalued in large part because the negative attention it attracted from more critical neo-Marxist scholars, and his emphasis on technology in his conclusions. Although his outcome was firmly embedded in Marxist theory, his theoretical rationales placed greater weight on the insights of Weber and Durkheim. He consequently neglected factors that would have been prominent in a purely Marxist treatment. Moreover, his emphasis on technology in both his analysis and conclusions overwhelmed his more general arguments about the structure of work conditioning the experience of alienation.

Most damning for Blauner’s legacy, however, is the intersection of these factors, and the resulting perception that he ignored the relations of production and class conflict in the evolution of many aspects of work, including but not limited to technological innovation. This criticism is largely accurate, but may be somewhat gratuitous since determinants of the labor process were never his focus. However, in neglecting to consider that the effect of technological innovations might also relate to its purpose (which is reasonably assumed to reflect class conflict as well as scientific discovery), Blauner left his work open to criticism on that basis. Indeed, more recent research has cast doubt on his wholly optimistic conclusions regarding automation, precisely because the implications of such technologies for worker well-being hinge on workplace social relations and how employers choose to incorporate it (Kelley 1990).
Elaboration on the Labor Process

Although his legacy is remarkably devalued (considering his broader theoretical contributions regarding the relationship between worker control and worker well-being), Blauner’s work is widely regarded as the origins of theory on the labor process. Indeed, neo-Marxist critiques of Blauner’s inattention to class relations in structuring the nature of work generated a surge of theory on this topic – emphasizing the significance of power in shaping the nature of work, and elaborating on modes of worker control.

Braverman (1974) argued that capitalists sought to cheapen labor by separating planning from execution and by segmenting tasks with consequences for workers that included deskilling, degradation, reduced wages, and increased alienation. Edwards (1979) highlighted worker resistance and resulting crises for capital in generating innovative control mechanisms evolving from supervisors to technology to bureaucratic rules, hierarchies and incentives that influence the activities of workers. Friedman (1977) explored capital’s adaptation to worker resistance with provisions for the exercise of responsible autonomy, which grants decision-making authority to workers in order to enhance firms’ overall control. Burawoy (1979) explored other avenues for aligning worker interests with those of their employers, demonstrating that even resistance could be structured in ways that enhance productivity.

Ironically, Blauner’s key contributions – systematic theoretical linkages between the organization of work and alienation, and an analytic approach this relationship – were left behind in much of this subsequent work. Labor process theory has greatly advanced our understanding of worker control – presenting a series of theses about how class conflict produces shifts the nature of work – but has tended to downplay psychological
responses to work, including alienation. Just as Marx assumed that work under capitalism uniformly generated alienation, most labor process theorists appear to take for granted that heightening control intensifies alienation. There are hints at interest in this outcome in Burawoy’s account of workers making work more meaningful by re-imagining it as a game, and in Friedman’s account of worker decision-making as a form of control. But in both instances, worker orientations are regarded as manipulated by capital and not as psychological responses to work. These theories have been somewhat more explicit with regard to variation in the degree of resistance and consent produced by disparate control structures. However, they do not offer theory predicting systematic variation in the nature or degree of these outcomes.

**Empirical Modeling and Extension**

A very small body of empirical research links the organization of work to some of labor process theory’s insights to outcomes associated with worker well-being. Schwalbe (1986) incorporates work of George Herbert Mead in conceptualizing social psychological aspects of the moment of production. His concept of “natural labor” incorporates Mead’s “aesthetic experience” into the study of work. In addition to dimensions tapped by Blauner, Schwalbe’s approach emphasizes the degree to which work allows role-taking, problem-solving, and orientation toward one’s own expressive impulses.

Hodson (1996) integrated theoretical developments pertaining to worker control with Blauner’s analytic approach regarding the nature of work and worker well-being. He drew ideal types of control strategies from the labor process literature and
demonstrated empirically that work contexts representing the varied strategies differed markedly on a number of worker outcomes associated with alienation, including satisfaction, pride, and effort, and coworker friendship and solidarity. His subsequent work further explored how the context of work produces sentiments and behaviors on the job. This research culminated in a (2001a) theory of dignity at work, describing challenges to dignity posed by production arrangements designed to maximize profits, and linking them to workers’ efforts to achieve or reclaim dignity by way of citizenship or resistance. While these studies did not retain the labor process framework, many of the causal arguments pertain to the nature of control.

The broad array of outcomes represented in this research provides a resource for understanding how production arrangements shape psychological and behavior responses to work. Hodson examines these under the rubric of citizenship and resistance. Citizenship encompasses positive psychological responses to work, such as meaning and pride, and pro-social behaviors, including commitment. It reflects a general orientation toward purposeful and productive activity, and helps workers to achieve self-respect, dignity, and satisfaction at work, regardless of whether others perceive value or meaning in what they do. An alternative to citizenship is resistance – found in organizational settings that impede the exercise of citizenship, or prompt feelings of injustice, anger or shame. In these circumstances, Hodson argues, resistance represents an attempt to reclaim dignity. Efforts may be active or passive (machine sabotage versus playing dumb, for example), informal or organized, and individual or collective. Some represent efforts to reclaim time purchased by employers (Friedman 1977).
Hodson’s research combines with insights of others to lay groundwork for elaborating on the relationship between the labor process and worker well-being, including outcomes associated with alienation, satisfaction, and consent and resistance at work. While conceptually distinct, these outcomes are clearly related. Intrinsic rewards of work, and especially autonomy, are the single most important predictors of job satisfaction, which in turn is a significant determinant of behavior on the job (Ducharme and Martin 2000; Gruenberg 1980; Kalleberg 1977; Lincoln and Kalleberg 1985). Many suggest that this relationship is attributable to the exercise of skill – shown to enhance loyalty, pride, effort, coworker assistance and attachment to firms (Halaby and Weiklein 1989; Lincoln and Kalleberg 1985; Walsh and Tseng 1998; Yoon and Thye 2000). Indeed, work groups in experimental studies attributed their positive psychological responses following increases in autonomy to an improved match between work tasks and their own needs, abilities and aspirations (Kahn 1981).

Hodson and others point to the features of work that shape levels autonomy, psychological well-being, and worker citizenship. Participation in production decisions is associated with high levels of autonomy, job satisfaction, pride, effort, and overall citizenship (Hodson 1996; 2001a). Bilateral input, common in professional and participative work settings, protects workers from the most alienating work arrangements. At the same time, workers in these settings also confront increasing demands on their time and energy. Many put in long hours and face intense scrutiny associated with normative pressures of team environments, generating resistance in some cases (Bosk 1979; Graham 1993; Kunda 1992). Professionals rarely resist the terms of work – perhaps owing to selection biases or to rewards associated with their autonomy and skill.
But others, including craft workers and non-professionals in Japanese-style participative environments, do resist – albeit at lower rates than other work groups – despite high rates of worker citizenship. Their resistance activities reflect both evaluations of their own competence and the perception of inequitable returns to demands on their time and energy (Hodson 2001a; Jackall 1978).

Other control techniques produce negative psychological and behavioral responses to work. The constraints of rationalization and regimentation in workplaces primarily controlled with bureaucratic rules have been shown to depress psychological well-being while increasing resistance at work (Hodson 2001a). Even poorer psychological outcomes are found among workers subject to oppressive technologies and direct supervision (Hodson 1996). Assembly work represents extreme division of labor performed at an intense pace. The work demands little skill or creativity, and precludes autonomy, freedom of movement, and control over the content and speed of production. As a result, assembly workers are subject to extraordinarily high levels of alienation and demonstrate very low levels of every form of citizenship. They also demonstrate high levels of resistance, but the narrowness of the work role and utter lack of discretion prevent most of its routine forms. Resistance options in such contexts are therefore limited to exiting the workplace (i.e. quitting and absenteeism) and engaging in collective action (Hodson 1996; 2001a).

Similar to oppressive technologies, direct supervision also promotes alienation and resistance while eroding citizenship (while an absence of direct supervision has the opposite effect). Substituting managerial caprice for more objective procedural or technical forms of control cultivates an environment characterized by managerial abuse.
and organizational chaos. Well-run organizations and just relations with management encourage consent and discourage resistance (Hodson and Roscigno 2004). Poorly organized, abusive, and unjust environments do the opposite (Hodson 2001b; Vallas 1987; Yoon and Thye 2000). Abuse prompts feelings of injustice and anger, while organizational chaos gives rise to the sensation that workers’ efforts are wasted – amplifying rage and frustration. These conditions limit satisfaction, meaning, and pride in work; and efforts to correct the injustice trigger a withdrawal of cooperation along with increases in all forms of resistance (Hodson 1999, 2001a, 2002b; Kalleberg 1977; Roscigno and Hodson 2004). Furthermore, hostile relations with management stemming from abuse and chaos generate infighting among coworkers – reducing the capacity of colleague support to mitigate the negative consequences of such environments (Hodson 2001a).

**Synthesis and Extension**

Labor process theory provides a framework for understanding the nature of worker control, and a theoretically coherent rationale underlying its structure. The work of Hodson and others points to psychological and behavioral implications of major forms of control. Hodson’s most directly applicable study combined the analytical approach of Blauner with the major contributions of labor process theory, and demonstrated relationships between forms of worker control and outcomes associated with alienation and worker citizenship. His subsequent work was less directly tied to labor process theory, but further illuminated relationships between the nature of work and psychological and behavioral outcomes. However, because Hodson’s comparisons are between settings
grouped according to their dominant modes of control, and because his subsequent research moved in an alternative theoretical direction (toward a theory of dignity at work), sociological understandings of the relationship between the labor process and worker well-being have not progressed as far as they might.

Worker control techniques exist in combination, but analysis thus far treats them in isolation, or in terms of dominant modes of control. Existing comparative research thus tells only a part of the story, without specifically revealing much about the intersections of control or their implications. Separate modes of control present in a given workplace are likely to intensify or mitigate one another’s psychological or behavioral effects, and likely give rise to emergent processes with implications for worker well-being. Without research explicitly investigating this likelihood, the implications of control remain little understood relative to the weight of their influence on workers’ lives.

This study asks how modes of worker control, and especially combinations of worker control, translate into degrees of alienation and positive and negative behaviors on the job. I draw from labor process theory, including classic treatments and more recent qualitative accounts, and revive Blauner’s investigation into the implications of control structures for worker well-being. I also build upon Hodson’s comparative approach and prior findings. In doing so, I extend labor process theory – placing theoretical and empirical emphasis on combinations of control and their implications for psychological and behavioral outcomes, including dimensions of alienation, consent and resistance.
In Chapters 2 and 3, I review and critique theory of the labor process, offering a synthesized model of general concepts, applicable across a range of work settings and across time, with linkages to worker outcomes. This model allows for comparative analysis across divergent work settings, and for investigation into emergent processes associated with combinations of control techniques. In Chapter 4, I describe my data, measurement and analytic strategy.

Chapters 5 and 6 present results from logistic regression and Qualitative Comparative Analysis (QCA), showing the implications of the major control techniques, and of combinations control apparent in the case studies that make up my data, for outcomes including two types of alienation (powerlessness and worthlessness), one measure of consent, and three forms of resistance, representing formal and informal activities (organized opposition, work avoidance, and loathing management).

Finally, I use this model to explore differences between work settings encountered by groups with various class, gender and racial composition, with the intent of revealing any inequality on these dimensions in the experience of work. Chapters 7, 8 and 9 identify the combinations of control apparent in work settings populated by members of different social classes (professional, manual and low service), different sexes (predominantly male versus primarily female), and different race groups (predominantly white versus disproportionately minority), and present the implications of those combinations for worker outcomes in the broader sample of work groups.

Because my quantitative data are culled from in-depth qualitative studies of workplaces, it is possible for me to return to the original ethnographic sources to reveal process involved in my qualitative findings. In many cases, evidence is available both to
illuminate the micro-level mediational processes linking worker control to worker outcomes, and to link these processes to broader contextual patterns associated with class, gender and race.
CHAPTER 2

THEORETICAL BACKGROUND

Marx’s work addressed manipulation of the labor process for the extraction of surplus value and class conflict, and he linked the purchase and deployment of workers’ labor power and removal of their discretion to working class alienation. Blauner examined the implications of varying work structures for workers’ subjective class experience with several dimensions of alienation. Subsequent research retreated from analysis of alienation, but examined the content of the labor process, probing for mechanisms by which capital organizes production and deploys labor to suit its needs. Cognizant that the mere purchase of labor is insufficient to direct tasks, these researchers have looked beyond the mere fact of control over work tasks, to explore the specific means by which control is achieved. Many of these studies were firmly rooted in Marxist theory. However, they infused insights of Weber and Durkheim, while attending to social and technological shifts that have subsequently transpired.

Edwards (1979) argued that the labor process is a contested terrain, shaped by the struggle between capital and labor, and that shifts in this domain reflected periodic crises in control over three aspects of work: content, speed and quality; evaluation of performance; and discipline and reward systems. He describes evolution of control from
direct control of owners or supervisors, to technical control over tasks, and finally to bureaucratic structures that secure consent by aligning the interests of workers and capital. Since publication of this influential account, labor markets and production techniques have changed. The service industry has grown, professionals have increasingly been absorbed into more traditional production relationships, and global market competition has called for more flexible manual production styles. As a result, employers increasingly demand emotion work from their employees, and rely on organizational culture and production teams to control labor (Fineman 2001).

Some posit that these techniques represent a departure from those described by Edwards, referring to them as “post-bureaucratic” or “hegemonic” forms of control. Edwards’ three-part classification scheme nevertheless remains quite useful in classifying even the more recent innovations in control. However, doing so requires revisiting and conceptually expanding his categories of worker control, with attention to insights of more recent scholarship. In the remainder of this chapter, I describe the existing labor process literature as revealing four dimensions of worker control: technology, bureaucracy, and surveillance.

**Technology**

Capital introduces technology into the labor process for a variety of reasons. For example, it may reduce uncertainty, replace human labor, or speed the production process. Technology’s implications for the nature of work vary with its form and its implementation in the workplace.
Blauner (1964) posits relationships between aspects of work and dimensions of alienation. While his theory addresses several aspects of the labor process, including the division of labor, bureaucracy and property relations, his conclusions reflect his qualitative investigation into the implications of technological form for the experience of powerlessness regarding pace, quantity produced, pressure, freedom of movement, and control over techniques. His qualitative analysis examined conditions in industries typified by their stages of technological development, to demonstrate hypothesized relationships between technology and freedom and meaning in work. He argued that craft, power machine, assembly line, and continuous process production technologies provide differing opportunities for the exercise of skill, shaping alienation in turn. He found that freedom and meaning were greatest in the craft industry, and lowest in the power-machine and assembly line industries. He found such work to have high levels of organization around continuous-process technology, which returns some of the responsibility, problem solving and initiative removed with introduction of power-machines and assembly lines. While Blauner understood some of technology’s negative consequences for workers, he expected the evolution of technological innovation to ultimately enrich the experience of work and the position of workers by liberating them from tedious, routinized work and by providing opportunities to exercise of skill, a broader perspective on the production process, and closer, more collegial ties to management.

Given that his theoretical approach was so firmly embedded in Marx’s theory of alienation, it is ironic that Blauner’s approach ignores Marx’s primary emphasis, the social relations of production under capitalism. Having conceived of technological
innovation only in scientific terms, Blauner’s model allows for only a single, evolutionary path of technological development with parallel, positive implications for the evolution of autonomy in work. What Blauner did not recognize is that there are distinct forces at work – the scientific advances that make technological development possible, and even more importantly, the social relations of production that impel specific workplace innovations their implementation in into the labor process.

Subsequent theory inserted class interests in theoretical approaches to the issue of technological innovation in the labor process (Braverman 1974; Edwards 1979; Friedman 1977). These theories broadened the scope of the question from technology to workplace change in general, emphasizing the role of capitalist social relations and class conflict in encouraging the development of worker control mechanisms and procedures. The premise for their arguments is that capitalists compete with each other on the basis of profit and accumulation. Contradictory class interests result in a struggle with labor over the terms of work. Capital seeks to reduce the cost of labor and increase efficiency, while labor seeks to retain its discretion and to negotiate the most advantageous material returns to work.

While labor process theories moved away from Blauner’s focus on workers’ psychological response to work, they developed a superior framework for understanding how technological innovation is part of a broader effort to increase productivity and reduce the cost of labor. These theories begin with class conflict, and investigate how capital manipulates the labor process with regard to its class interests and class conflict. Workplace transformations occur within a larger social context, within which technology
is not simply an antecedent of worker outcomes but also as a product of social relations of production and existing power relations in the workplace.

Friedman (1977), for example, agreed that machines reducing work requirements for human strength may indeed improve work relative to that of less technologically advanced sectors. But like Braverman (1974), he argues that modern industry is not simply more technical, but also reflects a systematic, purposeful removal of judgment and authority from workers. This latter factor, they argue, has more significant implications for both the exercise of skill and the creation of an undifferentiated or reserve army of labor.

Others have drawn attention to the active role of workers in the historical manifestation of class conflict over the nature and terms of work. Edwards (1979) conceived of the workplace as a “contested terrain” of class conflict, in which profit-seeking employers seek to maximize productivity by directing work tasks via a variety of control mechanisms. Precise forms of control emerge in response to crises of worker resistance and changing organizational needs and context. This approach does not speak directly to Blauner’s continuous-process production technologies, but regards Blauner’s power-machine and assembly line production as a “technical control” phase in the struggle for control over the labor process. According to Edwards, this phase, characterized by the technologies that separate, pace, monitor and direct workers, ascended with Fordist mass production and Taylorist streamlining of work processes, abating as the changing economy shifted production ways necessitating new developments in worker control.
From this perspective, worker resistance plays a significant role in inspiring technological development. While capital appears to assume the primary role – shifting modes of control according to its needs – it does so partly in response to worker resistance and collective action (Edwards 1979). For capital, these matters come down to cost and efficiency, which shape their capacity to compete in product markets. Reliance on workers skill and the potential for worker militancy increase the cost of labor and jeopardize the control necessary for maximum productivity. Technology is a useful strategy that simultaneously disempowers labor and maximizes control for greatest possible efficiency and profits, while obscuring the role of the capitalist hierarchy (Edwards 1979; Noble 1979, 1984; Staples 1987).

Qualitative case studies support Blauner’s critics, empirically illustrating that it is not technology per se, but how it is incorporated into production, that matters for skill (Vallas 1993). It may mobilize or replace users’ intelligence, depending on its specific function and whether operational knowledge is shared with workers (Adler and Borys 1996; Kelley 1990; Zuboff 1988). For example, Milkman (1997) found that the opposing outcomes are evident for distinct work groups within the same organization. Skilled male workers received new training and skills with programmable technologies, whereas line workers’ lost skill. Even in more participative work environments, these technologies may not so much enhance skill as build surveillance and quality control into the job (Smith 1997).

At the same time, technology does not determine the exercise of skill or other worker outcomes (Thomas 1994). Workers may collectively resist or negotiate the terms of technological innovation (Wallace and Kalleberg 1982; Walsh 1989). When new
technologies are introduced, their implications for the exercise of skill at work are contingent on a number of factors, including relationships between workers and employees (Kelley 1990; Liker, Haddad and Karlin 1999; Vallas 1993), efficiency motives (Adler and Borys 1996), worker resistance (Noble 1979, 1984; Wallace and Kalleberg 1982; Walsh 1989), organizational and economic context (Form 1987; Form, Kaufman, Parcel and Wallace 1988), occupation (Vallas 1990, 1993), industry (Form 1987), and even professional jurisdictional battles among production design engineers (Vallas 1998; 2001).

In sum, theoretical development and empirical research refute Blauner’s evolutionary conclusions, as managers with the inclination and leverage to do so often incorporate automation technologies in ways that inhibit the exercise of skill. Yet this is not always the case. As Blauner argued, some technologies do appear to enhance the experience of work. It is necessary to take into account not simply the level, but also they nature and intent of technology.

**Bureaucracy**

Labor process theory is embedded in Marx’s account of capitalist social relations, but implicitly or explicitly taps Weberian theory to explain worker control under monopoly capitalism. Weber argued that the essence of capitalism is rational profit calculation, replacing traditional sentiments, values, relationships and authorities influential under prior modes of production (Weber 1968). Bureaucracy is an essential element of rationalistic production characterized by a rigid hierarchy of positions, with fixed duties and rights reflecting written rules and eligibility for occupancy determined by training
and qualifications (Weber 1946). Explicit, written organizational rules determine the rights, responsibilities and remuneration entailed in each position, and dictate relationships between offices. Combined with exhaustive management rules and grievance and promotion procedures, extensive written records impart security against arbitrary demotion or dismissal and provide for career progression through the hierarchy (Weber 1946).

A tightly-woven network of interlocking bureaucratic constraints is extraordinarily effective in controlling workers – structuring capitalist power throughout the firm while obscuring the origin and degree of control with a veil of requirements, restraints and incentives that enlist the active cooperation of workers. Rules establish control over job categories and task content, speed, and quality, while a fixed discipline and rewards system (including promotion policies, wage structures, disciplinary procedures and internal labor markets) individualizes workers and secures their compliance with multiple inducements and constraints (Burawoy 1979; Edwards 1979). Key mechanisms include formal job analysis and production streamlining; centralized personnel functions with extensive record-keeping; internal labor markets outlining systematic career advancement over the course of long-term employment; and seniority provisions in some industries (Baron, Jennings and Dobbin 1988).

The current understanding of bureaucratic control addresses how distinct elements of bureaucratic employment structures exert control over workers, but does not fully conceptually distinguish between aspects of bureaucratic control with potentially divergent outcomes for workers. This is surprising given that bureaucratic controls range from piecework arrangements to internal labor markets (Simpson 1985). At the same
time, the concept, as defined by Edwards, is not conceptually broad enough to account for relatively recent, and arguably bureaucratic, participative regimes, which are consequently labeled “post-bureaucratic” (Jermier 1998).

This study seeks to make a theoretically meaningful distinction between forms of bureaucratic control, and to simultaneously make conceptual space for recent participative tendencies. This is possible with distinctions drawn from management studies. The evolution of managerial ideologies is marked by a shift from coercion via scientific management and division of labor to an emphasis on less obtrusive control mechanisms acknowledging and seeking to fulfill workers’ emotional desire to cooperate. Influenced by Barnard’s extension of Mayo’s ideas, the decision-making school of March and Simon identifies three types of control: 1) rules, regulations and surveillance; 2) specialization, standardization and hierarchy; and 3) unobtrusive, internalized control over the cognitive premises underlying individual action (Perrow 1986). The latter is the most difficult to achieve, but is also the most effective, as rewards and sanctions align worker interests with those of their employers, causing workers to pursue organizational interests as they make decisions on their own behalf.

In more recent work, Adler and Borys (1996) draw from contradictory sources of authority in Weber’s theory of bureaucracy (bureaucratic office and knowledge) to distinguish between coercive and enabling bureaucracies. Coercive bureaucracies rely on rules and forced compliance to extract effort from recalcitrant employees. Enabling bureaucracies are those in which rules and procedures provide workers with the independence to handle organizational contingencies, promoting organizational learning and codification of “best practices”. The authors describe implications of these divergent
bureaucratic forms, drawn respectively from negative and positive assessments of bureaucratic formalization in general. Negative assessments posit that formalization diminishes individual autonomy, and that the power structured into bureaucracies is inherently coercive, precluding fulfilling work and deterring satisfaction and organizational commitment, while producing resistance. Positive assessments indicate that formalization may produce overlapping individual and organizational goals helping workers to experience bureaucratic work as cooperative and fulfilling (Adler and Borys 1996).

Rigid rules dictating the method or outcome of work are indeed coercive, with negative implications for the work experience (Hodson 2001a). Moreover, participative work regimes (often labeled “post-bureaucratic”) are enabling as Adler and Borys describe. However, bureaucratic controls associated with division of labor are also effective constraints on workers’ activities. Moreover, the main thrust of bureaucratic control as defined by both Edwards (1979) and Burawoy (1979) – that is, interests aligned by internal labor markets, the internal disciplinary and reward procedures – do not fit neatly into Adler and Borys’ typology of bureaucracy. This reflects their concern with the effects of formalized procedures in the actual work, which excludes elements of bureaucratic functioning external to work tasks.

I draw from both of these traditions to distinguish between two forms of bureaucratic control with implications for worker well-being and behavior on the job. Drawing from Adler and Borys’ discussion of coercive bureaucracies, and Braverman’s emphasis on capital’s tendency to increasingly subdivide labor, I defining bureaucratic control associated with the division of labor and rules as constraining. Drawing from the
decision-making school of March and Simon, I define bureaucratic structures that coordinate the interests of capital and labor as cooperative. These include internal labor markets and the internal state, along with structured autonomy sometimes resembling what Adler and Borys called an enabling bureaucracy. I now turn to detailed discussions of these elements of bureaucratic control.

Constraining Bureaucracy

Constraining aspects of bureaucratic control include the division of labor and rules or specifications regarding the performance of tasks. The division of labor is a Durkheimian concept, but in investigation into worker control, it takes on decidedly Weberian and Marxist undertones, as divided work is distributed according to position in the organizational hierarchy, and capital routinely seeks to concentrate the exercise of skill in fewer and higher organizational positions (Braverman 1974). Moreover, bureaucratic rules and specifications increasingly dictate how workers may perform their work tasks. Tight specifications characterizing manual work under scientific management are expanding into other sectors, including service and professional industries thought the use of scripts and numerical targets.

Task Segmentation

Labor process theory’s most detailed elaboration on the role of the division of labor in controlling workers revolves around the exercise of skill - a basis of power upon which workers may draw in their struggles with capital over wages, working conditions, and transformations in the labor process. Reliance on workers skill and the potential for
worker militancy increase the cost of labor and jeopardize the control necessary for maximum productivity (Noble 1979, 1984; Staples 1987).

Braverman (1974) argues that capital seeks to establish efficiency and profits through managerial control, while minimizing the potential for workers to impede its objectives by limiting the exercise of skill in the workplace. From this perspective, managerial innovations and production shifts do not reflect an objective evolution of technique, but are rather elements of a systematic, ongoing campaign to cheapen and disempower labor by eliminating the exercise of skill in the workplace. Excessive power under monopoly capitalism is central to capital’s overwhelming capacity to shape production in ways that remove workers’ pivotal resource in for better wages and working conditions. Capital assigns analysts to study the work process to extract procedural knowledge from workers, and reconfigures the production process following the tenets of scientific management. That is, labor is divided and reconstructed in a manner centralizing knowledge of the production process among owners or managers. Machinery performs subtasks wherever possible, and remaining fragments of the work process are assigned to unskilled workers, whose pace and actions are easier to direct, monitor and evaluate.

Consequently, skill becomes redundant and unnecessary, losing significance in labor’s negotiations with capital, not only in manual trades, but also in middle class, service, technical, clerical and retail occupations (Braverman 1974; Smith and Thompson 1999). Work is degraded and cheapened, workers are disempowered relative to capital, and labor is transformed into an increasingly undifferentiated class in competition for
unrewarding work. Rising unemployment attributable to organizational and technological innovation only exacerbates workers’ increasing vulnerability (Friedman 1999).

Contradictory skill trend assessments of Braverman and Blauner have generated lengthy debate among scholars. However, existing research has not been capable of providing a definitive answer to the “skill question” – owing to the lack of consensus regarding the definition of skill, research methodology, and the effects of mechanization verses automation (Spencer 1983; Vallas 1990). Serious data limitations also thwart researchers’ capacity to provide an accurate account of overall levels of and trends in the exercise of skill. Yet, analysis of available data provide some evidence of slight change across the greater part of the Twentieth Century – apparently a result of offsetting effects across occupations or industries – and reveal little change in major occupations’ skill distributions (Form 1987; Spencer 1983; Vallas 1990). On the other hand, case studies offer persuasive evidence that craft control over production and craft skills have eroded over time. Some of this shift is attributable to new technologies implemented by capital. But creation of new skills for craft workers is also evident (Form 1987; Vallas 1993; Wallace and Kalleberg 1982). Just as significantly, they have described how workers have periodically checked deskilling tendencies by thwarting employers’ attempts to introduce labor saving technologies and to divide and redistribute their tasks (Walsh 1989).

Beyond empirical concerns, critics have underscored a number of limitations in Braverman’s approach. He is most commonly rebuked for neglecting the role of workers in resisting and negotiating the implementation of workplace change (Edwards 1979).
His work also romanticizes the exercise of skill under craft production and lacks consideration of countervailing tendencies and emerging demands for flexibility in an increasingly global marketplace.

Despite its flaws, Braverman’s work is revered for having reintroduced social relations of production into theory of workplace change. Indeed, his most significant and enduring contribution lies in his having located the deskilling tendency of advanced capitalism and mass production within a broader context of capitalist class struggle and accumulation processes.

At the same time, Braverman’s account is an imperfect description of what is happening in the workplace with regard to skill. His deskilling thesis directly contradicted Blauner’s earlier claim that automation would enhance the experience and position of workers by liberating them from tedious, routinized work and by increasing the exercise of skill and autonomy. Braverman argues that capital instead manipulates the labor process to proletarianize all segments of the working class. These forecasts have not materialized, as the working class remains highly stratified on the basis of skill, self-direction and remuneration. For many nonmanual workers, specialization and technology are not nearly so devastating to the exercise of skill, and may actually enhance the degree of skill exercised on the job. Yet service work is becoming increasingly subdivided, with negative implications for task variability. Restaurants for example, are increasingly assigning distinct tasks, such as seating guests, filling water, taking orders and bussing tables to separate workers.

Braverman’s theory appears to very useful for explaining transformations in manual work, where the planning and execution of tasks are more easily divisible. But
his theory cannot account for emerging participative practices that counter the irrational tendencies of Taylorist production styles. It has been argued that these practices call for greater decision-making on the shopfloor, although this is not necessarily the case (Smith 1997; Taplin 1995). Organizations clearly differ in their intentions with regard to worker skill (Kelley 1990; Zuboff 1988).

Braverman’s thesis may be most useful if conceived of as describing a tendency toward lesser reliance on the capacities of workers, if not a fixed progression toward degradation of labor inherent in the capitalist relations of production. This conceptualization leaves room for contradictions and countervailing tendencies emerging from a dynamic process, while underscoring how class conflict in the capitalist mode of production influence capital’s tendencies with regard to the organization of work (Spencer 2000). Regardless, it is necessary to retain Braverman’s emphasis on the intent behind the division of labor – that is, whether it seeks to minimize or enhance the substantive complexity of work.

*Rules, Specifications and Targets*

A second constraining dimension of bureaucratic control is way in which rules, specifications and targets structure how individuals perform their jobs. Rules often give explicit direction to workers – sometimes in such detail that little room remains for any significant degree of creativity or autonomy on the job. Taylorist scientific management practices are notorious for circumscribing how subtasks are to be performed, often down to the slightest motions. And even where physical actions are not so tightly scripted, procedures and targets exert a great deal of influence over workers’ activities.
This degree of constraint is commonplace in manual and clerical settings, but it is also becoming increasingly apparent in customer service – defined as face-to-face or voice-to-voice interaction with customers (Leidner 1993). Participant observation in the fast-food industry provides a great deal of evidence that bureaucratic rules dictate almost every task in fast food work (Reiter 1991). Scripts prescribe interactions with customers, standardized recipes and timers dictate food preparation, and rules determine the sequence and pace of assembling food orders. Scripts are common in customer sales, especially telemarketing (Leidner 1993; Palmer and Dunford 2002). Additionally, it is not uncommon for rules to dictate that certain words, such as “sales” are avoided while requiring the use of up-beat replacements like “rest-assured,” “certainly,” and “great” (Sturdy and Fleming 2003).

Increasingly, service workers are expected to become, in behavior and appearance, the emotional image the corporation is selling, such as fun, sexy, and funny. This is particularly the case in “smile industries,” such as airlines, restaurants and sales, where competence is measured with personality traits (Fineman 2001). Above all, many employers value what service workers communicate to workers with their appearance, disposition, and voice quality. Contrary to Weber’s theory of bureaucracy, personality type, not technical skills, qualify an individual for a position. Indeed, in hiring workers for a banking call center, managers placed less emphasis on technical skills than on verbal tone, personality, enthusiasm, explaining: “We recruit attitude” (Callaghan and Thompson 2002). Moreover, a very technically skilled worker was considered unsuitable for the work and fired on the basis of her personal attributes (Thompson, Warhurst and
Callaghan 2001). Along with training on more technical matters, employees in service industries may receive continued instruction their appearance (Taylor and Tyler 2000).

As expected, these jobs require a great deal of emotional labor on the part of service workers expected to keep their own feelings in check while they attend to others in accordance with rules (Hochschild 1983; Smith 1994). An organization’s training manual customer service workers to use a warm and friendly voice, and to express concern for customers while concealing their own anger, frustration or impatience (Putnam and Mumby 1993). Bank tellers were expected to use customer’s names frequently, make eye contact, complement them, and communicate to them “I care.” They, along with banking call center employees were trained to identify and respond to customer’s feelings, while keeping their own opinions in check (Austrin 1991; Callaghan and Thompson 2002). Such rules and expectations are so entrenched in service environments, that they apply even where they are absurd – hospital housekeepers encouraged to smile while they mop, for example (Bolton 2004), or culturally inappropriate, including in fast food work in Moscow or Greenland (Fineman 2001).

Whether these requirements improve work performance is a matter of debate. Workers sometimes claim that customers simply want to complete their transactions, and “don’t really care whether you’re their best friend” at the end of the call (Callaghan and Thompson 2002). Despite bureaucratic emphasis on standardization, supervision and sanctions, customers often prize flexibility and a sense of genuine concern in service workers (Peccei and Rosenthal 2001). Some are put off by the perception of forced, phony friendliness (Sosteric 1996). Consequently, personal aptitude in reading people is often necessary even in highly scripted sales or service work (Mulholland 2004).
Employees need skills to tailor their interactions, and employers look for workers who can “read” conversations, and have and use a sense of humor, communicating enthusiasm and a pleasant personality. In these contexts, these traits may also help workers survive days filled with repetitive, scripted telephone calls (Callaghan and Thompson 2002).

A final constraining aspect of bureaucratic rule structures is the presence of sales and production targets encouraging or requiring a particular level of output. Just like piecework is a kind of bureaucratic control (Simpson 1985), so are targets goals that cause workers to step up their activity. These are often tied to pay or remuneration (i.e. sales commission or bonuses), and bring workers into competition with other workers and with their own sales histories (Knights and Morgan 1990). However, they may be simply targets to which employees are held accountable, the number of calls taken or the average call time in call center work (Deery, Iverson and Walsh 2002). Professionals are increasingly employed by organizations (Hodson 2001a), and are more subject to control via auditing and assessment (Smith and Thompson 1999). Similar to the impetus for the emphasis on targets in sales work, control over professionals is often organized around issues of accountability and cost containment (Leicht and Fennel 1997).

**Cooperative Bureaucracy**

Persistent or recurring working class resistance has been responsible for most innovations in worker control (Edwards 1979). For example, constraining bureaucratic control mechanisms were incorporated into the labor process in part because supervision alone was not adequate to force workers to produce efficiently (Sewell 1998). While technology and scientific management are highly effective in removing the bulk of many
workers’ discretion, the control they transfer to employers is not total. Further, some segments of the labor market are less amenable to these forms of control. Continued resistance, increasing dependence on white-collar workers, increasing scale of work organizations, pressure from unions and the state, and later from global market forces revealed the inadequacies of coercive forms of control encouraged workers to pursue other options (Baron, Jennings and Dobbin 1988).

Organizations turned their attention toward arrangements that might secure workers active consent. Labor process theorists describe this as reflecting Gramsci’s (1971) concept of hegemony – rule by normative domination in lieu of coercion (Vallas 2003a). Burawoy’s (1979) comparison of an agricultural goods production facility established that the organization had shifted from despotic to hegemonic modes of control between 1945 and 1975, and explained it as the result of organizational arrangements that caused employees to voluntarily exert more effort than it seemed they should, given the social relations of production. Individualizing workers with formal structures for advancement and competitive pay rates, for example, is highly effective in obscuring the contradictory class interests of capital and workers and the common class position of workers – assisting capital in securing the surplus value it requires to compete for survival (Burawoy 1979). Classical management theory offers another, less critical explanation – suggesting that managers simply began to recognize that people want to cooperate at work, and that organizational settings may be arranged in ways that coordinate the interests of workers with those of the organization (Perrow 1986).

Though they are extraordinarily powerful means of control, not all firms have the means to employ hegemonic, or cooperative, bureaucratic control. Monopoly capitalism
concentrates assets in certain sectors of the economy. Firms in “core” industries have resources to vertically integrate, invest in overseas markets, and exploit peripheral firms competing for their business (Edwards 1979). Their economic power made it possible for firms in the core sector of the economy to pioneer more expensive, but highly effective forms of worker control inducing the active cooperation and consent of workers. They found that it was possible to alter the organizational context of production to simultaneously contain class struggle while fostering active, voluntary effort on the shopfloor. Internal labor markets, the internal state, and structured autonomy were all useful in this regard.

_Career Ladders_

The emergence of bureaucratic control is marked by the institution of personnel procedures enlisting the active cooperation of workers by providing them with a standard, structured employment relationship providing opportunities for advancement and protection from arbitrary actions on the part of management. Internal labor markets link positions within organizations, allowing for individuals to progress through job ladders providing steadily increasing levels of skill and pay. Reaching a position on the ladder requires having occupied each position under it in turn, and promotions are often a matter of seniority. The internal state refers to organization-specific entities portraying workers as industrial citizens with rights similar to those of citizenship (Burawoy 1979). Human relations departments govern on the basis of written rules, promotion policies and grievance procedures – regularizing relations between capital and workers by removing the potential for arbitrary action.
The evolution of managerial thought provides one explanation for the development of such mechanisms for eliciting desired behaviors from workers. Mayo reasoned that people want to cooperate at work. Barnard elaborated on this idea, emphasizing that organizational authority is granted upward from lower levels, and underscored firms’ need to secure worker consent. The decision-making school of March and Simon grew out of Barnard’s work, but approached the problem of gaining consent from a more critical orientation acknowledging conflict, coercion, and the top-down nature of organizational authority (Perrow 1986). They argued that managers are able to evoke desired behaviors by establishing an environment in which individuals, guided by their own values and pursuing their own interests, also achieve organizational ends. Managers are not expected to tailor an establishment’s goals to those of its employees. Rather, they are encouraged to manipulate bureaucratic environments to alter the cognitive premise underlying workers’ decisions. That is, organizational rewards and sanctions are established to parallel what is desired out of workers, who in turn meet organizational objectives as they act in their own interest. In short, the theory posits that workers will naturally act in their own interests, and that it is not necessary for workers to share organizational goals in order to achieve them.

Drawing from Gramsci (1971), labor process theory describes this campaign to align the interests of workers and capital as a shift from despotic to hegemonic control, allowing capital to rule without coercion (Burawoy 1979). This form of control substitutes normative domination, or manipulation of workers decision-making process, for force carried out by physical, technical or bureaucratic means. While management theories describes a detached evolution of managerial thought, labor process theory
argues that the shift in was not so much in ideology as in strategy resulting from a crisis in capital’s capacity to control its work force (Edwards 1979).

Burawoy (1979) describes this strategy as a purposive capital-driven construction of individualistic orientations within capitalist production arrangements. Capital’s power to alter the terms of production affords it the capacity to shape what individuals perceive as reality, including their self-interest. He posed the question: “Why do workers work as hard as they do?” His answer lay in hegemonic emphasis on individualistic decision-making frameworks presented to workers by the bureaucratic structure of the organization.

Burawoy cited the emergence of internal labor markets, the internal state and modified forms of compensation as the source of individualistic decision-making frameworks and the underlying impetus for the profusion of effort put forth by workers. He argues that personnel structures, along with competitive pay structures in the organization he studied, individualized workers, masking class relations and exposing them to greater degrees of capital control. These bureaucratic structures remove workers’ sense of collective class identity, as well as their sense of class-based opposition to capital, paving the way for consent to be achieved on the basis of workers’ “rational” decisions. In dispersing hierarchical conflict (and redirecting workers’ frustrations toward other workers), and aligning the interests of workers with their own, capital is able to simultaneously secure and obscure surplus value (Burawoy 1979). Regulating any remnants of class struggle with grievance procedures and collective bargaining further subverts class-based consciousness and action.
It is not my intention to adjudicate between the claims of labor process theory and managerial studies. Neither is adequate to explain the development or diffusion of bureaucratic personnel innovations, partially because they ignore outside influences such as the state (Baron, Dobbin and Jennings 1986). But it is necessary to note that bureaucratic personnel practices are lasting and effective in part because they simultaneously serve the interests of workers and firms. Internal labor markets and the internal state help capital to avoid problems arising out of instability or inadequacy of labor supply and demand – ensuring a steady stream of workers into increasingly skilled positions, and reducing costly turnover. Yet they also serve workers by promoting job security, stability, and career progression, not to mention a degree of choice on the shop floor. They also discourage arbitrary managerial actions and provide a measure of protection from abuse. Not all firms have the resources or market position to offer hegemonic, decision-based forms of control. Many rely on coercive techniques that are far more unpleasant for workers to endure, and far less effective in securing their consent.

*Structured Autonomy and Worker Input*

In his ethnographic study of an agricultural equipment production facility, Burawoy (1979) asked: “Why do workers work as hard as they do?” His answer had to do with securing consent of workers by instilling a hegemonic ideology of individualism with bureaucratic organization of work. He cited internal labor markets and the internal state as key mechanisms in this regard. A second aspect of his argument had to do with a piece rate pay scheme, combined with a degree of informal latitude that allowed workers to organize their time on the job. He characterized their actions – manipulating the work
they turned in to maximize economic returns in the face of pay-restrictions in the form of output limits and lapses in available work – as game.

“Making out” not only increased wages, but also imparted to workers a degree of control over the labor process and became a basis for shopfloor culture, status hierarchies and coworker relationships (Burawoy 1979). Management was aware that workers were not following written procedures, but allowed them to continue because in self-organizing, workers were putting forth a greater amount of effort than could be otherwise elicited. Thus, workers were consenting to the terms of work, and actively pursuing managerial goals, even as they resisted the bureaucratic work procedures. This process tightened management’s control over workers by enhancing individualistic orientations that obscured class conflict with capital and shared class interests among workers.

There is reason to believe that the factors involved are generalizable beyond situations in which it is possible to “make out.” Burawoy notes that workers were able to use their limited discretion to marginally increase their incomes. Individual rationality was thus aligned with that of the firm, as described in the previous section. But the stronger motivating factor appears to have been achieving in the game of making out. Burawoy argues that capital was able to produce consent by expanding workers choices within narrowly defined limits. In this case, a slight economic motivation combined with a limited degree of latitude translated into a great deal of motivation and effort.

Interestingly, when given the chance to find their own methods of improving productivity (with limited economic benefit), workers did so enthusiastically. Burawoy’s conclusions emphasized the role of capital in structuring the workplace in ways that promoted this outcome. But it could also be argued that individuals are psychologically
motivated to innovate for improved productivity. Coercive controls remove this potential. However, even a limited amount of latitude of flexibility in the labor process allows workers’ own motivations to take hold, even if returns to their efforts are minimal.

Acknowledging that individuals want to succeed or contribute at work does not require that we draw attention away from the role of capital in structuring this process. Indeed, we are able to further explore Burawoy’s viewpoint regarding capital’s emphasis on individualism with attention to more recent theoretical developments regarding what Knights and Willmott (1989) refer to as “subjectivity” in the labor process. They argue that the capitalist mode of production imposes a great deal of anxiety by separating workers from the means of production and individualizing them in negotiating the terms of their survival with capital. This vulnerability fosters ideologies and values that cause individuals to seek validation, and confirmation at work, and to achieve a sense of belonging from participation in the process. Their sense of identity is thus produced on the job. Workplaces further individualize workers, who subsequently construct their identity in the context of both capitalist social relations and capitalist power exercised over discipline, surveillance and discourse (O’Doherty and Willmott 2001; Smith and Thompson 1999; Willmott 1990).

The psychological desire to create a meaningful identity out of work is a powerful urge that grooms workers to consent when presented with organizational opportunities to perform. Subjectivity is particularly apparent where workers voluntarily go beyond work requirements in order to do the best job possible, even where it fails to advance their material interests. Nurses, for instance, exert more effort than is required in order to provide their patients with the best possible care (Bolton 2004). Subjectivity is also a
conceptual framework for understanding workers re-imagining their jobs to find meaning and do their best in what appears to be otherwise unrewarding work (Hodson 2001a).

Friedman (1977) describes how capital has purposefully expanded some workers’ degree of autonomy for the purpose of improving control over workers. Similar to the approach of Edwards (1979), who posited that capital initiates new modes of worker control in response to resistance, Friedman argues that workers are key players in shaping the labor process, as resistance inspires innovations in worker control. He argued that control mechanisms operating through coercion, including threats, supervision, or by limiting responsibility, are not always effective. Taylorist elimination of working knowledge and segmentation of tasks remove interest and reduce satisfaction with work, requiring that individuals with choices be persuaded to work, usually with higher wages. Moreover, task integration increases the potential for highly dissatisfied workers to cause damage outside of their particular production domain.

Friedman posits that capital has adapted to this threat, while encouraging adaptation to change in the firm, by expanding “responsible autonomy” in the labor process. Responsible autonomy offers workers limited decision-making in an attempt to maximize labor as variable capital. It seeks to convince workers that the organization values them and their contribution, and cares about their well-being. Workers feel protected by the firm and sense that organizational interests match their own – enhancing their satisfaction, loyalty and effort while diminishing their desire to resist (Friedman 1977). At the same time, it may encourage more advantageous decisions, and increase the odds that they will be carried out (Kahn 1981).
Thus, even as responsible autonomy increases individuals’ input, it enhances managerial control over their activities. This is possible because employees are persuaded to act in the interest of the organization. Moreover, increasing decision-making among rank and file is not inconsistent with increasing organizational power over employees, as authority and decision-making are not zero-sum phenomena (Friedman 1977; Kahn 1981). At the same time, increasing self-direction at work is not necessarily equivalent to increasing autonomy, particularly if the limits to one’s decision-making are very narrow (Edwards 1979).

On the face of it, this approach is similar to the decision-making school’s emphasis on aligning interests of workers and firms, but it is different in that organizations actively court employees to garner their goodwill by communicating to them “we care about you.” It resonates with the group relations branch of the human relations school of managerial ideology, which emphasizes the effect of organizational climate, and promotes creative release as pathways to high morale and productivity. Like the decision-making school, the human relations school emerged from the work of Mayo and later Barnard, but it also has roots in the Hawthorn Effect – the finding that managerial attention and special treatment increase morale and productivity (Perrow 1986). This school places primary emphasis on tapping individuals’ needs and drives. The group relations branch posits that people desire meaningful work; and portrays organization members as resources to be developed and tapped for the good of the organization.

We are able to see the intersection in the approaches of Burawoy, Knights and Willmott, Friedman, and the human relations school in Sosteric’s (1996) participant
observation in a Canadian nightclub (see also O'Doherty and Willmott 2001). Bartenders were expected to serve drinks to customers, but were given a great deal of latitude in how they went about this task. Just as Burawoy’s factory employers permitted workers to skirt the rules in order to make out, the hotel for which Sosteric worked overlooked bartenders’ tendency to favor regular, tipping clientele. The result was a great degree of effort to provide excellent service to these customers, a foundation of the nightclub’s economic success (see also Sallaz 2002). Sosteric describes servers as realizing their identity through the exercise of skill, autonomy, and self-expression on the job, and as feeling extreme loyalty and toward the organization as a result. They did not even bother to ask for some forms of compensation guaranteed to them by law. In this context, coercive controls were almost never required, Sosteric argues, because the needs the organization was balanced with those of employees. They enjoyed their jobs, earned a nice income from tips, and were committed to serving the organization and its customers. When new management instituted direct supervision and rigid constraining bureaucratic control (segmenting tasks, prohibiting specialized service/preferential treatment, and forcing servers to smile and feign fun), autonomy and the exercise of skill declined. This produced stress, alienation, resistance and high turnover among the staff.

While Sosteric’s study provides a near perfect example of how structured autonomy may produce consent in a service environment, most of what we know about the responsible autonomy as a mechanism of worker control has been realized in study of the manual sector, and especially participative work regimes that have emerged in recent years. These organization styles developed in response to a more skilled and demanding work force, and to market demands for quality and flexibility (Appelbaum and Batt 1994;
Taplin 1995). They grew out of Japanese innovations in the organization of work and productivity experiments in American firms during the 1960s and 1970s (Kanter 1990). Flexible innovations may be technical/structural (including Just-In-Time and job expansion or rotation policies) or social. The latter include quality circles, which address problems in production and generate ideas about cost saving innovations, and self-managing teams – small groups making decisions about how to organize and pace work in their own assigned domain of responsibility (Smith 1997). Total Quality Management, and Kaizen, or “continuous improvement”, are guiding principles and methods in flexible team production.

Firms outside of Japan sometimes have difficulty importing Japanese style practices outside of the cultural and organizational settings in which they were developed. Product market situations, workers skill levels, existing personnel procedures, and the degree to which individuals, especially managers will embrace such practices complicate firms’ ability to incorporate them (Lowe, Morris and Wilkinson 2000). American firms have often adopted flexible practices by borrowing piecemeal from other countries’ production models – incorporating self-directed teams in flattened hierarchies, an emphasis on work as a system (as opposed to a series of jobs), and/or a total quality management approach to production into what often remain primarily top-down organizational settings (Appelbaum and Batt 1994). Japanese-influenced production styles are most common in manual settings, but the service and public sectors are increasingly drawing on them as well

The hallmark of the Japanese participative style is maximum responsibility for line workers, who solve problems, make repairs, manage inventories, and ensure quality.
In the western context, the economic impetus behind the shift is usually economic crisis, rather than a sincere effort to improve quality or redistribute control (Appelbaum and Batt 1994). The American technique often begins with managerial efforts to increase workers participations in relatively minor decisions – in part because the existing managerial structure is not committed to organizational change and is reluctant to relinquish its knowledge and power (Zuboff 1988). In this context, restructuring is built upon, and reflects, the Taylorist production scheme upon which it is built (Smith and Thompson 1999).

Some researchers have optimistically wondered whether participative work structures could become the equivalent of undivided labor (Kahn 1981). Time has corrected this overly sanguine outlook by demonstrating that elements of Taylorist work structures remain in the participative regimes built upon them. In fact, some argue that participative structures, as constructed in this context, are simply solutions to some of the more irrational aspects of traditional work organization. It has been argued that capitalism is irrational in many respects, and that Taylorism is not as successful in subverting workers or resistance as Braverman assumed it to be (Wardell 1999). Erosion of human initiative is one of the more irrational features of coercive forms of control – one resolved with employee participation, which simultaneously adopts worker knowledge, encourages consent, increases productivity and curtails resistance (Hodson 2001a).

Participative work structures thus solve some of the dysfunctions of traditional management practices, but they are also argued to intensify the influence of Taylor, by expanding the scope of activities to which his philosophies are applied. Kraft (1999)
argues that total quality management exceeds the bounds of Taylor, streamlining the production process in general, as opposed to segmented work tasks. Continuous improvement eliminates the production equivalent of “unnecessary motions,” but workers, rather than design engineers, draw up the plans. Parker and Slaughter (1988; see also Graham 1993) describe stress on the line, and on workers, as a key means by which capital extracts workers’ knowledge in this context. Management stresses the production chain (limiting inventory, removing buffers, and speeding the line to reveal stalled production and slack), and stresses workers (with pressure, monitoring, visibility, and fear of job loss), leaving it to them to discover solutions. But at the same time, they draw upon the responsible autonomy they have presented to workers – appealing to their sense of pride, loyalty, creativity and responsibility. Peer pressure, discussed in the next section, also plays a role in this regard.

Eliminating slack in the production process, along with dismantling the hierarchy, can easily translate into work intensification in terms of speed and task load (Smith and Thompson 1999). It is argued that these shifts are accompanied not only by work intensification, but also by increased monitoring, more direct control, less autonomy overall and more limited career opportunities (Webb 1996). Spreading production design duties throughout the work context leads to greater levels of control overall. These implications cause some to argue that participative work structures have not so much supplanted traditional, coercive forms of control as extended them (Ezzamel and Willmott 1998). But significantly, the degree of structured autonomy afforded to workers in team or quality management settings clearly improves the experience of work. Although tasks
remain highly fragmented and unskilled; they are enriched, enlarged, and more varied
(Graham 1993; Parker 1993). Teams are not fully autonomous in any work domain, but they have a great deal of control over some aspects of production, such as work
distributions (Murakami 1997). Perhaps most significant from workers’ own standpoint, they are generally free from traditional methods of direct supervision. As I discuss in the following section, coworkers assume many surveillance functions in the team setting.
Nevertheless, the absence of a traditional, direct supervisor restores dignity to workers and relieves stress. An automobile production worker says: “I like the fact that I’m considered man enough or adult enough or responsible enough to come in and do my job without having somebody breathing down my neck. . . . It’s a lot more relaxed than having somebody with a tie cracking the whip” (Shaiken, Lopez and Mankita 1997: 35).
Workers who receive training in participative methods also feel that they are personally enriched, as they develop skills in problem-solving, communication, decision-making and cooperation, applicable in both their personal and professional lives (Milkman 1997; Smith 1996; Smith and Thompson 1999).

Workers’ sense of increased autonomy, and the capacity to organize some of their own activities instills a sense of meaning at work (Knights and McCabe 2003). Increased satisfaction from participative work improves performance and enhances consent (Batt and Appelbaum 1995; Yildirim 1999). As described by Friedman and the human relations school, participation in decision-making also fosters a sense of trust, fairness and reciprocity (Kochan and Isterman 1994 cited in Hodson 2001a p. 46). The overlap between individual and organizational interests serves as foundations for commitment and effort at work (Hodson 2001a). Despite intensification, extensive monitoring, flatter
hierarchies, and limits to consequential decision-making (Graham 1993), expanded choices, even within “ever narrower limits” (Burawoy 1979: 94) still appear to be choices that workers can feel good about.

**Surveillance**

Traditional approaches to worker control have tended to emphasize a shift from direct supervision to coercive technological and bureaucratic aspects of worker control, and later to cooperative bureaucratic functions. Most of the classical works relegate the influence of individuals to the period of capitalism preceding Monopoly Capitalism. At that time, they argue, capital was smaller in scale, and owners relied on “direct” or “simple” means of control – drawing upon established relationships and custom to control workers with patriarchal ties, personal loyalties, and existing norms (Edwards 1979). Owners were not confined or assisted by bureaucratic procedures, but rather supervised, made decisions, and rewarded or punished workers at will. Favoritism, abuse, threats and physical force were common practices (Baron, Jennings and Dobbin 1988).

As the scale of capital developed, managers or supervisors replicated this relationship – directly supervising workers and drawing on personal obligations and favors to elicit worker consent. However, this was ineffective, because supervisors’ dictates did not carry the weight that those of the owner did. Edwards argues that direct control was largely supplanted by technical and later bureaucratic control with the emergence of monopoly capitalism, but is argued to persist in the competitive manufacturing sector and in the service industry
More recently, social scientists have acknowledged that social relationships permeate the labor process, and play a powerful role in controlling behavior. Researchers now recognize that a broad range of individuals – including supervisors, customers and coworkers – assist capital with social control on the job. Their control over workers rests not only in their surveillance functions, but also in normative control.

**Supervision**

*Supervisors*

Blauner posits that social organization of work undergoing a broad shift away from traditional practices, where supervisors rule on the basis of custom and established relationships, toward more isolating and alienating bureaucratic management methodologies. While Edwards recognizes a similar shift, he does not unite the two forms of control in one continuum or spectrum. Rather, he imagines them as discrete and not even consecutive phases.

Direct supervision is indeed replaced by cooperative bureaucratic controls, particularly responsible autonomy, in some work settings (Shaiken, Lopez and Mankita 1997; Sosteric 1996). Moreover, it is the case that some supervisory roles have been absorbed by technological, bureaucratic and peer supervision, especially in production teams (Barker 1993; Sewell and Wilkinson 1992). Indeed, team production is argued to diminish the supervisory role, as it extends the separation of planning and execution, along with the loss of discretion upward, further centralizing power in the hands of senior management (Webb 1996). Indeed, Hales (2000) argues that team ideology is used to justify the reorganization of managerial work.
Even in workplaces organized around technological or constraining bureaucratic control, supervision is necessary to ensure that workers produce, because of negative implications for effort relative to arrangements that tap workers’ natural inclinations to produce. As described above, service industry work can be highly prescribed with constraining bureaucratic procedures. Line supervisors are required to ensure that fast food workers abide by procedures regarding customer service interactions, food preparation, and timing (Leidner 1993; Reiter 1991). Likewise, supervisors listen to call center customer service representatives, “coaching” them to follow scripts (Callaghan and Thompson 2002). Managers in a grocery retail setting were instructed to detect instances in which workers were not smiling or were offering “fake” smiles to customers, and to correct their behavior (Ogbonna and Harris 2002a). Supervisors can also draw on technology to monitor workers. In factory settings, computers are embedded systems of surveillance and control. Customer service work is monitored with computers, and video and tape surveillance revealing to supervisors how and how many customers are served.

Many researchers posit that relatively recent technical, bureaucratic and social innovations have relegated the supervisory role to implementation of rules devised by more senior managers (Rose, Marshal Newby and Volger 1987). However, it could be argued that this was always their purpose. Supervisors were first incorporated as a means to replicate, not replace, direct control by owners (Edwards 1979). Supervisors may have less discretion in allocating rewards and punishment, but are clearly important in shaping the work of subordinates, and in influencing, if not determining, policy made by more senior managers (Rose, Marshal Newby and Volger 1987). They also remain significant in interpreting and implementing policies and procedures, and in negotiating with labor
(sometimes assisting workers in subverting procedures and withholding effort) to get work done (Delbridge and Lowe 1997, Sosteric 1996).

**Customers**

As the economy and has shifted from manufacturing toward service sector work, capital has developed novel techniques of worker control. Service-sector capitalists are able to adapt some established coercive techniques, including direct supervision and constraining bureaucracy. But customer service is distinct in its reliance on personal interaction, and employers have found it necessary to devise new strategies to control workers.

Many have enlisted customers in this task (McCammon and Griffin 2000; Smith 1994). Customer feedback is a powerful form of discipline in service work (Gutik, Cherry, Bhappu, Schneider, and Woolf 2000). Feedback may be company-instigated, company-encouraged, or customer-instigated, and is an unobtrusive, but powerful source of monitoring, evaluation and discipline in the context of service work (Fuller and Smith 1991). Firms often monitor the number of complaints – a banking call center study revealed that employees were allowed only three complaints per ten thousand calls without incident (Callaghan and Thompson 2002). Another study revealed that customers were encouraged to help themselves to a dime out of a bowl placed in front of bank tellers if they didn’t get a smile (Austrin 1991).

In some cases, firms are not content to rely on customer reports, and employ “secret shoppers” who pose as shoppers to surreptitiously observe how workers interact with customer, including whether they smile, follow scripts and suggestive selling techniques, and so on (Ogbonna and Harris 2002a; Smith 1997). Some supervisors
pretend to be customers. A travel sales call center manager placed what she called “happy traveler” calls – pretending to book trips, while actually assessing whether employees were following their scripts (Palmer and Dunford 2002).

But not all customers are pleased with standardized service. Many prize flexibility and a sense of genuine concern in service workers (Peccei and Rosenthal 2001). Some are put off by the perception of forced, phony friendliness (Sosteric 1996). The conflicting demands of employers and customers are sometimes difficult to balance (Liedner 1993). Worker autonomy reduces role conflict and eases stress in these situations (Troyer, Mueller and Osinsky 2000).

In some cases, customer service workers achieve a sense of identity, competence, skill, and satisfaction with helping people (perhaps indicative of subjectivity) in providing good customer service (Korczynski, Shire, Frenkel and Tam 2000). Long term relationships and customer tips also help to ensure excellent customer service (Gutek, Cherry, Bhappu, Schneider and Woolf 2000). Indeed, customer control via tipping is often accompanied by a measure of flexibility that produces the kinds of worker control that stem from structured autonomy. These include a version of Burawoy’s (1979) “making out,” along with a sense of mutual benefit, loyalty and commitment that Friedman (1977) described as stemming from responsible autonomy. Tipping is a form of customer evaluation and a source of tight control over workers, but it produces a great deal of job satisfaction and effort (Ogbonna and Harris 2002b; Sosteric 1996)

In such situations, workers have control over the nature of the interaction and the effort they put forth. Relative social status helps to determine power in the customer-employee relationship (Guerrier and Adib 2000; Paules 1991). But status in the
interaction may override their external status relative to the customer. Where organizations give workers the autonomy to choose how, and especially whether, to serve customers, workers retain a great deal of control over how they are treated (Sosteric 1996). Organizations that completely subjugate workers to oppressive customer relationships (such as by requiring them to reveal their full names in a “King Customer” grocery initiative) expose them to verbal and physical assault (Ogbonna and Harris 2002a). Verbal and physical abuses, including sexual harassment, are particularly common in industries communicating subservience and sexuality to customers. This is especially common in travel, lodging and dining establishments (Bolton and Boyd 2003; Boyd 2002; Guerrier and Adib 2000)

**Coworkers**

Workers themselves have been assigned a controlling function, as work structures emerging in response to market demands for quality and flexibility (Appelbaum and Batt 1994; Taplin 1995) reveal the dysfunctions of constraining bureaucratic and technical control in the new global economy (Sewell and Wilkinson 1992). Work groups are able to secure effort in ways that management per se cannot.

Barker (1993) argues that teams shift vertical control into horizontal control. He describes a process by which teams convert their flexible, team-based production into increasingly stable, formalized, rigid, bureaucratic rule – “tightening the iron cage.” Once relatively autonomous teams are established, they determine their own modes of task direction, performance evaluation and disciplinary techniques. However, teams increasingly rationalize their techniques, in part to educate new workers unfamiliar with
their group-established norms. Barker argues that teams eventually abandon their emphasis on consensus as they establish “concertive control,” which transcends constraining bureaucratic control but achieves its rational objectives. This form of control is as limiting as traditional bureaucratic constraint, but more oppressive and complete as workers assume the role of both master and slave.

But the effort they secure has to do with how team settings are structured, including pay tied to group performance (Parker 1993), and guidance from established criteria and information systems (Sewell 1998). Firms influence team activities with mission statements and data from vertical surveillance and performance evaluations of individual workers. They are instructed to monitor themselves, but are encouraged to use this information to shape their activities, and ultimately to assume the surveillance functions formerly carried out by direct supervisors (Sewell 1998; Sewell and Wilkinson 1992). Sewell argues that these patterns do not reflect a shift from horizontal to vertical surveillance, but are rather simultaneously vertical (electronic monitoring) and horizontal (peer scrutiny). The vertical surveillance promotes self-discipline, while the horizontal surveillance identifies and standardizes the best individual performance, and evaluates members with data gleaned from vertical surveillance, and promotes group discipline through sanctions and rewards, along with self-discipline (Sewell 1998). Technology is as important as peer scrutiny in this context. Together, they form tight networks of extensive surveillance likened to an “electronic (or information) panopticon” – a totalizing institutional rationalism, or social Taylorism (Webster and Robins 1993; Sewell and Wilkinson 1992; Zuboff 1988).
**Normative Control**

The surveillance functions of participative work groups are intimately tied to normative control exercised by the collaborative nature of the work. The combination of team-level responsibility for work, pay tied to group performance, and performance data generated from vertical surveillance sets the stage for self control via normative group expectations. Normative control is not new in the sense that control mechanisms reflect alternating surges of normative and rational foundations for worker control (Barley and Kunda 1992). Progression through industrial betterment, scientific management, welfare capitalism, systems rationalism, and quality control illustrate this point. What is novel with the most recent incarnation is that workers are normatively obliged to serve capital rather than the reverse.

The key normative control over workers is their need to belong. Socialization is a complementary tool for eliciting desired behaviors. Reputation and teasing are common means by which norms are enforced on the job (Bensman and Gerver 1963). Indeed, much of the power of teams over behavior rests in its group dynamic, and the ease with which members may punish or reward those not putting forth what become defined as acceptable levels of effort (Kraft 1999). The risk of public definition as lazy or uncooperative is a powerful check on behavior. A call center service provider explains: “You’ve got to be a team player… You’ve got to conform . . . there is a herd instinct to it in some ways. I got into trouble recently because I used certain words that aren’t in their vocabulary and I got told to stop doing that . . . stop saying ebullient. . . It’s not teamy . . . . you’re not being particularly team playery.” She later remarks “I don’t like being moulded quite that forcefully into being this way.” (Knights and McCabe 2003: 1605).
Workers are sensitive to these techniques because they play on their internal desire for acceptance. Feeling rejected by coworkers elicits a powerful negative emotional response, including sensations of isolation, depression and loneliness, whereas belongingness produces feelings of security, solidarity and confidence. (De Dreu, West, Fischer and MacCurtain 2001). In this way, the approval of others operates as an incentive for effort, similar to incentives of cooperative bureaucratic controls, but with much greater risk of very negative emotional outcomes (Frenkel, Korczynski, Donoghue and Shire 1995).

If normative control is useful in the manual and service sectors, it is almost essential in control over professionals, who are much more difficult to control with coercive procedures because of the nature of their work. Professionals have a great deal of knowledge, their tasks are varied with indeterminate outcomes, and capital relies on their imagination - meaning that their tasks cannot be routinized easily as those of other workers (Causer and Jones 1996; Simpson 1985). Work is often quite flexible – organized around projects and completed with the assistance of collegial ties and decentralized authority. At the same time, their significance in getting products to the market gives employers a great deal of interest in speeding their work. However, doing so requires that workers be inspired to produce. The solution is to refrain from interfering in workers’ task discretion, but to regulate them socially (Grugulis, Dundon and Wilkinson 2000). Organizational identity is their primary tool in this regard – assisting in monitoring and providing indirect control over their work (Alvesson and Willmott 2002; Causer and Jones 1996).
Though comparative studies are not available to judge, there is some evidence to suggest that professionals may be particularly susceptible to normative organizational control (Vallas 2003a; Kunda 1992). Most have invested a great deal of resources in their position, and receive a great deal of pay and status for their work. They have more to lose than many other types of workers and do not wish to stir trouble with their employers. At the same time, there may be selectivity involved as well. Many professional positions require specific credentials, likened by Weber (1978) to social credit, facilitating exchange in an uncertain context. Likewise, credentialing theory posits that qualifications serve as signals to employers that applicants’ compliance extending beyond the technical capacity to perform tasks to cultural indicators of workers’ willingness to act in organizational interests” (Brown 2001: 25). Indeed, professionals are distinguished by their pleasure in work, their willingness – even eagerness – to put in long hours and hard work, and their lack of a resistance culture, even in the face of overwork (Hodson 2001a). And even where they would not choose do so, normative expectations can persuade professionals to exert an astonishing amount of effort on behalf of their employers. Open plan offices encourage this by increasing visibility. Many professional engineers in Kunda’s (1992) study of a high tech firm worked extraordinarily long hours – many disregarding their health and personal relationships along the way.

Cultures of professionalism require a great deal of normative training. Occurring through diffuse patterns of teaching and imitation, professions are taught how to look, sound, and act professional in interactions. This often involves some degree of emotion management (Fineman 2001). Lawyers in the UK, for instance, were informally
instructed outside of their schooling in how to behave with various players in the legal profession, including colleagues, clients, judges, and clerks (Harris 2002). Mentors in an accountancy firm instructed newer colleagues in creating the impression of excellent client service and commitment to the firm. This practice, combined with monitoring and discipline to establish self-discipline among mentees (Covaleski, Dirsmith, Heian and Samuel 1998). Much of this training is actually instruction in emotion work, often required of professionals under pressure to please customers while maintaining professional distance and serving the greater good (Harris 2002).

At the same time, firms in professional, manual and service industries may create their own cultures with normative expectations. Whether these are actually cultures in the Durkheimian sense is highly debatable. They are more akin to “ideological webs” in which control is less overt relative to other techniques (Lincoln and Guillot – Randy’s edited book – need up to date cite). Highly unnatural, superficial language is a hallmark of this phenomenon. “Putting people first,” “winning” metaphors, substituting the word “service” for “sales,” and referring to supervisors as “coaches” or “facilitators” are all examples. The point is to use language to alter beliefs about what is occurring, and power relationships among those involved.

Convincing workers to subscribe to these goals and practices is often a matter of recruitment, training, and weeding out dissent. Organizations seeking to base their worker control at least partly on a manufactured culture, and on normative control in general for that matter, often hire on the basis of personality. Psychological profiling, multiple interviews and team scenario exercises to select cooperative, enthusiastic team players are examples. Once hired, individuals are inducted into the normative (and often
team) culture with extensive orientation on matters such as attitude, expected behavior, and organizational history, values and practices (Graham 1993). Social events, organizational activities and internal training – often directed by “culture managers” and occasionally requiring costumes – communicate an expectation of loyalty, enthusiasm, conformity and participation (Grugulis, Dundon and Wilkinson 2000; Kunda 1992; Lowe and Oliver 1991).

When individuals do not subscribe to normative ideologies or participate in rituals, they are marginalized as personally flawed (Barker 1993; Flemming and Sewell 2002; Kunda 1992). In some cases, people are fired for expressing dissatisfaction with expectations or not participating. When a human relations director was fired because she was unwilling to immerse herself in the company culture, the firm’s culture manager remarked that the woman would not be missed because she did not fit in with the firm’s “people’ way of doing things” (Grugulis, Dundon and Wilkinson 2000: 111).

Conclusion

While a number of the same control mechanisms are found across manual, service and professional settings, it is apparent that dominant forms of control vary with occupational sector. Moreover, particular forms of control, and particular combinations, are often more prevalent in one sector than in another. For example, normative control dominates in the professions, while service work is often characterized by constraining bureaucratic techniques (particularly rules and scripts) and direct supervision. Even the same form of control is exercised differently across industries. Professionals whose work is organized in teams are often controlled by professional or organizational norms and cooperative
bureaucratic procedures, while manual workers in team settings are more subject to constraining bureaucratic control and surveillance.

The following chapter presents a theoretical critique of theory on the labor process, along with a model of generalizable elements of worker control that may be used to examine the implications of control, and especially combinations of control techniques for worker well-being. Further, this model makes it possible to compare the nature of control, and thus the experience of work, across class, gender and race. Analyses draw from the population of English-language workplace ethnographies. I use linear regression techniques to investigate the implications of control, and Qualitative Comparative Analysis for a case-centered analysis of their combined effects, and their variation across work force segments.
CHAPTER 3

THEORETICAL CRITIQUE, SYNTHESIS AND EXTENSION

Labor process theory and related insights highlight key forms of workplace control with potential, if not always explicit, implications for worker well-being. In Chapter 2, I classified control mechanisms under three broad umbrellas – technology, bureaucracy and surveillance – and shared theoretical insights regarding how control techniques are viewed as altering the experience of work. In this chapter, I highlight the factors that jointly impeded synthesis of this literature’s disparate insights, restrained theoretical growth, and deterred or limited the scope of empirical research. I outline three major limitations in the existing labor process literature. Afterward, I explain how the present study overcomes these constraints – advancing the theory with a synthesized, coherent model of worker control and links to worker well-being, and improving on empirical research by employing this model with a comparative approach.

Theoretical Critique

Limitations of labor process theory largely stem from its historical development. Benchmark theories did not develop the theory incrementally, but rather in surges with an emphasis on evolution in the nature of worker control. This developmental path
produced three related limitations to theory on the labor process. First, the theory lacks elemental concepts that may be generalized across divergent contexts, and theoretical specification for linkages to worker outcomes is incomplete. Second, as a result, major theoretical contributions do not provide conceptual tools for analyzing potentially emergent implications for combinations of control techniques. More recent qualitative research presents persuasive evidence that many workers are subject to multiple techniques, and that their combined effects produce an array of worker outcomes. Third, limited capacity to generalize the insights of labor process theory across contexts has resulted in a scarcity of comparative research to demonstrate how control techniques, and combinations of control, vary systematically across significant workforce divisions such as occupation, with implications for inequality in the experience of work by class, gender and race.

A few studies have addressed aspects of these limitations (e.g. Hodson 1996; 2001; Schwalbe 1986), but none have simultaneously solved the problems impeding theoretical growth in theory of the labor process. This study seeks to address these limitations simultaneously to develop a thorough, theoretically grounded understanding of the implications of the labor process and worker control for worker well-being. In the remainder of this chapter, I briefly describe the historical development of the literature, explaining how it has contributed to each of these limitations. Afterward, I present my theoretical synthesis and extension. I place particular emphasis on teasing apart the distinct insights of labor process theories, and reducing concepts to generalizable, combinable elements that may be used to investigate conditions across a range of work
settings, with implications for understanding systematic inequalities in lived work experiences across lines of class, gender and race.

**Historical Theoretical Development**

Labor process literature is marked by a lack of theoretical synthesis and growth stemming from the historical development of theory on the labor process. Perspectives on the evolution of control dominate the literature. Although many contributions have in common a Marxist theoretical foundation, their narratives described a number of distinct tendencies in the labor process. Blauner (1964) wrote about shifts in the nature of technology, and implications for alienation in work. Braverman (1974) introduced class conflict and capitalists’ ongoing efforts to segment, and thus deskill and disempower labor. Edwards (1979) and Burawoy (1979) felt that that Braverman’s treatment failed to consider workers roles in the changing nature of work. Each introduced theory premised on workers’ subjective actions, and described an ongoing trend toward hegemonic control operating through normative domination in place of outright coercion. Friedman (1977) also argued that control was shifting away from coercion, but his emphasis was on participative methods that introduced responsible autonomy and enlisted workers’ active enthusiasm and participation.

Perhaps in part because these studies were published at roughly the same time, major contributions to labor process research tend to speak at, rather than with one another. Often, they describe in detail the development or practice of one control mechanism or another, while remaining forms of control are neglected altogether, or are described as passing or past phases in the evolution toward the theorist’s own conceptual
emphasis. For example, Blauner focuses entirely on the evolution of technical control with implications for the experience of alienation, while Edwards argues that this mode of control is passing as control proceeds toward a highly effective, hegemonic, bureaucratic form.

As a result of its historical development, researchers did not build onto one another’s insights, but rather offered unique and sometimes incongruous accounts of workplace control. Consequently, labor process theory has not resulted from a continuous refinement of initial insights, but is rather the sum of discrete surges in theory developed as researchers called attention to what they argued were neglected factors or emerging forms of control. The result is a body of contributions erected not so much on as around one another, and a story that is complicated, often contradictory, and somewhat inconsistent in emphasis.

**Conceptualization and Modeling**

The development of labor process theory, and particularly its emphasis on evolutionary change, has failed to produce a model that draws together its disparate insights and links elements of the labor process to worker well-being. Theoretical synthesis and growth is impeded by challenges to both conceptualization and articulation of theoretical linkages.

**Conceptualization**

The labor process literature is marked by its tendency to overlook the need for elemental theoretical concepts that may be synthesized into a general, overarching model of the labor process. Early theorists’ preoccupation with evolution led them to underscore
techniques prevailing in a particular time and place, with an emphasis on the circumstances that fostered their development. The result is that modes of control are frequently linked to the circumstances in which they are argued to have risen. This tendency has not been conducive to development of elemental concepts that could be generalized to other socio-historic contexts.

Subsequent researchers have consequently been unable to straightforwardly apply initial insights to understand alternate contexts of control. For example, when researchers turned their attention to total quality management and other Japanese control techniques, the literature was not readily adaptable to studying them. This is not because they were disconnected from earlier forms of control – indeed, they are sometimes regarded as a more sophisticated stage in scientific management – but rather because earlier characterizations of control did not dissect control of the evolutionary stages they described into component elements that could be generalized and reconfigured to understand control in other historical and spatial contexts. Friedman’s responsible autonomy thesis was perhaps the theory most applicable to team production, but subsequent research has revealed that an equivalent, and perhaps dominant element of control in these control regimes is its reliance on surveillance (often extended to coworkers, in this case), which had been dismissed in the labor process literature as moribund (Barker 1993; Sewell and Wilkinson 1992; Webster and Robins 1993).

Breaking apart the causal mechanisms in the evolutionary arguments of benchmark theories allows construction of more general concepts that many be unified into a more complete model of worker control that is also more applicable across time and place. For example, disentangling the causal arguments of Blauner and Braverman
makes it possible to make greater use of their ideas. While empirical tests of their contradictory expectations for aggregate levels of skill exercised at work are indeed interesting, it is possible use their theories for other purposes. Disentangling their expectations from evolutionary arguments makes it possible to see that their causal mechanisms – automation and task segmentation – may be characterized as separate elements of a more general model of worker control.

A final consideration with regard to conceptualization has to do with specifying discrete, measurable concepts associated with a range of outcomes, including alienation, consent and resistance. For example, powerlessness, a dimension of alienation, does not necessarily predict propensity to support or engage in organized opposition – at least not to the degree that perceptions having to do with quality of working conditions, job stability, and supervisor supportiveness do (Vallas 1987). Consent and resistance also need to be clarified and disentangled from one another. Friedman and Burawoy interweave the concepts, but consent may be more than just a corollary of control. Contextual features of work may dissuade resistance, even among the most dissatisfied workers, and, as described above, internal characteristics may encourage unhappy, alienated, or resistance-prone workers to put forth extra effort at work – consenting to the terms of production.

Modeling

A second limitation for theoretical synthesis and growth arising out of its historical development and emphasis on evolution is a shortage of theoretically specified linkages between worker control and worker outcomes. Collectively, the theories span a broad,
but disjointed array of phenomena, mostly centered around worker control, with less systematic and less consistent emphasis on worker outcomes. For the most part, the emphasis is on consent, but many characterized this outcome as a foregone conclusion – compliance with capital as a result of increasingly tight, especially hegemonic, control.

Of course, existing theory does provide some guidance in drawing theoretical linkages. Although Blauner places emphasis on an evolutionary shift toward automation, he presents theoretical linkages between technological developments, the exercise of skill, and the experience of alienation at work. Friedman explains how participative decision-making promotes worker skill, with subsequent implications for satisfaction, consent and resistance. Edwards highlights the role of resistance in prompting alterations in the nature of control. Burawoy emphasizes capital’s role in producing a context that simultaneously obscures and secures surplus value. Although both almost assume heightened consent, they contribute a great deal to our understanding of how control may be achieved by structuring the premise of workers’ decision-making. Braverman’s emphasis on segmentation contributes to an understanding of how segmentation disempowers the working class – with potential implications for a host of unarticulated outcomes, such as willingness to engage in organized opposition to management.

But how easily do these contributions translate into research questions for scientific analysis? Linking worker control to outcomes requires a theoretical foundation. But some have suggested that theory on the labor process is perhaps overly informed by its Marxist underpinnings. In other words, assumptions about the underlying class struggle behind evolutionary change, and about oppositional class interests, are argued to
color its research questions and findings. Labor process theory has been called overly
deterministic, and charged with interpreting the same phenomenon in different ways,
depending on researchers’ preconceived notions of what workers “should” be doing in
the context of capitalist class relations – that is, seeking to overthrow capitalism (Tanner,
Davies and O’Grady 1992). At the same time, what workers actually do is interpreted in
the context of assumptions about capital’s overarching control over work and workers.
For example, Burawoy (1979) characterizes “making out” both as resistance to
production requirements, and as consent to capitalist hegemony.

Perhaps the same behavior can be both resistance and consent (Clawson and
Fantasia 1983). However, as Burawoy observed, workers’ intense effort was also
attributable to their own sense of accomplishment in “making out.” Indeed, people
attributing a variety of work and non-work outcomes to their work performance –
including earning enough money to meet material needs, gaining respect of others, and
experiencing happiness at home (Kahn 1981). In order to feel successful in this domain,
people make adjustments, including reorienting themselves psychologically for success at
work (Kohn 1990).

The theory of “subjectivity” in the labor process elaborates on this point, positing
that achievement motivations play a significant role in producing consent. According to
the theory, individuals endeavor to gain a sense of security, validation and affirmation
from achievement at work in response to the anxiety capitalism imposes by separating
workers from the means of production, individualizing them, and making them
vulnerable with regard to securing an income adequate to reproduce themselves (Knights
and Willmott 1989, Spencer 2000; Willmott 1990). In other words, workers cooperate
with capital, but the motivation comes less from control at the point of production, than
from individuals’ own attempts to attain some degree of security in an insecure situation.
In its current incarnation, this framework allows researchers to see that workers’ identity
issues complicate the matter of control and consent – perhaps making workers more
vulnerable to control at the point of production (O’Doherty and Willmott 2001).

Resonating with this view is recent theory regarding worker behaviors on the job
as efforts to achieve or reclaim dignity at work (Hodson 2001a). The influence of capital
and worker control in producing worker outcomes is not abandoned. Indeed, the
organization of work appears to reliably predict many psychological and behavioral
outcomes. Yet, it is acknowledged that the precise nature of the response is influenced
by individual endeavors to achieve personal validation in the form of dignity at work.

Another approach is withdrawing from some of the assumptions of labor process
theory, using insights to guide hypotheses, but leaving open the possibility that results
will not necessarily conform to them. This means approaching the relationship between
worker control and worker outcomes as a research question – neither divorced from nor
utterly dependent upon existing expectations rooted in Marxist assumptions about what
“should” be occurring in workplaces. Often complex and likely contingent on context,
the relationships between control and outcomes may only be fully visible if researchers
drift away from initial labor process insights, posit relationships not bounded by their
assumptions, and approach them as research questions in contrast to foregone
conclusions. Doing so leaves conceptual room for implications of control elements that
are not tied to an overarching theory about the causes or consequences of broad evolutionary shifts in the nature of control, and which may surprise us.

A good example of the limitations for research engendered in close adherence to theories so deeply tied to assumptions about evolutionary paths is found in research on the “skill question.” Blauner’s optimistic conclusion that technology would ultimately enhance freedom at work prevented him from imagining how technical progress might be shaped by class conflict. Braverman offers what many have suggested to be a competing, but equally unidirectional hypothesis – that capital uses technology to deskill labor. However, these theories may not be as well matched as they are presumed to be – presenting problems for social scientists attempting to resolve this “debate.”

Braverman’s focus was not so much technology as the division of labor and centralization of knowledge for planning production. In this context, technological innovation is a tool, not a causal force on its own. Moreover, skill was a mediator for Blauner (linking technology to alienation, a psychological response to work), and an outcome for Braverman (serving as a proxy for worker power, a source of leverage in bargaining with capital). Not surprisingly, the many attempts to resolve the “skill question” have not revealed definitive support for either evolutionary claim. Rather, aggregate trends show little change in skill distributions of major occupations, despite skill downgrades in craft production (Form 1987; Spenner 1983; Vallas 1990, 1993; Wallace and Kalleberg 1982).

Much more revealing have been those studies that stepped away from arguments of Blauner and Braverman, viewing automation in less value-laden terms (simply as technology that performs some of the work or all of the work), without expectations fully
tied to, or divorced from, class conflict or evolutionary arguments. Conceptualizing automation in this non-deterministic way and modeling the implications of automation as a research question makes it possible to reveal more about the process. For example, Kelley (1990) underscored the significance of economic, organizational, and institutional context in the integration of programmable technologies into the workplace. She demonstrated that the same technology had the effect of increasing workers’ skill in some contexts, while deskilling them in others, with divergent implications for the exercise of skill. Another example is Hodson’s (2001a) comparison of automated assembly lines and non-automated bench assembly. While assembly workers in general exhibit the lowest levels of well-being relative to workers under other dominant modes of control, automation seems to improve the experience of work under assembly lines relative to bench assembly, which requires that workers perform every routine function. The literature’s preoccupation with dominant control schemes makes it difficult to make these kinds of distinctions without stretching the theory to make way for context-dependent outcomes.

**Combinations of Control**

Directly related to these modeling concerns and the historical development of labor process theory is a second challenge: difficulty modeling combinations of control in a given workplace to understand potential emergent properties of particular contexts of control. Although benchmark theorists frequently acknowledged control techniques apart from those they emphasized, and conceded that diverse control mechanisms coexist in
time, their coexistence in place was a thorny matter that did not receive much serious theoretical attention. The emphasis on the evolution of dominant modes of control hindered sociology’s understanding of the range of control techniques exerting a combined influence on workers, and an understanding of their potentially emergent effects.

It cannot be argued, however, that labor process theories are in any way antithetical to the notion of combinations of control techniques. They were simply not conceptually arranged in a way that facilitated interpretation of stages or dominant forms of control in this light. The assembly line is an excellent example. Virtually all labor process theorists identify the assembly line as the dominant mode of control under mass production, and as a significant phase in some evolution of control. For Blauner, assembly lines are a stage in the evolution of technology (toward continuous process production). For Edwards, they are part of the technical era of worker control, situated between periods in which direct supervision and bureaucratic procedures dominate. For Braverman, assembly lines are perhaps a final stage in evolution of work toward segmentation with the intent of deskilling and disempowering the proletarianized masses. But these outlooks mask the convergence of distinct elements of control. Assembly lines are indeed a combination of automation (a more generic concept gleaned from Blauner’s evolutionary theory), divided labor (a more generic concept culled from Braverman’s work), and often, direct supervision (acknowledged as an early, passing stage of worker control in virtually all accounts of the labor process).

These are distinct forms of control, but workers confront them in combination. Researchers may be able to construct models that tease apart effects of distinct modes of
control, or that characterize work settings by their dominant modes of control, but individuals do not confront control techniques in this way. It is very likely the case that combinations of control techniques have emergent qualities that produce worker outcomes. It is thus possible that systematic variation in outcomes in production settings distinguished by the dominant organizing character of the work (whether assembly line, craft, professional, bureaucratic, or participative) shown by Hodson (1996, 2001a) is an artifact of emergent characteristics generated from particular combinations of control in those settings.

But many other combinations are possible, and it may be the case that outcomes are influenced not only by the combinations of control that are present, but also by the absence of one or more control techniques. To illustrate, assembly lines combine automation and task segmentation, and are often accompanied by direct supervision. It could be the case that the combination of automation and task segmentation would be less likely to result in negative worker outcomes if workers were not also subject to direct supervision, often marked by abuse and managerial caprice.

Recent sociological studies provide encouraging evidence and potential methodological avenues for research in this regard. Qualitative accounts have provided insight into how control techniques are combined in unique ways relative to the dominant evolutionary stages identified by labor process theory. They have also extended the scope of research by investigation into service and professional production settings. Some have even pointed to stress, anxiety, frustration and dissatisfaction experienced by workers as a result of particular combinations of control (e.g., Deery, Iverson and Walsh 2002). Methodologically speaking, recent studies have asked whether we should look to
qualitative accounts for a more case-centered approach to quantitative investigation into how combined attributes of workplaces come together to shape outcomes for workers and firms (Hodson and Roscigno 2004; Roscigno and Hodson 2004). This approach has revealed that work settings are often characterized by particular configurations of attributes, which have emergent implications for outcomes such as citizenship, meaning and strike activities. It is more than reasonable to imagine that combinations of worker control techniques would likewise have emergent qualities with implications for worker well-being.

**Comparative Research**

The final challenge of using labor process theory to understand implications for control for worker well-being is a scarcity of comparative research. There is a great deal of heterogeneity across workplaces and work groups – potentially producing vast differences in the labor process with implications for inequality across and lived experience of workers. However, the literature is thus far marked by a scarcity of comparative research on how control techniques vary across relevant dimensions such as occupation, with implications for variation in outcomes by class race and gender.

Research on the labor process has historically concentrated on manual and mostly male work settings. Yet, observers have long noted that diverse demands of the actual work tasks and the class composition of workers likely produce variation in control mechanisms across sectors of the economy (Thompson 1989). Both Edwards and Burawoy suggested that labor process varies by labor market sector. Yet no systematic
analysis has been undertaken to determine whether this is the case. Most conclusions about control are derived from case studies of manual work – a declining sector of the U.S. economy.

Compared to manual work, we know little about control in other sectors of the economy, or across even the most distinct industrial divides. To date, no study offers a systematic comparison of control in service occupations, or across goods- and service-producing industries (McCammon and Griffin 2000). Nor has research generated a comprehensive account of control in the professions. It is worth discovering whether the insights generated from study of manual work settings apply to other industrial sectors, especially as manufacturing jobs move overseas and the service sector expands. Yet, attempts to study professions or the service sector with concepts so intimately tied to manufacturing can be awkward, and leaves little room for features of those settings that are not present on the shop floor, such as customers and intrinsic interest in the work, which may dominate control in other sectors. Despite some parallels, control mechanisms are likely to vary across sectors, with certain elements or combinations of control dominating on one or another. Recent ethnographic accounts of control in the professional and service sectors demonstrated the utility of some existing theory, but also highlighted forms of control unique to these sectors including features of colleague and customer interaction (Kunda 1992; Obgonna and Harris 2002b).

Even within sectors, variation in control is apparent. For example, some service sector work, including fast food, is characterized by control structures akin to those of manufacturing, such as deskilling, automation, and direct supervision (Reiter 1991). Other service work, such as bartending, may be marked by an absence of these attributes,
and the presence of responsible autonomy, with implications for worker well-being (Sosteric 1996). Manual work can also vary significantly in the nature of control, evident in comparisons between traditional assembly and team-based production. Another potential basis for variation in the labor process is the age, gender, race and class composition of work groups. Burawoy argues that work relations override external factors such as race and gender, at least for workers. This may not be the case for employers, who strategize with these very traits in mind. It has been suggested that class, race, sex and trade unionism shape consent at work (Thompson 1989). I argue that they may also influence employer strategies relevant to control.

Gender is especially likely to influence the nature of control. Despite an interest in how gender relates to control, research has shed relatively little light on how gender influences design and maintenance of control strategies (Smith 1994). And little is known about the role of gender in employee responses to modes of control – largely an artifact of the scarcity of comparative research. And yet there is good reason to suspect a direct and possibly reciprocal relationship between gender composition of work groups and worker control, as well as gender variation in the relationship between control and worker outcomes for women and men. We also know that unionism impacts whether employers incorporate new technologies in ways that enhance or restrict the exercise of skill (Kelley 1990). Insights from other substantive areas may aid us in linking the demographic composition of workers to strategies of both employers and employees.

Comparative research on implications of the labor process is largely limited to the work of Blauner (1964), Hodson (1996, 2001a) and Schwalbe (1986). Schwalbe (1986)
drew from Marx and Mead to reveal connections between the nature of work and the experience of alienation, and illustrated broad differences in these experiences based on class-related occupational divides.

While it does not explicitly explore class, gender, or racial differences, Hodson’s work provides the most comprehensive comparative investigation linking the labor process to a range of dimensions of worker well-being, including psychological and behavioral outcomes. This work examines outcomes in workplaces distinguished by their dominant mode of control. In 1996, Hodson revisited Blauner’s Alienation and Freedom, adding insights of subsequent contributions of labor process theory. Using quantitative data culled from 86 qualitative ethnographic studies, he compares workplaces characterized by craft control, direct supervision, assembly lines, bureaucratic organization, and worker participation on outcomes that are both task-related (job satisfaction, pride, insider knowledge and effort bargaining) and co-worker related (solidarity, peer training, and social friendships). He followed Blauner and Edwards in portraying these as evolutionary stages in worker control, and charted their effects. His results were not inconsistent with Blauner’s evolutionary hypothesis, although his end stage was worker participation and not continuous process technology. Task-related outcomes formed a backward J – they were highest under craft, declined in direct supervision, assembly line and bureaucratic control, then increased under direct supervision. Effort under worker participation actually surpassed effort under craft. Co-worker relations had similar tendencies, but the improvements under worker participation were far smaller. Assembly lines consistently had the worst outcomes.
Hodson’s (2001a) book, *Dignity at Work*, built on these findings with further comparisons of workplaces characterized by their dominant mode of control (comparisons were made between workplaces characterized by craft control, direct supervision, assembly lines, bureaucratic rules, teams, and professions), using more cases, and with outcomes associated with workplace citizenship and resistance. These may be characterized as elements of worker well-being because of their relationship to dignity at work. Citizenship an expression of dignity at work, and resistance is a means to reclaim dignity denied in production. Outcomes were consistent with those presented in the earlier piece, and analysis investigated some of the mechanisms involved. Resistance and citizenship trends demonstrated some of the lowest levels of worker well-being under assembly lines (because of the extreme division of labor and overwork) and direct supervision (because of the heightened potential for managerial caprice and abuse). Bureaucratic procedures as the dominant mode of control also increase resistance and reduce citizenship. Craft, team, and especially professional work have far better outcomes.

While these studies offer the most complete comparative evidence regarding the implications of the labor process for worker well-being, Hodson’s intent was not to advance labor process theory. Rather, it was initially to test Blauner’s claims against available evidence, and then to build a theory of dignity at work that drew from, but was not premised on theory of the labor process. Although this work does not synthesize a model of labor process theory, or divide modes of control into elements allowing for investigation into diverse combinations of control, it provides a roadmap for comparative research with these objectives, and illuminates some of the mechanisms intervening in
the relationships between modes of control and worker outcomes. Moreover, in revealing patterns evident among certain occupational groups – professionals, for example – he provides a starting point for understanding occupational, and thus class, divides in the nature of control.

**Theoretical Synthesis and Extension**

The current study constructs a synthesized model of the labor process simultaneously incorporating generalizable concepts, theoretical linkages, and emergent processes having to do with combinations of control, and tests it using comparative techniques intended to reveal variation in the labor process and worker well-being along lines of class, gender and race. The remainder of this chapter outlines methods of control and theoretical expectations associated with them, and reviews some key findings helping to reveal the potential influence of particular combinations of control techniques. Many of these expectations are drawn from relatively recent qualitative work on worker control and worker well-being.

**Dimensions of Control and Theoretical Expectations**

The first requirement for theoretical synthesis is identification of elements of control and expectations based on theory and evidence culled from classical and contemporary research. This study breaks down control strategies into measurable elements that can be conceived of as acting independently, simultaneously, or in concert to produce worker outcomes. Particular care is taken to include control techniques more apparent in the professions and the expanding service sector, extend the theoretical and empirical scope
of the model, which might otherwise be biased toward manual contexts. I draw from benchmark labor process literature, more recent qualitative evidence (especially regarding how control techniques may be combined in workplaces), and the limited available comparable evidence to build a model embedded in existing theory and research.

Direct Supervision

Direct supervision has typically been characterized as a passing form of control, but it has retained a significant role in controlling workers, and indeed has been expanded as firms pass supervisory functions onto customers and, indirectly, to coworkers. Studies typically characterize direct supervision as negative for worker well-being for two reasons. First, it represents control unmediated by more impersonal influences, such as technology and bureaucracy, which may serve as a buffer against injurious managerial practices associated with supervisors’ personal proclivities or defects. Indeed, direct supervision as the dominant form of control hampers workers’ efforts to achieve a meaningful work experience, reduces worker cooperation, and increases resistance activities – largely because unilateral managerial fiat is frequently companied by abusive behavior and chaotic arrangements, which threaten workers’ dignity (Hodson 2001a). Indeed, perceptions about overall treatment by management, including nonsupportive supervisors, have been shown to produce a greater tendency for workers to see themselves in opposition to management and to support a strike, compared to other, seemingly more consequential aspects of work, including task complexity, authority and freedom of movement (Vallas 1987).
Direct control by customers may be especially prone to producing abuse, particularly in cases where customers perceive their supervisory function. The travel industry promotes itself heavily as purveyors of smiles, service, and customer satisfaction. Employees in firms providing travel and lodging services spend a great deal of time with customers, and are subject to frequent and extreme forms of abuse, including verbal batter, threats of physical violence, and requests for sexual attention (Guerrier and Adib 2000). Such indignities produce sensations of powerlessness and discontent among workers, reducing consent and promoting resistance.

At times, customers and supervisors work in tandem to abuse workers. When new management took over in a nightclub formerly characterized by a great deal of worker autonomy and introduced control via direct supervision, abuse by both managers and customers (both very rare prior to the change) escalated. Customers knew the power they wielded and used it against servers. “I could be the worst person in the world to you, the worst bitch. You still have to serve me. And if you don’t, they go running to the manager. You know how many times people run to the manager? . . . . (If) it gets to Karren, then (she) immediately comes over and gives you shit. Right in front of everybody.” (Sosteric 1996: 313). One customer picked up a server and held her in the air while she screamed for a doorman to help. Workers in this environment felt deskillled and demoralized by the use of these control techniques, and viewed their introduction as indicators of extreme incompetence on the part of management. Virtually all withdrew cooperation and subverted managers, and many quit, some with lively displays of resistance in retaliation against both the establishment and its customers.
Supervision also demeans workers who feel infantilized by the experience. Constant monitoring and measurement destroys initiative and produces alienation (Erikson 1990). Likewise, absence of direct control promotes sensations of pride and citizenship (Hodson 2001a). One auto assembly worker formerly controlled via direct supervision remarked that, “I like the fact that I’m considered man enough or adult enough or responsible enough to come in and do my job without having somebody breathing down my neck,” and “They don’t have to hire somebody to make sure that I’m doing my job…. It’s a lot more relaxed than having somebody with a tie cracking the whip” (Shaiken, Lopez and Mankita 1997: 35).

Direct supervision thus leaves little room for exercise of autonomy and creativity, with grave implications for sensations of powerlessness at work, and leaves workers open to the potential for abuse (Hodson 2001a). Direct supervision is thus likely to have negative implications for all dimensions of worker well-being. It can be expected to increase workers’ risk of powerlessness and worthlessness, to lead to withdrawal of consent, and to produce resistance. Other forms of control could mitigate or intensify these effects.

**Automation**

The effect of automation is difficult to disentangle from that of segmented work because the two concepts were bound to one another from the earliest days of labor process theory. The expectation of linkages between these elements of control is not unreasonable, given that Fordist mass production – a form of control repeatedly shown to have devastating effects of worker well-being – is characterized by the combination of
automated assembly lines and Taylorist segmentation of work. Yet, automation and segmented work are not inextricably bound. Clearly, the exercise of skill may exist both apart from technology and in conjunction with it, and technology plays important roles in both narrow and complex work. Blauner understood that automation does not necessarily deskill work. But automation has not evolved away from assembly lines toward continuous process production to the degree he imagined it would.

One strain of research pursuing the technology-skill relationship pitted Blauner’s expectation of evolutionary upskilling against Braverman’s argument that capital would increasingly deskill workers by segmenting and automating their tasks. But, as described above, the theories emphasized different causal phenomena. Blauner addressed implications of skill for workers’ exercise of freedom and meaning in work, but he did not address behavioral outcomes. Braverman did not consider such micro-level outcomes, but rather focused on more macro-level implications having to do with workers’ power relative to capital. Subsequent empirical research has revealed that neither evolutionary claim was wholly correct, and that the effects of technology are often dependent upon other contextual features of work.

A second strand of research more useful for my purposes is Hodson’s (1996; 2001a) comparative studies addressing outcomes for workers under distinct dominant modes of control. This work reveals extraordinarily poor outcomes for assembly line workers, indicating a lack of meaning, pride and satisfaction, withdrawal of consent, and participation in whatever resistance strategies are available to them. Although these studies are extraordinarily useful for indicating outcomes that may be expected where automation and segmented labor intersect, understanding their potentially unique effects
requires teasing apart the concepts and incorporating them into a model allowing room to consider their individual and combined effects.

I retain this work’s emphasis on automation – an enduring theme from Blauner’s overarching ideas about technology more generally. Automation alone may have positive or negative implications of worker outcomes. It can perform difficult or boring aspects of the work, thereby improving workers’ experience on the job (Form 1987; Hodson 2001a). Even so, it could negatively impact workers by diminishing their physical contact with the objects of their production (Zuboff 1988).

A more common perspective characterizes automation as doing the bulk of the work, absorbing the worker as a subordinate to its own function. In this context, automation would produce an experience in which the brain is disengaged in order to do work emptied of content (Erikson 1990). The result is temporary removal of the worker’s personhood, and alienation in the classic Marxian sense. If subject to speed-ups, this form of automation could produce work that is especially devastating to well-being, by simultaneously requiring that workers disengage their brains while paying constant attention. From this example, it should be apparent that automation may have a singular effect, but its overall implications for worker outcomes are even more likely to hinge on whether and how automation is combined with other elements of worker control, and particularly task segmentation. Specific expectations regarding combinations of labor process attributes will be addressed in later sections of this chapter. However, automation in general is expected to produce poor worker outcomes, especially with regard to alienation and consent, but also with some forms of resistance, contingent
upon workers’ freedom to engage in them. For example, workers posted at a machine may be able to withdraw consent, but may not be able to avoid work, because it would be so quickly detected.

*Task Segmentation*

As described in Chapter 2, bureaucratic control includes both constraining and cooperative techniques. Task segmentation is one form of constraining bureaucratic control. This form of control was emphasized by Braverman, and is characterized by separation of planning and execution and subdivision of tasks as dictated by Taylorist scientific management, and exercised, along with assembly line technologies, under Fordist mass production. Braverman predicted that capital would increasingly segment production in an effort to deskill, and thus disempower workers. As described in the previous chapter, craft skill persists, and other tendencies have emerged, including market pressure to offset the deleterious effects of segmentation for quality by reconstituting avenues for worker contributions. Moreover, the manual work – the sector most amenable to scientific management schemes – has shrunk relative to the professions and service sector, many (though not all) of which entail activities that are not as amenable to segmentation. Task segmentation is nevertheless apparent. However, little comparative research is available to examine the effects of segmentation apart from potentially emergent effects of segmentation combined with automation in assembly line environments. Yet, if we conceive of assembly as extreme division of labor, we can again look to Hodson’s (1996, 2001a) account of assembly lines for expectations regarding narrowly subdivided tasks.
Unlike automation, it is difficult even to imagine any positive implications of task segmentation for worker well-being. Indeed, it may even be possible to attribute the deleterious effects of assembly lines, and many of those associated with bench assembly (notwithstanding the presence of direct supervision), to narrowly divided labor. Because segmented work reduces the scope of decision-making and makes it difficult for workers to understand or feel a part of production as a whole, it alienates workers from the product of their labor. Task segmentation is thus expected to produce feelings of alienation, to inhibit consent, and to promote resistance.

**Rules**

A second form of constraining bureaucratic control is written rules, specifications and targets. These are pervasive – crossing industrial, occupational and demographic segments of the workforce – and effective. Sanctions for noncompliance are an important factor in producing consent and resistance (Tenbrunsel and Messick 1999). Yet, even in the absence of direct disciplinary consequences for noncompliance, the symbolism of close attention being paid to workers’ behavior is enough to encourage compliance (Edwards and Whitston 1989).

The implications for worker well-being are less clear. Written procedures have been found to increase satisfaction with some aspects of Dutch physicians’ jobs, for example, but only among those who had helped to write them (Stevens, Philipsen and Diederiks 1992). Those same procedures did not enhance satisfaction among medical residents in that setting. The constraining control inherent in bureaucratic rules and procedures also appears to produce dissatisfaction among workers by inhibiting their
capacity to find overlap between organizational goals and their own (Adler and Borys 1996). Indeed, where it is the predominant form of control, bureaucracy impedes the exercise of skill, autonomy and creativity, and reduces satisfaction, pride and effort (Hodson 2001a).

Reliance on rules for worker control could potentially benefit workers by streamlining production to some degree, and they may shelter workers from other, more oppressive forms of control, such as direct supervision or task segmentation. On the other hand, bureaucratic control may remove human rationality. Incongruent expectations may produce a sense of powerlessness and meaninglessness, with potential behavioral outcomes. Bureaucratic requirements calling for the appearance of a streamlined production process (such as a tidy office space), but lacking any consequence for efficiency, for example, produced apathy, frustration and conflict in a white-collar environment (Donald 2001). When workers in this setting lacked storage space for the items they were told to keep out of sight, they became angry. Restricted access to necessary equipment also frustrated workers simply eager to do a good job (Becker and Steele 1995).

Even without particular rules in place, targets directing workers can produce stress, fatigue and dissatisfaction, especially when combined with rules dictating use of scripts and particular interaction styles (Deery, Iverson and Walsh 2002). Rules dictating particular emotional displays can be particularly troublesome for workers in service settings. They regularly invite unwanted, forced intimacy that underscores workers’ relatively low status. Rules prescribing such displays led to a “smile strike” among clerks in a grocery story (Fineman 2001). This example demonstrates both how rules
may prompt resistance, and how easily some workers can resist the control of rules. Resistance is indeed common among workers primarily controlled by bureaucratic procedures (Hodson 2001a). At the same time, resistance is not always destructive. Workers sometimes resist this form of control in order to do a better job (Bolton 2004).

In general, rules may be expected to contribute to poor worker outcomes, but should not produce them to the degree that direct supervision, automation, and task segmentation do. Moreover, to the degree that they replace these more oppressive forms of control, they may offer workers a measure of protection, which may help to mitigate their generally negative impact on worker outcomes.

**Career Ladders**

Cooperative bureaucratic control techniques represent efforts to solve the dysfunctions of constraining bureaucratic control and other coercive techniques though the use of mechanisms that enlist the active cooperation of workers. Career ladders are one example, involving extensive on-the-job training and bureaucratic links to higher organizational positions. Although their implications for psychological responses to work have received little theoretical attention, it has been suggested that manual workers who gain on-the-job skills qualifying them for other positions gain a greater sense of how their work fits with that of others and into the production process as a whole (Wedderburn and Crompton 1972). Career ladders could thus be expected to reduce the degree of meaninglessness on the job. Moreover, because learning skills suggest using skills, it is possible that career ladders could also reduce workers’ likelihood of powerlessness.
More commonly, career ladders are characterized as having implications for workers’ behaviors. While little research has systematically linked the presence of career ladders to worker outcomes, it is apparent that many (although not all) workers exhibiting high levels of consent and low levels of resistance also have access to some of the longest and most elaborate career ladders, while many workers with poor outcomes have almost none (Hodson 2001a). The dominant sociological explanation emphasizes their capacity to reduce resistance and promote consent (Edwards 1979). They do so by altering the premise underlying workers’ decision-making – encouraging proactive behavior by establishing incentives that align workers’ interests with those of the firm. Achieving this degree of control involves normative, or “hegemonic” control (Burawoy 1979). An alternative, but complementary explanation may be developed from ethnographic evidence describing workers’ unwillingness to protest conditions if they feel that it may factor into their selection for receipt of further training for more skilled positions (Roger 1983).

Generally, however, career ladders are expected to improve worker well-being, particularly by increasing consent and reducing the likelihood of participating in resistance, and especially work avoidance, because they ostensibly reward workers for their efforts. At the same time, it is necessary to consider context. In some cases, career ladders may have been established in response to resistance to poor working conditions, as an attempt to enlist the effort of unhappy workers (Edwards 1979). If so, we may be less able to see their positive impact on the experience of work, or on workers’ behaviors.
**Worker Input**

Labor process theory argues that allowing workers at least some degree of decision-making enhances control over their activities. Communicating to workers that the organization cares about their input is argued to increase loyalty and reduce resistance, largely by promoting satisfaction (Friedman 1977). Burawoy (1979) argues that allowing workers a degree of flexibility to direct their own activities also leaves room for them to surpass organizational productivity requirements with schemes they orchestrate to promote economic returns, but especially psychological satisfaction.

Worker input is apparent in situations where employers make workers responsible for some or all of the organization or quality of work. It is most apparent in work that may be characterized as craft and professional work, and in manual settings organized around team production. Craft and professional settings are marked by outcomes associated with worker well-being, including meaning, job satisfaction, pride, autonomy, creativity, and freedom of movement (Hodson 2001a). Additionally, workers under craft and professional organization of work demonstrate high levels of consent, and professional control is associated with low levels of resistance (Hodson 2001a). There is also evidence that service providers with nearly complete control over the organization and quality of their own work also exhibit a great deal of consent (Sosteric 1996).

Team-based production arrangements give manual workers in non-craft settings an avenue for input. They are thought to produce meaning by making room for workers’ thoughts and problem-solving skills in production settings that might otherwise be characterized by the divorce of mental and physical production roles, and to generate consent and limit resistance in part by communicating to workers that the organization
values their input. Worker participation thus has been likened conceptually to Blauner’s continuous-process automation, in that it generates worker cooperation and effort by replacing routine, fragmented tasks with decision-making and problem solving (Lincoln and Kalleberg 1985). This viewpoint is consistent with evidence that the upswing in Blauner’s U-shaped curve of freedom and meaning in work may be realized to some degree through participatory work structures, and that participation improves outcomes associated with meaning, consent, and to a lesser degree, resistance (Hodson 1996; 2001a).

Craft and professional workers clearly have a great deal of input in the organization of their own work; but while team-based participation regimes provide an avenue for input among assembly workers, researchers debate the degree to which participation actually asks for and uses worker input, and the actual implications for the work. That workers want to contribute, and are dissatisfied and withdraw consent when firms provide no avenue for their input, is clear. An assembly worker in a setting that does not provide for worker input remarks, “I had lots of ideas I could suggest but I have given up. If management doesn’t want to draw on my many years of experience, I will say nothing. I’ll do just the least amount I can get away with without being disciplined. I’ll take my paycheck and forget about the job.” (Guest 1983: 148-149). Although this comment does not provide any indication of the man’s psychological response to work, it is reasonable to presume that having “given up” trying to make his voice heard, and resolving to “forget about the job” are associated with sensations of powerlessness and meaninglessness at work.
To what degree do team-based participatory work structures represent a divergence from hierarchical control based on scientific management? Many claim that TQM does not challenge the tenets of scientific management, but rather adapt it to demands of the modern market and workforce (Wardell 1999; Warner 1994). Management does not adopt all aspects of TQM wholesale, but rather integrates select practices filling very specific needs (Zbaracki 1998). Clearly, participatory practices do not challenge hierarchical control. Indeed, a former director of personnel for a UK Nissan production facility estimated that even given integration of participatory decision-making, ninety-five percent of assembly line workers’ activities were prescripted, leaving little to worker discretion (Smith and Thompson 1999).

The substance of discretionary activities is also a matter under contention. Some argue that teams do not improve the nature of the work, but rather simply increase the number of unskilled tasks workers perform (Parker 1993). It is true that despite enrichment and enlargement of jobs, assembly tasks in participative environments remain fragmented, and workers remain vulnerable to speedups (Graham 1993). Moreover, workers’ input is often limited to less consequential aspects of production arrangements. One quantitative study of relative decision-making power demonstrated that teams did not have full autonomy in any of the nine task domains under investigation, but that they did exercise a degree of autonomy over matters such as work distribution, quality, selection of representatives and, to a lesser degree, production method (Murakami 1997).

On the other hand, teams represent a break from increasingly narrow confines of discretion. Workers may not have full autonomy and their skills may not be greatly expanded, but they are monitoring themselves and gaining skills in communication and
cooperative problem-solving and decision-making (Smith and Thompson 1999).

Perhaps more importantly, workers perceive a sense of trust, reciprocity and justice from participation in such matters, and achieve dignity in doing work without direct supervision (Kochan and Osterman 1994; Shaiken, Lopez and Mankita 1997). Consequently, team-based work settings produce the highest levels of satisfaction and pride (compared to work settings in which other control techniques dominate), and participative work settings in general promote skill, autonomy, creativity, and freedom of movement, while protecting workers from the abuse and mismanagement that often accompany direct supervision as the dominant worker control technique (Hodson 2001a).

Participation does not reduce pace, and is actually argued to intensify work, but the psychological returns to autonomy and self-organization allow workers to ignore intensification of their labor (Knights and McCabe 2003).

Positive psychological outcomes of participative work translate into increased consent. When workers sense that their input matters, they take “ownership” of their positions and the objects of production, enhancing effort (Milkman 1997; Vallas 2003a). While these sensations may fade with time, there is no question that the initial implementation of participatory control techniques enhances effort (Milkman 1997; Vallas 2003a). Many workers feel that the additional training imparts skills that benefit them both on and off the job (Milkman 1997; Smith 1996). In some cases, employers encourage these preoccupations with efforts to convince employees that job security is their own responsibility – resting on employees own efforts to secure training and establish future employability for themselves (McCabe 2000).
Drawbacks to the implementation of participation sometimes mitigate or offset potential benefits for satisfaction and consent. Firms sometimes introduce participation with a threat of job loss via innuendo regarding capital flight and outsourcing (see Gartman 1999) also prompt dissatisfaction with management. In this context, the benefits of participation are viewed as part of an overall attempt to recruit support for production arrangements that would intensify work while removing protections, such as career ladders and seniority rules (Hodson 2001a). Workers with such perceptions cannot be as enthusiastic about storied benefits of participation. Threats of job loss, persisting hierarchy, and distance from management actually increased service industry workers’ sense of powerlessness, when management introduced initiatives to generate employee “involvement” in production (Edwards and Collinson 2002).

Other threats to the benefits of participation have to do with the degree to which it lives up to its promise. Turkish production line workers felt that participation improved their work, and exhibited a great deal of consent. On the other hand, they also expressed dissatisfaction with patronizing “choices” about matters with obvious solutions, such as where to locate a machine when there was a single, obvious answer (Yildirim 1999). Workers’ positive psychological responses to participation, and their enthusiastic acceptance of its tenets leave management open to a great deal of dissatisfaction and withdrawal of consent by workers questioning the degree to which management allows them to participate. Those who have gained some influence over decision-making usually come to desire more control (Collom 2003). And management’s disinclination to increase the scope of decision-making counteracts the benefits of participation for proactive behavioral worker outcomes. To illustrate, participative efforts were effective
in securing commitment in the UK between 1992 and 1997, but management’s reluctance to increase the scope of participation offset these increases, for a zero net increase in commitment during that period (Gallie, Felstead and Green 2001).

Many researchers argue that the potential for resistance is eliminated (or nearly so) by the “concertive” control of vertical and horizontal surveillance, and the “electronic (or information) panopticon” (Barker 1993; Sewell and Wilkinson 1992; Webster and Robins 1993). Rates of resistance are highest in workplaces lacking any form of participation, and are modestly lower where workers do engage in certain forms of participation (Hodson 2001a). One reason is that firms using control techniques based on worker input frequently recruit on the basis of whether prospective employees are likely conform to normative expectations in a participative context. These begin with elaborate, multi-stage testing and orientation procedures (Graham 1993). Training often extends past the initial stages of employment – reinforcing an emphasis on loyalty, enthusiasm and peer group conformity, and discouraging criticism as breaches of the collective spirit. These tactics are often tremendously successful - producing a work groups that closely identify with the goals of the firm (Lowe and Oliver 1991).

Firms introducing participative techniques to production arrangements in work settings populated by existing employees cannot rely on this technique, and are subject to resistance stemming from mismatch between participatory rhetoric and managerial action, and workers’ perception that participation represents efforts to intensify their work (Kraft 1999). Contradictions between promises made in selling participation and the subsequent practice may be especially infuriating to workers who believed that participation would substantially alter their work situation. In an auto manufacturing
facility, the goals and benefits of participation were heavily promoted among workers, whose optimism and enthusiasm quickly turned to heightened disgust with management, when it became apparent that the firm was uninterested in their ideas and supervisors reverted to their abusive, top-down managerial practices (Milkman 1997).

Workers also easily recognize that participation is accompanied by intensification. Team members frequently describe themselves as working harder, not smarter, mentally and physically under lean production (Stewart and Garrahan 1995). But resistance to intensification is often more subtle than overt, and tends to fall short of what would result in discipline – perhaps because workers in participative environments have less union-provided job security, or because oppression is not severe enough to warrant more overt resistance. Auto assembly workers in a team-based production facility resisted intensification by failing to participate in rituals such as morning exercises, refusing to adopt relatively minor changes in policy representing increases in work loads at the beginning and end of shifts, and interrupting production were it is possible to do so without being detected (Graham 1993). Workers in another context were described as “actively disengaging” by avoiding work or playing dumb, while offering just enough compliance to avoid discipline (Fleming and Sewell 2002). Workers may resist intensification in even more slight ways, such as a crowbar production worker’s refusal to “see the big picture” and use the word “business” in place of “product”: “I have nothing whatever to do with the ‘business’ crowbar. It is the marketing side which has to do with the business. . . . I am not interested in getting closer to the market. I have enough to do as it is.” (Alvesson and Willmott 2002).
Despite these disadvantages to worker input, this mode of control is expected to benefit workers by reducing the likelihood of negative psychological responses to work, and especially by increasing consent and reducing work avoidance – mostly for the reasons cited by Friedman. At the same time, because input is frequently accompanied by intensification, and because it increases workers’ expectations relative to their actual role in production, it may also be associated with frustration, and resistance activities. Moreover, assembly workers subject to most of the more oppressive forms of control are sometimes given a measure of input as a result of market-based pressures to compete with firms whose productivity has soared in response to a participative regime, rather than out of any true interest in workers’ contributions. Workers who desire the input they are often promised, but who sense a mismatch between employers’ words and deeds with regard to taking their input into account, may become even more dissatisfied with their jobs and management – prompting heightened interpersonal objections to management (Milkman 1997).

*Consistency of Effects across the Range of Dependent Variables*

In sum, supervision, automation, rules and task segmentation are top-down controls and are generally expected to impair worker well-being – especially with regard to the psychological experience of work. Direct supervision subjects workers to managerial abuse and caprice. Automation may take over routine or dangerous aspects of work, but are perhaps more likely to subordinate workers to their own function. Task segmentation reduces the scope of work, and limits the exercise of skill. All of these are expected to increase the likelihood of powerlessness and worthlessness. Rules, specifications and
targets are also generally expected to have a negative impact on worker well-being because they limit self-direction and are sometimes responsible for a great deal of pressure. On the other hand, they are typically less oppressive than the other top-down forms of control, and they may provide a measure of protection from alienation. Cooperative bureaucratic controls, including career ladders and especially worker input, are expected to have the reverse effect – limiting powerlessness and worthlessness by infusing work with a degree of self-direction and meaning.

While the implications of control techniques for psychological outcomes are straightforward, their consequences for behavioral outcomes are more complex. Psychological responses should generally be correlated with behavioral responses. However, resistance and withdrawal of consent may not follow from alienation for two reasons. First, while alienation may dampen the desire to cooperate, pressure exerted by these control techniques may obstruct avenues for resistance, or perhaps channel them into a few specific forms. Automation and direct supervision, for instance may exert such control over pace that workers cannot avoid work. Yet, it leaves open the option to participate in more formal, organized opposition or loathing management. Task segmentation may produce alienation, but its impersonal form may obscure its source (limiting workers’ capacity to pinpoint a target for resistance). Alternatively, workers performing segmented tasks have little skill-based leverage to make demands on employers, and they may be afraid to try – especially when supervisors threaten them with the ease with which they could be replaced (for example, see Juravich 1985).

Workers under the control of rules, especially when they are not subject to other forms of control, may be uniquely capable of avoiding work if they are so inclined,
because additional social controls are typically required to ensure that rules are carried out (Ferner 2000). At the same time, it is possible that having access to this outlet would discourage more overt and targeted forms of resistance. Because career ladders and worker input align the interests of workers and management, they may generally be expected to increase consent and reduce the likelihood of resistance, but this will not necessarily be the case. They may actually be associated with lower levels of satisfaction and cooperation, especially where they represent efforts to placate workers in oppressive settings, or where workers perceive a mismatch between managerial words and deeds.

Second, other factors apart from the nature of work may intervene in the relationship between control and behavioral outcomes, preventing alienation from translating into resistance or withdrawal of consent. Coworker relationships, workers’ efforts to validate themselves at work, degree of class consciousness, and fear of unemployment are all factors that may diminish resistance or enhance consent, even in cases where control structures produce great psychological distress. Loyalty to coworkers who will have to pick up slack in the production line may check an unhappy worker’s tendency to avoid work, and may even manifest as consent in the form of extra time and extra effort to get the job done (Roberts 1994). The desire to gain personal validation from work may also prompt workers to engage in practices associated with consent, while discouraging work avoidance. Workers lacking class consciousness are especially unlikely to engage in organized opposition to management. They may have difficulty pinpointing a target at which to direct their dissatisfaction, particularly in cases where the source of alienation is obscured. Fear of unemployment would have particular influence on workers, especially in tight labor market conditions.
We should therefore expect to find the strongest relationships between control techniques and psychological outcomes. While behavioral responses should demonstrate parallel patterns, they should also reflect variation in the nature of work and, perhaps, in the class, gender and race groups populating work groups. For example, if women or minorities are less likely to engage in organized opposition because of more congenial personal styles, as they are often presumed to be – these patterns should be apparent in the analysis.

Combined Control Techniques

The second requirement of theoretical synthesis and extension is acknowledging that control techniques coexist not only in time, but also in place, with potentially emergent implications for worker well-being. The literature tends to focus on one kind of control or another, to the exclusion of others. However modes of control coexist and may be correlated or systematically combined. Indeed, if jobs are “packages” of characteristics (Kahn 1981), the labor process is likewise a “bundle” of control structures encountered at work. And their effects are likely to be more than the sum of their parts. Rather, emergent properties of particular combinations should matter for workers’ experience. Teasing apart the effects of individual worker control mechanisms is possible, but may not be the best solution for understanding how the labor process shapes worker well-being, and how these processes play out in actual workplaces. Revealing how control techniques are combined systematically and interact to structure worker well-being is perhaps the most significant contribution of this study. But qualitative studies, and especially ethnographic research, provide important roadmaps: pointing to particular
combinations, and illustrating how distinct control techniques come together to shape the work experience, and thus worker well-being, in actual workplaces. In the remainder of this section, I review some of what research has previously revealed about the influence of these combinations for worker well-being.

*Automation and Task Segmentation*

Automation and task segmentation are control techniques clearly combined in workplaces. Assembly lines are a notorious example, and studies have demonstrated that they are consistently associated with many of the worst worker outcomes across considerations of alienation, consent and resistance. Benchmark theories provided important indications of potential implications of assembly lines, but were not presented in a way that promoted thinking of them as separate techniques functioning in combination. Blauner (1964) envisioned the assembly line as a technological stage in a single, evolutionary path toward continuous process production. Braverman (1974) envisioned assembly lines as a perhaps final stage in a tendency toward separation of planning and execution, and ultimately, degradation and disempowerment of labor. Edwards (1979) also envisions assembly lines as a stage – not in technology or the division of labor, but rather in the *form* of control emerging out of a battle for control over a contested workplace terrain. In this model, the assembly line plays an important, but passing role in the evolution of control, which moves in time in the direction of hegemonic, bureaucratic techniques.

Neither theory is sufficient alone. Blauner was correct to view technology as a significant factor in worker outcomes associated with freedom and alienation, but his
model was incomplete. Making explicit conceptual room for the division of labor might have resulted in a model in which technology and complexity come together to influence the nature of work and worker outcomes. Nor can complexity fully account for implications of assembly line work, since a hectic pace and overwork – both made more possible by mechanically manipulating line speed – are significant factors in outcomes. Thus, automation and task segmentation are perhaps best conceived of as separate components of worker control that may be combined with one another and/or with other forms of control to shape an array of worker outcomes. Automation is likely to enhance complex work – removing routine aspects of production and replacing them with autonomy and meaning, much as Blauner described the effects of continuous process production. Its implications for segmented tasks are likely to be very negative – heightening the experience of powerlessness and meaninglessness, reducing consent, and increasing resistance to the degree that workers have enough discretion to engage in it.

The intersection of task segmentation and automation in assembly lines simultaneously remove the mind’s function while occupying the body. This combination arguably renders this type of work unfit for most human work force participants. What’s worse is the combination of speedups with specialized overload (repetition of few, but demanding tasks), which alone is enough to induce stress with physical manifestations apparent in heart rate and blood pressure (Kahn 1981). Work-centered outcomes are apparent as well. The earliest assembly lines were rife with resistance in the form of stoppages, absenteeism, quitting, walkouts and strikes in response to the repetitive, boring nature of the work. Ford’s renowned “Five Dollar Day” was indeed a payoff intended to stem mounting resistance to his automobile assembly lines (Gartman 1999).
Recent research has revealed that assembly lines produce overwork and stress, and are a significant source of powerlessness, meaninglessness, erosion of consent, absenteeism, quitting, informal resistance activities and strikes (Hodson 2001a). Because they are also frequently under direct supervision, assembly workers are often subject to abuse and mismanagement, which further devastates worker well-being.

*Direct Supervision and Rules, Specifications and Targets*

Another combination evident from workplace studies is direct supervision with rules, specifications and targets. These constraining bureaucratic controls necessitate some element of social control (either direct supervisions or normative pressure) to ensure that they are carried out (Ferner 2000). Many studies have documented this particular combination in service settings, presenting cogent evidence that its implications for worker well-being are a function of emergent qualities of the combination, rather than the sum of its parts. The fast food work is highly regimented. Workers’ activities and customer interactions are scripted, and rules are enforced with nearly constant direct supervision (Fuller and Smith 1991; Leidner 1993; Reiter 1991). Personal banking is another industry where a combination of rules and direct supervision is apparent, and customers may be enlisted to assist with supervision. In one setting, tellers were told to offer each customer a smile. Those who did not receive one were encouraged to take a dime from the bowl in front of the teller serving them. Tellers objected transfer of control over the transaction to customers (Austrin 1991).

A plethora of studies also demonstrates that the combination of scripts, quality assurance rules, and direct surveillance (sometimes assisted by technology) promotes
stress and resistance among workers in call-centers. They frequently combine scripts, rules regarding emotion work, procedures for handling calls, and targets for number of calls taken with direct supervision. Supervises often listen in for “coaching” purposes, and also rely on the assistance of computers (which quantify the number of calls handled over a given period of time), and customer, whose complaints serve as a measure of quality service (Callaghan and Thompson 2002).

Workers in these settings experience this combination of control techniques as stressful, with implications for their attitudes and behavior: “[The customer service representatives] are all different personalities, but they’re trying to mould them into a Telebank person. Like robots, and they’re always pushing, pushing, and if they keep pushing, I’ll be out of the door soon.” (Callaghan and Thompson 2002). Conflicting demands for both quality and quantity of service lead to frustration, exhaustion, and fatigue (Deery, Iverson and Walsh 2002). Stress translates to work avoidance, covert insolence toward customers (when supervisors are not observing them), collective denial of knowledge, absenteeism and quitting (Knights and McCabe 1998b; Mulholland 2004).

The combination of direct and rule-based constraining bureaucratic control may thus hamper worker well-being. On the other hand, supervisors who are supportive, who lead by example (in lieu of more oppressive behavior), or who are willing to sometimes overlook occasional rule violations may help to mitigate the negative implications of this combination for worker outcomes (Deery, Iverson and Walsh 2002; Ogbonna and Harris 2002a; Peccei and Rosenthal 2001).
Control techniques associated with worker input are frequently argued to be at least partially functioning as replacements for direct supervision. Indeed, participative techniques have been characterized as rhetoric that justifies restructuring management roles and squeezing middle management positions out of the production process and, consequently, further separating planning from execution (Hales 2000; Webb 1996). Participative workplaces do appear to reduce the probability of direct supervision, and thus render workers less subject to the devastating consequences of mismanagement and abuse (Hodson 2001a). Significantly, despite transfer of surveillance functions to coworkers and the “electronic (or information) panopticon,” workers in participative environments may perceive freedom from direct supervision, because of the mere absence of “somebody with a tie cracking the whip” (Shaiken, Lopez and Mankita 1997: 35). Despite persistence of hierarchy and limits to their actual influence, workers respond positively to input and to perceived reductions in supervision (Smith and Thompson 1999).

However, little is known about its effect in combination with other control techniques. The presence of other forms of control may mitigate its benefits for the experience of work. Nevertheless, worker input is frequently combined with use of, and even increases in monitoring and direct supervision (as well as constraining bureaucratic controls) (Herriot 2001; Webb 1996). Auto assembly work, for instance, can be structured around dual tendencies toward decentralization of decision-making (with strict rules for implementation) and visibility, allowing supervisors to streamline production by removing supply buffers and identifying disruptions and bottlenecks (Graham 1993;
Parker and Slaughter 1988). Moreover, observations made by management (or discerned from electronic surveillance) are shared with team members, who may intensify its effects (Sewell 1998; Sewell and Wilkinson 1992).

When workers perceive it as such, combination of input with direct supervision may produce dissatisfaction, resentment and animosity toward the firm. It is difficult for workers to reconcile the rhetoric of trust and participation with monitoring via direct supervision or customer feedback (Callaghan and Thompson 2002; Frenkel, Korczynski, Donoghue and Shire 1995; Korczynski, Shire, Frenkel and Tam 2000). Those who perceive a disjuncture between promises and practices are especially likely to resent the firm that, after touting the benefits of worker input, revert to abusive practices associated with direct supervision (Milkman 1997). Workers in this situation who are also subject to control via and rules, specifications and targets may be especially unhappy with work arrangements. Workers in flight call centers characterized by control via supervisor monitoring, emotion work requirements, monthly targets, and “empowerment” would, when hang up on customers, withhold information, and be rude or cold toward customers, especially those condescending to them or subjecting them to demeaning sexual innuendo (Taylor and Tyler 2000). On the other hand, input may also help to mitigate potentially negative effects of control via a combination of direct supervision and constraining bureaucratic requirements. For example, casino gamblers’ work is highly scripted and supervised, but the workers’ input in the quality of work requirement also allows for greater self-direction and satisfaction than is possible in other types of work that are both supervised and scripted, such as fast (Austrin and West 2005).
Comparative Research

Identifying generic types of control that may be applied to workers across time and place, and allowing for combinations of control in empirical models paves the way for a third necessity to advance labor process theory – comparative research. This is necessary for understanding how control and its implications for worker well-being varies across a diverse work force. Workplaces can vary dramatically, a general model such as the one proposed here allows for investigation into a broader array of work settings than is apparent in existing research on the labor process. For example, it is possible to investigate control and its implications in the often-overlooked professional and service sectors, along with differentiated accounts of control in diverse (i.e. participative vs. traditional) manufacturing settings. Indeed, this model could be applied to any workplace for which available data includes enough information on the nature of work to evaluate the presence or absence of the control techniques identified here.

Moreover, this model may be used to determine whether control and its consequences vary along lines of class, gender or race. In any case, certain types of combinations of control will invariably emerge as more significant than others. It is possible, and perhaps likely that prominent techniques will vary systematically, depending on occupational divisions (and thus social class), and the gender and race composition of work groups. There are clearly divisions in the nature of work along occupational lines, with consequences for class variation in the psychological experience of work (Schwalbe 1986). Professionals, for example, have more complex, self-directed and meaningful work, are less subject to direct supervision and abuse, and exhibit greater levels of consent, and less resistance than other types of workers (Hodson 2001a). They
also have the longest and most elaborate career ladders. Much less is known about
differences in control techniques by gender and race composition of work groups, mostly
because of lack of data from which to draw conclusions. However, given job-level
segregation by sex and race, it is more than reasonable to imagine that work groups with
differing sex and race composition are subject to different forms of control, with
implications for their outcomes.

But race and sex differences in the nature of control or its effects would have to
do with more than simply occupational segregation. Rather, processes associated with
structuring control, assigning individuals to jobs with a particular type of control, or
linking control and worker outcomes through micro-level processes may be structured by
gender and race inequality in the broader society. For example, Westwood’s (1984)
ethnography of sewers in a British clothing factory describes how women in the factory
were subject to more direct supervision compared to men, and a male supervisor of a
predominantly female work group explains his views on female versus male workers –
revealing that he is less abusive, but more patronizing of women, compared to his
practices with men. Likewise, Foner’s (1994) ethnography of nurses’ aides describes
how the aides’ minority status (all were members of a racial minority) influenced all of
their interactions with other groups (all of which were mostly white) in the nursing home
facility, including patients, their families, nurses, and top administrators. Minority status
affected the nature of the patient abuse to which they were subject, and the nature of their
response to abusive supervisory practices. From the frequency of reports, I also suspect
that minority status of work groups contributed to the frequency with which some manual
workers were subject to degrading no-talking rules in a number of work settings
(Devinatz 1999; Pfeffer 1979). The point here is that work groups’ gender and racial character are likely to emerge as significant in processes associated with control – whether they factor into the nature of control, into determining the population assigned to existing jobs, or the micro-level processes linking control to worker outcomes.

**Conclusion**

This study attempts to synthesize and extend theory of the labor process with a model linking generalizable elements of control, combined in workplaces, to worker outcomes indicative of their well-being. This model will help to develop an understanding of emergent processes associated with particular combinations of control, and their consequences for worker outcomes. It also allows for an investigation into the potential for class, gender, and racial variation in the nature of control, and in processes linking control to outcomes. Next, I describe my data, measures and analytic strategy, and present my results.
CHAPTER 4

DATA, MEASURES, AND ANALYTIC STRATEGY

My synthesized model of the labor process suggests that direct supervision, automation, task segmentation, bureaucratic rules, career ladders and worker input are distinct modes of control that may be combined in workplaces with implications for worker well-being. These issues have only received limited empirical attention, owing chiefly to the constraints on theoretical synthesis and growth and, perhaps more significantly, a lack of available data appropriate for investigating the phenomena.

As discussed in prior chapters, Blauner approached the relationship between the labor process and worker well-being as a research question. His analysis employed data from surveys on job satisfaction. Unfortunately, surveys are in many cases unsuitable for capturing the complex reality of work, as workers completing them may be unaware of influential organizational attributes beyond the shopfloor. Moreover, although individuals have a great deal of insight into their own work experiences (Kahn 1981), surveys may be incapable of penetrating through “layers of emotional scar tissue” between workers’ internal experiences and external consciousness (Erikson 1990). Where possible, it is best to have objective measures of the work context, and subjective accounts of the workers’ own experience.
Qualitative workplace research tends to provide information regarding both objective data on the work context and subjective accounts of the work experience. Ethnographers generally amass objective indicators of market, industry, and organizational attributes. Since they are frequently embedded in work environments alongside their research subjects, many also observe workers’ subjective responses, including psychological and behavioral dimensions that non-observational methodologies are less capable of capturing (Tope, Chamberlain, Crowley and Hodson 2005). Almost all studies relevant to consequences of the labor process for workers derive from ethnographic or other in-depth qualitative research on one or a few workplaces or work groups. Research of this sort provides a rich account of context, processes and outcomes in the work settings studied. However, these studies have only limited capacity to explain implications of control more generally, because the samples involved are narrow and select.

A quantitative study of this qualitative research provides a unique opportunity for a more general understanding of the labor process and worker well-being. Book-length workplace ethnographies provide detailed accounts of work process, which may be analyzed for signs of control techniques evident in theory of the labor process. They also provide thorough descriptions of organizational context, workgroup characteristics, and indicators of worker well-being and resistance. Together, the body of existing ethnographic research is a unique, in-depth account of workplaces revealing how control is used in a range of work settings, how control techniques are systematically combined, and how control mechanisms and/or combinations shape worker well-being.
Data

Data for this study are quantitative coding of the population of English-language, book-length workplace ethnographies representing at least six months of research in the field. There are hundreds of these, representing over 400 person-years of doctorate-level field research (Hodson and Roscigno 2004). Those suitable for coding were selected via a two-part procedure. First, the population of workplace ethnographies was identified via computer-assisted searches of archives, examination of bibliographies in located ethnographies, and exploration of library shelves around identified ethnographies. In the second phase of selection, each book was examined in detail. The purpose was to generate a sample of distinct work groups with data pertaining to their work setting and to their organizational and industrial context. Books not identifying at least one clearly identifiable work group in a single organizational setting were thus eliminated from the sample, along with those that were too short, ambiguous or thematic to yield useful data. For this study, those lacking data on relevant dimensions of control and worker outcomes were also eliminated, producing a sample numbering 141 cases, each representing a work group in as many distinct organizational settings. The full list of ethnographies included in the sample is presented in Appendix A.

A team of four researchers developed the coding instrument for the ethnographies. First, a list of variables and preliminary response categories representing core concepts in the workplace literature was generated. Second, the team members each read and coded a common selected ethnography, and then met to compare their respective coding and to discuss the retention or removal of items and the refinement of variables, response categories, and coding protocols. This process of reading, coding, and refinement was
repeated for eight selected ethnographies. The goal was to create an instrument that trained coders could complete for all ethnographies with maximum reliability.

Once the coding instrument was finalized, the full set of ethnographies was read and coded by the same initial team of four researchers, participants in a year-long graduate research practicum, and additional graduate research assistants supported through a National Science Foundation grant. All coders were trained to use a common protocol, and were instructed to rely on direct evidence in coding the data, disregarding knowledge of sociological research. For example, while research demonstrates that assembly lines are associated with low levels of pride, the presence of an assembly line was not regarded as a suitable indicator of the level of pride among members of a work group. Direct evidence was required to code and document pride, such as the following quote from an ethnographic account of work at McDonald’s: Dennis, a host, speaks very disparagingly about working at McDonald’s. He says, “This isn’t really a job.” I ask what he means, and he says, “It’s about as low as you can get. Everyone knows it” (Leidner 1993: 182).

To further ensure reliability, all coding decisions and evidence were reviewed in debriefing sessions with one or more team members. Any uncertainty regarding how to code an item was resolved as a group by reviewing relevant passages and deciding together how to code the item in question. As data were collected, they were keyed into a statistical program allowing for quantitative analysis. After data were collected, 13% of cases were recoded to evaluate inter-coder reliability. The average correlation was .79, indicating a relatively high degree of coder agreement.
The result is a rich, quantitative data source describing work groups in a range of productive environments. The data include indicators having to do with the industrial and organizational setting, the nature of work, the composition, sentiments, and behaviors of work groups, and social interactions occurring within and between work groups as well as between workers and supervisors and management. Because a great deal of effort was made to code items relevant to the concepts present in the sociology of work, the data include indicators of the presence of control techniques described in classical and more contemporary literature on the labor process, such as automation, task segmentation, direct supervision, and worker input. Also included are measures of outcomes associated with worker well-being. These include psychological responses to work having to do with self-direction and meaning, and positive and negative behavioral responses, such as consent, formal resistance, reticence, and loathing management. For example, the data include indicators of autonomy, freedom of movement, meaning, pride, extra effort, commitment to organizational goals, cooperation, organized group conflict with management, striking, withholding effort, playing dumb, and social sabotage of supervisors and managers. Apart from key explanatory variables and outcomes, the data include information on industrial and occupational sectors along with potential control variables, such as organization size.

These data make it possible to compare the effects of various worker control techniques on worker outcomes with the model described in the last chapter. Indeed, these data are the source of the most detailed existing quantitative studies of worker control and outcomes (Hodson 1996; 2001a), and have also been used in a host of other studies on work (see Hodson 1998, 1999, 2001b, 20002a, 20002b; Hodson and Roscigno
2004; Roscigno and Hodson 2004). Additionally, because the data include indicators of occupation and work group composition, it is possible to make comparisons of the prevalence of particular types of control by class, gender and race composition of work groups. A further benefit of the data is the ability to return to the original ethnographic studies for elaboration on how processes apparent in quantitative results actually play out in workplaces. The books frequently include elaborate descriptions of worker responses to work – often in their own words. It is thus possible to validate research findings, and perhaps more importantly, to elaborate on theory by illuminating the linkages between worker control and worker outcomes.

It is worth noting that the ethnographic sources of the data are drawn from an array of disciplines with diverse substantive foci, including anthropology, government, management, psychology, and even more specialized disciplines, such as nursing. The sample is thus constrained neither to sociological accounts of work, nor to those associated with the questions guiding the present study. Nevertheless, the cases are not a random sample of work groups but are rather the equivalent of the population of work groups in a convenience sample of detailed workplace data. Still, the sample cannot be described as narrow or select. As Table 1 demonstrates, the data include work groups in a broad array of census-defined industrial and occupational sectors, and in organizations ranging in size from fewer than 50 to more than 5000. Industries represented include extractive and construction; nondurable manufacturing; durable and electronic manufacturing; transportation equipment; transportation, communication and utilities; wholesale and retail trade; finance, insurance, real estate and business services; personal
services; professional and related services and public administration. Occupations represented in the data include professional, managerial, clerical, sales, skilled trade, assembly, unskilled labor, service and farming.

Dependent Variables

Dependent variables include psychological and positive and negative behavioral responses to work. Intuitively, a positive psychological response to work should be associated with a positive behavioral response, while negative psychological outcomes should be accompanied by resistance behaviors. It is also reasonable to expect an inverse relationship between positive and negative behaviors. Yet, consent and resistance are not mutually exclusive, and other factors may prevent the psychological response to work from translating into positive or negative behaviors (Burawoy 1979). For example, workers’ own desire to achieve a sense of accomplishment at work may generate consent, even as workers experience alienation or perform acts of resistance (Knights and Willmott 1989, Spencer 2000; Willmott 1990).

Dependent variables are derived from six scales including two dimensions of alienation, a measure of consent, and three indicators of resistance. Table 2 presents scale components, loadings and alphas. The extraction method was Principal Component Analysis. Component matrixes reported only one factor, and in every case, the initial Eigenvalues are greater than 1.9, while the second values are below 1 (also indicative of a single factor for each scale).
Alienation

Alienation is an indication of workers’ psychological well-being. People desire work that allows for self-direction and sensations associated with meaning, pride and satisfaction on the job. An absence of these attributes is indicative of experiencing powerlessness and worthlessness on the job. Powerlessness is a scale comprised of reverse-coded indicators of autonomy and creativity (both five-point items with values ranging from very high to very low), and a reverse-coded measure of freedom of movement (a three-point item with values ranging from a great deal to little or none). Loadings are .86 and above, and the alpha equals .89. Worthlessness is a scale of reverse-coded indicators for meaningful work (a three-point item with values ranging from fulfilling to meaningless), pride in work (a three-point item with values ranging from a great deal to rare), and job satisfaction (a five-point item with values ranging from very high to very low). Loadings are .89 and above, and the alpha equals .89

Consent

Behavioral aspects of worker well-being are apparent in the workers’ positive and negative behaviors on the job. In general, workers want to exert productive, proactive effort at work, and achieve a sense of dignity and accomplishment from doing so. Consent is indicative of workers’ capacity to approach work consistent with a more natural proactive orientation. It is measured with a five-component scale, including cooperation (a three-point item with values ranging from absent to widespread), extra effort, extra time (both binary variables), effort bargain (a three-point item with values variable ranging from reticence to extra effort freely given), and the proportion of
workers who behave as “good soldiers” (a five-point item with values ranging from none to all). Loadings are .71 and above, and the alpha equals .85.

**Resistance**

Workers also tend to prefer to cooperate at work, so long as arrangements do not compromise their dignity. When workers do resist, it is not because they derive enjoyment from sabotage, disputes or withholding effort. Rather, resistance is an effort to reclaim dignity denied on the job (Hodson 2001a), and is thus indicative of worker perceptions that workplace arrangements are an assault on their dignity, and fail to allow for preferred cooperative orientations. Because these efforts take many forms, often depending on the nature of the work, this study includes three types of resistance activities. *Organized opposition* is a scale with three items including organized group conflict with management and/or supervisors (a five-point item with values ranging from absent to pervasive), striking during the research period (a three-point indicator of no strike, an informal strike, or a formal strike occurring during the period in which the original ethnographic study was conducted), and history of strikes (a three-point indicator of no strike history, a history of infrequent striking, or frequent past strikes). Loadings are .76 and above, and the alpha equals .74. *Work avoidance* is a scale comprised of five components, including measures of whether workers tend to play dumb, withhold enthusiasm, avoid work, or practice reticence widely (all binary indicators), and the proportion that attempt to minimize their effort-to-income ratios (a five-point indicator with values ranging from none to all). Loadings are .69 and above, and the alpha equals .78. *Loathing management* is a four-component scale, including the frequency of conflict
with managers, the frequency of conflict with supervisors (both five-point indicators with values ranging from never to constant) and binary indicators of whether workers engage in subversion or social sabotage of a particular manager or the firm in general. Loadings are .69 and above, and the alpha equals .75.

Because the primary analytic method requires binary dependent and independent variables, scales for each dependent variable have been transformed into binary variables indicating whether workers exhibit relatively high levels of powerlessness, worthlessness, consent, organized opposition, work avoidance, and loathing management. Means and standard deviations for these variables are presented in Table 3.

**Independent Variables**

Independent variables are binary indicators of the presence of the six key worker control techniques highlighted in classical and more contemporary accounts of the labor process, and described in Chapter 3. Means and standard deviations for independent variables are presented in Table 4.

**Direct Supervision**

Direct supervision has typically been characterized as a passing form of control, but it has retained a significant role in controlling workers, and indeed has been expanded as firms pass supervisory functions onto customers and, indirectly, to coworkers. This control technique is expected to produce poor worker outcomes because it introduces the potential for injurious managerial practices associated with supervisors’ personal proclivities or defects – particularly abuse and chaos – and because it infantilizes workers
Direct Supervision is a binary variable indicating whether the work group is subject to direct supervision.

**Automation**

Automation may perform difficult or boring aspects of the work, thereby improving workers’ experience on the job, but it is more likely to produce negative outcomes by diminishing physical contact with the product of the labor or subordinating the worker to its own function (Erikson 1990; Form 1987; Zuboff 1988). Automation is a binary variable indicating that technology performs at least a portion of the work group’s tasks.

**Task Segmentation**

Task segmentation is a constraining bureaucratic control technique, associated with separation of planning and execution and subdivision of tasks as dictated by Taylorist scientific management and exercised under Fordist mass production. While it promotes overall efficiency, it is expected exert a negative influence on the quality of the work experience – producing feelings of alienation, inhibiting consent, and to promoting resistance. Task segmentation indicates whether the work group’s tasks require speed and dexterity only, in contrast to work that requires involves a number of more complex tasks associated with people, data or things.

**Rules**

Rules, specifications and targets are a second constraining bureaucratic control technique. They are pervasive, crossing industrial, occupational and demographic segments of the
workforce. They appear to be instrumental in controlling workers, but they are not expected to have an impact comparable to other top-down forms of control described above. Reliance on rules for worker control could potentially benefit workers by streamlining production to some degree, and they may shelter workers to a degree by taking the place of other, more oppressive forms of control. On the other hand, bureaucratic control may remove human rationality, and incongruent expectations may produce a sense of powerlessness and meaninglessness, with potential behavioral outcomes. Workers are especially frustrated by – and may resist – rules that contradict efficiency or proactive efforts (Bolton 2004; Donald 2001). *Rules* is a binary indicator for whether work groups are subject to written rules, specifications or targets dictating all or part of their activities.

**Career Ladders**

Career ladders are cooperative bureaucratic control techniques, representing efforts to enlist the active cooperation of workers by offering them a “carrot” associated with skill gains and career advancement in return for workers’ active effort. Although their implications for psychological responses to work have received little theoretical attention, career ladders have been characterized as reducing resistance and promoting consent by aligning the interests of workers with those of management (Edwards 1979). Although a relationship to psychological outcomes is less direct, they may also curb the degree of powerlessness and worthlessness experienced on the job. An absence of career ladders should have the opposite effects on psychological, but especially behavioral outcomes, as
it may engender a lack of worker interest in doing a good job. *Career ladder* is a binary indicator of whether work groups receive extensive on-the-job training in their current positions.

**Worker Input**

A second cooperative bureaucratic technique is worker input, which is argued to increase loyalty and reduce resistance by promoting satisfaction in communicating to employees that the organization values their contributions (Friedman 1977). Worker input is apparent in situations where employers make workers responsible for some or all of the organization or quality of work. Settings characterized as relying on this technique have been found to produce superior worker outcomes relative to those relying primarily on direct supervision, assembly lines, and bureaucratic techniques (Hodson 1996; 2001a). Input is expected to reduce the likelihood of powerlessness and worthlessness, and to enhance consent while reducing resistance, especially work avoidance. However, because input may be compensation for other oppressive control structures, and because workers may become frustrated with limits to the degree their input is taken to heart by management. This type of cooperative control often manifests in one of two forms: craft or professional autonomy, or team-based participation regimes in settings less noted for worker autonomy. *Worker Input* is thus a binary indicator of whether the firm makes workers responsible for the quality of their own work or formally solicits their input.
Analytic Strategy

This study employs two analytic strategies: a traditional approach and a more novel technique more suited to my research questions and unique data. First, I use traditional logistic regression techniques to analyze the separate effects of each of my six forms of control (supervision, automation, segmentation, rules, career, and input), on each of six outcomes indicative of worker well-being (powerlessness, worthlessness, consent, organized opposition, work avoidance, and loathing management). The model introduces all independent variables simultaneously, and results thus indicate the effect of each control technique, net of the others. While it is possible to use continuous scale variables for the model’s dependent variables, I employ the binary outcome variables for consistency throughout the analysis and presentation of findings.

The second approach is superior given the realities of work and my research questions, which emphasize combinations of control and emergent processes with implications for worker well-being. While it is possible to test theoretical claims regarding the intersection of particular combinations of control techniques through the use of interaction terms in logistic regression, this strategy is not ideal for a number of reasons. First, relatively little is known about the range of possibilities for combined control in workplaces, and existing theory to suggest interactions is limited to only a few types of work that have received a disproportionate share of attention in sociological literature (e.g., assembly lines and call centers). Second, workplaces likely employ a number of control techniques simultaneously, creating the potential for interaction terms involving as many as six variables, which would obstruct parsimonious presentation and interpretation. Third, some configurations with separate outcomes for worker well-being
very likely overlap. This would require separate interaction terms for the same variables, and perhaps multiple models. Finally, the some forms of control may be correlated with others, complicating the use of regression techniques by violating their assumptions.

The data employed in this study make it possible to identify a number of configurations (some of which may apply to work in more than one type of productive setting) involving a complex set of control techniques, and to straightforwardly determine how particular control contexts shape worker well-being relative to other settings. Moreover, they make possible an interplay between theory construction and empirical evidence, which is arguably more suited to sociological research than are methods emphasizing predictive theory, multiple independent variables, and experimental tests – all derived from research techniques in classical physics (Lieberson and Lynn 2002).

Consistent with recommendations of Lieberson and Lynn (2002), my overall approach 1) presents parsimonious theory with relatively few independent variables, 2) draws conclusions from studies entailing observation of cases in natural (non-experimental) environments; and 3) advances knowledge with an interplay of theory and evidence.

This study’s primary analytic strategy involves Qualitative Comparative Analysis (QCA), an analytic tool developed to assist researchers with statistical analysis of qualitative research findings that were rich in detail but relatively few in number (Ragin, Drass and Davey 2006). The technique requires the researcher to identify a limited number of theoretically meaningful conditions whose convergence in settings may generate emergent processes with implications for outcomes of interest. The statistical program then uses Boolean and algorithmic logic to calculate all possible combinations of independent variables, and then to identify configurations that, according to the data,
systematically produce or prevent outcomes of interest. In doing so, configurations are reduced to the least amount of information necessary to characterize a setting and predict its effect on an outcome of interest.

The technique makes it possible to take advantage of the complex insights of qualitative, case-oriented approaches, while also allowing researchers to derive parsimonious and generalizable conclusions analogous to those generated from quantitative, variable-oriented techniques. The result is a case-sensitive quantitative analysis that illuminates the complexity of causation in the social world (Ragin 1987). Rather than seeking to identify a single model that best fits all data, and modeling emergent processes with interaction terms that measure one variable’s intensification of another’s effect, QCA makes conceptual room for variation in processes, even among the same independent variables, and emphasizes emergent realities from co-presence (or perhaps absence) of multiple causal factors.

QCA has been increasingly used in social science research as a tool for understanding complex patterns of causation (Amenta and Halfmann 2000; Brown and Boswell 1995; Cress and Snow 2000). Until recently, the technique was applied in ways that identified configurations of independent variables that in all cases produced or prevented a given outcome. This led to charges that the method was overly deterministic.

Researchers have recently employed a more novel approach, calling on QCA to indicate situations producing positive, negative, and contradictory outcomes – that is, those that either cause or prevent and outcome, or produce mixed results. The result is identification of configurations that differentiate among types of settings represented in the data. Reduced configurations are thus analogous to typologies reflecting co-presence
of meaningful workplace attributes. Identifying typologies that distinguish between contexts has two key benefits. First, it is possible to determine which configurations increase or decrease the likelihood of outcomes, while leaving room for the potential that the expected outcome will not materialize in every case. Second, it is possible to analyze the implications of each typology across a range of dependent variables. This approach has been used to analyze the ethnographic workplace literature to determine which kinds of work settings simultaneously promote worker dignity and organizational success (Hodson and Roscigno 2004), and to determine the combinations of organizational, social and historical attributes that prompt striking and other resistance activities on the part of workers (Roscigno and Hodson 2004).

In the present study, QCA is used to identify configurations of control that workers confront in their jobs. Relevant configurations are then regard to how they shape the likelihood of the range of worker outcomes described above. QCA systematically reduces the presence or absence of each of the six general forms of control to the least information necessary to characterize and to differentiate between distinct control settings. It is possible that as few as one or two dimensions would be enough information to set contexts with those characteristics apart from other work settings. If alienation on assembly lines does indeed stem from the precise combination of automation and segmentation, for example, the co-presence of those two control attributes would emerge as a distinct, meaningful configuration, regardless of the presence or absence of other forms of control. Likewise, it is possible that the absence of both of those forms of control would emerge as meaningful for the experience of work.
Reduced configurations are analogous to typologies denoting co-presence (or absence) of worker control techniques, and useful for distinguishing between the sorts of control “packages” of control workers confront on their jobs. In identifying control configurations, QCA allows for comparisons among control typologies to determine the implications of various control settings for the range of outcomes described above. Comparing the average rate of occurrence of each outcome for workers in a particular type of control setting to the rate of occurrence outside that setting makes it possible to determine the effect of that control setting on the likelihood worker outcomes, including powerlessness, worthlessness, consent, organized opposition, work avoidance, and loathing management.

The resulting ratio may be interpreted in the same way that one interprets odds derived from logistic regression. In other words, ratios equal to one indicates no difference in the level of an outcome for workers in a particular control context compared with workers in other contexts. Ratios less than one indicate that the configuration reduces the likelihood of an outcome, and ratios greater than one indicate greater likelihood of an outcome for workers in the configuration compared to workers in other settings. Tests of mean differences serve as significance tests for ratios.

Because lack of available data has limited comparative research on the labor process, this study will necessarily advance empirical research on the topic. Perhaps more significantly, it will advance theory on the consequences of the labor process for worker well-being. Employing this case-centered approach in place of variable-centered techniques – and applying it to in-depth studies of actual workplaces – makes it necessary to consider types of workplaces that exist in the real world, and “packages” of control
that workers actually confront on the job. Emphasis on the combined influence of control techniques will also illuminate emergent processes that have received little or no theoretical attention. Finally, because it is possible to return to the ethnographic data to further explore cases characterized by meaningful combinations of control, I can explore what these relationships mean for workers, and how they reflect on them in their own words as they go about their daily lives.

**Conclusion**

This study employs quantitative data culled from the population of English-language workplace ethnographies to analyze a model incorporating general, combinable control concepts, and linking them to worker well-being. Worker well-being is measured with two indicators of alienation (powerlessness and worthlessness), a measure of consent, and three indicators of resistance (organized opposition, work avoidance, and loathing management). An absence of alienation and resistance, and the presence of consent are indicative of well-being among workers, while alienation, resistance, and withdrawal of consent are indicative of its reverse. Independent variables include four top-down control techniques (direct supervision, automation, task segmentation, and rules), which are generally expected to have negative implications for worker well-being, and two cooperative bureaucratic techniques (career ladders and worker input), which are generally expected to have positive effects on worker well-being, with some caveats.

Two analytic strategies are used to investigate the relationship between independent and dependent variables. First, I employ logistic regression techniques to determine each independent variable’s unique impact on each outcome, net of the
presence or absence of other control techniques. Second, I use QCA to identify distinct combinations of control, analogous to “typologies” of control present in the data, and I compare the likelihood of each outcome for each of these typologies, relative to the remaining cases.

Chapter 5 presents the results of the logistic regression, while subsequent chapters reveal the results derived from QCA. Chapter 6 presents the initial QCA results and implications for worker outcomes in the entire data set. Chapters 7, 8, and 9 present parallel findings for configurations identified in work groups composed of different classes, sexes and races respectively. Chapter 7 presents comparisons of professions, manual, and low-service sector occupations; Chapter 8 presents comparisons of predominantly male and majority female work groups; and Chapter 9 presents comparisons of predominantly white (or majority race) and disproportionately minority race work groups.
CHAPTER 5

LOGISTIC REGRESSION

This chapter presents correlations and the binary logistic regression in which each of the six outcome variables are regressed on all of the six control techniques simultaneously. Correlations among dependent variables and among independent variables are presented before results linking independent and dependent variables.

Correlations

The upper panel of Table 5 displays correlations among dependent variables. The strongest (and most significant) correlations are between powerlessness and worthlessness (.52), worthlessness and consent, and consent and work avoidance (both -.42). Correlations between worthlessness and work avoidance and powerlessness and consent (.37 and -.31 respectively) are also quite strong. The remaining relationships are relatively small (ranging from -.02 to .17), and many are nonsignificant.

The bottom panel of this table presents the correlations among independent variables. Segmentation is highly correlated with automation and direct supervision (.49 and .38, respectively), and is moderately correlated with the presence of worker input and career ladders (.20 and .26, respectively). Direct supervision is correlated with worker
input and automation (-.32 and .27, respectively). Remaining relationships are relatively small (ranging from -.12 to .17) and largely nonsignificant. High rates of intercorrelation among independent variables underscores the benefits of subsequent analyses employing QCA to determine the emergent processes associated with control techniques systematically combined in workplaces.

Correlations between independent and dependent variables are presented in Table 6. Worker well-being entails low levels of alienation, high levels of consent, and low levels of every form of resistance. As expected, direct supervision, automation and task segmentation are correlated with poor worker outcomes, especially powerlessness and worthlessness, with correlations ranging from .37 to .60 (all significant). Rules appear to be uncorrelated with worker well-being, but cooperative bureaucratic structures, including career ladders and worker input, are often found alongside outcomes indicative of a positive work experience.

As expected, control techniques are more closely related to psychological than to behavioral outcomes. However, correlations between control and consent parallel correlations between control and measures of alienation. In other words, direct supervision, automation, and task segmentation are positively correlated with powerlessness and worthlessness, and negatively correlated with consent; while cooperative bureaucratic techniques are negatively correlated with alienation and positively correlated with consent. Worker input has a particularly strong, positive, and significant association with consent (.37).

Both cooperative bureaucratic control techniques have slight, but significant and negative associations with work avoidance (-.14 and -.17). The strongest association
with resistance is found in the correlation between automation and organized opposition (.30). However, direct supervision is somewhat positively associated with every form of resistance, automation is related to loathing management, and both cooperative bureaucratic structures (career ladders and worker input) are negatively associated with work avoidance.

**Binary Logistic Regression**

The results of binary logistic regression are presented in Table 7. Powerlessness, worthlessness, consent, organized opposition, work avoidance, and loathing of management are regressed on direct supervision, automation, task segmentation, rules, career ladders and worker input. Coefficients are odds ratios \([\text{Exp}(B)]\), calculated from log odds \((B)\), and may be interpreted as the *multiple* of the change in the odds of the dependent variable associated with a one-unit change in the independent variable. Consequently, a coefficient equal to 1 denotes the absence of an effect, or no change in the odds of the dependent variable accruing from a one-unit change in the independent variable. A coefficient greater than 1 indicates a positive effect, while a coefficient less than 1 denotes a negative effect. For example, a coefficient equal to 2 indicates that for every one-unit change in the independent variable, the odds of the outcome double. A coefficient of .25 indicates that the odds of the outcome are one-quarter as likely (or, in other words, three-quarters less likely) with every one-unit increase in the independent variable. Because the independent variables are also binary, interpretation is straightforward. Each coefficient indicates the odds of the outcome (powerlessness, worthlessness, consent, and so on) for work groups subject to a given form of control,
relative to its occurrence among work groups lacking this form of control, net of the influence of other control techniques included in the model. While nearly all coefficients are in the expected direction, not all are significant. Because nonsignificance is likely attributable in part, if not chiefly, to the relatively small sample size and to correlation among control techniques, I will discuss findings in terms of general patterns, highlighting the larger and statistically significant findings as appropriate.

Theory and empirical research suggests that direct supervision, automation, task segmentation and rules are generally more oppressive than cooperative bureaucratic techniques, and this expectation is confirmed here. Although rules have little to no effect, direct supervision, automation, and task segmentation appear to be quite negative for workers’ well-being, and are especially devastating to psychological outcomes. Consistent with the notion that workers are infantilized by direct supervision, workers under this form of control are more than eight times as likely to experience powerlessness. Their odds of worthlessness, organized opposition, work avoidance and loathing management are also more than double those of workers lacking direct supervision, net of other factors. The multiples for odds of loathing management and organized opposition are particularly large (2.59 and 2.40, respectively) – probably because of the potential for abusive relationships and the personal face that direct supervision lends to workers’ oppression. Workers in this situation are twice as likely to avoid work, but on average are only slightly less likely to exercise consent. This is perhaps an indication that while some direct supervisors harm worker well-being, others use their discretion to improve the quality of working life, and to enlist workers’ active effort in production.
Automation nearly triples the likelihood that workers will experience powerlessness and doubles their odds of worthlessness. Net of other influences, automated work reduces workers’ odds of consent by more than half. Interestingly, their odds of avoiding work are also reduced by about half, probably because automation requires workers’ presence and helps management detect when they are shirking tasks. It simultaneously increases workers’ odds of engaging in other forms of resistance. Significantly, such workers are almost four times as likely to engage in organized opposition to management. Causality could also conceivably flow in the reverse direction, as well. That is, firms may be more interested in automating work (and thus replacing and deskilling workers) in cases where work groups tend to engage in organized opposition. Kelley (1990) found that the way programmable automation technologies were introduced into settings (whether they increased or decreased line workers’ skills) depended on whether worker-management relationships were conflicting or harmonious. However, implications of technology for the nature of work would then feed back into the reciprocal relationship – reinforcing the existing qualities of worker-management relationships. Interestingly however, despite greater likelihood of organized opposition to management, automation only increases odds of loathing management by only about fifty percent – perhaps because it is perceived as more impersonal than control exerted by other modes of control, such as direct supervision.

Task segmentation has, by far, the largest and most negative implications for worker well-being – more than quadrupling workers’ odds of powerlessness and increasing feelings of worthlessness (low levels of pride, meaning and satisfaction) on the job by a factor of nearly eighteen. Workers with segmented tasks are half as likely to
consent, and 69% more likely to avoid work when they can, but their likelihood of loathing management is only 21% higher and, net of other factors, they may be even slightly less likely to engage in organized opposition to management. This finding is not wholly unexpected, given the impersonality of the division of labor and a lack of leverage among workers performing segmented work. Such workers are often reminded that they can be replaced with little or no effort, whether or not this is the case (Juravich 1985).

Just as the destructive influence of coercive techniques (supervision, automation, and the more constraining bureaucratic control techniques) are apparent, so are the ameliorative effects of cooperative bureaucratic controls. Career ladders reduce the odds of powerlessness and worthlessness by 51% and 35% respectively. Consistent with the notion that they align the interests of workers and employers, and they more than double the odds of consent, and reduce odds of work avoidance and loathing management by about 60%. At the same time, they also appear to increase the odds of organized opposition to management. As with the findings for technology, there is a possibility of a reciprocal relationship, in which career ladders have emerged in response to workers’ tendency to engage in organized opposition. Since they are also moderately negatively correlated with task segmentation (-.26), it is also possible that workers involved in career ladders have greater leverage with which to make demands on employers.

The implications of input for worker well-being are interesting and revealing. Net of other control strategies, input appears to reduce workers’ odds of powerlessness and worthlessness (by 20% and 34% respectively). Notably, input enlists workers’ active consent while suppressing resistance, precisely as Friedman (1977) predicted. Input more than quadruples workers’ odds of offering employers’ additional effort, time and
cooperation, and reduces likelihood of work avoidance by about a third. It also diminishes likelihood of engaging in organized opposition. Interestingly, worker input nearly triples workers’ odds of loathing management.

While prior theory on the labor process did not forecast this finding, the ethnographic workplace studies on which these data are based provide a strong indication of its source. Studies documenting the introduction of worker participation regimes are particularly telling. In establishing formal participative procedures, employers make promises that often fail to materialize, especially in the West, where participative structures are generally superimposed onto existing hierarchical arrangements. Many who initially believed that participation would give them greater say with regard to the organization of production become disenchanted when it fails to deliver. Milkman’s (1997) study of a GM automotive assembly plant revealed that worker cynicism and worker-management conflict reached new heights in the aftermath of introduction of participative procedures, as workers realized that management would not take their ideas as seriously as they had hoped, and as front-line supervisors returned to prior abusive practices in their struggle to reclaim their status and to satisfy output demands from above.

As it turned out, . . . GM-Linden management failed to deliver many of the organizational reforms announced with such fanfare during the training program . . . . Many foremen reverted to the demeaning behavior that had generated such bitterness among the workforce in the past years, and other promised improvements were subverted or distorted by shopfloor managers under pressure from above to ensure uninterrupted production in the face of chronic technological glitches. . . . In the end, the daily reality of work in the plant changed far less than workers had been led to expect, and the widespread sense of disappointment obscured those improvements that did occur. Workers readily embraced the new managerial rhetoric of participation, but its woefully incomplete implementation at GM-Linden
led to unanticipated results. Rather than enhancing productivity and commitment as intended, the (largely unrealized) principle of participation became a tool of critique that workers appropriated to attack managerial practices (138).

“Louis Lambert exclaimed . . . . “That’s all bullshit. They’re not doing it the way they said they were going to do it.” “The ‘new Linden,’ Jeffrey Goetz intoned with disgust, “it got lost in the wash.” . . . Ron Clark was equally disillusioned. “It sounded good at the time, but it turned out to be a big joke. Management’s attitude is still the same. It hasn’t changed at all” (174).

Although input does to improve the nature of work and elicits consent, it clearly does not restore self-direction or meaning, pride and satisfaction to the degree that many would hope or might imagine. Although it reduces the likelihood of alienation, it does not eliminate it, as the coefficients for powerlessness and worthlessness indicate. Separate descriptive analysis reveals that half of all workers lacking input on the job experience worthlessness, and just over half of such workers are powerless (having low levels of autonomy, creativity, and freedom of movement). Rates of both outcomes among workers with formal input in production are just over one quarter.

**Conclusion**

These relationships revealed here are important and illustrative, especially since this model corresponds to the structure of labor process theories as they were originally set forth. Control techniques have systematic effects on outcomes indicative of worker well-being. Coercive controls (especially supervision, automation, and task segmentation) are detrimental for worker well-being, while cooperative bureaucratic techniques (career ladders and worker input) are overwhelmingly beneficial.
Yet, because control techniques are highly correlated in many cases, coefficients reported here are not necessarily reliable. More significantly, workers confront their jobs as complex packages of control (involving as many as all six techniques at once), with emergent implications for the nature of work. Linear models are hardly capable of capturing the complexity of these processes in any easily interpretable way. In subsequent chapters, I turn to analyses of systematic and consequential combinations of control, and emergent processes shaping worker well-being.
CHAPTER 6

QUALITATIVE COMPARATIVE ANALYSIS

Control techniques are represented in these data with binary variables indicating its presence or absence. Possible combinations of direct supervision, automation, task segmentation, rules, career ladders and worker input number $2^6$, or 64. Although all of these are theoretically possible, some may be improbable. Of the 64 potential combinations of control, 36 are represented in the data. Table 8 is a truth table, displaying unreduced configurations, distribution of cases, and the number of cases in each configuration with positive scores on the six dependent variables. Clear patterns, especially with respect to psychological outcomes indicative of alienation, are apparent. For instance, cases in configurations in the upper portion of the table (marked by an absence of top-down control techniques, and reliance on few, often cooperative, means of control) have low rates of alienation and resistance and high rates of consent. In contrast, those at the bottom (marked by numerous top-down control techniques, often with an absence of cooperative means of control), have high rates of alienation and resistance and low rates of consent. Indeed, ten of the eleven work groups in the configuration with direct supervision, automation, task segmentation and rules, and no career ladders or worker input, experience powerlessness and meaninglessness, and only one engages in
consent. However, interpreting these data requires minimizing the information to its least necessary form. In systematically eliminating redundant and unnecessary information, QCA reduces these to 9 distinct typologies of control acting on the 141 work groups represented in the data.

Table 9 presents the nine configurations representing typical control “packages” distinguishing work groups in the data. Capital letters denote the presence of a control technique, lower case denotes its absence, and a “*” indicates their combination. Also presented are examples of work groups represented in each configuration, along with the total number of cases inside and outside each category of control. The sum of “configuration” and “non-configuration” cases is thus equal to the total number of cases (141). However, because configurations are combined in reduced categories, it is possible for a single work group to be classified as present in two or more configurations, and this indeed is the case, particularly among work groups experiencing both automation and task segmentation.

Coercive and Persuasive Approaches to Control

The control configurations are grouped into two categories distinguished by the presence and absence of cooperative control techniques (career ladders and worker input), and the presence or absence of top-down techniques (direct supervision, automation, task segmentation, rules). Coercive approaches to control are those in which a majority of elements represent the presence of top-down elements or the absence of cooperative control – particularly common among clerical, low-level service and various types of manual assembly occupations. One example of a coercive package is
RULES*DIRECT*career*input – common in the fast food industry and among nonprofessionals in office environments and the coercive approach with the largest number of cases (38) represented. In these settings, control is marked by the presence of two top-down techniques, and an absence of both forms of cooperative control (career ladders and worker input). A second coercive control context, common in domestic service and bench assembly, is SEGMENTED*DIRECT*career*input, likewise marked by the presence of two top-down control techniques and an absence of both cooperative forms of control. The remaining coercive control settings are those characterized by work that is both segmented and automated, found among various types of assembly, but also present in fast food and other environments. These include SEGMENTED*AUTOMATED*INPUT*career, SEGMENTED*AUTOMATED*RULES*career, and SEGMENTED*AUTOMATED*DIRECT*RULES*INPUT. In these cases, all or most (either three of four or four of five) elements indicate either presence of top-down control techniques, or absence of cooperative forms of control.

_Persuasive_ approaches are those in which at least half of the components represent an absence of top-down techniques or the presence of cooperative control. These configurations are marked by an absence of task segmentation, and they are commonly found among professionals, management, high-level service work, and skilled trades. The persuasive approach most common among cases in the sample is segmented*automated, representing the absence of both segmentation and task automation. Ninety cases, or more than half of the total sample may be characterized as encountering this persuasive control package – representing an absence of two of the most oppressive forms of control. While this setting characterizes the work of many
professionals, a number of jobs like nursing and trucking are also found in this category. Other persuasive configurations include segmented*RULES*CAREER (found, for example, among emergency service providers), segmented*DIRECT*CAREER*input (common in the skilled trades), and segmented*direct*RULES*INPUT (managers, for example).

Configurations and Worker Outcomes

Descriptive Patterns

Contexts characterized by coercive and persuasive approaches to control have remarkably dissimilar implications for worker well-being. Table 10 presents dependent variable means for work groups encountering control packages described by the configuration compared with those not falling into that category (labeled as Config and Nonconfig in the table). Because dependent variables are binary, each mean also represents the proportion of cases inside and outside each configuration with a given outcome. For example, 71% of the 38 work groups whose control setting is characterized by RULES*DIRECT*career*input are powerless, compared to 31% for the 103 work groups whose work does not share these characteristics. Likewise, 66% of these work groups experience worthlessness, compared to only 32% of the nonconfiguration cases. Even starker contrasts are apparent among work groups whose control setting is SEGMENTED*DIRECT*career*input, among which 85% experience powerlessness and 93% experience worthlessness, compared to 32% and 29% respectively for nonconfiguration cases. The most alienating settings, however, appear to be among the remaining coercive control environments – those that combine segmentation, automation,
with either additional top-down controls, and the absence of at least one cooperative control technique. The proportion of work groups in these setting experiencing powerlessness and worthlessness range from 86% to 100%, compared to proportions ganging between 35% and 40% for work groups outside of these configurations. Parallel tendencies are apparent for behavioral outcomes (work groups in each coercive configuration exhibit less consent and more of every type of resistance than do work groups outside of each configuration). Coercive approaches thus are thus associated with poor outcomes across all indicators for worker well-being.

Remarkably different rates of alienation, consent and resistant are apparent among workers in persuasive control environments. Zero to 26% of work groups in these control settings experience powerlessness and worthlessness, compared to 43% to 78% for work groups not found in these control settings. Likewise, their rates of participation in consent are much higher than for work groups outside these configurations, and their rates of resistance tend to be lower. Yet these indicators are descriptive and require further manipulation and tests of significance for interpretability.

**Mean Ratios**

Table 11 reports the configuration-to-nonconfiguration ratios of means (along with the results of statistical tests of mean differences) for each of the nine control settings. Interpretation is similar to interpretation of odds derived from logistic regression. Findings are the strongest and most significant among outcomes associated with alienation (powerlessness and worthlessness) and consent. Fewer coefficients for resistance outcomes are significant, which is likely attributable to social, organizational
and historical influences apart from control (see Roscigno and Hodson 2004) and the relatively small number of cases in each configuration. Because resistance ratios are correlated with other indicators of worker well-being (positively in the case of powerlessness and worthlessness, and negatively in the case of consent) and because several coefficients are sizable and significant, I will discuss resistance findings as elements of more general patterns evident across outcomes – highlighting the larger and statistically significant ratios as appropriate.

Results indicate that configurations of control indeed exert a significant influence on worker well-being. Moreover, control configurations have remarkably consistent effects across well-being outcomes, indicating that control settings tend to be either overwhelmingly positive or overwhelmingly negative for a number of outcomes, including psychological and behavioral (positive and negative) responses to work. Finally, worker well-being appears to hinge on the general approach adopted by firms – that is, whether control over workers is a coercive or persuasive project.

**Coercive Approaches**

A coercive approach is one marked by dependence on top-down control techniques, and an absence of cooperative control. In several instances, cases in these configurations had rates of powerlessness and worthlessness at or approaching 100%. Confronting configurations of control reflecting this approach more than doubles (and in several cases nearly triples) a work group’s odds of powerlessness. The same is true for worthlessness, but the relationship appears to be even stronger for this dimension of alienation. Indeed,
all but one configuration in this category increased odds of worthlessness by a factor of more than 2.5, and one (SEGMENTED*DIRECT*career*input) more than tripled the odds.

In many cases, processes become evident in looking more closely at cases in these configurations. For example, the combination of DIRECT*RULES*career*input characterizes the work setting in Leidner’s (1993) study of workers at McDonald’s. The following quote demonstrates how the potential for abuse via direct supervision join with the oppressiveness of rules directing tasks and an absence of cooperative methods, especially input, to create an oppressive setting in which workers are made to feel powerless:

Naturally, managers played a major role in keeping crew people hard at work. At this store, managers were virtually always present behind the counter and in the grill area. During busy periods several managers would be there at once, working side by side with the crew as well as issuing instructions. . . . Managers insisted on constant effort; they clearly did not want to pay workers for a moment of nonproductive time. For instance, I heard a manager reprimand a grill worker for looking at the work schedule: “Are you off work? No? You look at the schedule on your time, not on my time” (78).

In these settings, workers have difficulty deriving pride and satisfaction from their work. What’s worse, customers join in on the abuse. The result can be a sense of utter worthlessness on the job.

McDonald’s window workers and Combined’s agents had to find ways to reconcile their sense of themselves with the identity their job conferred upon them. Some of their difficulties arose because neither job was held in high esteem by the public. This low public regard affected both customers’ treatment of workers and the workers’ responses to their roles: Traci tells me, “Some people seem to look down on [McDonald’s] employees. Like I was working one night, and . . . we were really busy. My friend had taken this one girl’s order and she [the worker] picked up a straw and she
laid it on the counter. And the girl [customer] got mad and said that she threw the straw at her. And she started calling her ignorant for working at McDonald’s. Some people look down on us, [and] some people think, ‘It’s just a job. I have a job too.’”

Dennis, a host, speaks very disparagingly about working at McDonald’s. He says, “This isn’t really a job.” I ask what he means, and he says, “It’s about as low as you can get. Everyone knows it” (182).

Work avoidance is more than twice as likely (and significant) in these setting, compared to work groups outside this configuration. Interactions with customers were highly scripted, both in terms of the dialogue and expectations for emotional displays. Suggestive selling was required, but widely disliked by both workers and customers, who occasionally doled out abuse upon receiving meal suggestions. Outside the gaze of supervisors, workers avoided these requirements.

Whenever possible, crew members eliminated parts of the routine that they disliked, and some followed the letter of the law with no expression of friendly service. . . . During a special promotion the window workers were required to ask every customer, “Would you like to try our Bacon Double Cheeseburger?” Ten of the twenty-three workers I interviewed criticized the suggestive-selling requirement, and five more said that they frequently “forgot” that part of the routine (138-139).

Others chose to ignore requirements regarding emotional displays. In the following example, it is apparent that workers are withholding consent in order to reclaim a sense of dignity denied to them on the job.

One strategy, familiar to most fast-food customers, was to refuse to take on the upbeat, enthusiastic persona that management tried to impose. Thus, some workers delivered their lines and carried out their tasks as assigned, but they did so with a minimum of emotional commitment. Their unsmiling faces conveyed the message, “I have to do this, but I don’t have to like it” (190).
Although this form of resistance would seem trivial to many, employees engaging in it were taking significant risk, as workers in fast food settings are routinely fired for the “cardinal sin (of) bad attitude” (Reiter 1991: 127).

Other work avoidance ratios are smaller, except in the case of SEGMENTED*AUTOMATED*RULES*DIRECT*INPUT, where the coefficient is large (2.63), but nonsignificant. It is easy to imagine that the desire to avoid work is very high, but that tasks are so constrained as to severely limit ability to actually do it. Indeed, this type of work is extraordinarily coercive by virtue of the co-presence of every top-down control technique. In such settings, automation joins with direct supervision and rules to prevent workers from leaving the line, which controls the pace of work, by making any absence in violation of rules is highly visible. At the same time, opportunities to avoid work may arise, and workers in this contest are very likely to pursue them, as Milkman’s (1997) study of a GM automotive manufacturing facility illustrates.

Any excuse to get off the line, even for a short time, is eagerly seized. “Whenever that blood bank came around, I gave blood just so I could get off the line,” Edward Salerno confessed. “I’d go down there for like an hour. Anything to get off the line!” (48).

Combined attributes of the assembly line also play a significant role in producing worthlessness on the job.

Auto assembly work is the prototype of alienated labor: the combination of the Taylorist division of labor and the moving assembly line makes for extremely boring, monotonous work. ‘It’s the same thing over and over and over and over and over and over. You could do it in your sleep.’ (43).

However the causal attributes cannot be reduced to the assembly line alone. In contexts characterized by this configuration, technological, bureaucratic, and social
controls exert a *combined* influence on the experience of work. Milkman illuminates emergent processes arising out of the co-presence of multiple top-down control techniques. In the following passage, she describes how these settings can produce a grave sense of powerlessness among workers – an experience likened to prison.

The combination of mindless, monotonous work, unrelenting regimentation, and inhumane supervision made the workers feel like prisoners, and they routinely employ the metaphor of the plant as prison in discussing their jobs. They entered the factory gates willingly enough . . . But once they grew accustomed to the high pay and benefits, most began counting the years until their “sentences” (typically thirty years, when they became eligible for retirement) would be up. Like auto workers elsewhere in the nation, those at GM-Linden served out their time with deep feelings of bitterness, as prisoners of prosperity (27).

Matthew Larson made the comparison to incarceration explicit: “It’s not a great place to work. I always took it as a prison. It was like going to jail, like a work-release program. . . .” Other workers referred to the plant as “the joint,” “a compound,” or even compared it to slavery or to a concentration camp . . . the metaphor of imprisonment was central to the self-conception of most GM workers not simply because of the ‘thirty and out’ pension system, but also because they hated their jobs so intensely (43).

Psychological sensations of powerlessness were likely intensified by physical discomfort when workers needed to relieve themselves.

[An] issue that came up in virtually every interview was access to bathroom facilities. “When you’re on the line, a simple function like going to the bathroom, you have to raise your hand like a little kid,” Dennis Tucker lamented. . . . The fact that relief and utility workers do not always respond promptly to such requests contributes further to workers’ feelings of humiliation over this issue (45).

The intersection of multiple top-down structures of control contributed to an overwhelming sense of degradation and loathing of management. Shopfloor social relations, especially managerial abuse, loom large in translating psychological dissatisfaction into loathing of management.
Workers complain far more bitterly about their treatment by GM management personnel than about their subordination to the plant machinery or to the assembly line itself. As Sean O’Brien put it, “It isn’t so much that you hate the job – you hate General Motors, hate being there.” Some of the specific grievances may appear trivial to an outsider, but in the worldview of workers, each small insult resonates as part of a coherent whole, a pattern of continual degradation in a variety of arenas. . . . “Everything had to be done by whistle, you know, a whistle to stop, a whistle to go,” Patrick Nolan complained (45).

As illustrated above, these workers find it hard to avoid work in the presence of multiple top-down techniques, but their dissatisfaction manifests in other behavioral practices that are not obstructed by the nature of the work, and are even more pervasive than loathing management. First, they are less likely to exercise consent. Indeed, none of the cases in this configuration exhibited consent (a significant ratio of .00), compared to 35% among the remaining 136 work groups. This is the case despite the presence of worker input, shown in Chapter 5 to quadruple the odds of consent. Milkman describes one workers’ willingness to withhold consent in response to dissatisfaction with the firm.

John Pierce told a story . . . “I had a supervisor once . . . [a]nd he told me, ‘I’m your boss, and you do what I tell you to do.’ I said, ‘Sir, that’s the wrong answer,’ I said, ‘I can make you or break you, because I’m the worker. So therefore, if I want to give you good work, I can give you good work, but don’t harass me. It’s not going to get you good work. Only thing that’s going to do is make me angry and (not) want to work for you.’ ’Cause to me, people is the resources you have in business” (44).

The lack of consent in response to worker input is attributable to the combined presence of multiple, oppressive control techniques that overwhelm the potential for input to enhance proactive effort. In this case, it is also a result of the firm’s continued reliance on hierarchical supervisory relations and its continued tolerance of abuse (discussed in more detail in Chapter 5). The same may not be true for work groups not confronting so many top-down forms of control in addition to worker input. Workers in a similar
configuration that lacks supervision (SEGMENTED*AUTOMATED*INPUT*career) display only a small and nonsignificant tendency away from consent, despite the additional lack of career ladders. The remaining coercive configurations demonstrate significant, negative tendencies with regard to consent. Work groups in these control categories are only about one-quarter to one-third as likely to exhibit consent, compared to work groups outside each of these control categories.

Another behavioral response in settings combining multiple restrictive top-down control techniques is organized opposition to management, especially in cases where the nature of control leads to loathing of management. Its likelihood appears to be double in the case of SEGMENTED*AUTOMATED*INPUT*career (where the odds of loathing management are triple), and quadruple (significantly so) in contexts characterized by SEGMENTED*AUTOMATED*RULES*DIRECT*INPUT (where the odds of loathing management are nearly as high). Milkman notes that official grievances are less dramatic than strikes, but are an avenue of opposition to management increasingly employed by GM workers nationally (many of which are subject to the same type of control as those in the GM-Linden plant she studied). Complaints regarding overwork were a major source of official grievances, but more mundane shopfloor frustrations were also apparent (such as procedures having to do with going to the restroom). Grievances were also used as “ammunition in the ongoing war” between workers and supervisors (58).

Given the significance of the social relations of production in this setting, it is reasonable to ask whether different dimensions of control, rather than their combined influence, might be responsible for producing different sets of outcomes. It is more likely, however, that the combination of control techniques is no accident – and that
certain aspects or combinations of control may be so oppressive as to require others in order to ensure that they are carried out. For example, boring, repetitive assembly lines that move at a brutal pace (as auto assembly lines tend to do) may require some degree of direct supervision to ensure that the work is carried out. Alternatively, these abusive direct supervision practices may not have arisen, or may not have their devastating effect, in the absence of other top-down control techniques, because workers would be more able to walk away.

**Persuasive Approaches**

Precisely the opposite trends are evident among work groups characterized by persuasive approaches to control. Control configurations in this category are consistently associated with worker well-being, including diminished likelihood of alienation and resistance, and increased odds of consent.

All configurations characterized by this approach reduce work groups’ odds of powerlessness by about two-thirds, with the exception of one (segmented*direct*RULES*INPUT), which reduce these odds by more than 90 percent. Three of the four also reduce the odds of worthlessness by about three-quarters. None (a significant ratio of .00) of the seven work groups in control settings described as segmented*DIRECT*CAREER*input experienced alienation, compared to 43% of workers in the remaining 134 work groups. The ratio for segmented*RULES*CAREER was also negative, indicating a roughly 40% drop in odds of worthlessness, however the test of differences was nonsignificant.
Results are consistent, although less significant for consent. Work groups engaged in work marked by a lack of segmentation and automation (segmented*automated) are 2.64 times more likely to exhibit consent – a high level of submitting additional time, effort and cooperation. Workers in other persuasive contexts are also likely to offer consent – they are 1.67 times more likely to do so where work is segmented*direct*RULES*INPUT, and 1.77 times more likely where work is segmented*RULES*CAREER. The remaining persuasive configuration is also associated with a positive, though nonsignificant, ratio of 1.20.

Applebaum’s (1981) ethnography of construction workers illustrates the benefits of nonsegmented, nonautomated work for psychological outcomes and for consent. The following illustrates the self-direction (or absence of powerlessness) that is possible in the absence of the most oppressive, top-down forms of control:

Construction workers, particularly the skilled craftsmen, exercise autonomy over their work. Construction management relies on the tradesman to fabricate the product. Construction workers rely on themselves, rather than management, when confronting problems. The skilled craftsman professes to know his trade better than anyone else. He believes since he has the skill he should control the work. Management expects the skilled men to do their work without the need for strict supervision (61).

In this context, workers are able to gain a sense of meaning, pride and satisfaction (the reverse of worthlessness) from their efforts on the job.

A week after the pour, these men walked on the solid evidence of their labors. Construction workers get satisfaction from seeing the physical evidence of their work. I marveled that men, left alone to work and plan independently, can produce with intelligence and skill such creative results (11).
Just as significantly, given that blue collar workers often hold their own jobs up for children as examples of work to be avoided in adulthood, these workers are able to point to the outcome of their efforts with pride, and encourage their children to follow in their footsteps.

The positive self-image of construction workers is revealed in two other ways. One is the frequency with which they take their families past projects they have worked on and point with pride to their participation in the job. The other is their encouragement to their children to enter the industry (102).

Ratios reveal that workers in these settings are far more likely to exhibit consent (by a factor of 2.64) compared to work groups outside of this setting. This is the largest ratio apparent in the entire study, with the sole exception of the configuration that adds an absence of rules, and presence of both forms of cooperative control as well as direct supervision to these attributes (segmented*automated*rules*DIRECT*CAREER*INPUT). Indeed, the workers in this setting are eager to do as much as possible, and view managerial intervention as getting in the way of their efforts to increase the firm’s profits and productivity.

Worker control over production norms is not as much a question of “restricting output” as “deciding it.” At the sewage treatment plant, there were several occasions when the men placed a thousand yards of concrete in a single day. No one from management told them to do it. The superintendent, foremen, and key journeymen decided and planned it on their own initiative. One evening, at the local bar . . . Pete expressed the pride and satisfaction that comes from extraordinary accomplishment, and said:

If they’d leave us alone, we can take care of the work and make money for the company. We did a thousand yards today. But I’ve done better. As long as Carmen [his employer] leaves Earl [the superintendent] alone we can turn out the work (63).
Resistance outcomes are likewise consistent, indicating a lower likelihood of engaging in resistance activities where control reflects a persuasive approach. Work avoidance is less than one-fifth as likely where work is nonsegmented, and controlled by rules and career ladders (segmented*RULES*CAREER), and less than half as likely where work is nonsegmented, nondirect, and controlled by rules and input (segmented*direct*RULES*INPUT). Work groups in the remaining persuasive configurations (segmented*automated and segmented*DIRECT*CAREER*input), indicate smaller (19% and 42% lower likelihood) and less significant differences.

Rates of organized opposition are 59% lower among workers in nonsegmented, nonautomated work, and 66% lower among work groups in nonsegmented, nondirect work in which there are also rules and input (segmented*direct*RULES*INPUT). Rates are also lower in the remaining two types of persuasive control settings, (5% lower and 36% lower respectively where work is segmented*RULES*CAREER and segmented*DIRECT*CAREER*input). The latter is especially unlikely to produce work groups who loathe management. None (a significant ratio of .00) of the seven work groups in this category loathe management, compared to 30% in the remaining 134 work groups. In the remaining persuasive control categories, work groups were 29%, 31% and 60% less likely to loathe management, although only the latter ratio was significant (segmented*direct*RULES*INPUT).

All of the relationships presented here are replicated in binary logistic regression with dummy indicators of presence of control configurations, and with controls for logged organization size and the era in which data were collected. The coefficients for
binary control configurations are presented, along with model diagnostics, in Table 12. Patterns in direction of causation and significance are remarkably similar, despite the additional variables and differing method. However, relationships appear to be much stronger. In other words, coefficients are frequently much larger in the case of positive relationships (those with values greater than one), and much smaller in the case of negative relationships (those with values less than one).

**Conclusion**

These results reveal with certainty that combinations of control matter for worker well-being, as they represent contexts where outcomes associated with well-being are more or less likely. Moreover, the implications of configurations for worker well-being are not mixed, nor are they equivalent. Work settings appear to wholly benefit or wholly impair worker well-being, having consistently positive or consistently negative implications for well-being across a range of psychological and behavioral outcomes.

The results presented here indicate that control is not antithetical to worker well-being. Rather, what matters is its nature and combination of elements. Whether worker control enhances or impairs worker well-being hinges on the overall approach it represents, specifically where they represent coercive or persuasive strategies. Coercive approaches to control are those characterized by the presence of top-down elements and an absence of cooperative control. Persuasive approaches are those in which at least half of the components represent an absence of top-down techniques or the presence of cooperative control. The former are common among clerical, low-level service and various types of manual assembly occupations, and the latter are prevalent among
professionals, management, high-level service work, and skilled trades. Work groups are least alienated, most likely to exhibit consent, and least resistance prone in settings where configurations of control techniques reflect a persuasive approach to control. The reverse is true where control packages reflect a coercive approach, perhaps because the top-down and over-controlling nature of these contexts does not accommodate the most basic human desires for self-direction and meaning in work.

Some top-down techniques appear not to be as oppressive as others, depending upon the co-presence of other control techniques. Direct supervision and rules are apparent in configurations representing both coercive and persuasive approaches to control. All but one of the coercive approaches includes one or both of these top-down control techniques, but the same is true for persuasive approaches. While it appears that both are less oppressive and significant for the experience of work than are other top-down techniques (segmentation and automation), they do contribute to an overall negative or positive control setting for workers depending upon the overall approach to control.

Significantly, consent is highest among work settings associated with absence of two traditional top-down techniques (segmented*automated), and lowest among workers experiencing nearly every top-down form of control (SEGMENTED*AUTOMATED*DIRECT*RULES*INPUT). Because consent is a good approximation of heightened productivity (extra effort, for example, should translate directly into output for each unit of time), this finding would imply that workers may be especially likely to deliver results when left largely to their own devices, and much less likely to do so where control is a combination of oppressive, top-down
practices (even when an additional cooperative technique is present). Results for remaining coercive practices indicate that top-down control techniques may be particularly detrimental for consent and other outcomes when they are accompanied by an absence of cooperative bureaucratic control, including career ladders and worker input.

Compared with the results presented in Chapter 5, the results presented here demonstrate that while linear and additive models are useful for understanding the implications of worker control, they are not necessarily the most suitable technique for achieving a thorough understanding of these processes. Social worlds are often complex, involving interplay between causal forces. This complexity can be reflected in conceptualization and modeling with an approach that underscores co-presence in time and place, and acknowledges the potentially unique effects of certain configurations. For many social processes, this would be superior to presentation as single elements of an additive model, which may “over-control” for relevant contextual factors – masking the effect of configurations that may more accurately describe social settings. This is the case even when such models include interaction terms, which can be difficult to interpret, especially where more than two factors are involved.

Packages of control are far better at describing the complex reality of work than are single attributes of control. Models incorporating their effects have greater potential to represent work settings as objectively true, and as subjectively experienced by workers, particularly when meaningful configurations are identified from in-depth research on actual work settings, as they are here. Linear models attempting to represent these processes are simply too far removed from work as experience by workers, who
simultaneously confront multiple control structures, and feel their effects in combination. As a result, the implications of control are best understood with techniques specifically suited to analyzing the effects of configurations of attributes apparent across settings. Other substantive areas of the discipline may also benefit from reconsidering a linear approach to the universe and social processes, and by giving greater attention to conceptual packages, or theoretical bundles, in explaining social life.
CHAPTER 7

CLASS AND THE LABOR PROCESS

Packages of control thus matter for worker well-being. But does the nature of control, and thus worker well-being, vary systematically by social class? Because occupation is a significant dimension of social class, comparisons of control configurations in distinct occupational groupings could reveal class variation in the subjective work experience, with implications for their well-being. Specifically, comparing control configurations apparent in the professions to those in manual and/or service occupations may reveal class-based variation in the labor process attributable to managerial pursuit of persuasive versus coercive approaches to control. If the varied approaches were also found to have implications for outcomes consistent with those presented in Chapter 6, they would also reveal class-based variation in worker well-being. A better awareness of such differences would fill out sociological accounts class variation in worker outcomes, which are beginning to extend considerations beyond material well-being (see, for example, Jencks, Perman and Rainwater 1988; Kalleberg, Reskin and Hudson 2000).
Results

Tables 13, 14, and 15 report configurations identified in separate QCA analyses of professional, manual and low-level service occupations, along with mean ratios similar to those reported in Table 11. The manual subsample (n=60) is drawn from work groups employed in skilled trades, unskilled labor, and assembly. The professional subsample (n=29) is made up of the general sample’s professional work groups, and the service subsample (n=32) includes work groups employed in sales and service occupations.

While configurations are drawn from occupational subsamples, ratios of configuration-to-nonconfiguration means are computed from the entire sample of 141 work groups. This technique allows for a standardized comparison of configurations – one untainted by selectivity, which would result from reliance on occupational subsamples. The alternative – investigating the implications of configurations with comparisons of outcomes within occupational sectors – would distort results and render even the most general class comparisons meaningless. A ratio computed from a subsample of professionals, for example, would almost necessarily differ in direction, magnitude or significance from one computed with data on a greater occupational range.

Professional Occupations

Table 13 presents the results for configurations apparent in the professions. These are notable primarily for the absence of even a single coercive approach to worker control (those in which a majority or characteristics represent the presence of top-down elements and an absence of cooperative control). Every configuration is marked by a persuasive approach (in which at least half of the components represent an absence of top-down
techniques or the presence of cooperative control). In every case, work groups’ tasks are neither segmented nor automated. This circumstance partially reflects the nature of professional tasks, which are not as amenable to narrow segmentation, but may also represent a class advantage in exposure to more versus less oppressive control techniques. The most oppressive control techniques to which this group is exposed are rules and direct supervision, shown in Chapter 6 to be associated with both positive and negative worker outcomes, depending upon other attributes of the configuration.

Among configurations characterizing control in professions, rules and direct are not found together, and they are found individually only in combinations that are beneficial for worker well-being – diminishing odds of powerlessness, worthlessness, organized opposition, work avoidance, and loathing management, and increasing consent. The best outcomes are found among segmented*automated*rules*DIRECT*CAREER*INPUT. Although there are only two work groups in this configuration overall, neither experience either form of alienation, neither participate in any of the three forms of resistance, and both display a high level of consent (all comparisons are highly significant).

Other configurations include more cases (ranging from 20 to 46), but display evidence of the same tendencies. Two configurations are marked by rules, and a lack of segmentation and automation, along with an absence of one cooperative control technique (segmented*automated*RULES*input and segmented*automated*RULES*career). Work groups in these settings are less likely to experience powerlessness (53% and 37%, respectively) compared to work groups outside of these configurations. In both cases, coefficients also indicate negative odds of
worthlessness (less than half as likely in the latter case) and significantly negative odds of participating in organized opposition (36 and 40% as likely). Coefficients for consent and loathing management, however, indicate small and nonsignificant relationships, while work avoidance coefficients are positive, but nonsignificant. These positive relationships for work avoidance are perhaps indicative of primary reliance on rules to constrain workers’ activities. Workers in this circumstance are more able to avoid work if they are so inclined, than are workers subject to control through direct supervision and automation. Additionally, workers in both situations lack at least one cooperative bureaucratic control, which if present, might have helped to curb inclinations to avoid work.

The remaining configurations (segmented*automated*INPUT*direct*career and segmented*automated*direct*RULES) are also quite similar to one another, not necessarily in their components, but in their effects. Both reduce odds of powerlessness by 90%, and odds of worthlessness to about one-third (all significant ratios). Moreover, both increase odds of consent by about 50% (although one ratio is not significant) and reduce odds of organized opposition by 80% and 70%, respectively (both significant). Rates of participation in other forms of resistance are also lower – by 19 and 40% in the case of work avoidance, and by 51% and 60% in the case of loathing management. However, only the largest difference is significant.

These outcomes indicate parallel, consistent effects of configurations present in professional settings across indicators of worker well-being, with roughly the same rates of significance. The notable exception, however, is far lower rates of organized opposition. This finding makes sense in light of the fact that these persuasive
configurations, when applied to the overall sample, also include craft settings. Workers in craft environments generally exhibit high levels of worker well-being, but also have higher rates of organized opposition.

Zussman’s (1985) account of engineers in a metal working firm illustrate how persuasive professional settings (in this case, segmented*automated*direct*RULES) may be overwhelmingly beneficial for workers’ psychological and behavioral outcomes – reducing the likelihood of powerlessness, worthlessness, loathing of management, and organized opposition, while simultaneously increasing odds of consent.

The scope of their activities and absence of direct supervision render powerlessness extraordinarily unlikely.

The use and organization of time is largely the engineer’s own. Unless there is a pressing problem (‘putting out fires’), he chooses in what order he will work on particular tasks and projects and how much time he will spend on them in any given day. He takes lunch breaks and coffee breaks when he chooses, and exercises discretion over his time of arrival at work. It is not unusual for an engineer . . . regularly to arrive a half-hour after the official starting time. In only one case, after an engineer at Precision Metals had consistently come to work two or three hours late over a period of several months, did his supervisors decide to “remind” him, by posting a notice on the bulletin board that official hours began at 8:00 (105).

On the morning I met Bob, he was working on the early stages of a design. According to Bob, this is the most exciting part of his work, the part that takes “originality, coming up with the basic ideas.” It is, in the word of another engineer, “skydreaming,” an act of imagination that precedes the more mundane work of sketching out the idea on paper before it can be taken over for yet more detailed design by a draftsman” (44).

Because their activities are broad in scope, and because they make most of the decisions about how to go about the work, these engineers are able to achieve a great deal of meaning, pride and satisfaction in their work.
Tom takes considerable pride in the noise test laboratory: “The noise test lab is what I made it. There was nothing going on here and I made it into something” (38).

What do I like about my job? Getting an idea, building it, following through, applications and sales. It’s all one continuous thing from the initial phone call, writing specifications, building it, testing it, and hopefully getting an order. For an engineer, it’s almost better than a piece of taffy (92).

Workers in this context may not be fully satisfied with a lack of hands-on tasks, but segmentation in the professions does not compare to segmentation in manual work with regard to the degree of powerlessness and worthlessness invoked by the latter. Indeed, the author suggests that despite the very real sense of disappointment among engineers lacking hands-on practice, they are only able to sense this disappointment because of a relatively high rate of satisfaction with other dimensions of professional work.

The work [an engineer] had done [as a tool and die maker in the machine shop], he argued, was both more highly skilled and more satisfying than the work he did as an engineer precisely because it combined machine work with design. . . . [However, t]he engineers are not actively demanding an opportunity for physical, hands-on labor at the workplace. . . . The separation of mental labor from manual labor has not, then, affected engineers in the same way it has craftsmen. . . for manual skills have never been as critical or distinctive a part of engineering as mental skills have been of craftwork. But to say it has affected engineers differently from craftsmen is not to say that it has had no effects. To the contrary, it is the source of a pervasive, if often muted, disappointment with engineering practice. Here, though, the issue is not one of proletarianization so much as of the modalities of work satisfactions (80-81).

Workers in this setting are notable for an utter lack of loathing of management – perceiving supervisors as necessary and beneficial for their work. Engineers’ comments
regarding management are in marked contrast to feelings about management among manual workers – even those in settings characterized as persuasive approaches to control (described in greater detail below).

I asked each engineer, “In a job like yours, how important is the supervisor?” and then probed to specify the role of supervision. [Most] put the supervisor’s role in a . . . positive light (112).

I don’t know everything. I don’t know the total business workings of the company. There have to be some guidelines about whether or not what I’m doing really benefits the company. There has to be someone over me who really understands the business (112).

He’s a buffer. . . . [H]e’s the one who goes to all the meetings and finds out what new projects the company’s starting and what the parameters are (113).

At Frank’s level, a supervisor is really important. He’s directing the thinking of the whole department. He is the leadership (113).

A supervisor should be of assistance when a problem is beyond my ability. There’s an assurance that comes from talking to people with more knowledge or ability (113).

When the engineers do complain about the firm or supervision, the scope of the blame is quite narrow, and the criticism mild. Moreover, it represents an interest in seeing things done correctly for the benefit of the firm.

A few engineers do complain, often bitterly, about arbitrarily interference in their daily work, but these complaints are directed at individuals, the “bad boss,” rather than the more general structure of authority. . . . The bad boss is not bad because he exercises authority. He is bad because he makes a technical mistake, and he is bad from the point of view of the company as well as that of the employee. Thus the engineers do not reject authority. Quite the reverse, they welcome its proper exercise (113-114)

Even when the Precision Metals engineers do criticize the organizational structure, their criticisms are mild, directed more to potentially negative
consequences for the effective utilization of engineering manpower than to consequences for the engineer’s personal experience of work.

I think they made a mistake when they divided up the two (product design) departments. What’s learned on special products could be applied to standards, and it’s not being done (92-93).

Engineers’ positive experiences with work and supervision translate to an utter lack of interest in organized opposition to management. They are particularly unlikely to ask for further input, in part because they perceive it as contrary to the needs of the organization, which they openly consider to be of primary importance in their reflection on how their work is organized.

A large majority of the engineers – 70 percent . . . – simply rejected the idea of a more democratic workplace in any sense . . . . To these engineers, democracy implied inefficiency: drift rather than leadership, decision making without competence, an inability to respond quickly. And inefficiency, according to these engineers, is incompatible with the aims of a business organization (117).

Clearly, the absence of the most oppressive top-down controls creates a setting in which worker well-being is easily achieved.

**Manual Occupations**

Table 14 presents results for work groups in manual occupations. While control configurations in professional settings are overwhelmingly persuasive, control in manual settings is decidedly more mixed. Not only are more coercive configurations apparent; but persuasive configurations are not all as overwhelmingly positive as those in the professions appear to be.
Coercive Approaches

Five of the manual configurations are coercive. Three of these were also generated in the more general setting, despite the fact that manual work groups are only 60 of the 141 cases in the sample. Because ratios are computed from the entire sample, the ratios and significance levels for these three coercive manual settings are identical to those in the general sample, presented on Table 11. The remaining configurations (AUTOMATED*DIRECT*RULES*CAREER*INPUT and segmented*AUTOMATED*DIRECT*RULES *input) are unique to this analysis.

All coercive manual configurations apart from the one in which work is nonsegmented have a large, positive and significant influence on the odds of alienation. In all of these cases, the odds of powerlessness and worthlessness are more than double. In many cases the factor approaches or exceeds 2.5, and in one case odds are more than triple. The remaining configuration has a relatively small positive, but nonsignificant effect on work groups’ experience of powerlessness and worthlessness, perhaps because work in this is configuration is not segmented. All but one of these configurations is associated with a reduced likelihood of consent. However, only two are significant – those indicating that workers are 70% and 74% less likely to demonstrate consent. All but one is also associated with an increase in work avoidance, however none of these coefficients is significant, perhaps because of the presence of automation and/or direct supervision in each.

Several ratios also indicate elevated odds of organized opposition and loathing management, but only two of these coefficients are both large and significant. Organized opposition is more than four times as likely where work is characterized as
It is possible that this outcome is more likely in these contexts despite only slightly elevated odds of alienation, and lower odds of loathing management than is apparent outside of this configuration because the lack of segmentation work gives workers in these groups greater leverage to bargain with employers. Loathing management is nearly triple among work characterized as SEGMNENTED*AUTOMATED*INPUT*career. In this case, it is possible that workers resent the contradiction between formal input and oppressive, top-down controls.

Devinatz (1999) describes coercive control (SEGMENTED*DIRECT*career*input) among bench assembly workers in a high tech firm. Consistent with results for the entire sample, the nature of control in this setting engendered a grave sense of both powerlessness and worthlessness, and obstructed a desire to exercise consent on behalf of the organization.

Although this dissatisfaction engendered two instances of collective action, efforts to organize a union were met with disinterest and fear.

In this context, the combination of direct supervision and task segmentation reinforce one another and intensify one another’s effect. Here, the author illustrates how direct supervision helps to maintain task segmentation:

During this extra hour of work, I ran out of disc anterior pads to gel so I got up from my chair to obtain another box of pieces, which was on a nearby table, only a few steps away. Debbie became upset and she asked rather indignantly, “Victor, what are you doing?” “I’m getting some more pieces,” I replied. “A worker should never get pieces by himself because the plant manager will become upset,” she continued. “If you need something, call Art and he will get it for you” (37).
Likewise, segmentation gives form to the abuse doled out by direct supervisors.

Allowing easy measurement of productivity, segmentation provides a tool serving as a basis for supervisors’ threats.

That was all the line foremen seemed to be concerned with – production. They never stopped to ask the workers how they were feeling. They only asked them one or two questions repeatedly – “How many TR60s have you produced today?” or “Have you reached your quota for the day?”

(48).

“How many have you made today?” Steve asked. Andy pointed to his pile of completed electrodes on the table. “That’s all you’ve done today?,” Steve exclaimed. . . . [H]e counted Andy’s finished electrodes and said to him, “That’s only two hours and ten minutes worth of work!”

(86).

I heard Debbie barking at a woman assembler about making the quota for assembly work. Debbie complained that the assemblers were not working fast enough. She threatened to fire them if they did not start to turn out more work (48).

Workers in this setting were indeed fearful of firings, especially since the local economy was marked by a high rate of unemployment. Moreover, racial minority status made many particularly vulnerable economically; minorities had more difficulty in getting hired, and relied more on overtime compared to white workers. Raul, a young Latino, said:

I wonder what they are up to. They fire a bunch of people and hire a bunch of people. There were people here yesterday who aren’t here today, right? Maybe they fire you if you don’t work fast enough (44).

Direct supervision entailed abusive and capricious practices (see Hodson 2001). But its impact in this context was heightened by combined presence of task segmentation, which rendered the work extraordinarily boring. The result was a sense of powerlessness which one worker likened to a “prison camp” (84).
The management of Biomed attempted to engage the workers in production for every single minute that was designated as “work time.” To do this, management believed that it had to impose certain rules and clamp down on worker behavior that detracted from this ultimate goal, even if such arbitrary decrees had no grounding in reality.

When I first started working at Biomed, the workers were allowed to talk while performing their repetitive, monotonous jobs . . . . Shortly thereafter, Debbie, standing by one of the inspecting tables announced . . . “From now on, there will be no radio playing or talking when gelling. If you talk, you will be issued a warning. Three warnings and you’re out of here. . . .” . . . Although talking seldom interfered with working, it appeared that management wanted the work to be performed in as painful a manner as possible. (82-85).

Task segmentation and repetition removed all intrinsic value from the work and produced a uniform experience of worthlessness, and an utter lack of satisfaction.

[The assembly process was highly segmented. Each worker performed a limited number of movements over and over. Much of the work at Biomed, and all of the unskilled work, required little, if any, use of one’s mental faculties. The only obligation at Biomed was to “learn” the proper technique of one’s assigned job and then “learn” to perform it quickly. . . . Although the individual motions of the different production operations appeared to be radically different, the underlying labor process was essentially the same, no matter what you did in the factory. This resulted in the workers holding extremely similar attitudes toward their work.

After about two weeks of work at Biomed, Sam showed me the jobs he had been working on that day . . . . [prompting him] to say, “I don’t think there is one happy employee at Biomed. All the jobs in this place are miserable. There are no good jobs” . . . . “This is a terrible place to work,” Kay said. “Who would work here if they didn’t have to? Look at the people who work here. They work here because they need the money” (58-59).

Tight, coercive control prevented some of the more common forms of resistance. Direct supervision prevented workers from engaging in work avoidance (a worker sleeping on the job was immediately caught and reprimanded, and new, more restrictive rules were introduced that same day); and firings precluded restriction of output among
those who wished to keep their jobs (although workers padded output records with “pencil bonuses” to prevent disciplinary action).

Although managerial abuse was rampant, loathing of management was far more rare than one might assume, and was revealed primarily in workers’ uttered responses to direct abuse on the part of supervisors. Most workers did not outwardly attribute the nature of their work to management. Neither does management itself, if Devinatz’ discussion with one supervisor is any indication.

Lou said, “Nothing against the workers in the main area of the factory, but they don’t use their minds.” I defended them. “They don’t have a chance to use their minds because of the way the production process is structured,” I replied. “The workers should try to come up with better ways for doing things,” he continued. “The supervisors control the production process at the factory, I countered. “They don’t give the workers a chance to figure things out on their own.” I was not sure that Lou believed me. (60).

Of course, there was no outlet for workers to improve the production process, because workers in this scenario lacked both forms of cooperative control, including worker input. Indeed, workers withheld consent in response. Those who could have shared their ideas with management declined to do so. For example, they withheld “production secrets” from management, including the author’s discovery of a simple procedure for preventing workers’ capacity to disguise underperformance with “pencil bonuses.” In another instance, workers declined to share with a supervisor their technique for cutting five tin backings at once.

It is much better for the workers to keep the discovery to themselves and use it to work at a more comfortable pace while still “beating the rates.” If Sonita had this plan in mind, she is much smarter and more creative than Lou believed unskilled production workers could be (61).
Despite high rates of dissatisfaction, withdrawal of consent, poor working conditions, low wages, and prior uprisings (including a mass walkout), these workers failed to respond to the author’s subsequent efforts to form a union. Ethnic tension and lack of commitment attributable to the poor conditions and wages were factors, but perhaps the most significant source of disinterest was fear of losing even their low-paying jobs in the context of high local unemployment. The author’s very public firing associated with his efforts to contact workers to discuss a union would only have reinforced this fear.

Workers had been arriving for the past ten minutes and were beginning to congregate by their workplaces. I shouted at Ben, who was pretending to do some work on the dock. . . . “I know that I’m being fired for trying to organize a union in this place, for trying to get decent wages for the workers, and more than one washroom for fifty workers, and for trying to change the sweat shop conditions here!” . . . Ben and Steve tried to shut me up by saying, “That’s enough! That’s enough!” I was hustled out of the factory. It was all over (175).

**Persuasive Approaches**

Manual settings also include as persuasive control configurations, however worker outcomes for these configurations are not as overwhelmingly beneficial for workers compared to persuasive control settings evident in the entire sample and in professional settings. Only two appear to be overwhelmingly beneficial for worker well-being (segmented*automated*direct*input and segmented*direct*RULES*INPUT*career). In both cases, odds of powerlessness is reduced by more than 80%, and the odds of worthlessness decline by 60 to 70% (all significant). Although the ratios are not significant, these configurations also appear to somewhat increase consent and reduce
work avoidance. Organized opposition and loathing management are also reduced to by 72% and 78% respectively for the latter configuration.

Gamst’s (1980) ethnography of locomotive engineers demonstrates how the former (segmented*automated*direct*input) helps to produce autonomy and meaning in manual work. Here, he distinguishes between mechanization (in the form of locomotives) and automation (more common on assembly lines), and illustrates how they compare with regard to powerlessness at work.

Where the tasks are not just mechanized but truly automated, the worker is reduced to an often-bored observer of a part of the flow of production. This is not so with the locomotive engineer, who controls a locomotive and its train. Electrical power for operations does not come from a distant source not under his own control . . . , but is generated according to his commands in his own personal powerhouse on rails. He not only generates electricity; he compresses air; causes fuel, lubricating oil, and water to be pumped; applies sand to the rails as needed; acts as a radio operator; converts electric motors to generators and generators to motors for various purposes; and is even concerned with the operation of a steam boiler (on many passenger units) used for heating passenger cars.

The engineer is not an extension of the machine; rather, the machine is an extension of his skills. The locomotive and train respond, and sometimes react adversely, to his manipulations and idiosyncrasies. . . . He is responsible for making judgments concerning safe and efficient rail movements and for securing rolling stock – goods, passengers, and crew members (29).

Ouellet’s (1994) study of trucking illustrates how this kind of work mechanized, but non automated work in another configuration (segmented*automated*direct*input) makes it possible for workers to derive a sense of meaning and satisfaction on the job. However, in contrast to persuasive control contexts in professional settings, these workers are not entirely removed for some element of worthlessness in their work.

As a truck driver I experienced a wide range of emotions and feelings, may be more than other people in most other jobs. I had episodes of utter boredom and times of depression at the thought that this life might be my
fate. . . . The bleakness of concrete and smog at high noon, traffic jams on urban freeways, and mindless and seemingly endless thirty-minute cycles from quarries to construction sites and back numbed my mind. . . .

Yet, trucking has another side. Driving can be a source of great joy, satisfaction, and even enchantment . . . . There were nights of magic: crossing the snow-covered Cascades under a full moon so bright that I could drive with my headlights off . . . . I felt a sense of accomplishment in handling an eighty-thousand-pound rig, particularly over challenging roads and in poor weather conditions. I found gratification in seeing the end stage of a haul: food in a supermarket, concrete made into a road, a diving board above the swimming pool in someone’s backyard. . . . Finally, I found the act of driving at times utterly and addictively pleasurable. (3)

Indeed, some of the value truckers are able to derive from their own work is not attributable to the actual content of the jobs, but rather in relation to the meaninglessness of other manual jobs they believe might have otherwise been their fate.

In the places where they load and deliver, drivers thus see undesirable jobs performed by people of their class or fate. Many drivers with parents, relatives, or friends who work in similar places, are likely to see themselves as having escaped these jobs only by their efforts, good sense, fortune or whatever they use to explain how they became a driver. “Yes,” a driver might say, “driving may be dirty, but it is not as dirty as these jobs; it may often be boring, but excitement is liable to be around the corner; the boss may be bothersome, but I rarely see him; my work may sometimes seem repetitive, but not nearly so when compared to the bottle inspector, grain unloader, or scale attendant; it may appear mindless, but a single misjudgment can cost in life and limb, and, besides, there is always something new to learn . . . . Finally, perhaps more than anything else, the driver is likely to feel that the plant worker, as a plant worker, is a “nobody,” while the driver, as a driver, is a “somebody.” . . . At no time is this more obvious to the driver than when he leaves the dismal environment of the loading or unloading site and enters his main-stage, the road (198).

As further evidence that persuasive approaches to control in manual settings produce more mixed outcomes than do persuasive approaches in the general sample and among the professions, meaning in manual and mostly male work
settings may not so easily translate into consent – in part because of masculine and class-based ideologies of its participants.

With self-esteem as a goal, drivers work longer, harder, and for less pay than they would if motivated only by coercion or economic need. . . . To see drivers, however, as empty vessels into which the owner’s values and standards are poured is misleading. Aside from personal style, owners were successful in passing their values and standards on to drivers only to the degree that these were compatible with the values and myths associated with male roles, the occupation and our cultures conception of work (140).

[Drivers derive a sense of pride from a high degree of output].
But, in embracing measures of output as an indicator of performance and self-worth, drivers are at odds with certain features of idealized masculinity: employment is fundamentally ignoble, thus the effort necessary for high output may be taken as commitment to an ignoble relationship and acquiescence to exploitation – an unmanly accommodation (150).

Another aspect of this persuasive manual setting that stands in marked contrast to persuasive settings in the professions is the nature of their relationships with supervisors. Truckers are not subject to direct supervision, but their relationships with supervisors are frequently more contentious than those apparent in persuasive professional settings. However, this is not always the case, as comparisons of relationships with supervisors in two organizational settings (representing two distinct cases in the sample) illustrate.

Like the owners of AgriHaul . . . , Will made informal deals. His reputation as “unpredictable” and “chickenshit” arose out of his capricious interpretation of the deals he made or had inherited when his father turned the company over to him, a capriciousness that demonstrated his authority and served his immediate needs.

Comparing SandHaul with AgriHaul illuminates the differences in the way owners treat informal deals. Ernie, once purchased mudflaps imprinted with the company name. One of the road drivers, L.G., who was a particularly hard worker, thought these flaps were ugly and mounted them backwards, with the company’s name facing the tire and the blank side facing out. Ernie complained directly to L.G. about the waste of his money, but he did not make him remount the flaps . . . . In
effect, control over flaps and the truck’s appearance, in general, belonged to the drivers, and the owner let the deal stand. Such a response by Will is impossible to imagine; he would have seen this issue as a power struggle that he had to win (93).

At the same time, however, the overall persuasive approach to control prevented even those truckers employed by the oppressive supervisor from engaging in organized opposition to management. Dissatisfied workers simply quit their jobs when they were able to – usually for work with another trucking company.

Although they are similar, two persuasive manual configurations have similar but also quite different implications for worker well-being:

segmented*DIRECT*rules*CAREER*input and

segmented*direct*RULES*CAREER*input. Both appear to remove entirely any odds of formal opposition, and of loathing management (all significant ratios of .00) – perhaps because lack of segmentation and presence of a career ladder help to ensure the practice of skill, and gains in skill over time, despite a lack of input. Both have nonsignificant, but negative influence on powerlessness and consent, as well as little impact on work avoidance. However, the odds of worthlessness differ markedly. Apparently, where work is nonsegmented and in a career ladder, but lacks worker input, the absence of rules and presence of direct supervision helps to reduce odds of worthlessness, but the absence of direct supervision and presence of rules does not. This would run counter to claims that direct supervision infantilizes workers. In this kind of context, it appears that supervisors may play a more supportive role, or perhaps these relatively skilled workers prefer direct contact with supervisors to impersonal control via rules.
An example of the latter configuration (segmented*direct*RULES*CAREER*input) demonstrates how persuasive manual settings may inhibit loathing of management, and organized opposition despite poor psychological outcomes. Interestingly, the process differs from the existing labor process account of cooperative control. Roger’s (1983) ethnographic study of seamen on a Norwegian freighter explains how career ladders did not simply promote consent through satisfaction, but also discouraged resistance with an element of fear.

Another dimension to the captain’s work served to reinforce his authority and to discourage open expression of views by the crew. The captain played a large part in determining who would receive further training and education. . . . It was the captain, poring over the employees’ records and evaluations, who decided which crewmen should get the financial backing of the company. This meant that very few of the sailors wanted to get into a conflict with him. “I do not want to be called a man who rocked the boat.” One rating said candidly (76-77).

An illustration of this influence on behavior is apparent in how workers responded to distress about ship matters. Norwegian law mandates that every industrial plant or commercial enterprise – in this case, the Hoegh Mallard – have a meeting once a month to deal with any subjects that the employees want to discuss. . . . We assumed that the men would use this opportunity to voice their escalating complaints about the ship’s food. . . . A few crew members who had privately complained to us were later asked why they had said nothing during the meeting. They replied that they did not want to be looked upon as troublemakers, or “get bad paper” which could hurt their careers at sea and “look bad on my record” (70-71).

In this context, workers followed the rules closely, despite high levels of powerlessness and meaningless in their work and an absence of direct supervision.

Although an effort had been made to vary the work, the nature of this ship drained much of the creativity and ingenuity out of the labor . . . (85)
On a day-to-day basis most ship work is inevitably repetitious: chip rust and paint, grease and clean machinery, lock the crane or unlock it, clean the engine, tie up the ship when you arrive and let go the lines when you leave. “You do what you’re supposed to do,” Cox said. “And when you finish, you start all over again.” . . . The work community was relatively small on the Mallard, and each man knew what he was expected to do. As Moore pointed out, “We all know what we’ll do tomorrow. We’ll do about the same thing we did today and yesterday.” . . . Johnson and Moore recalled how they got their work assignments. Johnson received his orders from the bosun, and Moore got his from the first engineer. There wasn’t any discussion: they were told what to do and did it. . . . I don’t remember men having any say-so about their jobs” (80-81).

Ratios in the remaining configurations (segmented*DIRECT*RULES*CAREER*INPUT and segmented*automated*DIRECT*career) are surprising for their lack of consistency and significance. Almost none of these ratios are significant, although a few of them in the case of the former are quite large. Among work groups in this configuration, none withheld effort (a significant ratio of .00), likely because of the presence of both cooperative bureaucratic control techniques. The odds of consent were 88% higher, but not significant. Strangely, while the odds of loathing management and organized opposition were large (more than double and triple, respectively), they were not significant. As in other cases, it is possible that the contradiction between input and hierarchical control causes fosters antagonism toward management. The latter configuration, in which work appears to be almost solely controlled via direct supervision, appears to have positive and negative implications for worker well-being, most of which are not significant. The sole significant ratio is in the case of loathing
management – an understandable result of reliance on direct supervision combined with an absence of career ladders, even in cases where work is neither segmented nor automated.

In sum, while control in professional settings overwhelmingly reflects a persuasive approach, control in manual occupations is decidedly more mixed. Persuasive configurations are apparent in manual settings, and many are overwhelmingly beneficial for worker well-being. However, some are associated with negative, as well as positive effects, and many of these are not significant. More importantly, manual work occupations are also notable for a number of configurations characteristic of a coercive approach. These consistently impair worker well-being across an array of outcomes, and are indicative of a poor day-to-day work experience.

Service Occupations
Table 15 presents results for configurations found in the service occupations. It is worth highlighting here that since customers play a significant role in control over customers, direct supervision here indicates that work groups are either directly controlled by a supervisor, or spend at least 65% of their time with customers. Substituting this more inclusive measure of direct control had no effect on the configurations identified among professional and manual occupational groupings. In contrast to professional occupations, for which configurations are uniformly persuasive, sales and service occupations involve both coercive and persuasive approaches. As in the case of manual occupations, persuasive configurations present in the service occupations have relatively mixed effects on worker well-being.
Coercive Approaches

These coercive approaches differ from those identified in the general model in that none involve a combination of segmentation and automation. Indeed, despite a preponderance of attributes associated with negative influences on worker well-being, one of these is marked by an absence of segmentation and automation (segmented*automated*RULES*career*input). Perhaps because it lacks the most oppressive top-down controls, this configuration does not overwhelmingly impair worker well-being. Indeed, it is marked by negative, though nonsignificant effects on powerlessness and worthlessness (reducing their likelihood by about a third and nearly a quarter respectively). The configuration does appear to diminish consent (by about one fifth) and to increase work avoidance (by 52%) and loathing management (by 23%), although these ratios are not significant.

Interestingly, despite increasing odds of loathing management, work groups in this configuration are less than half as likely to engage in organized opposition compared to the rest of the sample. This outcome is also less likely among work groups in the remaining coercive configurations, for which odds of organized opposition are 16 to 39% lower than among other work groups. It is likely that this deviation from trends apparent in other occupational groups and in the general sample has to do with these configurations representing control typologies in service settings. Organized opposition has historically been concentrated in the manual sector, and service settings – even the most oppressive ones, such as fast food providers – tend not to produce it.
The remaining configurations representing a coercive approach to control are associated with poor worker outcomes across an array of indicators. Work that is SEGMENTED*DIRECT*RULES*career*input, combines three of the four top-down control techniques with an absence of bureaucratic avenues for enlisting worker support. Consequently, odds of powerlessness and worthlessness increase by factors of 2.66 and 2.73 respectively. Both ratios are significant, as is the ratio indicating that work groups in this configuration are less than a third as likely to exhibit consent. Work avoidance and loathing management are likewise elevated (the former by 67%), however these ratios are not significant.

The final coercive configuration combines direct supervision with an absence of cooperative bureaucratic techniques and an absence of automation (automated*DIRECT*career*input). Work groups confronting this control typology are 74% more likely to experience powerlessness, 79% more likely to experience worthlessness (both significant). Perhaps because they lack cooperative bureaucratic techniques to enlist their cooperation, they are also less than half as likely to consent and more than twice as likely to engage in work avoidance (both significant). The lack of automation would further enable them to avoid work. Despite workers’ obvious dissatisfaction, these work groups apparently do not hold management responsible, as their odds of loathing management are barely, and nonsignificantly elevated.

The following example, drawn from Mars and Nicod’s (1984) ethnographic study of waiters in a high-status hotel restaurant in London illustrates these processes. Because they require direct contact and customized service, waiters’ tasks are not amenable to segmentation or automation. They also require a great deal of contact with customers,
who serve a supervisory role and dictate much of the content of workers’ tasks.

Subservience is a key component of waiters’ work role.

Different meanings attach to the term ‘service’; we are not simply referring to the serving of food. Service involves the need to supply customer satisfaction in a variety of ways, not all of which are explicit or easy to define . . . (28).

Most . . . thought that to succeed in their profession they needed to be pleasant, charming, polite and discreet. Others emphasized the need to show respect and play a submissive role . . . [One] customer . . . ordered two bananas for dessert. Like all raw fruit, the bananas were served on a silver platter with a knife ready for the customer to peel them herself . . . . The customer called for a waiter and asked him to peel them for her. As a general rule a waiter should not be seen to touch food . . . . With a carving knife in one hand and a fork in the other, he carefully cut along both edges of the skin until nothing but the bare inside was left for the customer to eat (36-37).

Similar to workers in non-service settings, direct supervision (in this case by customers) subjects these waiters to abuse, producing a significant degree of powerlessness on the job.

The customer who wants to be a step ahead may make a special request simply to enable him to take control. It is a kind of game in which the customer pits himself against the waiter’s wits and can score points easily. Waiters often feel they have little choice but to accept most claims which customers exert. In some cases, the waiter may even anticipate what the customer wants and grant him a favour without being asked. Though this helps the waiter to retain some control, he is always vulnerable because the customer can so easily change his mind. On one occasion, for instance, a customer who always had the watercress and onion salad, rebuked a waiter for bringing it, saying ‘I don’t remember ordering this’, as if he had never eaten it before in his life. So normally the waiter has little room for manoeuvre. He must simply accept his subordinate status as part of the ‘primary adjustment’ required of him (76-77).

Tipping and vulnerability to customer complaints heighten feelings of powerlessness, and have the potential to induce sensations of worthlessness of the
work. Not every interaction will have this result, but the nature of the relationship subjects workers to the possibility of this outcome.

In cases where a complaint is about food and it appears to have been made sincerely, the remedy is simple: the waiter returns the food to the kitchen and asks the chef either to alter or replace it . . . . There are cases where a complaint is not genuine, and the customer does not honestly believe in it either: the complaint is simply a means of drawing attention to his own importance. . . . Nothing can be done to satisfy this kind of complainant because no sooner has the original complaint been dealt with than new ones are invented (77-78).

[The customer’s] single most important advantage comes from the practice of tipping. Undoubtedly there are some people who never tip . . . it is this very element of uncertainty – ‘will he or won’t he’ that puts the customer a step ahead . . . . [C]ustomers often give an inadequate reward for the service they receive; sometimes they leave nothing at all. The extent to which this upsets those who serve indicates that non-monetary factors are involved . . . . For many waiters or waitresses, the greatest insult . . . is to receive such a small tip that they feel degraded, embarrassed, nonplussed, or otherwise upset at having to accept it. Some thought that it was better to receive nothing at all than be given an amount which was totally unrepresentative of the service they provided (73-75).

Of course, tipping also generates additional effort, such as larger portions not technically sanctioned by management.

This is often preceded by a phrase such as ‘Would you like any extra . . . , sir?’ to make the customer aware that such treatment is provided as a special favor . . . . If the response is right, and they know that there is some guarantee that the time and effort they have invested will bring greater financial reward, they will then take the risk (82-83).

More often, however, waiters respond to their psychological experience by withdrawing consent and engaging in work avoidance. In the context of service work under direct supervision of customers, these resistance activities take a distinct form. Specifically, they manifest in activities that represent waiters’ refusal to adopt the subservient role expected of them. At the same time, however, they do not outright reject the role.
Customers may be aware that they have been rebuked, but the nature of the resistance is such that they may not claim to have been disrespected, leaving them with no basis on which to seek redress.

[T]he subordinate nature of personal service means that a waiter frequently feels a resentment that must remain unarticulated. While not wishing to render customer satisfaction impossible, a waiter may use his service skills to cheat or insult the customer, or at least to cause some indefinable disquiet. To do this he must use strategies that combine subtle aggression with what should be able to pass for good professional conduct . . . . One waiter we knew had developed a particularly effective method of inducing dissonance – especially when directed at the socially insecure. He would repeat all the orders offered by the customer in French but would do so with an emphasized accent at each repetition. He was able thereby to suggest that the hapless customer was obviously unused to expensive eating out because he could not even pronounce the names of the dishes correctly! (83-84).

Because of the mass of rules and (often spurious) expertise surrounding dining out and social etiquette, as the specialist the waiter is ultimately always in a stronger position than those he serves. A good example of this occurred . . . when a customer complained that the brandy he had been given was not Rémy-Martin as he had ordered, but a less expensive one. By taking the glass back and returning impassively with it a little later, the waiter managed to create the impression that the brandy might have been changed for the kind which the customer had ordered. On the other hand it might not. In fact, it was the same glass of brandy and the customer had been deceived, but it would take a particularly confident customer to send it back a second time (85).

Consistent with the quantitative findings regarding the type of control found here, workers in this context are not any more likely than the rest of the sample to loathe management, and appear to be unlikely to engage in organized opposition, despite poor psychological responses to work. They do withdraw consent and engage in work avoidance, but these resistance activities, like the resentment that engenders them, is directed at customers who mete out abuse and not toward management.
**Persuasive Approaches**

The implications of persuasive approaches are generally positive for worker outcomes, although two of the three have mixed effects. The most positive outcomes are apparent where rules are the only top-down form of control, and where the context is also marked by absence of the remaining top-down controls and presence of both cooperative bureaucratic control techniques. While this configuration included only seven work groups, none exhibited powerlessness, worthlessness, work avoidance or loathing management (significant ratios of .00), compared with respective rates of 44%, 43%, 25%, and 30% among the remaining work groups. Likewise consent was 2.55 times more likely (also significant). Only the ratio for organized opposition, indicating that these work groups were more than one-third less likely to involve themselves in this activity, was not significant.

The other settings are marked by an absence of segmentation and automation, and the presence of direct supervision. One of these (segmented*automated*DIRECT*career) lacks at least one cooperative bureaucratic technique, and the other (segmented*automated*DIRECT*rules*INPUT) lacks an additional top-down control and incorporates a cooperative form of bureaucratic control. Surprisingly, given that both lack the most oppressive top-down controls, neither has much effect on powerlessness. However, both diminish the odds of worthlessness – by 58% (significant) in the case of the latter, and by almost a third (nonsignificant) in the case of the former – and resistance (both nonsignificant). At the same time, both increase odds of loathing management (although comparisons are nonsignificant). The most interesting comparisons between these configurations is found in consent and work
avoidance. Work groups in the latter configuration, marked by presence of worker input (a cooperative technique), are more than twice as likely as those outside the configuration to demonstrate active consent (this ratio is significant). In contrast, workers in the former configuration, marked by the absence of at least one bureaucratic form of control, are more than twice as likely (and significantly so) to engage in a high rate of work avoidance.

Mansbridge (1983) describes an example of the latter control configuration (segmented*automated*DIRECT*rules*INPUT) among service providers in a 24-hour crisis center in a major American city. The nature of the work was not amenable to most coercive forms of control, especially task segmentation and automation, which are routinely employed in non-service settings.

[Helpline] provided services, not material goods, and thus required a higher initial level of interpersonal competence than do most factory jobs. Helpline was basically a dispenser of counseling services, so that the job itself placed a premium on being able to understand other people” (147).

Unlike circumstances in which input supplements numerous top-down controls (Milkman’s GM-Linden plant, for example), here, worker input is a central organizing feature of workplace practices.

From its inception, Helpline had always had the characteristics of a unitary democracy. It was dedicated to the common interest; it made its decisions by consensus, face-to-face; and it affirmed equal respect among its members . . . . Each member of the forty-one person paid staff belonged to a service group . . . . Each service group established its own procedures, but all worked within a presumption of equality and attempted, more or less, to make decisions by consensus . . . . The entire organization . . . functioned primarily as a direct democracy. They made decisions by consensus . . . . At any stage, a community member could demand a full community meeting . . . . All major policy decisions were to be made by the entire staff assembled at Community Day (142-144).
Here, input is not compensation for coercive practices, but rather a means to build commitment and to offset low wages for this population whose social class gave them other options for work.

Because the staff members’ education and middle-class status made it easy for them to find jobs elsewhere and because they were also adventurous, young and undecided in their career plans, turnover was high. To survive without raising salaries or losing its staff and volunteers, the organization had to try to live up to the ideals of service, community, and democracy (148).

Input does not have much effect on workers’ overall sense of powerlessness, however, because many workers feared interpersonal elements of decision-making meetings.

Even among the confident, therapeutically trained staff at Helpline, some people feared public ridicule. . . . Several people told me that “people take decisions very personally,” and even the most articulate staff sometimes suppressed what they wanted to say because it would open them to personal attack. . . . [A] staff member once worried that a meeting would attack his project: “I felt alone. Part of the fear was losing that group of people and being alone and not having them.” . . . These fears mean that some people never speak out . . . they report, “I’m so angry that I get very frustrated, and I can’t say what I think” (159-160).

Despite frustration, workers do not loathe management, and had no need or use for organized opposition.

This was the way members of Helpline wanted to make their decisions. Despite their divisions, they believed that they could and should reach unity on issues of this kind. Their ideal was a unitary democracy; and requiring consensus gave that ideal institutional form. . . . It required . . . that dissenters’ objections be sought out, heard, and taken into consideration, and that at the end of the process they agree they could “live with” the decision of the greater part of the group. . . . The consensual process was one of converting initial disagreement into agreement or at least into universal willingness to go along with the result (163).

Had the CPC made decisions by majority vote, it would probably have settled the matter in a quarter as much time . . . [b]ut by spending another thirty hours on the decision, Helpline had produced a better informed
decision and had made it acceptable to a significant minority who might otherwise have disowned it (173-174).

A newcomer to the organization describes the importance of input and knowledge imparted during decision-making meetings for the quality of the services Helpline provided:

If everyone isn’t really agreed on some policy, it usually doesn’t work. Because there’s a lot of feeling required behind any of the things you tell the kids. . . . They know whether you believe what you’re saying. . . . And if it’s just some policy that someone else has made . . . it just doesn’t work. You just can’t get it across to a kid (177-178).

High levels of input also enhanced consent, which was fundamental in accomplishing this challenging service work not amenable to more coercive forms of control.

Because it was frequently possible to uncover a truly common interest, the consensus rule had the further practical advantage if increasing commitment. The difficult, decentralized, unregimented work of Helpline demanded that each member be self-motivated. And in Helpline’s consensual system, every worker had at least formally agreed that the task at hand ought to be done. Kaye, easily irritated by slackness, praised consensus for generating commitment: “You have people doing things that they understand they should do, and have agreed to do. It’s an internalized sort of discipline (172).

Commitment and mutual trust that resulted were especially useful during periodic crises, which fell squarely on the backs of the workers. In contrast to the frustration and infighting that often results from production chaos (Juravich 1985), the control structure created a context where people pulled together to get the work done, and felt good about doing it. A worker states:

You get high off the spirit of the crunches. I know these people; I know they are really going to be as crunched as I am, and they are really competent people. It’s okay to be in a crunch with them (177).
Another describes a particular crisis as “one of the real high points in my life”:

I felt really close to the other people – a real part of the community. In that week I was totally involved, every part of my being was involved. All of my emotions, the way I felt toward the kids, all of my inspirations – it was just really, really beautiful! (177).

The author continues:

The work at the shelter – interdependent, communal, ridden with crises, . . . allowing at times the sense of a task completed – thus strengthened ties between individuals, developed their attachment to the Shelter as a whole, and made it easier for them to adopt as their own the good of the others and of the whole (177).

This commitment and attachment allows for a great deal of pride. At the end of one interview, a worker turned to the author “with genuine emotion and blurted, “We’re wonderful. God bless us!” (178).

In sum, control in service settings represents a mixed approach. Persuasive approaches are apparent in half of the configurations revealed, but they are not overwhelmingly advantageous for workers, as they tend to be in professional settings. Coercive approaches, with concomitant disadvantages for worker outcomes are also apparent. All of these are marked by an absence of both cooperative bureaucratic control techniques meant to enlist workers’ active effort. Unlike such approaches in manual settings, none of these combine the two most oppressive top-down controls (segmentation and automation). On the other hand, two are characterized by the presence of direct supervision, which can be infantilizing in some contexts and can subject workers to abuse.
Conclusion

These results indicate class differences in packages of control available to workers, with implications for the class-based inequality for the subjective work experience and workers’ behavioral response. Work in the professions is overwhelmingly advantageous for worker well-being. Configurations apparent among professional work groups were uniformly persuasive – that is, at least half of their attributes represented the absence of top-down techniques or the presence of cooperative bureaucratic controls including career ladders and worker input. Their implications for worker well-being are also overwhelmingly positive.

In contrast, manual and service work groups had more variation in the nature of control, with more diverse implications for worker well-being. About half of the manual and service configurations reflected a coercive approach to control, marked by a preponderance of top-down techniques and/or the absence of cooperative bureaucratic controls meant to enlist worker effort. These coercive configurations were in turn associated with greater odds of alienation and resistance activities, and reduced likelihood of consent. The persuasive approaches apparent outside the professions also tend not to produce overwhelmingly beneficial outcomes to the degree that those apparent in the professions do.

The nature of control confronted on the job thus varies by class, producing class-based divergence in the experience of work. Professional work in less oppressive, and experiences at work, including psychological responses to work and behavioral tendencies on the job, are more positive. The labor process in manual and service settings is advantageous for some, but these settings are more prone to reflect approaches
to control that are coercive and disadvantageous for these same outcomes. As a consequence, workers experience their social class at work.
CHAPTER 8

GENDER AND THE LABOR PROCESS

Results presented thus far demonstrate that the techniques used to control workers shapes psychological and behavioral dimensions of their well-being. Settings characterized primarily by top-down methods, or by an absence of cooperative structures are coercive, and impair worker well-being by increasing rates of powerlessness and worthlessness, reducing consent, and encouraging multiple forms of resistance, including organized opposition to management, work avoidance, and loathing management. The reverse is true where control settings are persuasive – that is, where at least half of all relevant aspects of control represent cooperative techniques or an absence of top-down methods of control. Significantly, comparisons of the nature of control for occupational categories demonstrate that class is a significant factor in whether workers confront coercive or persuasive packages of control, and consequently in whether the overall experience of work is positive or negative.

The current chapter investigates whether variation in the nature of control and worker well-being is also apparent by gender composition of work groups. In other words, are coercive or persuasive strategies more apparent among work groups primarily made up of men or women? To answer this question, I use QCA to identify control
configurations in subsamples of cases with high and low rates of female participation. Afterward, I compute ratios of configuration-to-nonconfiguration means from the entire sample of 141 work groups. This technique allows for a standardized comparison of configurations – one untainted by selectivity and distortion that would result from reliance on comparisons within predominantly female or predominantly male subsamples.

Work groups with low rates of female participation are those in which the percent female is less than 10% (n=70), while those with high rates of female participation have a percent female of at least 60% (n=36). These criteria were selected for their capacity to generate subsamples that are distinctly female and male in composition, with the capacity to reveal variation in control strategies along lines of gender, while preserving as many cases as possible for determining configurations. Notably, replication with subsamples using differing criteria yielded remarkably consistent patterns. For example, subsamples of work groups less than 15% female and less than 20% female yielded configurations that were identical (or very nearly so) to the subsample restricted to work groups less than 10% female. Likewise, configurations apparent for work groups that are at least 60% female are identical to those that are at least 75% female.

Results

Tables 16 and 17 display the configurations evident in control settings encountered by work groups that are primarily male and primarily female, along with mean ratios (configuration-to-nonconfiguration) generated from the entire sample for each of the six dependent variables. Results demonstrate that disproportionately male work settings
have a greater variety in the nature of control, and are more often persuasive than coercive. In contrast, work settings occupied primarily by women have less variation, and tend to be coercive. The implications of persuasive and coercive approaches for worker well-being parallel tendencies reported in prior chapters, indicating that job-level gender segregation has significant implications not only for wage inequality, as previously reported, but also for the psychological and behavioral experience of work.

Low Female Participation

Table 16 displays the configurations characterizing work groups with few women (less than 10% female). These configurations are overwhelmingly persuasive. Only three of the ten configurations are coercive, each with overwhelmingly negative implications for all six indicators of worker well-being. The remaining seven configurations are persuasive, with overwhelmingly positive implications for worker well-being. As in prior analyses, ratios tend to be more significant for psychological outcomes (powerlessness and worthlessness), than for behavioral outcomes, but even non-significant ratios are in the expected directions. At the same time, many configurations do have large and highly significant effects on certain behavioral outcomes.

Coercive Approaches

Two of the three coercive configurations were also apparent in QCA results drawn from the full data set (DIRECT*RULES*career*input, and SEGMENTED*AUTOMATED*RULES*career). The remaining coercive configuration is similar to the latter (SEGMENTED*AUTOMATED*DIRECT*career). All have
overwhelmingly negative implications for the psychological experience of work – more than doubling rates of powerlessness and worthlessness, and nearly tripling odds of those outcomes in the case of work characterized as

SEGMENTED*AUTOMATED*DIRECT*career. Additionally, the rates of consent are only 26% to 36% as likely in these settings – probably a result of an absence of cooperative controls that might serve to enlist worker support, combined with the presence of top-down methods that promote dissatisfaction. In all of these cases, mean ratios are highly significant.

This is not the case for resistance outcomes, which (as noted before) often reflect conditions beyond just the nature of the work. All three configurations appear to elevate the odds of each form of resistance, however only one of these reaches the level of statistical significance. This particular ratio indicates that workers subject to control characterized as DIRECT*RULES*career*input are more than twice as likely to avoid work. The other configurations have a positive effect on this outcome, but the ratios are smaller and nonsignificant. As suggested previously, it is likely that the presence of automation makes it difficult to avoid work in these contexts. Odds of organized opposition and loathing management are elevated in each of these settings – in most cases by more than 50%. However, none of these ratios is significant. Interestingly, the smallest increases in these outcomes (49% and 16%) are found in the configuration that promotes work avoidance. It appears that these workers are not only more able to avoid work, but also channel their relatively high levels of dissatisfaction into work avoidance, rather than directing it at management.
**Persuasive Approaches**

The persuasive configurations apparent in work done by predominantly male work groups are nonsegmented. Several are also nonautomated, and more than half involve the presence of a cooperative bureaucratic control technique. With very few exceptions, these configurations enhance worker well-being by reducing the likelihood of powerlessness, worthlessness, and all three forms of resistance, and by increasing the likelihood of consent. All of the configurations lacking both segmentation and automation (segmented*automated*career, segmented*automated*input, and segmented*automated*RULES) reduce the likelihood of powerless and worthlessness by 38% to 72%, but their influence on behavioral outcomes is less consistent. Generally, they increase consent by about one quarter to one half (the latter ratio is significant), but segmented*automated*input appears to reduce consent by about a quarter. This configuration also does not appear to be as significant a factor in reducing odds of organized opposition to management, although the ratio indicates a negative effect.

Contradictory effects for the three nonsegmented, nonautomated settings are also apparent in the remaining resistance measures. The lack of cooperative control techniques apparent segmented*automated*career, and segmented*automated*input may contribute to (nonsignificant) elevated levels of work avoidance in those settings. Where the absence of cooperative control is replaced by rules, there is a slight negative effect on this outcome (also nonsignificant). Yet another pattern is evident in the case of loathing management, where two of the three configurations appear to reduce its occurrence, while the third has a slight positive effect (all nonsignificant). These tendencies with regard to behavioral outcomes are in stark contrast to those apparent for all work that is
nonsegmented and nonautomated (presented in Table 11). When all of these cases are compared to the rest of the sample, alienation and resistance are reduced, while the rate of consent increases dramatically. This comparison is indicative of the emergent qualities of varying combinations of control.

With the exception of the final persuasive configuration presented on Table 16, the remaining persuasive configurations (segmented*direct*RULES*career*INPUT, segmented*DIRECT*CAREER*input, and segmented*RULES*CAREER*input ) are consistently beneficial for worker well-being. All but one (segmented*RULES*CAREER*input) has sizable and significant negative effects on powerlessness and worthlessness, rendering these outcomes no more than a third as likely among workers in these configurations. The sole exception also indicates a negative, although nonsignificant effect. All have moderate, though nonsignificant, positive implications for consent, and negative implications for each of the resistance measures. These negative implications are large and significant for loathing management, which is completely absent from two of the configurations, and is less than a quarter as likely in the third.

The final configuration (segmented*DIRECT*RULES*CAREER) is an exception primarily because of the relatively small and nonsignificant negative implications for powerless and worthlessness, and the large, although nonsignificant, positive effect on organized opposition to management, accompanied by an elevated, though nonsignificant, tendency to loathe management. These outcomes appear to be attributable to the combination of direct supervision and rules (which promotes dissatisfaction) with nonsegmented work (which gives workers a degree of power with
which to negotiate with management). Interestingly, despite apparent frustration with the job and with employers, workers in these settings are also very unlikely to engage in work avoidance (none of them do, as indicated by a significant coefficient of .00), and have almost double the tendency to engage in consent. The combination of nonsegmented work and career ladders is apparently persuading them to exert effort on behalf of their employers.

**High Female Participation**

Male-dominated work settings have a markedly different character compared to those chiefly occupied by women. While the former may take a number of forms, primarily persuasive, the latter have less variation in structure, and are overwhelmingly coercive as Table 17 indicates.

**Coercive Approaches**

Of the five configurations apparent in settings with high rates of female participation, four are coercive. And three are composed entirely of attributes denoting top-down control and an absence of cooperative techniques. These are tremendously damaging to worker well-being – doubling or tripling the rates of powerlessness and worthlessness compared to work groups outside of these configurations, and reducing rates of consent by 64% to 83%. One of these (DIRECT*RULES*career*input) has appeared repeatedly throughout the analysis, and has repeatedly been shown to more than double the rate of work avoidance while reducing consent. Implications for organized opposition and loathing management are positive (and sizable in the case of the former), but
nonsignificant. Comparatively, SEGMENTED*DIRECT*career*input has only weak and nonsignificant effect on all three measures of resistance, despite extraordinarily high rates of powerlessness and worthlessness on the job. This is perhaps because workers in these settings have less freedom to avoid work and less power to negotiate with management. It is not clear why workers so dissatisfied with their jobs would have a slightly reduced tendency to loathe management, however.

Although those in SEGMENTED*AUTOMATED*DIRECT*RULES*career workplaces have 45% to 78% higher rates of engaging in all three forms of resistance, these ratios are not significant. They do withhold consent, however – probably in part because of a lack of a career ladder. The overwhelming array of top-down controls likely makes it very difficult to avoid work, although workers appear to do so when they can. They may have relatively little skill-based power with which to resist, but their dissatisfaction with the job does appear to translate into an increased tendency to loathe and oppose management.

Westwood (1984) describes assembly workers in a British clothing factory subject to this configuration of control. Ninety percent were female, and these women were locked out of jobs with more skill.

As machinists, the women were expected to clean their machines and to replace the needles should they become blunt or broken – but no more than this . . . . One of the young supervisors, Carol, was keenly aware of the male monopoly on skill: ‘they never train the girls for that kind of work. The men keep it to themselves’ (23).

In addition to a lack of skill, and partially owing to it, women’s jobs in the factory were marked by a more coercive approach to control than were men. Westwood illustrates the women’s awareness of the greater degree of direct supervision and of the combination of
task segmentation and rules apparent in the “minutes,” “gradings” and “units” to which the author and a worker refer below. The author links gendered factory arrangements to Andrew Friedman’s (1977) comparison of strategies founded on what he called “direct” control (marked by managerial reliance on threats, close supervision, and narrow responsibilities) to those built around responsible autonomy, or worker input. Beyond demonstrating the implications of particular configurations of control, Westwood thus helps to illustrate this study’s finding that coercive arrangements are more prevalent among work groups in which the majority of workers are women.

[T]he direct-control strategy was clearly in evidence . . . among women who were classified as semi-skilled workers (much to their constant annoyance), whereas the responsible-autonomy strategy was in evidence with the skilled male workers, the knitters. They worked in a capital-intensive area and, although they were subject to the minutes and gradings, they were not subject to direct supervision and they did not work on units (41).

Annie said:

The men get away with murder in this company. Just for example, every night the women leave here one or other of them is checked by security. But the men, they get into their cars and off they go . . . . They get away with just coming and going as they please. You see on the night shift there are only two managers and one of them has been away a lot because he was ill. The men are not supervised like the women. The knitters look after their machines and that’s that. They aren’t on units like in [our] department. Annie made these comments without any prompting, she didn’t need any. . . . She also took the point into the area of control: male wages and privileges meant more freedom for men and less for women.

Sallie  So, the women are more tightly controlled than the men?

Annie  Oh, yes. The units are a different way of working. The men in the dyehouse, the cutters and layer-uppers are just doing their own thing most of the time, in my view. They are really spoilt in this industry and remember it’s female dominated, by numbers anyway.
. . . Despite the high number of women, the hosiery industry gives power to men, supports male wages and men’s ability to ‘do their own thing’ (71-72).

Similar to other configurations, elements work independently and in concert to produce worker outcomes. Here, Westwood describes how segmentation helps to create a sense of powerlessness and lack of interest in the work, and how attempts to infuse meaning into the work partially reflect gendered interests of the worker.

Each woman was responsible for making up part of a garment – no one made a whole dress, or a whole blouse. Instead, a woman might sew side-seams all day, every day, week in and week out. The work was highly repetitive and, as the women attested, very boring. Changes of style and seasonal variations rang a superficial change in the nature of the work, but whether the cloth was cotton or wool, sewing pieces together was the same. The individual worker had no control over what she would do, but she tried to boost her speed on each operation in order to secure the highest rate for the job (19-20).

Women . . . always worked at the same machine. In an attempt to impose something of themselves on the production process, the women always referred to their machines . . . as ‘my machine’ and their chairs as ‘my chair’. Any encroachment upon ‘my chair’ was likely to cause a major row . . . Possession was reinforced by the women through the use of decorations. The machines would be adorned with pictures . . . The pictures the women chose presented the world of the home, of domesticity and dependent creatures – dogs and kids – quite unlike the pin-ups and motorbikes of the dyehouse male workers. . . The domestication of [this] department . . . was further reinforced by the way in which used spare oddments of material to make aprons for themselves . . . Aprons brought the world of the home and of domestic labour right into the middle of the factory – by so doing, they extracted from the company something much more than the fabric pieces and the labour time involved in their production (19-22).

Similar to the bench assembly setting studied by Devinatz (1999), direct supervision helped to reinforce segmentation, restrict freedom of movement, and hasten their production speed.
The supervisors’ responsibility to the women on the units was to provide a continuous flow of work so that no one was idle. They, and their assistants, spent their time fetching and carrying large boxes of pattern pieces on wheeling shelves. . . . [T]he machinist could not move from her machine. . . . (19).

But these were not the only forms of control to which the women were subject. A combination of segmentation and work rules in the form of targets, added to rule-based wage downgrading for failure to meet them, engendered a sense of extreme powerlessness and meaninglessness. Because the women’s work was formerly organized around piece rates, many of the women who have been with the company for years have a firm grasp on the implications of the existing control arrangements for the experience of work. They often explain it by drawing comparisons between the systems. Here, one explains how the combination of control represented in “the minutes” creates extreme pressure and powerlessness over the use of workers’ time.

The older women who had known the piecework system were very clear in their understanding that ‘the minutes’ were not simply about increased production, but were essentially about control. They resented the loss of control over their time and their production: ‘. . . I loved [piecework] because if there was no work . . . you went home and you could see your children more . . . .’ For . . . many of the women, [this freedom] had been taken away. In this, it represented a real imposition and control over her life that had not previously been the case.

Betty It was different here then. We were all on piecework and we used sing and have a laff. You can’t do that now with these minutes. You’ve just got to keep your head down and work to your target. Some of them work through their breaks because it’s the only way you can keep up. . . .

Sally But you have the guaranteed week.

Betty Yes, and you pay for it. When we need time off they want to know where we are going, for how long and you have to prove it. In the old system it didn’t matter. It was much freer then. This is more regimented. . . .
As Nell put it:

I wouldn’t choose to do this job . . . It’s very hard work . . .
. and no one minds you. But now you’ve got to work solid
otherwise you’ll be downgraded: that’s always hanging
over you like a threat (43-45).

What’s more, this particular combination of control techniques, particularly the
segmentation and emphasis on speed in production targets, have removed skill, and thus
the meaning, pride and dignity workers achieved under prior arrangements.

You can be really good and it makes no difference, it’s
speed they want. . . . All we have to do now is turn it out.
The last two years the quality has really gone down . . . I
came here because I used to sew at home . . . and my
husband’s friend used to say I was really good so I should
go to StitchCo because they made quality goods. That was
ten years ago. Then, we used to put our initials on the back
of some of the labels because we were proud of our work.
Now, I don’t even put it on the tag of the work. Because
we have to work so quickly the quality is gone. It’s the
same for the cloth and the cutting, it’s rubbish. We make
rubbish here now and what I wonder is who buys this stuff
(46-47).

Clearly these women were dissatisfied, but supervisors had a view of women as
more compliant, hard working, and likely to adopt a sympathetic stance for the firm’s
own vulnerabilities, when compared to men. While illustrating this viewpoint, one
supervisor suggests that he has altered his direct supervisory strategies in dealing with
women. His statement seems to suggest that women are more subject to derogatory and
patronizing attitudes, but less subject to overt verbal abuse than are those numerically
dominated by women.

*John* I can tell you right away that I prefer to work with women,
and the differences are very simple; women are less reliable; they
are more illogical and they work a lot harder . . . . [T]hey do have
time off for their children and to have babies and all the rest. Of
course, you get the odd one who doesn’t want to bother. . . , but overall, it’s the women who give good value to the company. Our targets keep going up . . . , but the women not only meet the targets they surpass them.

I’ve worked with men before . . . and you can talk straight to a man, tell him off, or whatever. You can’t do that to women. You’ve got to be more roundabout and you have to have more different approaches. There’s some like Jessie and Eve I can talk to like men, swear, all of that, but I wouldn’t do that to Amita or Gillian and then with Clare, of course, I am always a gentleman talking to a lady. . . .

While you can’t talk straight to women they are much better at understanding the wider situation, the national situation and the situation of the firm. They won’t get shirty and all high and mighty, but will accept what is happening and do their best, not like men who will start the rumblings, each individual worrying about himself (28).

Contrary to this supervisor’s opinion, Westwood argues that it was gender-based variation in control strategies and particularly the combination of control techniques to which the factory’s workers were subject that dampened organized opposition among women – despite a high degree of dissatisfaction and a lack of sympathy for the firm, which they felt was cheating them.

Like Lata, other women on the shopfloor believed they were cheated by a system which fractionalized time and disassembled operations for the purposes of reconstructing both in line with efficiency. . . . As with other workers, the ultimate protest was to withdraw their labour – to walk off the job, call the union rep and wait. Resistance of this kind emerged at the point of production and was also a part of the lives of male workers who, in fact, resisted the introduction of the scheme more militantly than the women. But the scheme operated differently for men at StitchCo, and this was consistent with the way that patriarchal forms intervened in the labour process. Rules and management techniques had a special force for women workers who were more closely monitored, more highly supervised and, finally paid less (42-43).
Indeed, the women were extraordinarily dissatisfied with the organization of their work, increasingly angry with the firm, and eager to engage in collective action – even in the absence of perceived support from the union.

‘I hate this minutes thing; it’s the worst part of my job. I feel sick, I’ve got a headache. Every time the minutes are given there is a row, every time.’ Lisa, the assistant supervisor, was also looking very worried as the fury from the women grew. Some sat defiantly with arms folded while others talked together in small groups. . . . It’s ridiculous. Every time the minutes are given they get worse, they want more from us every time. Well, it won’t work. I can’t do that target. Shanta, you should get the union man . . . . Shanta made a valiant attempt to calm the situation down: ‘I’m going for the union man,’ she announced. . . . ‘Bah, the union, the manager, they’re all the same here, nobody cares.” Having said this, Asha, in floods of tears, raced toward the lavatories. The whole unit was now in total disarray and no one was working. . . . ‘I’m not going to work until the change the minutes.” . . . ‘We’ll go on strike’ (51-52).

The perception that the union would not support their efforts was pervasive, and reflected the women’s understanding of their subordinate status in relation to men and in relation to the firm, which paid the on-site union representatives, who in turn consistently sided with the firm when workers protested their treatment.

Despite the high number of women, the hosiery industry gives power to men, supports male wages and men’s ability to ‘do their own thing’.

*Sallie* Do women have the same opportunities as men?

*Annie* No, they don’t. . . . Women don’t have the same opportunities as men in this industry and they are not treated equally, either, because the men control things.

*Sallie* In the union as well?

*Annie* Absolutely! Our membership is more female than male, but the union is controlled by men and run for the men (72).

[The minutes] get tighter and tighter and you can’t get the target out. . . . They are impossible. They are doing us out of our money and the union just come along and say they’re all right, every time. They don’t do much for us, I can tell you. They work for management (56).
Circumstances had made the women eager to engage in organized opposition. However, they were right about the union, which did not support the women’s efforts, largely, Westwood argues, because the men running it did not communicate with the women, or understand or take up the women’s causes. Their emphasis was on the situation of skilled male workers, largely owing to assumptions about female workers and outmoded ideas about their place in the workplace.

Even in the absence of union support for their efforts, the women engaged in collective resistance – albeit informal. This took the form of a collective withdrawal of consent and avoidance of work. Even without the union’s support, the women achieved a degree of success with their efforts. Although Westwood does not attribute their actions or success to gender-based solidarity, it is reasonable to imagine that it played a role, especially given the women’s explicit understanding of the gender bias behind the union’s lack of support.

Some of the women involved in the dispute were without work and they were sent to Eve’s unit to assist with a packing job. They consistently and deliberately got the packing wrong and spent their time chatting about the dispute and the failure of the union representative to appear . . . . While we were having this conversation we were all supposed to be packing bikinis, but they didn’t get packed and we were constantly in trouble with Eve for doing the job badly. Later in the week, the baby clothes came back. Management suspended the minutes as it was a small order, and made an appeal to get the job done as quickly as possible. The women had a victory. As part of the management appeal, the unit was both making and packing the baby clothes in an effort to get them out by the end of the week. . . . Gillian, the supervisor . . . told us that the orders had to go out that night and so we must be quick and get finished. When she had gone Amina responded: ‘. . . slow down everyone, we want this work to last us for Monday morning. We’re not on minutes for this job and it’s a bit boring, but it’s nice and easy, innit.’

We all grinned conspiratorially . . . . Their resistance to the imposition of what they considered to be unfair targets and, therefore, super-exploitation was total; they maintained this collectively and
individually over the two weeks that the baby clothes were being produced. The clothes were not ready for Friday evening, but were packed by lunch-time on Monday. The women had fought and won their own time back again (53-54).

The remaining coercive control configuration (segmented*automated*DIRECT*RULES*input) is not nearly as oppressive or top-down as the others. Indeed, the only top-down elements are those that are generally least oppressive, and this configuration is marked by an absence of those that are most impressive. Only a lack of input weighs this configuration in the direction of coercive control. These characteristics have mixed effects on outcomes, with little impact on powerlessness and worthlessness, which are usually quite responsive to the nature of the work. Likelihood of loathing management is hardly elevated compared to the remainder of the sample, but organized opposition only about half as likely, perhaps because the work does not produce alienation, or loathing of management, and allows workers enough flexibility to channel any frustrations into work avoidance, odds of which are double (though nonsignificant), or withholding consent, which is a third less likely for workers in this configuration (also nonsignificant). The absence of worker input likely contributes to the latter.

**Persuasive Approaches**

In stark contrast to work groups in primarily male settings, only one configuration is indicative of a persuasive approach to control (segmented*automated*career). This configuration was also apparent in primarily male work settings. While lack of segmentation and automation are generally very beneficial for worker well-being, the
absence of career ladders appears to mitigate some of the benefits. Powerlessness and worthlessness are less than half as likely, and organized opposition is only a third as likely (all significant). However, the odds of loathing management is slightly elevated (10% higher), and the odds of work avoidance are increased along with the odds of consent – both increase by about a quarter, but are nonsignificant.

Street (1992) describes nurses (95% of whom are female) subject to this persuasive configuration in an Australian hospital. These workers are clearly not powerless, despite limitations to their decision-making from doctor’s orders.

Although much of the nurses’ role involves following doctor’s orders for the patient, Ann is making independent decisions on the provision of physical care for her patient. . . . The nurse needs to ensure that the patient has adequate air . . . and to take responsibility for deciding when the patient needs assisted air intake or needs to be weaned off the ventilator . . . . The nurse is responsible for the technological interventions and the supervision of drugs and food/drink intake. The nurse regulates noise and visitors, often a challenging role requiring sensitivity and diplomacy (185-186).

Nurses’ decision-making is even broader than this relatively technical description would suggest. They seek to provide the best possible experience for patients, and an absence of segmentation and automation is instrumental in their ability to make decisions to that end. Lacking direct supervision, nurses are also able to manipulate doctors to ensure the best possible care for patients, despite relative powerlessness in setting medical orders. Here, a nurse uses this flexibility to her advantage – finding a creative way to accommodate the doctors serving as her supervisors, while influencing their decisions to improve patient care.

Bev had set the ventilator to the low level that her experience suggested was appropriate for the patient. A new surgical intern . . . ignored her and finally set the ventilator to a higher setting. . . . She explained why she had
set it on the lower setting, but the intern reminded her that the patient is “my patient.”... although she decided that the patient was not at risk..., she told me that she was concerned that the patient would be rather uncomfortable as a result of the experience of the intern. ... [S]he decided to go over his head, and when he had left the bay she called the senior anaesthetist on another pretext and then causally mentioned: “We are maintaining the patient on level 10.”... As she had predicted the senior doctor replied: “Oh well, we can put him on 4 now don’t you think.”... The nurse readily agreed and changed the level. When the intern returned and queried the change she told him that the senior anaesthetist had changed the levels when he came into the bay.... In this incident the nurse judged her role to be an advocate for the comfort of her critically ill patient.... In a subsequent discussion of this incident she agreed that she had been manipulative but felt that... if she had asked the intern to come with her jointly to discuss it with the senior anaesthetist, ... [he] would have sided with the junior doctor. She felt that manipulation was the only form of resistance open to her other than accommodation in her powerless position (234-235).

Using their clinical skills and to make a difference in the health and experience of patients allows nurses to derive a great deal of meaning from their work.

Nurses recognize the value of their clinical skills, knowledge, experiences, and relationships when they are participating in the process of transformation of a person from illness to health or from illness to death... [N]urses... spoke about the satisfaction when they were able to recognize a potential difficulty before it was apparent through the regular diagnostic channels associated with hospital technology, or the value of the nurturant activities despite the devaluing of this by a society interested in dramatic cures (255-256).

Despite meaning and self-direction, nurses experienced a great deal of dissatisfaction with their lack of input into hospital affairs and policies. However, these feelings are translated into better provision of patient care.

Nurses... reported feelings of identification with patients who were being oppressed by the hospital system because of their own experiences within the system. Nurses... often worked hard to get special delicacies or particular foods to entice patients to eat. The commonality of their experience of hospital food enabled them to appreciate patient difficulties (258).
More traditional forms of resistance, including work avoidance were apparent. However, these too represented efforts to provide better care for patients. Their form also demonstrates the value that nurses placed on female roles, values and norms. In the following example, nurses avoid work that represents an attempt to infuse male-normative written record keeping into their tasks. Their motivations are valuation of the female-oriented oral tradition apparent in nursing and a continuing emphasis on quality of care.

Clinical nurses emphasized again and again that their interests lay in providing quality care, and that nursing academics and administrators appeared to them to be more interested in the recorded care than in the actual care (269).

The nurses in the study did not believe that the nursing care plans were functional and so engaged in passive resistance by either ignoring the charts, making minimal effort to record information, or by being deliberately absent from the ward or busy with the patient just before the shift ended.

Nurses don’t like writing down what they do. . . . I tend to read the medical notes and don’t bother with the nursing notes . . . . We hear it in handover. You have plenty of time to talk to the nurse and then you look after the patient when the nurse is having a meal break. Then if you have any questions you can ask the nurse when they come back (229)

This resistance is never formally organized but constitutes part of the “common-sense” knowledge of what it means to be a nurse. . . . The unspoken value . . . is the valuing of the development of oral skills. . . . [which] would challenge the legitimacy of written cultures of the male-dominated medical and administrative cultures and actively support the further development of the kind of descriptive and expressive oral skills which are generally the domain of women (268-269).

Still another example demonstrates a nurse’s (no doubt gendered) reflections on what she would want, were she the parent of the brain-dead child for which she was caring. Her reflections led her to ignore doctor’s instructions regarding the child’s care in order to
improve the experience for the dying child’s family. While she continued to provide a degree of care that would protect her and the hospital from liability for the child’s death, she removed life support equipment that would have prolonged the child’s life. Her violation demonstrates a degree of resistance to authority and work avoidance, but its intent was improving care based on knowledge and values derived from women’s social roles as caregivers. Street’s analysis illustrates how such actions help nurses practice self-direction on the job.

. . . . The baby revived but was not in good shape . . . , so he was transferred to our ICU. Our specialist had examined him and pronounced him brain dead . . . . My role was to give the baby general nursing care and maintain the life support systems. I began looking after him, and as I gave him general nursing care I looked at this beautiful child and I thought, “if this was my child what would I want to do?” I talked to the parents about him . . . and they understood that he was going to die. I thought if this was my child, I wouldn’t want him to die connected to all this equipment. . . . I asked if they would like to cuddle him. Of course they wanted to, and so, as the doctor had disappeared, I took him off the ventilator and gave him to his mother. . . .

In this incident the nurse acted as the midwife for the grieving process. . . . She reflected on her knowledge of herself, on the situation, and on her capacity to change the situation. This led to enlightenment about the situation, which showed her that she had the power to choose to maintain the baby . . . or to deliberately choose to be proactive by initiating a situation, which was technically beyond her proscribed power as a nurse but which was important to her ethics as a caring person. . . . Her reflections on her values and the subsequent translation of those values into action transformed the situation for everyone (263-265).

The nature of nurses’ resistance, including failure to follow orders they find objectionable, does not reflect any loathing of the doctors who, in effect, supervise their work. Nor does their dissatisfaction with a lack of control over hospital policies translate into loathing of management. Street presents evidence that collective action, while not
unheard of, is unusual among nurses because they are female dominated, have comparatively low status, lack power and influence within health care organizations, are generally passive and non-assertive, and do not receive the support of male-dominated trade unions. However, she also provides an alternate explanation for the failure of nurse’s frustrations to translate into loathing, which might also help to explain the lack of organized opposition among nurses: a female-gendered valuation of team participation which overwhelms nurses’ interests in greater power with respect to doctors and the hospital.

All the nurses in the study valued their participation in team relationships with doctors and found this team participation one of the rewarding aspects of their nursing. . . . In general discussions some nurses were particularly vociferous in denouncing nurses who wanted to separate the nursing role from the medical role, claiming that they were “antidr and antimen” and wanted to make nursing into some isolated female profession. Although the nurses sometimes appeared to be powerless in my observations of their team interactions . . . they experienced the interactive role as satisfying. . . . [T]he unspoken value by which nurses judged the team effectiveness was in terms of their capacity to collaborate with the medical staff to bring about the best result for the patient. A commitment to collaborative action that nurtured the capacities of their colleagues to bring about quality patient care was valued more highly than . . . competitiveness . . . . Nurses who value collaboration and their roles as team facilitators more readily tolerate the power plays of doctors, recognizing the power games and ignoring them or changing the rules without attempting to resist them. . . . Any analysis of the doctor/nurse relations needs to recognize the transformative actions that can occur even in situations where nurses are oppressed and that the limits to freedom experienced by nurses can contribute to their satisfaction and well-being because nursing culture values collaborative relationships over individual power positions (273).
Conclusion

The results presented in this chapter strongly suggest that the nature of control varies along lines of gender. Work groups composed primarily of men are subject to control configurations that are largely persuasive, while those in which women dominate numerically are overwhelmingly coercive. Consistent with findings throughout, worker well-being, and especially psychological dimensions, reflects the nature of control. Persuasive settings produce advantageous worker outcomes, while coercive settings impair worker well-being. These findings indicate that job-level gender segregation produces sex-based inequality in the experience of work in addition to – and distinct from – the material inequities that are better understood.
CHAPTER 9

RACE AND THE LABOR PROCESS

Results presented thus far demonstrate that the nature of control shape a range of attributes associated with worker well-being, and provide evidence of systematic differences with regard to both the nature of control (whether generally persuasive, generally coercive, or a mixture of both) and the benefits of persuasive control (whether overwhelmingly positive or more mixed), by class and gender.

The current chapter seeks to determine whether differences in the nature or consequences of control also vary by racial composition of work groups. In other words, are coercive or persuasive strategies more apparent among work groups in which most participants are members of the dominant racial category, compared to those in settings disproportionately populated by racial minorities. Alternatively, are the implications of persuasive settings for worker well-being more mixed in either case, as they were for manual and service occupations and for disproportionately female work groups.

This research question was approached similar to those addressed in Chapters 7 and 8. Configurations were drawn from QCA analyses of separate subsamples of high- and low-proportion-minority work groups, and ratios of configuration-to-nonconfiguration means are computed from the entire sample of 141 work groups. This
Technique allows for a standardized comparison of configurations – one untainted by selectivity and distortion that would result from reliance on comparisons within racially distinct subsamples.

Work groups with low rates of minority participation are those in which the percent minority is less than 10% (n=93), while those with high rates of minority participation have a percent minority of at least 40% (n=30). These criteria were selected for their capacity to generate subsamples differing enough to reveal variation in control strategies along lines of race, while preserving as many cases as possible for determining configurations.

Because the sample size permitted it, I was able to use a very strict criterion for selecting cases with a low proportion minority. It was necessary, however, to use a less restrictive criterion in selecting cases for the high-minority-participation subsample than in selecting cases for the high-female-participation subsample. It is more difficult for minorities than for women to achieve numerical dominance because job segregation is less prevalent by race than by gender. Moreover, the basis for job segregation by race differs from job segregation by sex – creating differences in the need for more restrictive criteria. Gender segregation reflects sex-typing of jobs, while race segregation may be more symptomatic of minorities being excluded from the most desirable positions (Tomaskovic-Devey 1993). If women are indeed crowded into certain jobs because they are viewed as suitable for certain types of work, it is likely that their amenability to particular forms of control are also taken into account. On the other hand, if minorities are simply excluded from the best jobs, rather than being crowded into worst based on
assumptions about their natural abilities or inclinations, it may not be as necessary to isolate work groups numerically dominated by minorities.

**Results**

Is variation evident when work groups populated primarily by the numerically dominant race category are compared to those in which a significant proportion of workers are members of a racial minority? Tables 18 and 19 report configurations identified in separate QCA analyses of subsamples of cases with and low and high rates of minority participation, along with mean ratios (configuration-to-nonconfiguration) generated from the entire sample for each of the six dependent variables. In contrast to comparisons by gender composition, there is little to no variation in the balance of coercive and persuasive approaches to control. However, there are apparent differences in the degree to which the persuasive approaches in settings populated by a high proportion of minority workers produce advantageous outcomes associated with worker well-being. Although many ratios indicate effects in the expected direction, there are a number of exceptions.

**Low Minority Participation**

Results presented on Table 18 indicate that work groups with a very small proportion minority are subject to both persuasive and coercive approaches to worker control with implications for worker well-being that are consistent with findings for the overall sample.
Coercive Approaches

Coercive approaches are marked by extraordinarily high rates of powerlessness and worthlessness, odds of which increase by 85% in one setting (SEGMENTED*DIRECT*rules*career*input), but more than double among those that remain. This setting is also an exception to other tendencies among the coercive settings. It is associated with a relatively modest and nonsignificant increase in odds of organized opposition to management, while the remaining coercive settings more than double these odds (only one of those ratios is significant). Perhaps this has to do with much lower rates of loathing management in this type of setting compared to the rest of the sample (38% less likely, but nonsignificant). Another exception in this configuration is the lesser tendency to engage in work avoidance – odds of which are elevated in the remaining coercive settings – despite demonstrating significantly lower odds of consent (less than a quarter as likely). Interestingly, most (more than 70%) of these cases are work groups in which the majority of workers are women, and many are employed in relatively unstructured assembly. In many such settings, avoiding work amounts to placing a greater burden on coworkers, and there is some evidence that women will go out of their way to avoid this (Roberts 1994).

Patterns for consent and work avoidance among coercive configurations are interesting. The two coercive configurations marked by an absence of both cooperative bureaucratic controls (SEGMENTED*DIRECT*rules*career*input and AUTOMATED*DIRECT*RULES*career*input) also have significantly lower rates of consent – indicating that these work groups are only about a quarter as likely to exhibit consent as workers outside of these settings. This work is also significantly more likely
to spawn organized opposition (odds of which more than double), although workers in these settings are no more likely (and are possibly somewhat less likely) to loathe management. In contrast, work that is AUTOMATED*DIRECT*RULES*CAREER*INPUT is quite alienating (greatly increasing odds of powerlessness and worthlessness), but appears to elevate consent (by almost 40%), even while it doubles rates of work avoidance (both ratios are nonsignificant). The remaining configuration (SEGMENTED*AUTOMATED*career*INPUT, marked by an absence of career ladders and the presence of worker input falls in between – reducing consent and increasing work avoidance to a lesser (and nonsignificant) degree – despite high rates of both forms of alienation, double the odds of organized opposition, and nearly triple the odds of loathing management (the latter ratio is significant). Clearly, cooperative bureaucratic controls have the potential mitigate negative outcomes, or even encourage positive outcomes, in coercive settings, while their absence can easily lead to withdrawal of consent and other negative behaviors arising from dissatisfaction.

**Persuasive Approaches**

Persuasive settings in this sample have overwhelmingly positive implications for worker well-being. All three (segmented*automated, segmented*direct*RULES*career*INPUT, and segmented*RULES*CAREER*input) reduce odds of powerlessness and worthlessness by at least two-thirds, with the exception of worthlessness in the case of the latter, for which the reduction in odds by nearly one-third are not significant. All of these also increase odds of consent (a significant increase
by a factor of 2.64 in the case of nonsegmented, nonautomated work). Work avoidance is reduced in all cases, although none of these ratios is significant. In contrast, most of the ratios indicating reduced odds of organized opposition (by up to 72%) and loathing management (which is completely absent among work groups in segmented*RULES*CAREER*input), are significant.

**High Minority Participation**

Table 19 presents results for work groups in which minorities have a relatively high rate of participation. The mixture of coercive and persuasive approaches is not markedly different from that of work groups with low rates of minority participation. However, the implications of the persuasive approaches have less uniformly advantageous implications for worker well-being than has been apparent among persuasive approaches throughout this study.

**Coercive Approaches**

Coercive control arrangements in these settings have remarkably consistent destructive implications for the entire range of worker well-being. As has been the case in previous analyses, results are far more significant for psychological than for behavioral outcomes. However, in these settings, ratios for consent are just as significant (highly significant every case, in fact) as are ratios indicating effects on powerlessness and worthlessness. Every coercive configuration among work groups with a high proportion of minority workers significantly increases (more than doubling in most cases) odds of powerlessness and worthlessness. These configurations also reduce odds of consent by 64% to 83%.
Effects on odds of resistance are nearly as consistent, but many ratios indicate that they are relatively small and nonsignificant. Interestingly, while an absence of both cooperative controls doubles work avoidance in two settings (automated*DIRECT*career*input and DIRECT*RULES*career*input), its effect is smaller (increasing odds by 43%) and nonsignificant where the remaining forms of control are so coercive as to not allow it (SEGMENTED*AUTOMATED*RULES*career*input). The effect is similar (indicating a 45% increase in odds, but is nonsignificant) in the final coercive configuration (SEGMENTED*AUTOMATED*DIRECT*RULES*career). The very low rate of consent (odds of which are 83% lower in this configuration) indicate that while workers may not be able to avoid work in these settings, they do decline to refuse to exert additional effort beyond what is required. Consistent with a high degree of dissatisfaction, these workers have greater odds of engaging in organized opposition and of loathing management (which increase by 62% and 78%, respectively), although these ratios are not significant.

Pfeffer (1979) describes one of these coercive configurations (DIRECT*RULES*career*input) among forklift operators in a Baltimore area piston rings factory. It was estimated that half the workers were minority, and most or all of them were African-American. In this context, direct supervision and rules came together to engender powerlessness in an apparent managerial strategy to assert its control. Supervisors in Devinatz’ (1999) study used segmentation and targets to hound workers (asking repeatedly how many pieces had been produced). Here, supervisors used rules to
badger workers – routinely handing out warning slips for minor infractions. Workers’ responses to these tactics reveal the sense of powerlessness that resulted.

Management periodically asserts its formal authority and power by issuing warning slips, sometimes in bunches like bananas. On the day after I received my oral warning for “talking too much” at least three other men in the service department got oral warnings for not wearing safety glasses. . . . They knew they were being slapped on the wrists like children . . . . One of the most frequent complaints workers make is that superiors “don’t treat us like human beings.” . . . One man . . . who had not worn the proper safety equipment for a job in a particular area, was threatened by his foreman with a warning slip and a ticket. The worker felt his foreman was pleased to have something over him and was playing with him. At some point the worker exploded at the foreman, saying “I ain’t no dog or child” . . . . “Enough; do what you want to do, but do it.” He later said to me, “I ain’t needed no one over me since my mother had to be to drop me” (100-103).

Two days after I had been warned, while I was assuming the position in front of a latrine, a night fork operator razzed me inquiring whether I had asked Sam if I could “take a piss.” He said that soon we wouldn’t “be allowed to piss during company time, only during breaks” (81).

In this context, workers were keenly aware of being treated as less than men – leading to angry responses couched in terms of race. The presence of a significant number of black workers in this position brought about a mutual understanding of and support for this perspective. When stories regarding supervisor this sort of treatment were repeated, the men were collectively riled, and the storyteller was always certain to mention how the worker stood up for himself, defending his manhood. This is a source of pride for the workers, and yet no one suggests organized opposition to supervisor abuse.

One day I came into the cafeteria to hear the tail end of an angry complaint by several workers about something that had happened with our superintendent. The two . . . highest-grade blacks in our department . . . had worked the preceding Sunday and had left before 2:00 P.M. . . . The gate guard apparently had reported the fact to Ron Merrit, who the next day bawled them out for leaving early. . . . They understood Ron to be telling them that when the company needed them “you got to work
Sundays.” To that one of the men had replied: “There’s only two things that my grandpa . . . told me I got to do. One is to be black and the other is to die.” In fact, they both worked almost whenever they were asked/told, but they demanded the dignity of believing they were choosing for themselves whether to work.

Another morning . . . the men were talking about a verbal fight between our foreman and one of the workers . . . . Sam apparently had told the worker to “shut up.” The worker responded furiously, telling the foreman off . . . as some of the other workers who had witnessed the events were quick to point out. Everyone at the long table seemed angry about it, saying . . . “there ain’t no boys around here” and “everyone should be talked to like a man” (101-102).

Lacking automation, these workers had freedom of movement lacking among workers in automated assembly lines. Yet, the author found them to be as alienated as assembly line workers in other parts of the factory.

This palpable negativism of employees about their job exists across the board in nearly all job categories, largely independently of the degree of technological routinization attached to the particular job . . . I found little or no evidence . . . that machine operators engaged in very simple, repetitive tasks were appreciably more negative about their jobs than say lower level maintenance personnel with equivalent weekly wages, whose jobs involved greater flexibility and scope. In any event, hardly anyone I knew in the factory, with the exception of a handful of craftsmen, had any substantial positive commitment to his/her job as a “career” (79-80).

A young black machine operator, gazing at company posters that sought to instill a pride in work, when asked if he had pride in his work, only laughed and retorted, “you mean out on the streets?” (79).

Similar to assembly workers in other contexts (e.g., Definatz 1999), Pfeffer found that he and other workers responded to the meaninglessness of their tasks with particular attention to time, and by counting – a common adaptation to boring, repetitive work.

I was acutely aware of time passing. I counted hoppers, hours, days, weeks, and months. . . . [N]early everyone in the plant was counting time. . . . “Only four and a half more days of this bullshit.” . . . I saw [a 20-year veteran of the plant] counting minutes until the end of his lunch hour, counting days until Saturday . . . counting months until his vacation time came around again. Another employee . . . thought about [retiring when
he turned 62] nearly every day. In talking about it, he said, each day he looked forward to the 12:30 whistle, signaling the end of his lunch half-hour and his return to work, because that meant the date he would retire . . . was one day closer (76-78).

Sensations of worthlessness joined with low wages to engender work avoidance and a lack of consent. Because these workers lacked automation tying them to a single location, many were able “hide,” even in the presence of direct supervision.

One young black worker who had been with the company for only a few months expressed his feelings about the job this way. He said he couldn’t accomplish anything on his job, so “just being here is work.” “I put in my eight,” he said, but he did as little as he could get away with (78).

When asked in casual conversation what they thought of their jobs, workers nearly universally responded, “it’s a job.” . . . With such an attitude about their jobs and work time, it is hardly surprising that most workers have reduced motivation to do a particularly good job. Nor is it surprising that workers try to make free time for themselves so they can hide. . . . One day in July when my container was filled, I was sitting with two young workers on a pile of cardboard cartons in the shipping department, dangling my feet over the sides, and . . . smoking . . . . I was reminded of . . . Huckleberry Finn playing hookey from a distasteful school (78).

This occurred even among conscientious and hard workers, and represented a calculated effort to do the least work for the most money.

That same day a savvy fellow worker had advised me, “to be able to get yours, you have to understand how management works. You do your job according to how you get paid. . . . [G]enerally just do your job and make some free time for yourself.” . . . An older black man . . . [in] manifest appreciation of his feelings for his job, . . . paced himself in each task. Between tasks he hid on the edge of the plant and rested a half-hour. He wasn’t lazy, you could see that from how he worked when he wasn’t resting. He just gave his job exactly the effort it deserved. He was working for $3.34 and hour (80).

The attention to money here illustrates a lack of intrinsic reward, and of cooperative control, which helps to secure worker effort by altering the premises of workers’ own
decision-making and taking advantage of their self-interested calculations. A lack of both forms of cooperative control, in addition to perceptions of race-based disadvantage in promotions, contributed to a lack of consent among workers. Here, black workers separately describe refusing overtime and withholding production secrets.

A middle-aged black man, graded as a 7, believed he was qualified to move up to 5. The company, he said, refused to promote him because of race prejudice. He claimed to take it coolly, but declared that he had ways to get back at the company. He refused to work overtime when they needed him. A black, middle-aged woman . . . said she wasn’t going to work herself to death. She said . . . “. . . I won’t bust my ass.” She said she often did less than 65 percent of her standard, but she wasn’t going to ask to have the standard restudied. Let the company initiate a study if it wanted (79).

Despite low wages, high rates of dissatisfaction, withdrawal of consent and withholding effort, these workers displayed resignation to their circumstances – seeking to enjoy their non-work lives. While Pfeffer does not explicitly address this tendency with attention to race, it is conceivable that minority workers, relegated to the secondary labor market, simply did not see collective action as a viable tactic for altering their circumstances.

Two men expressed more generally the range of outward reactions to work as well. . . . One always complained about the job. The other rarely complained. The one wasn’t satisfied with what he’d settled for. Complaining to fellow workers was his main way of expressing that dissatisfaction, because otherwise he was fairly timid. The other was “well adjusted.” He had learned to expect nothing from his job but money. . . . He didn’t appreciate being treated like a child by the company, but he didn’t fight back or complain much any more. He just hung in there, doing his job, earning his bread and regularly refilling the refrigerator he had at home reserved exclusively for beer (78-79).
**Persuasive Approaches**

Similar to persuasive configurations in manual and service (vis-à-vis professional) settings, and in predominantly female settings (relative to predominantly male settings) those apparent in work groups with high levels of minority participation are less consistently and significantly beneficial for worker well-being. Typically, persuasive settings are overwhelmingly beneficial for worker well-being, at least on the psychological dimensions. And this is generally the case for one type of persuasive control (segmented*automated*RULES*career) in work settings that are disproportionately minority. This configuration reduces powerlessness and worthlessness, increases resistance, and reduces rates of resistance, except in the case of work avoidance. Overall, however, the persuasive configurations apparent among these work groups are more mixed.

One of these is marked by the absence of every top-down form of control and of one additional cooperative control technique (segmented*automated*direct*rules*input), with expected implications for odds of alienation. Meaning, satisfaction and pride are especially strong among work groups in these settings, as none of them experience worthlessness. Paradoxically, these settings appear to increase the likelihood of consent while reducing work avoidance. Further, they more than double the odds of organized opposition, while reducing to zero the odds of loathing management. These findings make sense, however, in light of the fact that all work groups in this configuration, save one, are involved in craft production. Craft workers have been shown elsewhere to exhibit relatively high rates of both consent and organized resistance, often in response to the pace (Hodson 2001a).
Segmented*automated*DIRECT*career is remarkably mixed – decreasing the likelihood of worthlessness by about a quarter, but increasing the likelihood of powerlessness by almost a third. This configuration has little to no effect on consent, but increases both work avoidance and loathing management by about seventy percent (of all of these, only the latter ratio is significant). Foner (1994) describes the effect of this persuasive configuration among what aides in a nursing home. All were minorities, and many were Black, although their ethnicities varied. Nearly all (98%) were also female.

The lack of segmentation and automation allowed aides a degree of flexibility in which they were able to provide service they felt good about. As a result, aides did not experience worthlessness on the job. Indeed, many felt pride and meaning in helping patients, and derived a sense of satisfaction from personal relationships with them. The gendered nature of satisfaction with this work is apparent as well.

“It’s not depressing here, you can really help people.” In fact, a great many aides spoke of the satisfaction they got from “making patients feel good” and taking good care of them. . . . Aides take pleasure, too, from feeling needed and becoming emotionally close to patients. “You’re working here,” one told me. “You’re saving someone’s life. They can’t feed themselves, can’t dress themselves. I feel I’m helping them” (49).

For many, the opportunity to do “caring work” outside the home is an enormous source of satisfaction. Many aides spoke of the rewards they received from “doing good for people” . . . . They depend on you,” said Florence Wright. “You get a satisfaction from seeing you’ve cleaned them and met a lot of their wants. Sometimes they need someone to listen to them.”

Some aides likened relationships with patients to those they had in their own families. . . . A few said that patients filed in, in some ways, for their own absent or dead parents or grandparents. One worker said, “I never had a grandmother or grandfather; here I find them” (104-105).
At the same time, relationships are not the same as those between family members.

Unlike adult children who look after frail elderly parents, nursing aides are not bound to residents by long years of love and affection . . . . Aides are paid to do the job of caring for strangers (38).

Verbal and physical abuse from patients removed some of the potential to derive meaning from their care. Race differences played into and inflamed existing antagonisms. Most patients were white, and some were not receptive to contact with minorities.

Every aide has stories to tell about the battle scars received during the course of duty . . . . Sexual overtures and fondling from residents are common. . . . Then there are the insults, name-calling, swearing, and even threats of blackmail. Many times, I heard residents shouting and screaming at their aides. “You fucking bitch, you fucking bitch,” one woman yelled venomously the entire time she was being dressed. . . . Patients can lash out with racial slurs . . . something aides are too sensitive to laugh off . . . . [R]acial and ethnic cleavages create additional barriers and misunderstandings between aides and residents (37-38).

Racial differences feed into and intensify, rather than create, divisions . . . in the nursing home. At Crescent, they added to the aides’ sense that patients, as a group, were in an opposite camp and increased . . . social distance from patients’ relatives (149).

The control configuration encountered by these aides was very similar to that of Street’s nurses, described in Chapter 8. However, in contrast to nurses, the aides were subject to direct supervision by nurses, whose duties and interests, in this context, lay with fulfilling bureaucratic procedures. This altered the aides experience entirely, producing a sense of powerlessness on the job.

The nurses on each patient floor are also sources of endless directives . . . . Over the course of a day, coordinating nurses issue a steady stream of orders . . . . “Move Turner,” . . . “Bring Rosy back to her room.” . . . “Take Wright’s weigh,” “Take Goss’s temperature,” “Help Hill . . . lift Jackson” - these are the kinds of commands emanating from the nursing station (78-82).
The nurses’ authority is keenly felt. . . . For example, aides cannot take a patient off the floor or alter care plans, even adding chair padding, without a nurse’s okay . . . . Should a patient want to stay in bed, the coordinating nurse must grant permission. If a patient asks an aide for a certain kind of food, she cannot call the kitchen herself but must go through the coordinating nurse. The same is true if the aide thinks some aspect of care . . . needs changing, say, the type of chair used . . . a nurse must do it (81).

The aides were extraordinarily frustrated and resentful of their powerlessness relative to nurses, contributing to an overall loathing of management.

To aides . . . the need for nurses’ approval for countless things is a source of continued frustration and resentment . . . . “The nurses, they get on my nerves, “complained a young Jamaican aide. “Because they’re in a position and they boss you around, dump everything on you.” Another described her supervisor in no uncertain terms: “a slave driver” (81-82).

Enhancing aides’ frustration was their inability to exercise consent to the degree that they were otherwise inclined. Attempts to do so invited abuse from nurse supervisors. Hence, the aides’ powerlessness impeded their ability, although not their desire, to display additional effort and commitment on the job.

Under pressure to deal with mounds of paperwork, coordinating nurses have little patience with aides who interrupt them . . . . Sonia Vega, a Dominican aide, approached the nursing station to report that a resident’s foot looked much worse than usual. “Her foot bad, really bad. Can you come look?” Irritated by this intrusion, the nursing coordinator barked, “Does she have booties on?” . . . “Go get the booties. Jesus, can’t you do your job? I’m very busy.” [She] did not bother to look at the foot or even consider a change in treatment . . . . The aide was abashed and inwardly seethed . . . Next time she might think twice about interrupting (82-83).

Nurses can discourage humane and responsible care; some are even decidedly unsympathetic to patients. Aides who challenge a supervisory nurse’s authority so as to help patients risk being hounded by her, as Ana,
the conscientious aide, learned. Most aides would not get into trouble for a patient. They develop indirect strategies to avoid nurses’ controls and let off steam by complaining to each other (77-78).

Hindering consent joins with powerlessness to heighten aides’ frustration with and resentment of nurses.

Clearly, tensions between aides and nurses often have to do with their different perspectives on care as well as the structure of authority. Nurses tend to have a bureaucratic view and aides a more personalistic approach to patient care . . . . Working with the same patients day after day, aides often become attached to many of them. These attachments can pit them against nurses . . . . Often, aides want to make their patients more comfortable when physical arrangements, such as chair padding seem to be a problem and to help out when patients have special requests . . . . Following proper procedures – and waiting for the nurse’s approval or action on requests – usually means delays . . . . Taking matters in their own hands can lead to trouble. . . . Quite apart from conflicts over patient requests, aides differ with nurses over the sheer enormity of their physical tasks and the time it takes to do them. . . . One diligent and conscientious worker complained, “You cut corners because you can’t do everything they assign in one day” (83-85).

Aides’ resentment, however, does not translate into resistance, because workers are fearful for their jobs. Minorities are frequently aware that they are not employers’ preference, and fear of firing may strike a unique chord with them. Devinatz (1999) suggests that minorities are more uncertain of their ability to get hired and more dependent on their existing wages, and that their fear of firing caused them to submit to brutal working conditions and supervisory abuse until their working conditions became absolutely untenable. In that setting, workers resisted only once it became clear to them that their race was related to their relegation to the least desirable and most unstable tasks in the work group.

Since nursing aides in Foner’s work setting were all minorities, they lacked an explicit point of reference with regard to the role of race in their treatment. Moreover,
they were clearly afraid of losing their jobs. Similar to supervisors in Pfeffer’s (1979) study, nurses used the rules to badger and threaten aides into submission. The resulting fear led them to turn on one another rather than to engage nurses in any organized way.

Most aides . . . fear the consequences – ultimately, their jobs – if they step out of line. Nursing coordinators have been known to “punish” insubordinate aides by going out of their way to criticize them for even slight deviations from procedures, a fate Ana suffered. “Put a whole strip of mess against you,” is how one aide put it . . . [T]hey may write a bad evaluation and set the stage for disciplinary procedures. . . .

Typically, aides are deferential in the face of their superior’s criticism, even when boiling inside. They do not challenge the legitimacy of the order or criticism itself . . . . Rather, they sift the blame for the messy drawers, dirty nails, unmade bed, or other “misdemeanor” away from themselves. It is the fault of the worker on another shift, aides commonly say, or workers who replaced them on their day off. (89-90).

Before calling the coordinating nurse, Ana told Ms. Knight that if she did not feel well, she should do what she wanted and stay in bed . . . . Because Ms. Knight insisted . . . the nurse relented, saying she could remain in bed until the doctor had a look at her. Fearing that the nurse would suspect her role in this incident, Ana told me, “I’m gonna get fired from this place one of these days” (84).

The only direct challenges to nurses took the form of verbal retorts made either out of nurses’ earshot or in a language they could not understand. The latter would not have been possible had a significant portion of the work group not shared minority status and a common ethnic origin. Interestingly, female, Spanish-speakers in Devinatz’ (1999) high-tech bench assembly setting also resisted abusive supervisors’ “no-talking” rules by communicating in their native tongues (through notes written on paper towels).

Whether grievances against nurses stem from different approaches to care or the sheer weight of nurses’ authority, aides frequently vent their anger by complaining to each other. An especially unpopular administrative nurse . . . was a constant topic of conversation, roundly cursed time after time. She need only cough in the staff dining room, and the aides muttered among themselves about how she was polluting the food.
Hispanic and Haitian aides can get away with direct verbal assaults in Spanish or Creole if the nurses in question does not speak the language (87).

Minority status shapes all of aides’ day-to-day interactions – between aides and patients, and aides and nurses – aggravating divisions between these camps and creating bonds among aides that strengthened their existing ties based on a common work experience. It is apparent, however, that the intersection of race and class was significant in shaping aides’ conflict with nurses.

The nature and structure of nursing aide work and aides’ responses play themselves out against the background of the social characteristics of the nursing home work force. . . . [This] has enormous implications for what goes on within nursing homes. From the aides’ perspective, race and gender, as well as ethnicity, affect relations with those they care for, work with, and take orders from, sometimes providing a source of solidarity and sometimes accentuating divisions and dilemmas. Class comes into play mainly as it overlaps with occupational inequalities among staff. At Crescent, it had little bearing on relations with patients . . . . What does still mater, however, is race, something that remains visible for all to see. Where aides are overwhelmingly people of color and patients and top administrators are overwhelmingly white, race aggravates already existing divisions. . . . A further complicating factor is gender. Like race, it is a tie that . . . can help bridge ethnic divisions. . . . Yet shared gender roles and identities, in themselves, did not . . . overcome wide inequalities of status and power among female staff in the nursing home. What stood out at Crescent was how keenly aides felt – and so often resented the authority of coordinating and administrative nurses. . . . Not surprisingly, in the nursing home work place, occupation was of overwhelming importance in shaping relations among staff. Among “occupational equals” like nursing aides, common gender and racial identities . . . served to reinforce bonds that had already developed on the basis of shared interest and problems on the job (148-150).

Race was clearly important in the nature of relationships between aides and nurses. However, personal interaction style was also a significant factor.

Popular nurses at Crescent were . . . women of color. Race drew them closer to aides, and shared ethnicity could also reduce strains. The key to nurses’ popularity, however, was the careful cultivation of good relations
with workers – showing concern for aides’ problems and taking time to chat and joke with them in a comradelike way, even as they issued instructions and made critiques. Indeed, two of the most well-like and respected nurses . . . were also among the strictest. They were able to introduce tougher regulations and more tightly structured regimes without arousing animosity because they were masters of interpersonal relations (92-93).

While this setting is generally persuasive (half the attributes are an absence of top-down controls), these workers are not subject to cooperative controls, and they are subject to direct supervision, which is quite negative for their work experience. This case thus helps to illustrate how persuasive settings for minority workers are less advantageous for workers relative to persuasive settings in the general sample and in more advantaged subsamples.

**Conclusion**

Findings with regard to race distributions are less straightforward than those associated with gender. The balance of coercive and persuasive control configurations does not appear to vary with the racial distribution of work groups. However, persuasive configurations evident in work groups with a relatively high proportion of minority workers are not as consistently advantageous for worker well-being as they have tended to be at other points in the analysis. Consequently, despite a number of persuasive configurations, work groups with a relatively high proportion of minorities confront settings that are systematically less beneficial, if not markedly more detrimental for their overall well-being.
CHAPTER 10

CONCLUSION

While the urge to produce is innate, the organization of work as we know it is distinctly social. Capitalism infuses the productive process with its own logic – co-opting the human labor instinct and circumscribing its expression with prescriptions imposed by firms. Pressured by competition for survival and aided by power in setting the terms of employment, the ultimate objective and tendency is toward increasing control over workers.

More than forty years ago, Robert Blauner drew sociology’s attention to the implications of heightening control for the psychological experience of work. Subsequent theory developed increasingly detailed understandings of the labor process and worker control. However, the historical development of this literature impeded theoretical synthesis and extension, complicating construction of a model allowing for systematic analysis of the implications of worker control for worker outcomes. While comparative research is needed to evaluate these relationships, empirical research has been limited by theoretical and methodological challenges to modeling and testing relationships. Only a few studies (e.g., Hodson 1996, 2001a) have used quantitative, comparative techniques to link control techniques to worker outcomes.
This study seeks to fill this gap by offering a model of generic and combinable components of control that may be used to characterize the nature of control across a broad range of work contexts; then using it to evaluate the implications of control for the experience of work. Six key forms of control are highlighted: direct supervision, automation, task segmentation, rules, career ladders and worker input. Expectations for worker outcomes are drawn from benchmark theories and more recent, often qualitative, research. I evaluate their implications for six indicators of worker well-being, including powerlessness, worthlessness, consent, organized opposition, work avoidance, and loathing of management.

I use data culled from the population of English-language, book-length workplace ethnographies to analyze the implications of worker control techniques for my indicators of worker well-being. Cases included in the analysis were drawn from studies in an array of substantive disciplines, including, but not limited to, management, anthropology, psychology and sociology, in which researchers spent at least six months in the field, focused on at least one identifiable work group in a single organizational setting, and provided enough information to code a range of attributes relevant to the sociology of work in general, and this research project in particular. These data include 141 work groups in a broad range of occupations, industries, and organizational types.

Analytic Strategy and Results
My analytic approach proceeds in three stages. First, I use logistic regression to measure the effect of each form of control, net of the others, on the odds of each worker outcome. Consistent with expectations, top-down control techniques, including direct supervision,
automation, and task segmentation are generally negative for worker well-being –
heightening workers’ odds of experiencing alienation and engaging in various forms of
resistance and reducing their likelihood of consent. Given that they are less oppressive to
workers, rules were expected to have more mixed results despite their top-down
orientation, and this was indeed the case. As expected, cooperative controls, including
career ladders and worker input, tend to benefit worker well-being – decreasing the
likelihood of alienation and most forms of resistance, while greatly enhancing workers’
ods of exercising consent.

Some results contradicted these tendencies, but not in ways that were wholly
unexpected. For example, workers under the control of automation are less likely to
engage in work avoidance because technology generally requires the presence of workers
and/or measures output, making it easier for employers to detect any shirking of tasks.
Additionally, career ladders and worker input appear to increase odds of engaging in
organized resistance and loathing management respectively, even as they heighten
consent and discourage work avoidance. This finding makes sense given the fact that
career ladders can be a concession to unhappy workers – providing them with job
security – and input may actually increase frustration with management if workers
perceive limits to the influence they expect or desire.

The second stage of the analysis investigates the combined influence of worker
control on worker outcomes. The emphasis here is on revealing patterns associated with
the co-presence (or absence) of multiple control techniques. Like all job attributes,
workers confront control in packages. This goal of this part of the study is to understand
their consequences for worker well-being. I use qualitative comparative analysis (QCA)
to identify configurations of control present in the data, reduced to the fewest components necessary to distinguish among cases. The result is a number of control “typologies,” which I in turn classify as representing either coercive or persuasive approaches to control, depending upon the balance of top-down and cooperative control techniques. This characterization resonates with what Friedman (1977) identified as strategies associated with direct control, in which management limits workers’ discretion (and thus the scope of their resistance) with coercion, threats, supervision and limiting their responsibilities, versus responsible autonomy, which wins loyalty and cooperating by providing a degree of autonomy that convinces workers to adopt managerial aims as their own.

Cases in each typology were compared to the remainder of cases to reveal their impact on the odds of each worker outcome under investigation. A surprising a tendency toward two extremes emerged in this initial QCA analysis, revealing little or no middle ground between “good” and “bad” jobs. Configurations identified in the total sample were either remarkably advantageous (persuasive approaches that reduced rates of alienation and resistance while increasing rates of consent); or extraordinarily injurious to worker well-being (coercive configurations where the opposite patterns were evident). The good news is the broad array of work settings apparent among the former, which included, for example, managers, professionals, emergency service providers and skilled tradespeople. The latter were mainly many low-level service jobs, such as fast food, and a number of jobs associated with bench and automated assembly. These workers experienced astonishingly high rates of powerlessness, worthlessness, and every form of resistance, along with very low rates of consent.
The third phase of the analysis sought to identify patterns in the nature of control, and consequently, worker outcomes by class, gender and race. The sample was divided into manual, service and professional subsamples, primarily male and primarily female subsamples, and predominantly majority-race and disproportionately minority-race subsamples. For each subsample, I used QCA to generate a set of control packages, and computed odds of outcomes for each of these packages from the general sample.

As expected, differences in the nature of control with implications for worker well-being were apparent by class, gender and race. Only persuasive approaches were apparent among professionals, and these were overwhelmingly advantageous for worker well-being. In contrast, work groups employed in manual and service sector occupations are subject to more coercive approaches to control. Moreover, persuasive approaches apparent in manual and service settings did not display overwhelmingly positive influence on worker well-being found among professionals. To be sure, there were persuasive approaches in these settings associated with overwhelmingly advantageous worker outcomes, but there were also persuasive approaches with decidedly mixed implications for worker well-being.

A similar tendency was apparent when I compared settings dominated numerically by women and men. Far more persuasive approaches than coercive approaches were apparent in male-dominated work settings, and persuasive settings were overwhelmingly beneficial for worker well-being. In contrast, all but one of the control packages apparent in work groups dominated by women was coercive, and the lone persuasive approach had relatively mixed implications for worker well-being.
Differences by race were not as marked, but were nevertheless apparent. While
the balance of persuasive and coercive approaches to control was roughly the same in
work settings with high and low minority representation, persuasive approaches in work
settings with disproportionately minority work groups had mixed implications for worker
well-being, while those in workplaces with low minority representation were associated
with overwhelmingly advantageous worker outcomes.

**Methodological Implications**

Worker control is best understood in its totality – that is, as packages confronted on the
job. As a consequence, results of analyses employing traditional analytic techniques,
however interesting, are not ideal for portraying the actual experience of work, or for
revealing its influence. Regression results reveal independent effects of control
mechanisms. But where co-presence of multiple attributes is key, reliance on regression
techniques invites omission. Likewise, over-controlling for influential factors may
induce distortion. Possible solutions such as use of interaction terms are of limited use
where theory to guide expectations is limited or where the complexity of the phenomena
would unduly complicate modeling and interpretation – both of which are the case here.
Moreover, modeling interactions would not solve issues arising from correlation of
independent variables, which almost necessarily bias regression results.

The ethnographic studies reveal multiple ways in which combinations matter. In
some cases, these appear to be the result of interactions. For example, direct supervisors
appear to be able to use rules and task segmentation to badger and threaten workers
(Devinatz 1999; Pfeffer 1979); and cooperative control techniques appear to mitigate the
negative influence of top-down controls. But often it is simply the co-presence of separate techniques, or the combined absence of others, that matters for well-being. Both additive effects and emergent processes are apparent in Milkman’s (1997) study of automotive assemblers employed with General Motors. Workers are able to justify boredom and overwork associated with task segmentation and fast-paced technology, but their combination with abusive supervisory practices causes conditions to become more than many are able to bear. Emergent processes are also evident in the frustration that arose from the co-presence of formal input and demeaning direct supervisory practices. The competing logics of these techniques aroused a very specific frustration and loathing of management having to do contradictions between what management said and what they did.

Quality of Life

These findings illuminate the relationship between attributes of work and outcomes of workers. However, their implications extend far beyond the workday. Humans have an innate need for fulfilling, proactive, cooperative production. Whether workers are able to meet these needs have consequences not only for the quality of work life, but also for the quality of life in general. Of course, the sheer amount of time spent at work is a significant factor, but what happens at work is crucial. Comparisons of the ends of the outcome spectrums – between jobs that engross workers to the point of obsession, and those for which ticking off minutes, hours, days, or years until time off is what passes for interest in the work, or between workers with total autonomy and those subject to daily
abuse and humiliation – are illuminating. It is easy to understand the tremendous influence work exerts on an individual’s identity, self-concept, and physical health (Kahn 1981; Sennett and Cobb 1972). Its impact extends even into the realm of personal relationships and childrearing practices with implications for occupational success in the next generation (Kohn and Schooler 1983). Simply put, regardless of nature of the job, all workers take their work home with them in one way or another.

Some might point to the influence of job “fit” in gauging its effects – arguing that it’s not the jobs themselves, but the match between job requirements and individual needs that matter for worker well-being. Certainly, understanding variation in individual responses to work would require attention to such matters. The design of this study emphasizes work groups’ overall response to work, washing away much of the effect of individual variation. But even for individuals, work context is substantially better than individual preferences for predicting variation in responses to work (Kahn 1981). The reason is simple: individual preferences are dwarfed by basic human needs important to most, if not all workers. If some control settings routinely produce high rates of alienation and resistance, and diminish consent, it is because they simply do not “fit” human needs and capabilities. Many of these settings require that workers leave some aspect of their humanity at home.

Do employers compensate workers for these sacrifices? Or, are workers able to compensate for them in their leisure time? Sadly, the answer to both questions appears to be no. Although some employers arguably attempt to counter the negative effects of coercive control with participative arrangements, wages do not compensate workers for
coercive control. If employers compensated workers for oppressive control structures with higher wages, the most undesirable control settings would be associated with higher wages; and these differences would be considerable, since nonmonetary job characteristics are more than twice as important as differences in wages in accounting for job desirability (Jencks, Perlman and Rainwater 1988). However this is not the case. The most coercive control settings were found among bench and automated assembly and among low service sector workers employed in fast food and domestic service – all notoriously low in pay. Independent research confirms that many of the lowest paid jobs are also those with the most disadvantageous, noneconomic attributes (Jacobs and Steinberg 1990).

In some cases, collective resistance has translated into higher wages among workers in extraordinarily oppressive settings – most notably in the automotive industry. Ford’s famous “Five Dollar Day” was the first of these wage concessions to automotive assemblers (Gartman 1999). However, many workers in this industry find that once they become accustomed to high wages, they are bound to work that they liken to a prison sentence (Milkman 1997). Many unions have emphasized pay and job security over matters associated with the nature of the work – a tendency that has backfired to some extent by contributing to increasingly coercive arrangements, heightening both alienation and capital flight overseas.

Likewise, existing evidence indicates that leisure activities tend to parallel, and not counterbalance the mental requirements of work. Kohn and his colleagues have argued that means of coping with workplace realities are generalized to non-work realms,
transferring work activities to personal values and use of leisure time (Kohn and Schooler 1983; Miller and Kohn 1983). Another explanation drawn from ethnographic research on an automotive assembly line, is physical and mental fatigue, leaving manual workers with little energy for other pursuits (Chinoy 1955). Such fatigue can be physical, mental or both. Physical pain from overwork is a common occurrence among workers under a great deal of constraint (see, for example, Devinatz 1999; Milkman 1997). But mental strain is common as well. While it may seem that workers who have “checked their brains at the door” would experience less mental fatigue at work, this is not the case. Paradoxically, use of complex skills appears to fatigue workers less in comparison to repetitive tasks requiring little skill, but constant attention (Blauner 1964). Fatigue can also result from emotional labor required in service jobs.

**Social Inequality**

In their study entitled “What is a good job”, Jenks Perman and Rainwater (1988) found that while earnings are the most important single factor in ratings of job desirability, nonmonetary factors combined are more than twice as important as earnings. Factoring in these job characteristics with wage rates more than doubles the calculated level of total labor force inequality, and entirely explains class, gender and race variation in job satisfaction according to these authors. This research underscores findings of this study: 1) workers confront their jobs in their totality, rather than as discrete attributes; 2) the nature of work affects the experience of work; and 3) inequality in the nature of work by
class, race, and gender is a dimension of the broader lived experience of inequality along these lines.

Sociologists have long been interested in variation in access to cooperative control strategies (especially career ladders) by industry. But large variations in control strategies are apparent within industries, and even within firms. For example, front line service providers are subject to different control strategies compared to office workers in service industry firms (Korczynski 2004). Despite greater resources to fund persuasive control practices, core firms reserve them for workers who are more difficult to replace, and doing more highly valued tasks (Friedman 1977; Batt and Keefe 1999). These distinctions are widely regarded as occupational. Kraft (1999) describes a bifurcation in control, in which the planners, or “experts”, are controlled with mechanisms associated with autonomy and collegiality, while the executors, including those under team-based regimes, receive supervision and technical control.

Prior empirical research documents class-based divides, and links them to worker outcomes. Schwalbe (1986) found class-related occupational differences in job requirements associated with multiple dimensions of alienation. Hodson (2001a) observed that professionals are subject to less direct supervision, and task segmentation, and have better outcomes associated with self-direction and meaning in work. Of course, some of this difference has to do with the nature of professional work, especially its indeterminate task content and the need for creativity, which are difficult to force (Alvesson and Willmott 2002; Causer and Jones 1996). However, Friedman (1977) suggests that control may also vary along lines of gender, race and even nativity. This
study’s findings support his proposition. Clearly, worker control techniques vary with work group’ class, gender and race composition. This is a significant contribution to labor process theory, which has frequently broached the possibility of difference by gender, but has rarely if ever gone beyond the topic of job segregation in actually providing evidence of it.

Returning to the ethnographic sources of my data helps to illuminate processes associated with these variations. Westwood (1982), for example, quotes women explicitly stating that the female work groups in the British clothing factory she studied were subject to more direct supervision (and were searched nightly as they left the factory) compared to the factory’s men, who “get away with murder in this company . . . . coming and going as they please (71-72). They were also subject to greater constraint via rules and task segmentation. Interviews with a supervisor in this firm revealed that managers had patronizing attitudes toward women – indicative of a lack of trust in their interest and capacity to determine their own activities. Likewise, Mansbridge (1980) is quoted as stating that the extensive participatory practices of Helpline were partly a result of desire to retain their young, adventurous workers, whose middle-class origins presented them with options apart from Helpline’s low-wage jobs.

The influence of broader stratification dynamics is even more evident in how control, and especially direct supervision is carried out on the shop floor – a process particularly apparent in the case of direct supervision. Certainly, there are class differences in the nature of relationships with supervisors. This is in part because professionals are less subject to direct supervision. However, abusive practices among
direct supervisors appear to be concentrated in less esteemed occupations – perhaps because there is a greater occupational, and thus social, distance between workers and supervisors in these settings, than in the professions, where a supervisor may simply be a more senior engineer, for example. The mention of white-collar attire by an automobile assembler in a workplace shifting control procedures from direct supervision to worker input underscores how status is carried onto, carried out, and interpreted on the shop floor. He states, “I like the fact that I’m considered man enough or adult enough or responsible enough to come in and do my job without having somebody breathing down my neck. . . . It’s a lot more relaxed than having somebody with a tie cracking the whip” (Shaiken, Lopez and Mankita 1997: 35).

Supervisory practices also appear to reflect gender, race and age dynamics in the broader society. I interpret these processes as micropolitical mediational processes (see Roscigno and Ainsworth-Darnell 1999) associated with broader social, economic and political inequalities – played out among actors brought together in workplaces and assigned roles with different levels of power in workplaces – and translating social status into lived experiences at work. Westwood (1982) quotes a supervisor describing his feelings about, and behavior with, female and male workers. He displays an explicit tendency to be patronizing and condescending toward women (whom he describes as “illogical”) and to be abusive toward men: [Y]ou can talk straight to a man, tell him off, . . . . swear, all of that, but . . . I am always a gentleman talking to a lady (28). I also found what appeared to be a heightened tendency toward “no-talking” rules for work groups that were disproportionately minority (Devinatz 19999; Pfeffer 1979). Age, too,
may have been a factor in the abuse commonly doled out to fast food workers (Leidner 1993; Reiter 1992). Indeed, multiple dimensions of inequality are likely to simultaneously shape these processes and relationships. Foner (1994) describes class, race and gender as coming together to influence relationships between aides and multiple groups other groups (patients, supervising nurses and administrators) within a nursing home.

Another way in which social stratification intervenes in work relationships is in how it influences worker responses to their settings. Pfeffer’s (1979) forklift drivers interpreted supervisors’ abuse through the lens of racial subordination. As black men, they collectively perceived abuse as assaults on their manhood, and their responses represented efforts to assert it for themselves and their coworkers. However, their response rarely went beyond complaining privately or work avoidance, which were pervasive. A separate pattern was evident among female, foreign-language-speaking minorities. Many openly spoke out against supervisors but in their native languages, which supervisors could not understand (Foner 1994). Where supervisors forbade workers from speaking to one another, Spanish-speaking Latinas wrote notes to one another (in Spanish) on paper towels (Devinatz 1999).

The role of gender in response to work was very apparent among nurses, whose resistance activities represented a commitment to patient care and valuation of female gendered social roles and values (Street 1992). Gender also appeared to factor into resistance among Westwood’s (1982) clothing assemblers, but in unexpected ways. The women were eager to strike, but could not persuade the male-dominated union, and
especially the company-paid union representatives, to support them. Their only alternative was to band together in collective acts of work avoidance, which was successful in helping them to regain the time they wanted back. These examples suggest that there are roadblocks to formal collective resistance for marginalized populations, sometimes owing to union dynamics or secondary labor market status. But the processes involved may be more complex. Different types of resistance may be more or less achievable or preferable given the nature of work or gender or race-based preferences, ideologies, or perceptions of the people involved.

Further investigation into how class, gender and race influence the way in which control is played out on the shopfloor, and into variation in workers’ responses on the job, represent enormously fruitful avenues for future research. Just as systematic analysis was required to confirm and understand long-suspected variation in the nature of control by dimensions of stratification in the broader society, a similar approach is necessary to reveal apparent roles for class, gender and race in how these processes play in workplaces – both in terms of how workers are treated and how they respond. Of course, this endeavor requires a great deal of attention to theory on how gender, race and class influence organizational processes and group dynamics. Bringing these insights together with theory on the labor process and worker well-being should stimulate new insight capable of revealing how broader stratification dynamics influence this most basic human activity.
APPENDIX A

LIST OF ETHNOGRAPHIC SOURCES


APPENDIX B

TABLES
### Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extractive and Construction</td>
<td>6.4</td>
</tr>
<tr>
<td>Nondurable Manufacturing</td>
<td>19.9</td>
</tr>
<tr>
<td>Durable and Electronic Manufacturing</td>
<td>12.8</td>
</tr>
<tr>
<td>Transportation Equipment</td>
<td>7.1</td>
</tr>
<tr>
<td>Transportation, Communication, and Utilities</td>
<td>7.8</td>
</tr>
<tr>
<td>Wholesale and Retail Trade</td>
<td>11.3</td>
</tr>
<tr>
<td>Finance, Insurance, Real Estate and Business Services</td>
<td>6.4</td>
</tr>
<tr>
<td>Personal Services</td>
<td>7.8</td>
</tr>
<tr>
<td>Professional and Related Services</td>
<td>17.7</td>
</tr>
<tr>
<td>Public Administration</td>
<td>2.1</td>
</tr>
</tbody>
</table>

### Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>20.6</td>
</tr>
<tr>
<td>Managerial</td>
<td>7.8</td>
</tr>
<tr>
<td>Clerical</td>
<td>3.5</td>
</tr>
<tr>
<td>Sales</td>
<td>4.3</td>
</tr>
<tr>
<td>Skilled Trade</td>
<td>7.1</td>
</tr>
<tr>
<td>Assembly</td>
<td>29.1</td>
</tr>
<tr>
<td>Unskilled Labor</td>
<td>6.4</td>
</tr>
<tr>
<td>Service</td>
<td>18.4</td>
</tr>
<tr>
<td>Farm</td>
<td>2.8</td>
</tr>
</tbody>
</table>

### Employment Size

<table>
<thead>
<tr>
<th>Employment Size</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer than 50</td>
<td>24.1</td>
</tr>
<tr>
<td>50-99</td>
<td>8.5</td>
</tr>
<tr>
<td>100-499</td>
<td>20.6</td>
</tr>
<tr>
<td>500-999</td>
<td>11.3</td>
</tr>
<tr>
<td>1000-4999</td>
<td>19.1</td>
</tr>
<tr>
<td>5000 or more</td>
<td>12.1</td>
</tr>
</tbody>
</table>

Note: N= 141

Table 1. Industrial and Occupational Locus of Organizational Ethnographies
### Alienation

<table>
<thead>
<tr>
<th>Component</th>
<th>Scale</th>
<th>Loadings (Alpha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powerlessness&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>1-Very High 2-High 3-Average 4-Low 5-Very Low</td>
<td>.93</td>
</tr>
<tr>
<td>Creativity</td>
<td>1-Very High 2-High 3-Average 4-Low 5-Very Low</td>
<td>.92</td>
</tr>
<tr>
<td>Freedom of Movement</td>
<td>1-A Great Deal 2-Average 3-Little or None</td>
<td>.86</td>
</tr>
<tr>
<td>Alpha</td>
<td></td>
<td>(.89)</td>
</tr>
<tr>
<td>Worthlessness&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaningful Work</td>
<td>1-Fulfilling 2-Somewhat Meaningful 3-Meaningless</td>
<td>.91</td>
</tr>
<tr>
<td>Pride in Work</td>
<td>1-A Great Deal 2-Average 3-Rare</td>
<td>.91</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>1-Very High 2-High 3-Average 4-Low 5-Very Low</td>
<td>.89</td>
</tr>
<tr>
<td>Alpha</td>
<td></td>
<td>(.89)</td>
</tr>
</tbody>
</table>

### Consent

<table>
<thead>
<tr>
<th>Component</th>
<th>Scale</th>
<th>Loadings (Alpha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperation</td>
<td>1-Absent 2-Mixed 3-Widespread</td>
<td>.84</td>
</tr>
<tr>
<td>Extra Effort</td>
<td>1-No 2-Yes</td>
<td>.77</td>
</tr>
<tr>
<td>Extra Time</td>
<td>1-No 2-Yes</td>
<td>.71</td>
</tr>
<tr>
<td>Effort Bargain</td>
<td>1-Reticence 2-Conditional Effort 1-Extra Effort</td>
<td>.87</td>
</tr>
<tr>
<td>Good Soldiers</td>
<td>1-None 2-Some 3-Half 4-Most 5-All</td>
<td>.76</td>
</tr>
<tr>
<td>Alpha</td>
<td></td>
<td>(.85)</td>
</tr>
</tbody>
</table>

### Resistance

<table>
<thead>
<tr>
<th>Component</th>
<th>Scale</th>
<th>Loadings (Alpha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organized Opposition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organized Group Action</td>
<td>1-Absent 2-Infrequent 3-Average 4-Widespread 5-Pervasive</td>
<td>.84</td>
</tr>
<tr>
<td>Strike during Research</td>
<td>1-None 2-Infrequent 3-Formal</td>
<td>.76</td>
</tr>
<tr>
<td>History of Strikes</td>
<td>1-No 2-Infrequent 3-Frequent</td>
<td>.84</td>
</tr>
<tr>
<td>Alpha</td>
<td></td>
<td>(.74)</td>
</tr>
<tr>
<td>Work Avoidance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing Dumb</td>
<td>1-No 2-Yes</td>
<td>.69</td>
</tr>
<tr>
<td>Withholding Enthusiasm</td>
<td>1-No 2-Yes</td>
<td>.77</td>
</tr>
<tr>
<td>Work Avoidance</td>
<td>1-No 2-Yes</td>
<td>.72</td>
</tr>
<tr>
<td>Reticence Practiced Widely</td>
<td>1-No 2-Yes</td>
<td>.74</td>
</tr>
<tr>
<td>Minimal Effort:Income Ratio</td>
<td>1-None 2-Some 3-Half 4-Most 5-All</td>
<td>.72</td>
</tr>
<tr>
<td>Alpha</td>
<td></td>
<td>(.78)</td>
</tr>
<tr>
<td>Loathing Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict with Managers</td>
<td>1-Never 2-Infrequent 3-Average 4-Frequent 5-Constant</td>
<td>.79</td>
</tr>
<tr>
<td>Conflict with Supervisors</td>
<td>1-Never 2-Infrequent 3-Average 4-Frequent 5-Constant</td>
<td>.80</td>
</tr>
<tr>
<td>Subversion of Managers</td>
<td>1-No 2-Yes</td>
<td>.76</td>
</tr>
<tr>
<td>Social Sabotage of the Firm</td>
<td>1-No 2-Yes</td>
<td>.69</td>
</tr>
<tr>
<td>Alpha</td>
<td></td>
<td>(.75)</td>
</tr>
</tbody>
</table>

<sup>a</sup> Extraction Method: Principal Component Analysis. All first Eigenvalues are greater than 1.9, and all second Eigenvalues are below 1. Every component matrix reported only one factor.

<sup>b</sup> Variables are reverse-coded. The measure of autonomy, for example, is an indicator of lack of autonomy.
Note: Please refer to Table 2 for scale components, loadings, alphas and eigenvalues.

Table 3. Means and Standard Deviations of Dependent Variables
### Table 4. Means and Standard Deviations of Independent Variables

<table>
<thead>
<tr>
<th><strong>Surveillance</strong></th>
<th><strong>Technology</strong></th>
<th><strong>Bureaucracy</strong></th>
<th><strong>Cooperative</strong></th>
<th><strong>Worker Input</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Supervision</td>
<td>Workers are directly supervised (0-no, 1-yes)</td>
<td>.60</td>
<td>.49</td>
<td></td>
</tr>
<tr>
<td>Automation</td>
<td>Some or all of the work is automated (0-no, 1-yes)</td>
<td>.27</td>
<td>.45</td>
<td></td>
</tr>
<tr>
<td>Coercive</td>
<td>Rules</td>
<td>Work is directed by written rules, specifications or targets (0-no, 1-yes)</td>
<td>.69</td>
<td>.46</td>
</tr>
<tr>
<td>Coercive</td>
<td>Task Segmentation</td>
<td>Tasks require speed and dexterity only (0-no, 1-yes)</td>
<td>.26</td>
<td>.44</td>
</tr>
<tr>
<td>Cooperative</td>
<td>Career Ladder</td>
<td>Workers receive extensive on-the-job training (0-no, 1-yes)</td>
<td>.21</td>
<td>.41</td>
</tr>
<tr>
<td>Cooperative</td>
<td>Worker Input</td>
<td>Workers are responsible for the quality of their own work or the firm formally solicits their input (0-no, 1-yes)</td>
<td>.39</td>
<td>.49</td>
</tr>
</tbody>
</table>
### Table 5. Correlations among Dependent and Independent Variables

<table>
<thead>
<tr>
<th></th>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Organized Opposition</th>
<th>Work Avoidance</th>
<th>Loathing Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Powerlessness</strong></td>
<td>1.00</td>
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</tr>
<tr>
<td><strong>Worthlessness</strong></td>
<td>.52 ***</td>
<td>1.00</td>
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<tr>
<td><strong>Consent</strong></td>
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<td><strong>Loathing Management</strong></td>
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<td>.15 †</td>
<td>-.18 *</td>
<td>.16 †</td>
<td>.09</td>
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<table>
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<tr>
<th></th>
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<th>Task Segmentation</th>
<th>Rules</th>
<th>Career Ladder</th>
<th>Worker Input</th>
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<tr>
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<td>-.20 *</td>
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Note: ***p<.001 ** p<.01 * p<.05 † p<.1 (two-tailed tests)
<table>
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<tr>
<th></th>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Organized Opposition</th>
<th>Work Avoidance</th>
<th>Loathing Management</th>
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<td>.37 ***</td>
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<td>.19 *</td>
<td>.16 †</td>
<td>.17 *</td>
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<td>.40 ***</td>
<td>-.22 **</td>
<td>.30 ***</td>
<td>-.01</td>
<td>.15 †</td>
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<tr>
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<td>-.22 **</td>
<td>.22 **</td>
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<td>-.13</td>
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<td>-.23 **</td>
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<td>-.07</td>
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<td>.11</td>
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Note: ***p<.001  **p<.01  *p< .05 † p<.1 (two-tailed tests)

Table 6. Correlations between Dependent and Independent Variables
<table>
<thead>
<tr>
<th></th>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Organized Opposition</th>
<th>Work Avoidance</th>
<th>Loathing Management</th>
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<tbody>
<tr>
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<td>.37</td>
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<td>.13</td>
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</table>

Note: ***p<.001 **p<.01 * p<.05 † p<.1 (two-tailed tests)

Table 7. Odds Ratios from Logistic Regression of Alienation, Consent and Resistance on Worker Control
<table>
<thead>
<tr>
<th>Configurations (1=Yes, 2=No)</th>
<th>Cases</th>
<th>Outcome Frequencies among Cases in Each Configuration</th>
</tr>
</thead>
<tbody>
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</table>

Table 8. Unreduced Configurations, Distribution of Cases, and Outcome Frequencies among Cases in Each Configuration
### Coercive Approaches

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Examples</th>
<th>N</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>RULES<em>DIRECT</em>career*input</td>
<td>Fast food, office workers</td>
<td>38</td>
<td>103</td>
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<tr>
<td>SEGMENTED<em>DIRECT</em>career*input</td>
<td>Bench assembly, maids</td>
<td>27</td>
<td>114</td>
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<td>SEGMENTED<em>AUTOMATED</em>INPUT*career</td>
<td>Metal machine operators</td>
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<td>134</td>
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<td>SEGMENTED<em>AUTOMATED</em>RULES*career</td>
<td>Assembly lines, fast food</td>
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<td>124</td>
</tr>
<tr>
<td>SEGMENTED<em>AUTOMATED</em>DIRECT<em>RULES</em>INPUT</td>
<td>Automobile manufacturing</td>
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<td>136</td>
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</table>

### Persuasive Approaches

<table>
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<th>Configuration</th>
<th>Examples</th>
<th>N</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>segmented*automated</td>
<td>Nurses, truckers, professionals</td>
<td>90</td>
<td>51</td>
</tr>
<tr>
<td>segmented<em>RULES</em>CAREER</td>
<td>Emergency services, management</td>
<td>19</td>
<td>122</td>
</tr>
<tr>
<td>segmented<em>DIRECT</em>CAREER*input</td>
<td>Skilled trades</td>
<td>7</td>
<td>134</td>
</tr>
<tr>
<td>segmented<em>direct</em>RULES*INPUT</td>
<td>Professionals, management</td>
<td>24</td>
<td>117</td>
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Note: Capital letters denote presence of the form of control in question, lower case denotes its absence, "*" denotes combination. Cases may fall under more than one configuration.

Table 9. Reduced Configurations and Frequencies
<table>
<thead>
<tr>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Loathing</th>
<th>Management</th>
<th>Work</th>
<th>Avoidance</th>
<th>Organized Opposition</th>
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</table>

Table 10. Percent of Cases Demonstrating Alienation, Consent and Resistance, by Configuration Status
Note: ***p<.001 ** p<.01 * p<.05 † p<.1 (two-tailed tests); denotes statistically significant difference between configuration mean and mean of cases not captured by the configuration.
### Table 12. Odds of Alienation, Consent and Resistance Outcomes for Workplace Configurations and Model Diagnostics\(^a\).

<table>
<thead>
<tr>
<th>RULES<em>DIRECT</em>career*input</th>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Organized Opposition</th>
<th>Work Avoidance</th>
<th>Loathing Management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.68 ***</td>
<td>5.19 ***</td>
<td>.25 **</td>
<td>1.73</td>
<td>3.01 *</td>
<td>1.20</td>
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<tr>
<td>-2 Log likelihood</td>
<td>171.70</td>
<td>168.97</td>
<td>170.70</td>
<td>142.18</td>
<td>147.50</td>
<td>162.97</td>
</tr>
<tr>
<td>Cox &amp; Snell R Square</td>
<td>.13</td>
<td>.14</td>
<td>.09</td>
<td>.04</td>
<td>.06</td>
<td>.04</td>
</tr>
<tr>
<td>Nagelkerke R Square</td>
<td>.18</td>
<td>.20</td>
<td>.13</td>
<td>.07</td>
<td>.09</td>
<td>.05</td>
</tr>
</tbody>
</table>

| SEGMENTED*DIRECT*career*input | 15.06 *** | 70.39 *** | .17 ** | 1.14                 | 1.37            | .89                 |
| -2 Log likelihood         | 160.71       | 140.13       | 169.66  | 143.54               | 153.56          | 163.09              |
| Cox & Snell R Square      | .20          | .30          | .10     | .03                  | .02            | .04                 |
| Nagelkerke R Square       | .27          | .41          | .14     | .05                  | .02            | .05                 |

| SEGMENTED*AUTOMATED*INPUT*career | 8.24 † 3.E+09 | .56 | 2.34 | 1.35 | 5.51 † |
| -2 Log likelihood         | 184.76       | 172.90       | 179.54  | 142.60               | 153.87          | 158.98              |
| Cox & Snell R Square      | .05          | .12          | .03     | .04                  | .01            | .06                 |
| Nagelkerke R Square       | .06          | .16          | .05     | .06                  | .02            | .09                 |

| SEGMENTED*AUTOMATED*RULES*career | 29.60 ** 27.56 ** | .18 * 1.98 | 1.96 | 2.15 |
| -2 Log likelihood         | 167.23       | 163.90       | 173.58  | 142.26               | 152.66          | 161.23              |
| Cox & Snell R Square      | .16          | .17          | .07     | .04                  | .02            | .05                 |
| Nagelkerke R Square       | .21          | .24          | .10     | .07                  | .03            | .07                 |

| SEGMENTED*AUTOMATED*DIRECT*RULES*INPUT | 2.0E+09 3.E+09 | .00 13.95 * 6.70 † 4.E+09 |
| -2 Log likelihood         | 182.07       | 176.39       | 174.40  | 137.13               | 150.27          | 152.07              |
| Cox & Snell R Square      | .07          | .10          | .07     | .08                  | .04            | .11                 |
| Nagelkerke R Square       | .09          | .13          | .10     | .12                  | .06            | .16                 |

| segmented*automated       | .10 *** 0.66 *** | 4.48 *** | .31 ** | .74 | .63 |
| -2 Log likelihood         | 154.44       | 136.88       | 166.11  | 136.00               | 153.45          | 161.73              |
| Cox & Snell R Square      | .23          | .32          | .12     | .09                  | .02            | .04                 |
| Nagelkerke R Square       | .31          | .43          | .17     | .13                  | .02            | .06                 |

| segmented*RULES*CAREER    | .19 * .44 | 2.77 * .76 | .16 †  .61 |
| -2 Log likelihood         | 182.15       | 182.67       | 175.99  | 143.41               | 149.00          | 162.46              |
| Cox & Snell R Square      | .07          | .06          | .06     | .04                  | .05            | .04                 |
| Nagelkerke R Square       | .09          | .08          | .08     | .05                  | .07            | .06                 |

| segmented*DIRECT*CAREER*input | .19 0.00 | 1.58 | .38 | .67 | .00 |
| -2 Log likelihood         | 187.09       | 178.17       | 179.70  | 142.77               | 153.84          | 159.65              |
| Cox & Snell R Square      | .03          | .09          | .03     | .04                  | .01            | .06                 |
| Nagelkerke R Square       | .04          | .12          | .05     | .06                  | .02            | .08                 |

| segmented*direct*RULES*INPUT | .04 ** 1.6 ** 2.82 * .21 * .44 .31 † |
| -2 Log likelihood         | 166.38       | 174.55       | 175.28  | 138.16               | 152.15          | 159.19              |
| Cox & Snell R Square      | .16          | .11          | .06     | .07                  | .03            | .06                 |
| Nagelkerke R Square       | .22          | .15          | .09     | .11                  | .04            | .09                 |

---

Note: ***p<.001 ** p<.01 * p<.05 † p<.1 (two-tailed tests)

\(^a\) Binary logistic regression results. Models include intercepts and controls for logged organization size and research period. Coefficients available upon request.
<table>
<thead>
<tr>
<th>Configuration</th>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Organized Opposition</th>
<th>Work Avoidance</th>
<th>Loathing Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>segmented<em>automated</em>RULES*input</td>
<td>.53 *</td>
<td>.71</td>
<td>.83</td>
<td>.36 *</td>
<td>1.42</td>
<td>.99</td>
</tr>
<tr>
<td>segmented<em>automated</em>RULES*career</td>
<td>.37 ***</td>
<td>.48 **</td>
<td>1.13</td>
<td>.40 *</td>
<td>1.28</td>
<td>.89</td>
</tr>
<tr>
<td>segmented<em>automated</em>INPUT<em>direct</em>career</td>
<td>.10 ***</td>
<td>.33 **</td>
<td>1.48</td>
<td>.20 **</td>
<td>.81</td>
<td>.49</td>
</tr>
<tr>
<td>segmented<em>automated</em>direct*RULES</td>
<td>.10 ***</td>
<td>.32 ***</td>
<td>1.53 †</td>
<td>.30 **</td>
<td>.60</td>
<td>.40 **</td>
</tr>
<tr>
<td>segmented<em>automated</em>DIRECT<em>rules</em>CAREER*INPUT</td>
<td>.00 ***</td>
<td>.00 ***</td>
<td>2.84 ***</td>
<td>.00 ***</td>
<td>.00 ***</td>
<td>.00 ***</td>
</tr>
</tbody>
</table>

Note: ***p<.001 ** p<.01 * p<.05 † p<.1 (two-tailed tests); denotes statistically significant difference between configuration mean and mean of cases not captured by the configuration.

Table 13. Mean Ratios (Configuration to Non-Configuration) for Alienation, Consent and Resistance among Configurations in Professional Occupations
<table>
<thead>
<tr>
<th>Configuration</th>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Organized Opposition</th>
<th>Work Avoidance</th>
<th>Loathing Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEGMENTED<em>DIRECT</em>career*input</td>
<td>2.70 ***</td>
<td>3.20 ***</td>
<td>.26 ***</td>
<td>1.01</td>
<td>1.30</td>
<td>.90</td>
</tr>
<tr>
<td>SEGMENTED<em>AUTOMATED</em>INPUT*career</td>
<td>2.17 *</td>
<td>2.63 ***</td>
<td>.78</td>
<td>2.05</td>
<td>1.20</td>
<td>2.73 *</td>
</tr>
<tr>
<td>SEGMENTED<em>AUTOMATED</em>RULES*career</td>
<td>2.71 ***</td>
<td>2.54 ***</td>
<td>.30 **</td>
<td>1.75</td>
<td>1.56</td>
<td>1.82</td>
</tr>
<tr>
<td>AUTOMATED<em>DIRECT</em>RULES<em>CAREER</em>INPUT</td>
<td>2.44 ***</td>
<td>2.48 ***</td>
<td>1.39</td>
<td>2.32</td>
<td>2.11</td>
<td>1.78</td>
</tr>
<tr>
<td>segmented<em>AUTOMATED</em>DIRECT<em>RULES</em>input</td>
<td>1.36</td>
<td>1.09</td>
<td>.60</td>
<td>4.28 **</td>
<td>.92</td>
<td>.77</td>
</tr>
</tbody>
</table>

**Persuasive**

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Organized Opposition</th>
<th>Work Avoidance</th>
<th>Loathing Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>segmented<em>automated</em>direct*input</td>
<td>.19 ***</td>
<td>.40 **</td>
<td>1.16</td>
<td>.80</td>
<td>.72</td>
<td>.60</td>
</tr>
<tr>
<td>segmented<em>direct</em>RULES<em>INPUT</em>career</td>
<td>.14 ***</td>
<td>.30 **</td>
<td>1.34</td>
<td>.28 *</td>
<td>.81</td>
<td>.22 **</td>
</tr>
<tr>
<td>segmented<em>DIRECT</em>rules<em>CAREER</em>input</td>
<td>.59</td>
<td>.00 ***</td>
<td>.69</td>
<td>.00 ***</td>
<td>1.04</td>
<td>.00 ***</td>
</tr>
<tr>
<td>segmented<em>direct</em>RULES<em>CAREER</em>input</td>
<td>.59</td>
<td>1.22</td>
<td>.69</td>
<td>.00 ***</td>
<td>1.04</td>
<td>.00 ***</td>
</tr>
<tr>
<td>segmented<em>DIRECT</em>RULES<em>CAREER</em>INPUT</td>
<td>1.61</td>
<td>1.64</td>
<td>1.88</td>
<td>3.17</td>
<td>.00 ***</td>
<td>2.42</td>
</tr>
<tr>
<td>segmented<em>automated</em>DIRECT*career</td>
<td>1.32</td>
<td>.74</td>
<td>.98</td>
<td>.68</td>
<td>1.70</td>
<td>1.71 †</td>
</tr>
</tbody>
</table>

Note: ***p<.001 ** p<.01 * p<.05 † p<.1 (two-tailed tests); denotes statistically significant difference between configuration mean and mean of cases not captured by the configuration.

Table 14. Mean Ratios (Configuration to Non-Configuration) for Alienation, Consent and Resistance among Configurations in Manual Occupations
Table 15. Mean Ratios (Configuration to Non-Configuration) for Alienation, Consent and Resistance among Configurations in Service Occupations.

<table>
<thead>
<tr>
<th></th>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Organized Opposition</th>
<th>Work Avoidance</th>
<th>Loathing Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coercive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>segmented<em>DIRECT</em>RULES<em>career</em>input</td>
<td>2.66 ***</td>
<td>2.73 ***</td>
<td>.32</td>
<td>.84</td>
<td>1.67</td>
<td>1.12</td>
</tr>
<tr>
<td>automated<em>DIRECT</em>career*input</td>
<td>1.74 **</td>
<td>1.79 **</td>
<td>.42 **</td>
<td>.61</td>
<td>2.20 *</td>
<td>1.05</td>
</tr>
<tr>
<td>segmented<em>automated</em>RULES<em>career</em>input</td>
<td>.66</td>
<td>.78</td>
<td>.79</td>
<td>.45 †</td>
<td>1.52</td>
<td>1.23</td>
</tr>
<tr>
<td>Persuasive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>segmented<em>automated</em>direct<em>RULES</em>CAREER*INPUT</td>
<td>.00 ***</td>
<td>.00 ***</td>
<td>2.55 **</td>
<td>.64</td>
<td>.00 ***</td>
<td>.00 ***</td>
</tr>
<tr>
<td>segmented<em>automated</em>DIRECT<em>rules</em>INPUT</td>
<td>1.09</td>
<td>.42 †</td>
<td>2.20 *</td>
<td>.39</td>
<td>.74</td>
<td>1.69</td>
</tr>
<tr>
<td>segmented<em>automated</em>DIRECT*career</td>
<td>1.09</td>
<td>.68</td>
<td>1.00</td>
<td>.56</td>
<td>2.04 *</td>
<td>1.57</td>
</tr>
</tbody>
</table>

Note: ***p<.001 ** p<.01 * p<.05 † p<.1 (two-tailed tests); denotes statistically significant difference between configuration mean and mean of cases not captured by the configuration.

* Service workers are classified as directly supervised if they are subject to traditional direct supervision, or if they spend at least 65% of their time helping customers. Substituting this measure into QCA analyses of professional and manual work has no effect on configurations identified in those settings.
<table>
<thead>
<tr>
<th>Coercive</th>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Organized Opposition</th>
<th>Work Avoidance</th>
<th>Loathing Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRECT<em>RULES</em>career*input</td>
<td>2.29 ***</td>
<td>2.05 ***</td>
<td>.36 ***</td>
<td>1.49</td>
<td>2.14 *</td>
<td>1.16</td>
</tr>
<tr>
<td>SEGMENTED<em>AUTOMATED</em>DIRECT*career</td>
<td>2.82 ***</td>
<td>2.89 ***</td>
<td>.26 **</td>
<td>1.87</td>
<td>1.11</td>
<td>1.61</td>
</tr>
<tr>
<td>SEGMENTED<em>AUTOMATED</em>RULES*career</td>
<td>2.71 ***</td>
<td>2.54 ***</td>
<td>.30 **</td>
<td>1.75</td>
<td>1.56</td>
<td>1.82</td>
</tr>
<tr>
<td>Persuasive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>segmented<em>automated</em>career</td>
<td>.48 ***</td>
<td>.42 ***</td>
<td>1.24</td>
<td>.32 **</td>
<td>1.24</td>
<td>1.10</td>
</tr>
<tr>
<td>segmented<em>automated</em>input</td>
<td>.62 *</td>
<td>.58 *</td>
<td>.76</td>
<td>.58</td>
<td>1.40</td>
<td>.76</td>
</tr>
<tr>
<td>segmented<em>automated</em>RULES</td>
<td>.28 ***</td>
<td>.39 ***</td>
<td>1.52 †</td>
<td>.47 *</td>
<td>.95</td>
<td>.73</td>
</tr>
<tr>
<td>segmented<em>direct</em>RULES<em>career</em>INPUT</td>
<td>.14 ***</td>
<td>.30 **</td>
<td>1.34</td>
<td>.28 *</td>
<td>.81</td>
<td>.22 **</td>
</tr>
<tr>
<td>segmented<em>DIRECT</em>CAREER*input</td>
<td>.33 †</td>
<td>.00 ***</td>
<td>1.20</td>
<td>.64</td>
<td>.58</td>
<td>.00 ***</td>
</tr>
<tr>
<td>segmented<em>RULES</em>CAREER*input</td>
<td>.33 †</td>
<td>.68</td>
<td>1.20</td>
<td>.64</td>
<td>.58</td>
<td>.00 ***</td>
</tr>
<tr>
<td>segmented<em>DIRECT</em>RULES*CAREER</td>
<td>.79 †</td>
<td>.80</td>
<td>1.91</td>
<td>2.41</td>
<td>.00 ***</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Note: ***p<.001 ** p<.01 * p<.05 † p<.1 (two-tailed tests); denotes statistically significant difference between configuration mean and mean of cases not captured by the configuration.

*Propotion female is less than ten percent.

Table 16. Mean Ratios (Configuration to Non-Configuration) for Alienation, Consent and Resistance among Configurations in Work Groups with Low Rates of Female Participation.
<table>
<thead>
<tr>
<th>Configuration</th>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Organized Opposition</th>
<th>Work Avoidance</th>
<th>Loathing Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coercive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIRECT<em>RULES</em>career*input</td>
<td>2.29 ***</td>
<td>2.05 ***</td>
<td>.36 ***</td>
<td>1.49</td>
<td>2.14 *</td>
<td>1.16</td>
</tr>
<tr>
<td>SEGMENTED<em>DIRECT</em>career*input</td>
<td>2.70 ***</td>
<td>3.20 ***</td>
<td>.26 ***</td>
<td>1.01</td>
<td>1.30</td>
<td>.90</td>
</tr>
<tr>
<td>SEGMENTED<em>AUTOMATED</em>DIRECT<em>RULES</em>career</td>
<td>2.61 ***</td>
<td>2.67 ***</td>
<td>.17 ***</td>
<td>1.62</td>
<td>1.45</td>
<td>1.78</td>
</tr>
<tr>
<td>segmented<em>automated</em>DIRECT<em>RULES</em>input</td>
<td>1.05</td>
<td>.90</td>
<td>.66</td>
<td>.54</td>
<td>2.03</td>
<td>1.12</td>
</tr>
<tr>
<td><strong>Persuasive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>segmented<em>automated</em>career</td>
<td>.48 ***</td>
<td>.42 ***</td>
<td>1.24</td>
<td>.32 **</td>
<td>1.24</td>
<td>1.10</td>
</tr>
</tbody>
</table>

Note: ***p<.001 ** p<.01 * p<.05 † p<.1 (two-tailed tests); denotes statistically significant difference between configuration mean and mean of cases not captured by the configuration.

*Proportion female is at least sixty percent.

Table 17. Mean Ratios (Configuration to Non-Configuration) for Alienation, Consent and Resistance among Configurations in Work Groups with High Rates of Female Participation\(^a\)
### Table 18. Mean Ratios (Configuration to Non-Configuration) for Alienation, Consent and Resistance among Configurations in Work Groups with Low Rates of Minority Participation

<table>
<thead>
<tr>
<th></th>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Organized Opposition</th>
<th>Work Avoidance</th>
<th>Loathing Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coercive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEGMENTED<em>AUTOMATED</em>career*INPUT</td>
<td>2.17 *</td>
<td>2.63 ***</td>
<td>.78</td>
<td>2.05</td>
<td>1.20</td>
<td>2.73 *</td>
</tr>
<tr>
<td>SEGMENTED<em>DIRECT</em>rules<em>career</em>input</td>
<td>1.85 *</td>
<td>2.46 ***</td>
<td>.24 *</td>
<td>1.27</td>
<td>.74</td>
<td>.62</td>
</tr>
<tr>
<td>AUTOMATED<em>DIRECT</em>RULES<em>career</em>input</td>
<td>2.19 ***</td>
<td>2.04 **</td>
<td>.26 **</td>
<td>2.23 †</td>
<td>1.11</td>
<td>.92</td>
</tr>
<tr>
<td>AUTOMATED<em>DIRECT</em>RULES<em>CAREER</em>INPUT</td>
<td>2.44 ***</td>
<td>2.48 ***</td>
<td>1.39</td>
<td>2.32</td>
<td>2.11</td>
<td>1.78</td>
</tr>
<tr>
<td><strong>Persuasive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>segmented*automated</td>
<td>.31 ***</td>
<td>.26 ***</td>
<td>2.64 ***</td>
<td>.41 **</td>
<td>.81</td>
<td>.69</td>
</tr>
<tr>
<td>segmented<em>direct</em>RULES<em>career</em>INPUT</td>
<td>.14 ***</td>
<td>.30 **</td>
<td>1.34</td>
<td>.28 *</td>
<td>.81</td>
<td>.22 **</td>
</tr>
<tr>
<td>segmented<em>RULES</em>CAREER*input</td>
<td>.33 †</td>
<td>.68</td>
<td>1.20</td>
<td>.64</td>
<td>.58</td>
<td>.00 ***</td>
</tr>
</tbody>
</table>

Note: ***p<.001 ** p<.01 * p<.05 † p<.1 (two-tailed tests); denotes statistically significant difference between configuration mean and mean of cases not captured by the configuration.

*Propotion minority is less than ten percent.
Table 19. Mean Ratios (Configuration to Non-Configuration) for Alienation, Consent and Resistance among Configurations in Work Groups with High Rates of Minority Participation

<table>
<thead>
<tr>
<th>Coercive</th>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Organized</th>
<th>Work</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>automated* DIRECT<em>career</em>input</td>
<td>1.81 **</td>
<td>1.86 **</td>
<td>.36 ***</td>
<td>.63</td>
<td>2.29 *</td>
<td>1.09</td>
</tr>
<tr>
<td>DIRECT<em>RULES</em>career*input</td>
<td>2.29 ***</td>
<td>2.05 ***</td>
<td>.36 ***</td>
<td>1.49</td>
<td>2.14 *</td>
<td>1.16</td>
</tr>
<tr>
<td>SEGMENTED<em>AUTOMATED</em>RULES<em>career</em>input</td>
<td>2.46 ***</td>
<td>2.24 **</td>
<td>.22 **</td>
<td>1.15</td>
<td>1.43</td>
<td>1.19</td>
</tr>
<tr>
<td>SEGMENTED<em>AUTOMATED</em>DIRECT<em>RULES</em>career</td>
<td>2.61 ***</td>
<td>2.67 ***</td>
<td>.17 ***</td>
<td>1.62</td>
<td>1.45</td>
<td>1.78</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Persuasive</th>
<th>Powerlessness</th>
<th>Worthlessness</th>
<th>Consent</th>
<th>Organized</th>
<th>Work</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>segmented<em>automated</em>direct<em>rules</em>input</td>
<td>.39</td>
<td>.00 ***</td>
<td>1.41</td>
<td>2.41</td>
<td>.68</td>
<td>.00 ***</td>
</tr>
<tr>
<td>segmented<em>automated</em>RULES*career</td>
<td>.37 ***</td>
<td>.48 **</td>
<td>1.13</td>
<td>.40 *</td>
<td>1.28</td>
<td>.89</td>
</tr>
<tr>
<td>segmented<em>automated</em>DIRECT*career</td>
<td>1.32</td>
<td>.74</td>
<td>.98</td>
<td>.68</td>
<td>1.70</td>
<td>1.71 †</td>
</tr>
</tbody>
</table>

Note: ***p<.001 ** p<.01 * p<.05 † p<.1 (two-tailed tests); denotes statistically significant difference between configuration mean and mean of cases not captured by the configuration.

Proportion minority is at least forty percent.

Results for one persuasive configuration (segmented*AUTOMATED* DIRECT*rules*CAREER*input) are unreported, because the category contained too few cases to allow for computation of significance tests. Each mean ratio was equal to .00.
BIBLIOGRAPHY

*Gender and Society* 4: 139-158.


