

ABSTRACT

PAYNE, JULIANNE CATHERINE. 'Put Your Hands Where My Eyes Can See': An Analysis of Workplace Surveillance, Resistance and Consent. (Under the direction of Martha Crowley.)

Since the 1990s, workplace surveillance has become a popular topic of sociological investigation. Researchers debate whether monitoring schemes elicit consent and self-control among workers or provoke pervasive worker resistance. I use quantitative data culled from 158 detail-rich, book-length, workplace ethnographies to analyze how direct supervision, electronic surveillance, peer monitoring, and customer surveillance influence workplace behavior. I find that workers neither consent wholeheartedly to surveillance, nor do they uniformly resist their control. Instead, my analyses reveal that the effect of surveillance on workplace behavior depends on the *form* of surveillance employed. Notably, the effects of peer monitoring on resistance and consent differ markedly from those of other forms of surveillance.

'Put Your Hands Where My Eyes Can See': An Analysis of
Workplace Surveillance, Resistance and Consent

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BIOGRAPHY

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Introduction

Are we being watched? Scholars in sociology, psychology, and law argue that we are and increasingly have been throughout the past twenty or so years. For some, this represents a shift towards a surveillance society, in which we are subject to an outsider's gaze on the job, in our homes, while using information technologies, and places we frequent the public sphere (Staples 2000; Scott 1995; Nock 1993). Webster and Robins (1993) refer to this change as "social Taylorism," the "management of ever more aspects of social life which presume close monitoring as a prerequisite for action" (p. 250). Of particular interest to scholars is surveillance in the workplace, which is distinct from general societal surveillance in that it occurs in the context of differential power relations between owning and working classes (Thompson 2003; Sewell 1996).

Researchers disagree about the effects of workplace surveillance on worker resistance and consent. Postmodern theorists adopting a Foucaultian paradigm argue that surveillance leads to totalitarian control over workers' actions and the elicitation of near-perfect consent (Sewell 1996; Sewell & Wilkinson 1992). They regard surveillance systems as analogous to a panopticon, a prison structure devised by Jeremy Bentham which allows guards to observe prisoners' activities without their knowledge. Because captives know they may be observed at any time, they obey prison rules to avoid punishment. Workplace surveillance, it is argued, heightens visibility of employee behavior, encouraging compliance with managerial expectations. More recently, however, investigators have challenged the notion of total worker consent – underscoring how workers exercise agency even under conditions of

extreme surveillance (Lankshear et al. 2001; Thompson & Ackroyd 1995). For example, Bain and Taylor (2000) demonstrate that even in conditions of near perfect surveillance, workers find spaces to escape the managerial gaze and interfere with the production process.

Further research is needed to determine whether the workplace is a consent-eliciting panopticon, a site of ongoing worker subversion, or something else entirely. In this paper, I review the literature on surveillance, resistance and consent, including a potential mediating role for organizational anomie. I then use quantitative data culled from the population of book-length, English-language workplace studies to explore the consequences of direct supervision, electronic surveillance, peer monitoring and customer surveillance for a range of workplace behaviors, including two forms of consent (devotion and compliance), and three types of resistance (collective action, exit, reticence, and sabotage). Generally, I find that existing theories – both those characterizing the workplace as a panopticon and those emphasizing the pervasive nature of workplace resistance – fail to explain the complexity of worker behavior. Instead, my results indicate that the effect of surveillance depends on the form it takes, as modes of surveillance vary markedly in the degree to which they prompt consent or curtail resistance, depending on the type of behavior considered. I discuss my findings in light of existing research and theoretical paradigms, and conclude with ideas for future research.

Resistance

Studies of worker resistance and consent gained popularity within industrial sociology during the 1980s. Prior to this time, researchers tended to focus on workplace

structures rather than worker agency, in line with traditional labor process theory. They treated individual subjectivity and behavior as separate issues or as contributing to a larger system of worker control (e.g., Kunda 1992; Burawoy 1979). Further limiting research on resistance was difficulty spotting disobedience due to its covert nature (Mumby 2005; Prasad & Prasad 1998; Edwards et al. 1995), coupled with political and cultural forces against studying resistance in nations that emphasize workplace consensus and harmony (Edwards et al. 1995).

Writers such as Giddens (1984) and those in the postmodern movement challenged strictly structural accounts of the workplace, renewing research interest in individual action and human subjectivity. From this work, industrial sociologists including Hodson (1995), Edwards and colleagues (1995), Prasad and Prasad (2000, 1998), Hollander and Einwohner (2004) and Mumby (2005) have proposed conceptual models for understanding worker resistance as embedded in workplace structures.

Defining worker resistance is no easy task. Definitions of resistance vary considerably within sociology and across disciplines, demonstrating that the concept of resistance itself is a social construction (Hollander & Einwohner 2004). As Prasad and Prasad (1998:229) state, studies "...do not offer simple and unanimous visions of workplace resistance but very complex interpretations of what resistance is and how it is enacted." Hollander and Einwohner (2004) argue that while researchers use the term resistance to broadly represent any form of oppositional action, there is considerable disagreement among scholars regarding whether or not resistance must be intentional and regarded as such by others. For the purposes of this study, resistance is defined as oppositional behavior that can

be identified by third party observers, but need not be intentional. Although this definition may miss certain acts of resistance that are hidden to third party observers, the acts that researchers *can* observe may help us subsequently to better understand those that are less visible. Defined as such, resistance consists of overt, collective action such as striking, or covert subversion including worker reticence, sabotage, and exit.

A great deal of existing research on workplace resistance focuses on overt forms of collective action, such as striking and unionization. For example, Fantasia (1988) describes how workers mobilize collectively as a result of managerial control and abuses, forming supportive “cultures of solidarity” from which worker organization develops. He argues that resistant activity often originates rather spontaneously in reaction to some form of workplace abuse, and is sustained by workers within the organization and community supporters. Recent investigations of collective action describe changes in union membership and striking over time, often in terms of legal and historical shifts (Fantasia & Voss 2004). Collective action likely captures the attention of social scientists because research indicates that striking and unionization often win workers material workplace rewards, such as better pay, increased benefits and formalized grievance procedures (U.S. Department of Labor 2008). It may also be the easiest form of resistance to study and gather data on, given that it is overt and often documented by organizations, unions and other interested parties.

Others have brought into relief more covert and subtle ways that workers act, either individually or collectively, to challenge power relations in the workplace. Some research has highlighted reticence, or typically hidden subversive acts including withdrawal, withholding enthusiasm or “making out” (a process by which workers manipulate workload

for personal comfort and convenience). For example, Roy's (1952) participant observation in a machine shop revealed that workers acted collectively to restrict output and withhold effort in order to maximize their wages under a quota system. Workers enforced hourly wage ceilings among their colleagues using social sanctioning so that time study engineers would not re-price their jobs or pay them less per manufactured part than the current rate. Although workers in the shop lost some status among peers when they failed to meet production quotas, they were pulled aside and strongly urged by coworkers to slow down when they exceeded group-established production limits. Thus, reticent workers, while expressing solidarity with peers, subvert formal organizational expectations and processes.

Other investigations have underscored how workers sometimes act individually to subvert organizational control – hiding their efforts from both management and their peers. Workers sabotage the production process, spread rumors about managers, withhold information and subvert the authority of one or more bosses. Although covert acts may not create sweeping organizational change like collective action, sabotage helps workers maintain positive identities in the face of abusive work environments. Prasad and Prasad (2000) describe how workers in a health management organization (HMO) engaged in secretive acts of “careful carelessness” in order to undermine an unpopular computerization plan. Managers claimed that workers intentionally destroyed new technology by leaving opened drinks, which were easily knocked over, next to keyboards and purposely damaged machines by cleaning them with abrasive chemicals. Such acts could be so damaging that they interfered with day-to-day workplace functioning, undermining production. Confronted with such accusations, workers claimed that they had made innocent mistakes. However,

when word circulated that a machine had been damaged, the unidentified culprits were hailed as “courageous dissenters” among their peers (p. 397).

Dissatisfied workers also sometimes “vote with their feet.” High rates of turnover, quitting and absenteeism often indicate that workers reject some aspect of the labor process so forcefully that they seek employment elsewhere. Workers exit the organization when other employment options are available and when they are not invested enough in the firm to stay and fight for change (Hirschman 1970). Exit must be interpreted cautiously as Mumby (2005) indicates, because many workers leave organizations for reasons unrelated to workplace conditions. For instance, Ouellet (1994) describes how personal issues contributed to turnover, quitting and absenteeism among truckers. Yet, in many firms, high levels of worker exit indicate patterned worker behavior in response to workplace conditions. Leidner (1993) illustrates that McDonald’s employees and agents of Combined Insurance frequently left their respective organizations due to high rates of dissatisfaction and uncertainty, limited autonomy and meager pay. In the case of McDonald’s, some degree of turnover may have been attributable to transition of young, part-time workers into permanent and higher-paying forms of employment. The same cannot be said for Combined Insurance, however, where rates of exit exceeded that of otherwise similar competitors – costing the company excess training time and money.

Consent

Researchers studying surveillance often juxtapose resistance with consent, or worker acceptance of and contribution towards organizational goals. Although a great deal of

research and theorizing has recently emerged on the topic of resistance, scholars discuss consent less explicitly and under a variety of different names, including commitment, cooperation, citizenship and accommodation. Consent can be attitudinal devotion, in the case of commitment or pride in work, or behavioral compliance, like working extra hours or exerting extra effort. Importantly, compliance does not necessarily imply devotion, as some workers may go above and beyond expectations in terms of their behavior without accepting organizational prerogatives. For instance, Kunda (1992) describes how many professional workers at Tech (a pseudonym) expressed cynicism about formalized workplace values and norms yet put long hours and tremendous effort into work tasks.

Generally, analyses of worker consent tend to focus on how managers can elicit the devotion and compliance of their employees. Mayo (1933), an early contributor to this literature, argues that workers will be more responsive to organizational goals when management pays attention to their activities. His work describes the renowned Hawthorne experiments, in which a small group of factory workers increased their productivity in reaction to being studied. Although Hawthorne researchers originally intended to examine the effect of factory conditions (e.g., lighting) on productivity, they found that workers increased production regardless of factory manipulation—simply because those in authority expressed interest in their behavior. Later, those in the human relations tradition argued that workers will accept and pursue organizational goals when they see those goals as complementary to their own. They suggested that managers structure production such that workers have personal incentives to pursue firm objectives attitudinally and behaviorally (Jaffee 2001). This can be accomplished by narrowing the scope of worker decision-making;

management provides workers with a limited set of behavioral options, all of which are congruent with manager's objectives. Workers pursue some desired course of action, seemingly unobstructed, but actually controlled by management (Perrow 1986). For example, Barker (1993) illustrates how workers under participative management appear to have total control over the production process, but may use their latitude to make arrangements in which they work longer and harder than they did under traditional top-down management.

A popular method for securing worker consent used in many contemporary firms is workplace culture, a set of assumptions, values and behaviors that workers learn through processes of organizational socialization. Advocates of workplace culture argue that it provides workers freedom from oppressive top-down management by encouraging worker innovation and input regarding firm goals, guided by a set of shared values. For instance, Grugulis, Dundon, and Wilkinson (2000:107) describe one organization in which a "work hard, play veerrryyy hard" company motto was maintained by a "culture manager," who secured worker loyalties with extensive social activities within and outside the workplace. Overall worker satisfaction was high and consent was nearly complete.

Managerial attempts to elicit consent from workers have often been coupled with drives to end collective action and reticence. As Bendix (1956) describes, the scientific management movement sought to align labor capabilities with organizational positions, maximizing the productivity of workers by giving them responsibility commensurate with their full potential. In theory, this appears beneficial for both managers and workers: managers increase productivity, while workers achieve at the highest levels possible. However, assessing employee abilities one-by-one individualizes the worker and undermines

collective forms of resistance including unionization and output restriction. American human relations scholars similarly battled resistance while seeking consent by promoting an ideology of workplace cooperation following World War I. Managers empowered workers by appealing to their creativity, emotions, and drive to create while pushing for non-confrontational company unions that gave the appearance of worker voice although controlled by management (Bendix 1956).

Although a great deal of scholarly work on consent focuses on how managers can manipulate workers and prevent resistance, other investigations discuss consent more as an expression of worker agency. Hodson (2001) exemplifies such approaches in his discussion of worker citizenship. Hodson argues that workers desire opportunities to be included in and to contribute to organizational goals. They seek out jobs that allow them to participate in decision-making, foster pride and meaning, act autonomously and demonstrate skill. When workers find organizations that provide them with such opportunities, they cooperate and are satisfied. Workers may alternatively encounter structural challenges within the firm that curb their citizenship; particularly, managers can be abusive or incompetent or can silence employees and/or overwork them.

Why Consider Both?

Although there is a tendency to study *either* resistance *or* consent, treating resistance and consent as two sides of the same concept and hence redundant, some theorists have questioned the adequacy of such singular approaches (e.g., Mumby 2005). Workers can both

accept workplace arrangements in some ways and challenge them in others, thus cooperating and subverting at once. For instance, workers in Button, Mason and Sharrock's (2003) study of the printing industry rejected a formal electronic monitoring system established by management because it interfered with informal, efficient work processes. Although workers resisted bureaucratic managerial rules, they did so in order to complete tasks more quickly, benefiting both management and clients. Similarly, Burawoy (1979) describes how manufacturing workers exert tremendous effort to build up large stashes of work so that they can later relax as desired. Although this process of "making out" allows them to manipulate workload for their personal comfort, it also allows management to meet production goals. Further, Newby (1975) describes how traditionally powerless groups (i.e., slaves, tenant farmers), unable to resist overtly for fear of punishment or abuse, tend to appear cooperative in the face of management while subverting them secretly. Edwards, Collinson and Della Rocca (1995) thus conclude "Oppositional practices are likely to be characterized by overlapping and mutually embedded practices of consent, devotion and resistance (p. 294)." The interconnectedness of resistance and consent means that they ought not be studied independently of each other.

Of course, it is a simplification to discuss either resistance or consent independent of social context. As Edwards and his colleagues argue (1995), both can be influenced by cultural and historical factors. For instance, some nations have cultural values supporting worker resistance (e.g., England), while others tend to view workplace relations as more consensual (e.g., France). Blue collar workers have a long tradition of resistance, whereas white and pink collar jobs do not. Resistance may also vary over time as a result of legal and

cultural changes (Fantasia & Voss 2004). Thus, researchers studying resistance and consent must take contextual factors into account.

Surveillance and Control

Surveillance is the process by which behavior is monitored. In the context of the capitalist workplace, management typically employs surveillance as a means by which to control workers. The assumption behind systems of surveillance is that if worker behaviors are visible, resistant behaviors can be punished, and desirable consenting behaviors can be rewarded and/or established as standard workplace expectations (Taylor 1947). Workers who are not monitored in some way are free to set their own productivity standards, use company time as personal time and produce goods and services of varying quality. These behaviors potentially cost management large sums of money, and undermine capitalist goals to maximize surplus value (Marx 1976). Surveillance thus reveals deficient worker activity for sanctioning, helping management to control the laboring class.

Whether or not surveillance is an effective form of worker control is an empirical question that researchers address from one of two perspectives: a panopticon perspective or a worker agency perspective. Panopticon conceptualizations of the workplace suggest workers rarely resist controlling arrangements and consent to management's prerogatives after internalizing firm expectations. Alternatively, agency conceptualizations argue that even under highly-monitored conditions, workers resist control in both overt and covert ways.

Panopticon scholars adopt Foucault's (1979) argument that powerful groups employ organizational structures to prevent resistance and elicit consent from powerless groups. The

panopticon, a penitentiary plan drawn up by Jeremy Bentham in the late 1700s, illustrates how this can be accomplished. The panopticon is a circular prison in which small cells separated by windowless walls surround a raised observation tower with tinted glass windows. Within the tower, guards view the activities of prisoners at whim but without prisoners' knowledge, as captives cannot see inside the tinted observation windows. Foucault (1979) argues that the panopticon leads prisoners to constantly police their own behavior in accordance with prison expectations, as guards in the tower can spot and intervene in malfeasance at any time. Rather than disobeying prison rules and risking discipline, Foucault argues that prisoners will internalize regulations and effectively control themselves.

Industrial sociologists use the panopticon as a metaphor illustrating workplace control processes. Sewell and Wilkinson (1992) argue that workplace surveillance systems, particularly electronic and peer monitoring, render worker activities visible to either supervisors or peers. They assume that supervisors and coworkers will punish those who fail to meet production standards. Workers escape discipline by internalizing company goals and going out of their way to meet them. Surveillance elicits exceptional performance, which becomes the standard expectation over time, and unveils hidden worker knowledge traditionally used as a bargaining chip for wages and respect with management (Sewell 1998). Barker (1993) demonstrates that managers and coworkers ridicule those who resist surveillance arrangements or question organizational objectives, resulting in a tightening of control.

Although the panopticon metaphor is quite popular in investigations of surveillance, researchers outside the surveillance literature and even some within it reject the notion of

consenting, non-resistant workers. Instead, they see workers as agents with power to challenge workplace conditions. As Edwards (1979) argues, control and resistance exist in a dialectical relationship. Historically, as workplace control evolves, workers innovate methods of resisting control in ways that exploit the weaknesses of managerial systems. For instance, as technical control of workers via the assembly line became common during the Fordist era, workers voted with their feet at crucial junctures – shutting down entire production processes. Hodson (1995) likewise argues that different forms of workplace control provoke divergent forms of worker resistance. Researchers who equate surveillance with perfect control over worker behaviors thus assume that worker agency fails to impact the workplace in meaningful ways, despite historical data indicating otherwise. They also tend to ignore covert, individualized forms of worker resistance, focusing almost exclusively on resistance as collective action (Prasad and Prasad 1998).

Gabriel (1999), an agency theorist, demonstrates that managerial attempts to watch and control workers are imperfect, and those who equate surveillance attempts with total worker control credit management with too much power. Workers find ways to subvert monitoring systems, escaping surveillance in the “margins” of the organization (Gabriel 1999:195); for example, peripheral locations and the night shift. Although some organizations collect information on production time, including how long employees work, the frequency with which they begin tasks, and any down-time they experience, workers can nevertheless withhold effort and use their expertise against management (Knights and McCabe 1998). For instance, Bain and Taylor (2000) describe how electronically-monitored call center workers trick management into believing they are servicing customers by staying

on the telephone line after they have transferred calls to an automated computer system. This renders management's vision of workers imperfect, undermining the consistency with which malfeasance can be spotted.

Occasionally, peers and even managers themselves undermine workplace control through resistance. Peers may develop cultures in which withholding effort and even outright resistance is celebrated (Graham 1995). Similarly, management may elect not to discipline workers for monitored misbehavior, as doing so potentially disrupts intra-organizational trust and cooperation, creating conflict more troublesome than undesirable worker behavior. Lankshear and Mason (2001) report that although one group of managers possessed surveillance-capable technology, they chose not to monitor workers, believing discipline based on monitored data would provoke strong worker resistance and interfere with work flow.

Surveillance, then, is a form of worker control, limiting resistance and eliciting consent under a limited set of conditions. Management sometimes uses surveillance effectively to spot, then sanction or reward actions. In other instances, workers and managers reject control schemes either collectively or individually. Researchers can better understand resistance and consent by investigating how surveillance is implemented successfully and unsuccessfully. I now turn to an investigation of different forms of surveillance. For most forms of surveillance, I provide two sets of hypotheses: one set representing a panopticon approach (labeled "P"), and the second set representing a worker agency paradigm (labeled "A"). The agency perspective is most helpful for understanding how direct supervision

shapes consent and resistance. I thus provide one set of hypotheses representing this approach (labeled “A”).

Direct Supervision

The oldest form of worker monitoring is direct supervision. Under this form of surveillance, a supervisor observes workers completing tasks, gathering information on productivity and correcting undesirable behaviors first-hand. For instance, a manager at a McDonald’s fast food restaurant verbally berated a worker for poor quality work as the worker continued to service customers (Leidner 1993:81). Workers can respond to direct supervision by trying to impress supervisors with improvements to the quality or intensity of their work during surveillance periods, or alternatively, by withholding effort during supervision in order to prevent later production speed-up. Burawoy (1979) describes how manufacturing workers deliberately added extra movements and steps to work routines in order to keep managerial production quotas low.

Hodson (2001) demonstrates that direct supervision results in high levels of workplace resistance, including sabotage, strikes, absenteeism, quitting, and workplace conflict. Direct supervision is also associated with low levels of worker consent, including low cooperation, pride and commitment (Hodson 2001). Direct supervision presumably elicits negative responses from workers due to its extremely intrusive nature, as supervisors may literally watch workers over their shoulder. This is not to say, however, that direct supervisors may not increase production, especially the quantity produced. Workers despise the mistrust such monitoring implies, and resent being watched so blatantly (Austrin and

West 2005). Sosteric (1996) describes how supervisory surveillance of customer-worker interactions in a bar actually undermined bartenders' job satisfaction and quality of work by interfering with the authenticity of their service. Ogbonna and Harris (2002) illustrate that workers are subject to supervisory surveillance of actions as minute as a smile; managers in this study sanctioned those workers who did not appear genuine enough. Existing research on direct supervision, resistance and consent thus leads me to expect the following:

Hypothesis A1: Direct supervision increases the likelihood of worker resistance.

Hypothesis A2: Direct supervision reduces the likelihood of worker consent.

Direct supervision is the foundation for later technological and social innovations in surveillance. The principle behind direct supervision—that workers' activities must be observed and regulated in order to establish control—continues to operate as managers adopt other ways of monitoring workers. For instance, managers in Austrin's (1991) research anticipated that direct supervisors in their bank would soon be eliminated, as electronic surveillance and self-monitoring were more flexible and less costly means by which to control worker behavior. Similarly, workers in Ogbonna and Harris' research (2002) believed that companies instituted new forms of surveillance in order to fire managers, thus cutting costs. Burris (1998) confirms that increasing "technologicalization" of the workplace decreases the need for direct supervision. Mason (2000) suggests otherwise, that supervisory positions are not declining but changing, as labor and production schedules increase in complexity and companies call for efficient work processes. Likewise, Gordon (1996) states

that management numbers have actually increased over time despite popular “lean management” rhetoric.

Electronic Surveillance

Researchers argue that electronic surveillance of workers has increased over time due to the growth of computer technologies during the 1980s. New technologies provide managers with a means by which to gather information about worker behaviors without watching them directly and at a low cost (Garson 1988). Postmodern theorists typically regard electronic monitoring to be totalizing and inescapable (Ferne and Metcalf 1997; Garson 1988). At their most invasive, electronic surveillance systems collect data on the frequency of work tasks, the length each takes to complete and the amount of workers’ free time (Lankshear et al. 2001). The information collected on each worker can be compared to company-established productivity standards and/or that of co-workers (Bain and Taylor 2000). Many argue that workers, acknowledging the constant gaze they are under, will come to police their own behavior according to company standards under electronic monitoring. Sewell and Wilkinson (1992) argue that this produces an “electronic panopticon,” in which workers know that cameras, computers, and other machines record their behaviors, but experience uncertainty regarding whether or not management will spot misbehavior and discipline them. Under seemingly constant gaze, researchers assume that workers will be comply with organizational goals and be compliant to managerial mandates in order to escape sanctioning. Garson (1988) argues that such conditions create an “electronic sweatshop.”

Studies of casinos classically illustrate panopticon-like workplace conditions. Austrin and West (2005) describe how cameras catch every bodily movement of casino dealers. Dealers are expected to conform to very specific work routines, dictating actions as specific as hand-positioning during card shuffling. While dealers with a great deal of seniority are confident regarding their skills and regard cameras as non-invasive and even functional, new dealers experience electronic monitoring of their work as oppressive and humiliating. Sallaz (2002) comments that large black globe cameras record workers' actions at all times, and surveillance specialists regularly review the videos at unknown times. Taping, coupled with circular table design and tight-fitting uniforms with pocket less aprons (to decrease the likelihood of hidden cards) maximize worker visibility to management. Even when surveillance experts fail to watch workers, workers know they may be observed, creating panopticon-like conditions. Workers monitored so extensively arguably demonstrate high levels of consent.

Another common example scholars provide of the electronic panopticon are call centers, typically studied in the United Kingdom. Call center work is under extensive surveillance via telephone systems and desktop computers (Ferne and Metcalf 1998). Managers record telephone conversations for quality assessments, call lengths and quantities, computer entries, and system down-time of customer service representatives, commonly referred to as "CSRs" (Lankshear et al. 2001; Bain and Taylor 2000). In many cases, managers use such information to pressure CSRs to increase call volume and examine worker compliance with customer service scripts (Bain and Taylor 2000; Ferne & Metcalf 1997). Panopticon visions of the workplace lead me to expect the following:

Hypothesis P1: Electronic surveillance decreases the likelihood of worker resistance.

Hypothesis P2: Electronic surveillance increases the likelihood of worker consent.

Despite panopticon arguments, new lines of research demonstrate that electronic systems are far from the inescapable iron cage that some researchers envision. Button, Mason and Sharrock (2003) describe how workers in the United Kingdom printing industry completely subverted a newly-instituted electronic surveillance system called SURVALANT. The SURVALANT system interfered with the printers' informal processes of anticipating print jobs before they were formally submitted, beginning new jobs before old jobs had finished, changing the sequence of requests to fit them more efficiently into the workday, and assisting co-workers when technical problems arose. Workers, viewing management's monitoring of their activity as legitimate, created a new set of monitoring norms using the SURVALANT technology to satisfy management's desire for worker records and their personal goals of maintaining discretion and customer service. This is hardly a tale of inescapable electronic gaze. Timmons (2003) also finds a failed panopticon within the context of the nursing industry. Although managers requested that nurses enter patient care records into a computer system, nurses refused, regarding the computer systems as time-consuming and artificial measures of care. Likewise, Garson (1988) describes how secretaries evaded electronic monitoring systems by saving electronic documents under misleading names such as "XMASMEMO" (p. 213). When workers modify, reject or subvert surveillance systems, rather than unquestioningly complying with managerial dictates, they are resisting, often with reticence or sabotage. Workers defend their autonomy within the

workplace when faced with electronic control structures. Such research leads me to construct the following agency-based hypotheses:

Hypothesis A3: Electronic surveillance increases the likelihood for worker resistance.

Hypothesis A4: Electronic surveillance decreases the likelihood of worker consent.

Peer Monitoring

Beginning in the 1990s, there was an explosion of research on team management. Global competition, increasingly educated workers and changing consumer expectations led capitalists to seek cost-effective ways to monitor workers while still giving them enough discretion to respond to market demand (Hodson 2008). Business scholars and sociologists alike have proposed that team management provides a solution to such modern workplace conditions. While there has been debate surrounding the utility of team management for workers and management (Smith 1997), team-organized workplaces undoubtedly result in greater interaction among co-workers and increased visibility of peers' work (Hodson 2008).

Under team management, rewards for productivity are typically distributed according to group accomplishments, meaning that workers depend on their peers for pay and job security. Workers easily spot weak performers on their teams, and pressure them to work harder to maximize group bonuses and escape managerial scrutiny (Ezzamel and Willmott 1998). Capitalists benefit from such arrangements, because peers replace supervisors as avenues for obtaining devotion and securing worker compliance, reducing vertical workplace

conflict. Capitalists can facilitate the peer monitoring process by displaying both individual and team productivity levels in public work spaces, creating the potential for competition among individuals and groups (van den Broek 2004; Fernie and Metcalf 1998). Barker (1993) classically demonstrates the peer monitoring process in his study of ISE Communications, a company experiencing a transition from bureaucratic work organization to team management. Under the team system, workers coordinated workflow and managed one another. Individual and team productivity indicators were posted for all to see, informing within-group peer discipline. Workers, particularly those who had been with the organization the longest, policed their peers regarding the completion of work tasks, promptness, and the quality of their performance. Few workers questioned the intense expectations of co-workers, as production standards originated out of democratic process and not from cruel higher-ups. The few workers who did refuse to work late or who made minor mistakes saw their integrity questioned by others in the group (Barker 1993). When workers cannot keep up, peer surveillance can lead to isolation and anger from colleagues (Graham 1995). Barker's study at ISE Communications is a tale of extreme worker consent and little resistance.

Peer monitoring is not necessarily limited to teams. Jackall's (1988) study of managers illustrates that intense workplace competition for promotions led workers to constantly negotiate their reputation among peers and keep tabs on the activities of others. Since the quality of managerial work can be difficult to assess, promotions often depended on social contacts and company reputation. By obsessively tracking the reputations and associates of co-workers, managers in Jackall's study were better able to anticipate their own mobility or termination. Managers also furthered their success by disassociating themselves

from peers known for failed projects or social missteps. Put simply, managers sanctioned one another according to informal group hierarchies based on workplace achievement. Managers rarely questioned this system, and spent extraordinary amounts of time maintaining their “public face.” This study, and team management studies discussed earlier, lead me to the following panopticon hypotheses:

Hypothesis P3: Peer monitoring decreases the likelihood of worker resistance.

Hypothesis P4: Peer monitoring increases the likelihood of worker consent.

Other studies suggest that workers may have more latitude to resist under peer surveillance than Barker’s (1993) or Jackall’s (1988) research suggests. Ezzamel and Willmott (1998) find that some workers experience peer monitoring and within-group discipline as extremely stressful and would accept punishment from management rather than sanction peers. Since co-worker relations can serve as a source of refuge in even disastrous work conditions (Hodson 2001), many workers prioritize peer relationships over firm success (Townsend 2005). Workers can also use teams originally engineered by management as a vehicle for resistance. Graham (1995) finds that workers at a Subaru-Isuzu manufacturing plant, angry about managerial manipulation and the grueling work pace, encouraged co-workers to stop the assembly line often and speak defiantly during team meetings. Those workers who were reluctant to walk off the line with the group were verbally coerced into doing so. This work echoes earlier findings that workers collectively restrict output and sanction peers who do not cooperate (e.g., Roy 1952).

The effectiveness of peer monitoring for establishing worker consent can be further limited by within-team divisions. Vallas (2003) describes how team management in a paper mill failed as a result of status differences among workers. Men overrode team plans to rotate job tasks in order to monopolize high status jobs for themselves. Although their work was visible to peers, their positions of relative social power allowed them to (1) resist team decisions that would have lowered their occupational prestige, and (2) escape team sanctioning. In light of such contradictory findings, I propose an alternative set of agency-based hypotheses:

Hypothesis A5: Peer monitoring increases the likelihood of worker resistance.

Hypothesis A6: Peer monitoring decreases the likelihood of worker consent.

Customer Surveillance

As the service sector continues to expand over time, some researchers have moved away from studying the management-worker dichotomy that has traditionally dominated the labor process tradition and examined the relationships between workers and customers (Gutek et al. 2000). Increasing competition and consumer empowerment lead managers to emphasize service, quality, and customer accommodation as business strategies for the modern market (Peccei and Rosenthal 2001; du Gay and Salaman 1992). Supervisors may find it difficult to assess worker devotion with such goals, however, as service work tends to be completed via telephone, electronically or in multiple locations (e.g., throughout retail stores). One potential solution for managers hoping to monitor such workers is to enlist

customers as their eyes and ears. Customers, as management's allies, inform sanctioning of workers while pursuing their own desires for excellent service (Fuller and Smith 1991). In this sense, customers elicit consent and squash resistance from workers by examining workers' compliance to company-established service standards and reporting back to higher-ups. According to Gamble (2007) and McCammon and Griffin (2000), very little social research has been done on customer surveillance processes to date.

Fuller and Smith (1991) identify three forums customers have for reporting worker activity to management: company instigated (present in 80% of the organizations the authors studied), company encouraged (present in 86% of organizations studied), and customer instigated (present in all organizations studied). Company instigated forums include comment cards and customer surveys. Company encouraged forums employ methods such as feedback mechanisms on websites or telephone questionnaires promoted with coupons or premiums. Customer instigated feedback most typically comes in the form of telephone calls or letters that consumers submit without encouragement from management. Data collected via customer feedback mechanisms inform managerial evaluation and discipline of workers via annual assessments, worker files and on-the-spot sanctioning (Fuller and Smith 1991). For instance, Hochschild (1983) describes how flight attendants worried about customer service letters as much as supervisory control. Managers filed both "onion" (i.e., complaint) and "orchid" (praise) letters in employee records to inform later rewards and punishments. In order for such feedback mechanisms to be useful, customers must be motivated to use them (typically with company-provided rewards or an expectation of quality service in future encounters) and believe that management will take their claims seriously (Gutek et al. 2000).

Customer feedback provides management with information on worker courtesy and service. Fernie and Metcalf (1998:18) describe how customers monitored whether or not workers in one organization smiled upon greeting them, in what management referred to as “moments of truth”. Austrin (1991) similarly describes how customers at a bank are invited to take a company dime from a counter bowl if workers do not smile at them. More covertly, undercover corporate customers known as “mystery shoppers” assessed the friendliness and genuineness of workers in a UK grocery store (Ogbonna & Harris 2002). Management-issued surveys collect information on workers’ attitude, knowledge, and appearance (Fuller & Smith 1991). Such monitoring is often accompanied by managerial demands for authentic worker emotional displays of cheer and concern, illustrating what Hochschild (1983) refers to as emotional labor. Management creates various avenues by which workers can demonstrate company characteristics and appropriate service to customers, such as themed dress days illustrating the firm’s dedication to fun (Austrin 1991). This research leads me to formulate the following panopticon hypotheses:

Hypothesis P5: Customer surveillance decreases the likelihood of worker resistance.

Hypothesis P6: Customer surveillance increases the likelihood of worker consent.

Although workers dislike the mistrust that management-sponsored customer surveillance implies, they may also view customer perspectives as helpful feedback enhancing their job performance (Gamble 2007; Korczynski et al. 2000). Workers feel extremely fulfilled when providing excellent customer service, and view customer interaction

as one of the best aspects of their jobs—especially when they envision themselves helping someone similar to themselves (Gamble 2007). Even when customer feedback is used to sanction misbehavior, workers believe that *management* is controlling them—not customers (Korczynski et al. 2000). Furthermore, workers occasionally use customer service ideology as a means by which to resist management. Knights and McCabe (1998) describe how workers in the Probank organization use managerial emphasis on customer service to request more staff and workplace resources amidst cost-cutting.

Workers may not experience customers as particularly controlling when submitted feedback is almost exclusively positive. Gamble's (2007) study of customer surveillance in Chinese retail stores demonstrates that customers rarely submit negative comment cards. If a customer takes the time to submit feedback on individual workers to the organization, it is typically for a job well done. Thus, customer surveillance alone may not provide management with an effective means by which to elicit consent and undermine resistance if they report biased observations of worker behavior.

Not all researchers agree that customers will ally with management in order to control worker behavior. Sosteric (1996) argues that workers and customers may mutually benefit by subverting management. Bartenders and bouncers in Sosteric's research delivered high quality service only to elite, regular patrons, often disrespecting non-regulars. For their selectivity, workers earned large tips and established their bar as exclusive and high status in the local market. As management began receiving service complaints from non-regulars, they demanded that workers provide consistently high quality service regardless of patron. This angered workers and regulars alike, interfering with club reputation and service authenticity.

Rather than enforcing management's call for consistent service, many high-paying customers took their business elsewhere. Workers resisted with high rates of turnover. Worker and customer partnership in Sosteric's study casts doubt on the notion that customer surveillance necessarily elicits worker consent. I conclude with an alternative set of hypotheses:

Hypothesis A7: Customer surveillance increases the likelihood of worker resistance.

Hypothesis A8: Customer surveillance decreases the likelihood of worker consent.

Anomie

While my previous discussion of surveillance describes monitoring systems as having a direct effect on resistance and consent, some researchers argue that surveillance may also indirectly affect resistance and consent via organizational anomie. For instance, Hodson's (1999) research examines the effects of job characteristics (skill, autonomy, percentage of female workers and union presence), labor process measures of workplace control, and organizational anomie on resistance and citizenship. He finds that anomie is a better predictor of resistance and consent than either job characteristics or labor process control schemes. As Hodson (1999:318) states, "Disrespectful, disorganized and chaotic workplaces engender worker resistance. In contrast, worker citizenship is engendered in workplaces that are coherently organized and in which workers are treated with dignity and respect".

Certain forms of monitoring may be more or less closely associated with anomic work conditions. As Hodson (2001) finds, workers in directly supervised settings commonly experience mismanagement and managerial abuse. When workplace power is concentrated

among a small number of supervisors, those supervisors may use their power irresponsibly and to the disadvantage of workers. Workers respond to abusive conditions by resisting their control and withholding consent (Hodson 1999). Thus, workplace anomie intervenes in the relationship between direct supervision, resistance and consent. In this study, I expand Hodson's research to investigate whether anomie mediates the relationship between other forms of monitoring—electronic surveillance, peer monitoring, and customer surveillance—and resistance and consent. Including the indirect effect of monitoring on resistance and consent via anomie will better specify the direct effect of surveillance on my outcomes.

Summary

A great deal of research has been done on how workers are monitored and consequences for worker behavior. On one hand, researchers propose that surveillance schemes, particularly in the electronic, peer and customer form, create a totalizing umbrella of worker control analogous to Foucault's (1979) panopticon. Supervisors, technological devices, coworkers and clients monitor workers so completely that they rarely question workplace arrangements and effectively control themselves. On the other hand, agency advocates argue that managerial surveillance schemes are far from perfect. Workers subvert surveillance systems with collective action, reticence, sabotage and exit. I contribute to existing theoretical debates by testing both panopticon hypotheses and agency hypotheses to assess which, if either, explains variation in worker resistance and consent. I now describe my data and analytic approach further.

Data

To examine the effects of surveillance on worker resistance and consent, I use Hodson's Workplace Ethnography data, a population of ethnographic workplace studies coded into quantitative variables. By transforming data from qualitative texts to quantitative measures, Hodson and his colleagues allow investigators to run statistical analyses on rich ethnographies and make generalizations about workplace relationships extending beyond a single workgroup or small set of workgroups. Although coding ethnographies into quantitative variables results in a loss of contextual information, statistical findings can later be re-contextualized using direct quotes from the original qualitative studies. The Workplace Ethnography data thus provide researchers with the benefits of both qualitative and quantitative methodologies.

Ethnographies were first located using computer databases, browsing library shelves, inter-library loan, suggestions from a panel of twenty experts, and from the bibliographies of other ethnographies. The search ended when efforts produced only repetitious cases. There are three criteria for inclusion in this dataset: (1) the ethnography must be based on at least six months of direct observation, (2) the focus of the study must be on a single workplace or small group of workplaces and (3) the author must focus on one group of workers within the workplace. Short or thematically restrictive books failing to provide enough useful information for coding are excluded from the dataset. The resulting dataset is comprised of 204 work groups from 158 ethnographic books. Although Hodson and his colleagues

continue to expand these data as new ethnographies are written, the analyses in this project are based on a total 204 cases.¹

Hodson and four graduate students developed the original coding instrument for the Workplace Ethnography data. These scholars brainstormed to create variables relevant to sociology of work research, and produced response categories to maximize information on workplace constructs while still maintaining variation in the data. The resulting instrument was tested on eight ethnographies, informing code sheet revisions. All changes were made collectively following group discussion.

A team of twelve graduate-level researchers used the revised instrument to examine the remaining ethnography cases. Researchers underwent shared training and then coded books independently, noting page numbers containing relevant information for each variable. Coders met frequently to discuss any questions or problems that arose while reviewing books, re-reading passages and spending hours in discussion to establish consensus on each item. Thirteen percent of all cases were re-coded to examine the data for inter-rater reliability, which was a satisfactory .79.²

Some of the variables in these data are coded on a scale from one to three or one to five, while others were coded categorically or dichotomously. For instance, the variable “union strength” is measured as 1-weak, 2- average, or 3-strong. Corporate sector is coded as 1- core, 2- periphery, 3- non-profit, or 4-public. Direct supervision is coded as 1- yes

¹ The number of cases in analyses may vary from the total N of 204 as a result of missing values.

² Although the reliability for the entire dataset is .79, individual questions often had higher reliabilities than this. Also note that the reliability coefficient represents exact coding matches, and that responses that were not identical yet were similar (e.g., good versus exceptional) are reported identically to those that were completely different. This produces a very conservative reliability coefficient.

(present) or 2-no (not present). Missing values vary according to ethnography content, and have not been imputed.

Drawing conclusions about workplaces from data coded in this way relies on the assumption that ethnography authors have fully and fairly represented actual workplace conditions in their writing. Of course, the ethnographers were undoubtedly subjective and had points of view, and some individual variation is lost with a work-group unit of analysis. However, these limitations are more than offset by the quality of the data, which provide a rich account of the nature of work, social relationships in the workplace, psychological and behavioral responses to work, and organizational context of work groups in a broad array of industrial and occupational settings.³

Variables

Resistance and Consent

Table 1 presents independent, intervening and control variables used in this study. Table 2 provides specifics on the construction of all indices appearing in Table 1. My dependent variables for this study are theoretically-derived indices of worker resistance and consent. Resistance is measured with four indices: collective action, reticence, sabotage and exit. *Collective action* ($\alpha=.79$) is measured with union presence, strike during research period, history of strikes, and organized group conflict against measurement. This index captures overt, formalized acts of worker opposition, which have traditionally been the focus

³ Readers interested in other publications using these data can access Randy Hodson's webpage at: http://www.sociology.ohio-state.edu/rdh/Workplace_Ethnography_Project_Publications.html

in sociology of work research. Organized collective resistance is important to distinguish from other forms of resistance because it has the greatest potential outcomes in terms of material change (Knights & McCabe 1998).

Reticence ($\alpha=.64$) is measured with withdrawal/avoidance, withholding enthusiasm, and making out. This index captures the ways in which workers disengage and hold back effort, either individually or as part of collective efforts to manipulate output

Social sabotage, procedural sabotage, playing dumb (withholding information from management) and subverting a particular manager form the *sabotage* index ($\alpha=.76$). This index measures workers who covertly interfere with the production process and authority structures. Sabotage can be a more active, intentional form of resistance than is captured by the reticence indices, but is less likely to affect structural change than collective action.

Quitting, absenteeism, and turnover comprise the *exit* index ($\alpha=.61$). Workers may elect to exit the organization rather than resisting via collective action, reticence or sabotage to avoid punishment. Alternatively, they may find surveillance conditions so oppressive and all-encompassing that they wish to escape. As a group, these measures of resistance capture both overt group opposition, and also hidden acts of individualized subversion, in line with Prasad and Prasad's (1998) call for research on resistance beyond formal union activities. Conceptualizing resistance in this manner acknowledges that workers resist controlling workplace conditions both to inspire material change and also to preserve spaces in the organization for individual integrity.

Worker consent is measured with two consent indices, one measuring devotion, or attitudinal consent; and the other measuring compliance, or behavioral consent. The *devotion*

index ($\alpha=.83$) is comprised of the variables commitment, pride in work and meaning of work. *Compliance* ($\alpha=.79$) is measured with extra time spent on work, extra effort expended at work, cooperation and good soldiering (putting one's personal needs aside to achieve organizational goals). It is important to distinguish between devotion and compliance because one does not necessarily imply the other; workers can be mentally dedicated to the organization without actually contributing to its success, or they can work hard without buying into what the organization stands for.

Since index variables are measured differently (i.e., some dichotomously, some ordinally with three categories, some ordinally with five categories), I center each variable around the mean before creating indices to ensure that no variable is given more weight than any other. The value of each index is calculated by averaging all component values within that index. When index variables contain missing data, only the variables containing data are averaged together. Using this technique, I maximize sample size without imputing values.

Surveillance and Anomie

My independent variables are dummy measures of direct supervision, electronic surveillance, peer monitoring and customer surveillance. If the surveillance type is present, the case is coded "1". If surveillance is absent, the case is coded "0". Missing data are recoded as "0", as surveillance is such a salient component of workplace organization that we can assume ethnography authors would comment on it when present. Recall that all variables in these data are coded from detail-rich workplace ethnographies, in which researchers have painstakingly documented the labor process at length. It is difficult to imagine how an

investigator could write and ethnography and neglect to mention supervisors, technology, coworkers or customers. Furthermore, coding protocol makes it likely that missing cases are actually instances of work groups without surveillance. In order for an ethnography to receive a coding of no surveillance present, the coder would have to indicate specific pages in the book explicitly stating that no surveillance is used. Because it is unlikely that a researcher would waste space with comments like “This firm had no teams” or “Customers never interacted with workers in this organization,” it seems appropriate to code missing values as “0.”

Direct supervision is measured on the original coding instrument as either present or absent. Electronic surveillance was transformed into a dummy from a categorical variable, which distinguished between cameras, computers, drug testing, and other means of using technology to monitor workers. Cases were coded as “1” if surveillance was accomplished with cameras, computers, or “other” means, such as the tachometers used to monitor truckers’ driving (Ouellet 1994).⁴ Peer monitoring is measured with a dummy indicator of peer surveillance relevant to blue-collar and white-collar settings. The variable was coded as “1” if task group are self monitoring (capturing peer monitoring in the context of workplace teams in manual settings) (e.g., Jackall 1988) *or* if peers monitor one another on the basis of success in the workplace (Crowley, Tope, Chamberlain and Hodson 2007). If neither form of peer surveillance is present, then peer monitoring is coded as “0”. Customer surveillance is assessed using a variable measuring customer service interaction. Although customer

⁴ Drug testing was not included as a measure of surveillance, since it is typically used to assess workers’ character during hiring, and not as a means by which to monitor worker productivity as other forms of surveillance in this study are.

interaction is not necessarily the same as customer surveillance, it serves as a proxy for surveillance. While only some workplaces encourage clients to provide feedback on workers, customers generally operate as a form of surveillance since they are able to give feedback regarding service. Indeed, Fuller and Smith (1991) found that 100% of the firms they studied used customer-initiated feedback mechanisms. However, just as limited contact with supervisors is not classified as direct supervision, limited customer contact is not classified as customer surveillance. I coded my dummy variable for customer surveillance as “1” if at least 50% of work time was spent in contact with customers. All other cases were coded as “0”.⁵

I use a measure of organizational anomie to test whether an indirect effect exists between surveillance, resistance and consent. Hodson (2001, 1999) suggests that workplace anomie mediates the relationship between direct supervision, resistance and citizenship. I build on this work by examining whether or not including anomie in my models changes the effects of electronic surveillance, peer monitoring and customer surveillance on my outcomes. To do so, I use the anomie index Hodson (1999) originally developed. Anomie is indexed using the variables managerial abuse, firings, organization communication, organization of production, leadership, and level of repair.

⁵ Guided by researchers such as Sewell and Wilkinson (1992), I examined whether theoretically-driven combinations of my surveillance measures predicted my outcomes better than single forms of surveillance used alone. None of these combinations were statistically significant.

Control Variables

Because worker consent and resistance are very context dependent, I include control variables for country, industry and year.⁶ As Edwards and colleagues state (1995), locale history and culture have a major influence on worker consent and resistance. Some places, such as Britain, are known for a history of militancy and a conceptualization of the workplace as a battleground between workers and management (Edwards et al. 1995). I included a control for England, since using these data, Roscigno and Hodson (2004) found that organized resistance is especially common there. Since resistance is also more common among blue-collar occupations, I controlled for industry with a dummy for blue-collar work (pink-collar and white-collar work is coded as “0”). Year of the original study’s completion is measured categorically in order to capture any changes in resistance and consent over time. Four time periods are represented: (1) the era prior to 1947 the passage of Taft-Hartley (my reference category); (2) Taft-Hartley through Kennedy’s 1961 executive order 10988, authorizing collective bargaining among federal employees; (3) the Kennedy era through the pre-Reagan years (1962-1979); and (4) Reagan’s 1980 election through the present. Each of these time spans represents a legal and cultural shift in American labor relations, as described in detail by Issac, McDonald, and Lukasik (2006).

⁶ In early analyses, I also included a control measures for community unemployment and the region U.S. South. I thought high unemployment in the community might keep workers from resisting at work by exiting the workplace, but no significant effects were found and substantive findings remained constant. I also expected that there might be less collective action in the U.S. South as a result of strong anti-union sentiment and constraining labor laws. Again, no significant effects were found and substantive effects remained the same. Both variables were subsequently removed from analyses.

Analytic Approach

To examine the effects of each surveillance type on worker consent and resistance, I use ordinary least squares (OLS) regression models. Since each of my resistance and consent indices is created by averaging the values of standardized variables, my resulting dependent variables are continuous. This makes regression an appropriate statistical tool.

Each form of resistance and consent is predicted in a separate model. Models labeled (1) in Table 3 contain the four types of surveillance I have discussed—direct supervision, electronic surveillance, peer monitoring and customer surveillance—as well as my control variables. Models labeled (2) add anomie as a mediator.

Results

Table 3 displays unstandardized OLS regression coefficients for worker resistance and consent regressed on surveillance, anomie, type of work, nation and year. Each model is statistically significant with the exception of sabotage (1), meaning that surveillance and contextual workplace characteristics are reliable predictors of worker resistance and consent, generally speaking. The explanatory power of each model is represented by the R^2 values listed along the bottom of the table. Generally, the results indicate that different types of workplace surveillance are associated with different forms of workplace resistance and consent.⁷

⁷ Control variables generally acted as expected within models (1) and (2). Blue collar workers are more resistant and less consenting than pink or white collar workers. Resistance via sabotage is more likely in England than

Direct Supervision

Hypotheses A1 and A2 state that direct supervision increases the likelihood of worker resistance and decreases the likelihood of worker consent, respectively. I find support for Hypothesis A1 and partial support for Hypothesis A2. Direct supervision predicts collective action, devotion and compliance. Otherwise, direct supervision does not explain variance in work resistance, net of control effects.

Model (1) illustrates that work groups that are monitored by supervisors are more likely to engage in collective action than those who are not. Practically speaking, this means that unionization, striking, a history of striking and organized group resistance against management are more common in directly supervised work groups than others. Linhart (1978) describes the atmosphere at a Citroën factory following a large a strike against management. Fed up with mistreatment from bosses and frustrated that supervisors watched their every move, took collective action and stopped production.

This Tuesday morning, right from the start, the Citroën antistrike machine has been set in motion. Yesterday the bosses treated us with contempt. Today, a change of tactics: it's their presence!... They're harassing us as we work, and they stay there to intimidate us. They're highly visible, they watch us. We'll see whether, this evening at five o'clock, the mass of workers will dare to down tools again under their noses, a few feet away (Linhart 1978:89).

Workers who are directly monitored by supervisors are less likely to take pride in their work, find their work meaningful and express commitment to organizational goals than

other nations. Over time, collective action has decreased as cultural and legal shifts have occurred. Unexpectedly, I find that devotion has also decreased over time.

those who are not monitored this way. They are unwilling to go above and beyond job requirements and withhold cooperation. This finding is true across conditions of varying types of work, nations, and over time. Reiter (1991) illustrates the low levels of devotion she felt while completing a participant observation at Burger King, a directly supervised organization:

I had to do whatever the managers told me to, but I hated it when their orders made no sense to me, and I began to feel very sorry for myself. When I first started working on a daily basis after the George Brown course [a class on working in fast food], it seemed as if everybody had a right to tell me what to do. I tried to laugh at myself by comparing my research—which sometimes involved emptying trash cans in the Burger King dining room—with that of a colleague who spent two years in a lovely mountain village in the south of France doing her fieldwork... I had ways of bolstering my ego, of convincing myself that I was not just my Burger King identity. Only at Burger King, in this situation, was my status likely to be lower than the manager ordering me around. Even though I knew that, the managers could still make me feel pretty low (Reiter 1991, p. 79-80).

The quote above conveys the meaninglessness and loss of pride Reiter felt as she completed her research. Although her post at Burger King was temporary, she felt extremely disillusioned with her low status there. Other workers in this study expressed similarly low levels of devotion; one remarked, “Any trained monkey could do the job (167).” These are certainly not the words of someone who finds their work meaningful and is committed to the firm.

Electronic Surveillance

I predicted that electronic surveillance would decrease resistance and increase consent in hypotheses P1 and P2, or alternatively, that it would increase resistance and decrease

consent with A3 and A4. Analyses provide no support for P1 or P2, my panopticon hypotheses, and no support for my agency hypothesis A4. I find some support for agency hypothesis A3, however. Electronic surveillance predicts resistance via exit ($p=.01$), although it does not explain variance in collective action, reticence or sabotage.

Work groups that are electronically monitored have higher rates of absenteeism, turnover and quitting than those without electronic surveillance, net of organizational anomie or context. Employees in the meat processing plant in which Fink (1998) completed her participant observation were miserable owing to the fast-paced, dangerous and exhausting work. Cameras recorded workers nearly everywhere inside the plant, and were even stationed in parking lots to monitor workers as they came and went. Fink felt unable to escape the abysmal conditions, whether she was on or off the clock. The only escape available was to leave altogether. Fink illustrates high levels of exit among electronically monitored workers:

...Barely two weeks after we had started, I stopped to talk to Buck in the hall by the cafeteria. I hadn't been where I could see anyone in our [orientation] group regularly. Now Buck told me that everyone had quit or been fired. Well, not quite everyone. Eight of the twenty-one of us were left (Fink 1998, p. 30).

Note that Fink and other workers in the plant were not devoted or responsive as a panopticon argument might suggest, nor did they engage in frequent acts of subversion as agency theorists would argue. Instead, they left the factory either willingly by quitting or unwillingly through firings.

Peer Monitoring

Panopticon hypotheses P3 and P4 state that peer monitoring decreases resistance and increases consent. Agency hypotheses argue conversely—that peer monitoring increases resistance and decreases consent. I find support for P4 and partial support for P3. Unlike other forms of surveillance examined in this study, peer monitoring is negatively associated with worker resistance and positively associated with worker consent. Only three coefficients were statistically significant, however: resistance via exit ($p=.01$), work group devotion ($p=.001$) and work group compliance ($p=.05$).

Generally, in work groups where peers monitor one other, workers are more likely to take pride and find meaning in their work, accept organizational goals, expend extra time and effort in production, act cooperatively and unconditionally do their best than in work groups without peer monitoring. Mansbridge (1980) illustrates such conditions in her study of Helpline, a crisis intervention organization:

At Helpline all were committed to a common task—giving therapeutic support to people in trouble, while criticizing the polity and economy from which that trouble derived. Individual members inevitably had different interpretations of what that task entailed, and each service group had also evolved its own distinctive collective interpretation, ranging from the Shelter’s commitment to “good service” for the runaways, through Van’s fantasy of a street people’s revolution, to CCC’s [Center for Community Counseling; a branch of Helpline] vision of a humane reordering of relationships through counseling, communes, and personal growth (Mansbridge 1980:165).

Helpline workers felt passionately about the organization’s outreach mission, although different workplace teams emphasized variants of the larger organization’s goals.

Helpline was not about top-down style management; it was about improving social conditions in a democratically-run organization. These workers not only took pride in their work, found it meaningful, and expressed commitment, however—they went above and beyond to ensure that the organization and those within it accomplished their goals. Biggart (1989) quotes a worker expressing similar levels of consent in an egalitarian-organized direct service organization (DSO):

Everybody wants everybody else to succeed. It's not like competition that you get in some jobs where I don't want you to know what I know because if you do, then you can take my job. I want to share with you what made me successful, so you can be successful too. You don't find some one-star general encouraging some colonel to go ahead [of him] and say, "Hey, I'll help you and you can become a four-star general over me." No, you don't find that. But in this business we encourage people to go ahead of us. We don't care where they go. If they want to make eight times more money than I made, that's great (Biggart 1989:90)

Within the DSOs Biggart examined (1989), peers publicly acknowledged and supported the success of one another in a feminist-run organization. Workers openly shared their triumphs and their problems, genuinely interested in the well-being of others and accepting the firm's mission.

Peer monitoring appears to produce more than strong levels of consent, however—it has the potential to strengthen relationships between coworkers. Since peer monitoring is common to organizations employing team management, workers who monitor each other also tend to share goals and workplace tasks. Workers know that they play a role in their team's success, and feel that others count on them to be at work:

...Absenteeism, tardiness, and shoddy quality work on the part of a TMM employee will directly and immediately impact that employee's work team. These aren't just coworkers, but friends whose welfare and opinions matter (Besser 1996:148).

Although such conditions appear positive, it may be that workers exhibit high levels of consent and engage in little exit as a result of panopticon control. This perspective of the workplace is supported by low levels of resistance, illustrated not only by low levels of exit but also by low levels of sabotage. Workers who peer monitor are less likely than others to engage in procedural or social sabotage, play dumb or subvert a particular manager than others.

Customer Surveillance

Panopticon hypotheses P5 and P6 predict that customer surveillance decreases resistance and increases consent, while agency hypotheses A7 and A8 state that customer surveillance has the opposite effects. I find some support for Hypothesis A7, but no support for P5, P6 or A8. Reticence, or withdrawal, withholding enthusiasm and manipulating workload for personal comfort, is the only form of workplace resistance or consent predicted by customer surveillance.

Service workers potentially use reticence to resist and relieve the emotional stress of interactive work without abandoning consumers or clients. Worker reticence under customer surveillance is illustrated in Miller's (1991) ethnography of personnel in a Work Incentive Program (WIN). Below, she quotes a WIN employee discussing how workers cope with

unenthusiastic clients forced to go through the WIN program in order to maintain Aid to Families with Dependent Children (AFDC) welfare monies:

They [clients] get passive, sit back and look around. [They] don't pay attention to [staff member's questions and instructions]. [They] act like this is a lot of bullshit and they don't care. It's all bullshit and they're not going to do it, but they have to come here to get their [AFDC] check... It's depressing work, I guess. Frustrating, after a while you learn to turn off the frustration 'cause you see it all the time. You just do it. Go through the motions, you know? (Miller 1991:70).

While the WIN workers wanted to help families move through their program, they occasionally faced individuals who were uncooperative with the program's goals. Such clients made their jobs extremely difficult, and workers learned to disengage from their work when encountering such persons. Under these circumstances, their clients are unlikely to complain about the quality of service exchanges because many hope to have as little future contact with the WIN program as possible.

Anomie

To examine the whether anomie changes the relationships between surveillance, resistance and consent, I include an index measure of anomie in all models labeled (2) shown in Table 3. Although the anomie measure changes the significance level of select surveillance coefficients, there are only two fully mediated effects: anomie explains away marginally significant effects of direct supervision on collective action and responsiveness. As Hodson (2001, 1999) argues, direct supervision opens the door for managerial incompetence, abuse and uncertainty. Workers tend to resist such conditions, as anomic leadership calls firm

legitimacy into question (Hodson 1999). The anomie coefficient is a strong predictor of all forms of resistance and consent, again echoing Hodson's (1999) findings.

It is not surprising that anomie would mediate the relationship between direct supervision and resistance and consent while leaving other surveillance effects unchanged. The anomie measures employed here and also by Hodson (1999) largely capture top-down decision-making processes and abuses of power, not anomic conditions associated with coworkers or customers.

Discussion

The purpose of this study is to examine the effect of different forms of workplace surveillance on worker resistance and consent. While such authors as Sewell and Wilkinson (1992) and Barker (1993) argue that workplace surveillance represents a tightening of the iron cage and panopticon conditions, agency-focused case studies (e.g., Timmons 2003; Bain & Taylor 2000) indicate that workers resist often and in a variety of ways. In order to resolve debates in the literature, I examine the association between surveillance and worker attitudes and behavior with data representing a wide variety of workgroups. Generally, I find that the effect of surveillance on worker resistance and consent varies according to the type of monitoring examined. Different forms of workplace surveillance are associated with different types of resistance and consent. This implies that either panopticon and worker agency approaches to understanding worker behavior under surveillance may be insufficient to account for complexity across organizations.

According to existing research, direct supervision increases the likelihood of worker resistance and decreases the likelihood of worker consent. My findings provide partial support for high levels of resistance under direct supervision, and confirm low levels of consent in directly supervised workgroups. Collective action is more likely in directly supervised work groups, and devotion and responsiveness are less likely.

Those workers who are observed by supervisors are less likely to find pride in their work, regard their work as meaningful or accept organizational goals than those who are not monitored by supervisors. As Austrin and West (2005) state, workers resent being watched by supervisors, as they feel it implies a great deal of mistrust in the workplace. Rather than fostering a community in which workers feel they are contributing to the firm's success, direct supervision implies that management has production goals which workers potentially interfere with. Workers under such conditions may come to regard organizational goals as belonging to and benefiting management, not of those at the bottom of the hierarchy. They may take less initiative in attaining goals, doing only what is minimally expected of them. Stated differently, direct supervision may be negatively associated with work group devotion because it fosters worker alienation and an "us (workers) versus them (management)" mentality. This conceptualization of the workplace is further supported by the marginally significant finding that workers are more likely to engage in collective action under direct supervision than are those who are not. Collective action, as a resistance strategy, is inherently based on the notion that workers, as a group, sometimes stand in opposition to management.

However, once a measure of organizational anomie is added to my models, the effect of direct supervision on collective action and responsiveness goes away. This confirms Hodson's (2001, 1999) contention that the relationships between direct supervision, resistance and consent are mediated by anomie. Direct supervision opens the door for mismanagement, abuse, and organizational uncertainty, which provoke worker resistance and undermine consent. Once an organization is controlled by a small group of persons and power is divided unequally, those persons potentially create oppressive regimes that workers come to reject. We can conclude that direct supervision has direct and indirect effects on resistance and consent outcomes.

Electronic surveillance, in contrast, only predicts worker exit—turnover, absenteeism and quitting. The finding that electronic surveillance predicts exit and *not* collective action, reticence or sabotage implies that workers who are electronically monitored may find it difficult to resist management with traditional worker organization or individualized acts of subversion. This supports the contention of some (e.g., Fernie and Metcalf 1997) that electronic surveillance is totalizing and inescapable, resulting in panopticon-like worker conditions. However, if this conceptualization of the workplace were entirely correct, then we would expect to see high levels of worker devotion and compliance under electronic monitoring; that is, workers ought to express dedication to the firm attitudinally or, at minimum, behaviorally as a result of internalizing organizational goals. The data do not support this. I conclude that electronic monitoring does not produce perfect panopticon conditions, nor does it lead to subtle acts of widespread resistance as described by some

(Lankshear and Mason 2001; Knights and McCabe 1998). So how can we explain the finding that workers flee from electronic surveillance?

One explanation for this behavior could be that workers resent the distrust represented by electronic monitoring (similar to direct supervision), but find it difficult to escape the constant gaze of electronic devices. They do not buy into the goals of the organization or go beyond their basic workplace duties, but neither do they interfere with the production process or repudiate their responsibilities. This does not necessarily imply that resistance via collective action, reticence or sabotage is impossible under electronic monitoring—just that it might be difficult and time consuming to do so given the consistency of electronic surveillance, and that workers might prefer to leave such conditions than actively challenge them. This explanation blends both panopticon and worker agency perspectives.

Peer monitoring, unlike other forms of surveillance in this study, is consistently associated with high levels of consent and low levels of worker resistance. Although many of the coefficients representing the effect of peer monitoring in the models do not reach the level of statistical significance, the direction of all relationships is consistent: workers are attitudinally and behaviorally devoted to the workplace and rarely resist under peer monitoring conditions. Peer monitored workers accept organizational goals and go out of their way to meet those goals. Such findings could support positive portrayals of teamwork and autonomous professional work (e.g., Smith 1996). However, low levels of worker exit and sabotage also found under peer monitoring indicate that panopticon visions of the workplace may be more accurate. In line with a panopticon argument, those work groups in which coworkers take responsibility for surveillance internalize firm expectations, self-

regulate and rarely challenge control structures with resistance. Of course, support for this perspective is not complete. Peer monitoring is not associated with reduced collective action or worker reticence.

Most accounts of customer surveillance in the existing literature have conceptualized customers as expanding the gaze of management; customers now report worker consent to organizational rules back to management in the form of surveys, letters and comment cards (Fuller and Smith 1991). This extension of managerial power is assumed to result in self-policing tendencies among workers: they regulate their own consent down to the smile (Fernie and Metcalf 1997). Some writers have challenged this notion of colluding managers and customers, however. Sosteric (1996) shows how customers can sometimes align with workers instead. My findings indicate that control over workers under conditions of customer surveillance does not elicit devotion or compliance. Instead, I find that customer monitoring results in work group reticence. This finding is potentially explained by competing forces in service sector jobs. While workers may face managers who threaten their dignity with extensive control systems, thus creating conditions ripe for resistance (Hodson 2001), they may also feel intense loyalty to their customers and clients. As Gamble (2007) and Korczynski and colleagues (2000) state, many workers enjoy helping others and internalize high service standards as they imagine themselves in the customer's shoes. In their individual pursuits for workplace respect, workers might hold back from collective action, sabotage, or abandoning the organization via exit more so than others because doing so might hurt consumers as much as management. Rather than resisting in ways that have a definite negative impact on customers, service workers can resist by emotionally withdrawing from

the organization, withholding enthusiasm or manipulating their workload to personally manageable levels (making out).

Alternatively, reticence in service occupations may be likely when worker-customer relationships are conflict-laden. Workers in such settings might consider themselves burdened by clients of the organization more so than those who run it. As my earlier quote from Miller (1991) indicates, customers can be disrespectful and abusive towards workers, even when workers are truly interested in helping them. As time passes, workers may adapt to customer conflict by investing less in service exchanges. They can withdraw, withhold enthusiasm, or disengage to protect their emotional and physical interests over those of clients. Rather than resisting collectively, engaging in sabotage or exiting the organization—acts that would likely affect management more than clients—such workers may practice reticence to resist customers directly.

It is important to note that differences across the types of surveillance I have examined are not the result of industrial, national or historical differences. Using these control variables, I have tried to isolate the effects of surveillance type on resistance and consent, thus limiting cultural and situational influence on worker behaviors. Of course, examining statistical relationships between variables necessitates a loss of information on local meaning systems. This weakness in my research is offset by my ability to examine relationships across a range of work groups in diverse organizational, industrial and occupational settings to reveal how surveillance shapes behavior more generally.

Conclusion

Does surveillance result in frequent worker resistance, an outcry against organizational control; or does it lead to consent, an acceptance of workplace arrangements

and dedication to firm goals? This research argues that both of these approaches, proposed by sociologists, are insufficient when used alone. Neither account fully explains variation in worker behaviors. Instead, I find that the form of surveillance used in an organization affects how workers will react to it. My findings are in line with general conceptual work on workplace resistance and consent (e.g., Mumby 2005; Edwards et al. 1995; Hodson 1995) more than with that of surveillance researchers. This study indicates that workers resist and consent in a variety of ways, and the manner in which they do is so closely linked to organizational structures such as surveillance systems. For us to better understand worker behaviors, we must distinguish between different forms of workplace organization and appreciate the complexity of worker resistance and consent.

Future investigators can expand the literature on surveillance, resistance and consent by exploring the interrelationships between different types of surveillance and worker actions. What other forms of surveillance are used within the workplace? How do workers experience such surveillance? One unexplored topic within this literature is that of government surveillance. Does state monitoring tighten the iron cage, expanding management's control over workers under a guise of state legitimacy? Alternatively, do workers and government officials come together against management, demanding quality working conditions and protecting public safety? Researchers might also study how a trend towards self-monitoring has affected existing surveillance structures. Has workplace culture replaced direct supervision, electronic surveillance, peer monitoring and customer surveillance as a means by which to establish worker control? As Kunda (1992)

demonstrates, workplace culture is a powerful tool managers can use to obtain strong devotion to the firm as well as high levels of output.

In addition to continued research on different forms of surveillance, a longitudinal analysis of changes in surveillance is needed. As I have already argued, researchers tend to describe surveillance as evolving linearly, although many contest the notion that new forms of monitoring (i.e., electronic, peer and customer surveillance) necessarily replace older types (van den Broek 2004; Thompson 2003; Sewell 1998; Barley and Kunda 1992). Since my findings indicate a relationship between surveillance form and worker action, any historical transitions in surveillance potentially explain changes in worker resistance and consent over time.

Assessing differences in surveillance within the work group provides future researchers further opportunities for development. This analysis has treated persons in the work group as conceptual equals—each individual is assumed to be monitored the same as others in the group. However, this researcher has doubts that all workers are watched in similar ways or experience surveillance in the same way. Given the prevalence of racism, homophobia and sexism in the workplace, it is likely that members of oppressed groups may experience greater surveillance than those in relatively powerful groups or perhaps are sensitized by earlier experiences and hence have a lower threshold for awareness or reaction. As Jackall (1988) and Kanter (1977) argue, affluent white male managers are less likely to trust those in the organization from backgrounds dissimilar to their own because diverse workers create organizational uncertainty. In order to compensate for the lack of trust, such managers may disproportionately monitor the activities of those unlike them. Perhaps less

controversially, surveillance may also vary according to tenure in the firm or tenure in one's position so that with familiarity comes less monitoring. Lankshear and Mason (2001) and Garson (1988) provide some preliminary support for such ideas.

One particularly interesting finding from this study is that peer monitoring is unlike other forms of surveillance; peer monitoring appears to fit within panopticon conceptualizations of the workplace. Workers consent often and are unlikely to resist when surveillance is accomplished among peers. If this theory is useful for understanding organizational processes, then it ought to give us pause. Peer monitoring and team management schemes have increased in popularity within the past twenty years, meaning that more and more workers likely experience lateral forms of surveillance. These findings provide support for Barker's (1993) theory of concertive control, which states that workers today experience a tightening of the iron cage. Although critical perspectives such as these have been critiqued by many (e.g., Smith 1997), this study provides further evidence on a larger set of work groups than typically examined. It appears, then, that the workers experiencing peer monitoring, a trend in the contemporary workplace, may in fact be moving towards panopticon conditions after all. Ironically, when workers are empowered through participation in teams and autonomy, their agency, at least that expressed in resistance, is reduced.

Finally, I find support for Hodson's (2001, 1999) point that anomie intervenes in the relationship between direct supervision, resistance and consent. However, the anomie measure used here represents primarily anomic conditions caused by managers—abuse, chaotic workplace organization and operation, and poor workplace repair. Managers, as a

result of their relative workplace power, can create anomic conditions such as these in the course of controlling workers. Yet workers may also experience anomie resulting from other actors in the organization. In future work, I plan to investigate whether peer and customer anomie mediate the effects of peer monitoring and customer surveillance on worker resistance and control.

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APPENDIX

Table 1. Independent, Intervening & Control Variables

Independent Variables	<i>Coding</i>	<i>Mean/Yes</i>	<i>N</i>
Direct supervision	0-no, 1-yes	112	204
Electronic surveillance	0-no, 1-yes	25	204
Peer monitoring	0-no, 1-yes	80	204
Customer surveillance	0-no, 1-yes	56	204
Intervening Variable			
Anomie index*	Continuous	2.45	169
Control Variables			
Blue collar	0-no, 1-yes	95	204
England	0-no, 1-yes	32	204
Taft-Hartley era	1947-1961	15	204
Kennedy era	1962-1980	92	204
Reagan era	1981-present	94	204

*See Table 2 for more information.

Table 2. Indices

<i>Index</i>	<i>Coding</i>	<i>Mean</i>	<i>N</i>	<i>Loading</i>
Collective action	Cronbach's alpha=.79		199	
Unions	0-no, 1-yes	.61	170	.774
Strikes	0-no, 1-yes	.18	177	.714
Strike history	1-no, 2-infrequent, 3-frequent	1.69	124	.841
Organized group conflict	1-absent, 2-infrequent, 3-average, 4-widespread, 5-pervasive	2.02	169	.804
Reticence	Cronbach's alpha=.64		188	
Withdrawal/avoidance	0-no, 1-yes	.66	164	.753
Withholding enthusiasm	0-no, 1-yes	.68	154	.839
Making out	1-none, 2-some, 3-half, 4-most, 5-all	2.87	131	.693
Sabotage	Cronbach's alpha=.76		175	
Social sabotage	0-no, 1-yes	.63	132	.822
Procedural sabotage	0-no, 1-yes	.81	150	.722
Playing dumb	0-no, 1-yes	.42	116	.703
Subverting particular manager	0-no, 1-yes	.62	134	.806
Exit	Cronbach's alpha=.61		188	
Quitting	0-no, 1-yes	.85	129	.860
Absenteeism	0-no, 1-yes	.65	149	.694
Turnover	1-low, 2-medium, 3-high	2.04	176	.689
Devotion	Cronbach's alpha=.83		198	
Commitment to organizational goals	0-no, 1-yes	.58	182	.778
Pride in work	1-rare, 2-average, 3-a great deal	2.24	189	.915
Meaningful work	1-meaningless, 2-somewhat meaningful, 3-fulfilling	1.98	177	.901
Compliance	Cronbach's alpha=.79		202	
Extra time	0-no, 1-yes	.81	185	.787
Extra effort	0-no, 1-yes	.75	183	.731
Cooperation	1-absent, 2-mixed, 3-widespread	2.47	196	.848
Good soldier	1-none, 2-some, 3-half, 4-most, 5-all	3.40	174	.768
Anomie*	Cronbach's alpha=.79		204	
Managerial abuse	1-never, 2-rarely, 3-sometimes, 4-frequently, 5-constantly	2.45	169	.674
Firings	0-no, 1-yes	.67	153	.420
Communication	1-poor, 2-average, 3-good	2.13	188	.720
Organization of production	1-exceptional, 2-good, 3-adequate, 4-marginal, 5-catastrophic	2.94	197	.822
Leadership	1-exceptional, 2-good, 3-adequate, 4-marginal, 5-catastrophic	2.95	196	.817
Level of Repair	1-poor, 2-average, 3-good	1.78	140	.698

*The anomie index is an intervening variable. All other indices are dependent variables.

The author also examined eigenvalues while constructing indices. The 1st and 2nd values appear appropriate.

Table 3. Effects of Surveillance on Worker Resistance & Consent

Variable	<u>Collective Action</u>		<u>Reticence</u>		<u>Sabotage</u>		<u>Exit</u>		<u>Devotion</u>		<u>Compliance</u>	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Direct supervision	.186†	.122	.214	.090	.109	-.055	-.006	-.137	-.448***	-.269*	-.228†	-.099
Electronic surveillance	.065	.064	.129	.117	-.067	-.100	.515**	.509**	-.004	.003	-.007	-.003
Peer monitoring	-.129	-.107	-.142	-.074	-.271*	-.213†	-.381**	-.308**	.457***	.369**	.262*	.211†
Customer surveillance	.034	.029	.381*	.370*	.032	.008	.109	.105	-.176	-.154	-.041	-.030
Blue collar	.626	.642***	.239	.267†	-.082	-.046	.069	.120	-.463***	-.502***	-.486***	-.516***
England	.157	.162	.228	.236	.277†	.285†	.046	.049	-.112	-.100	-.087	-.096
Taft-Hartley Era	-.335	-.341	-.038	-.072	.370	.392	.018	-.014	-.180	-.106	-.142	-.129
Kennedy Era	-.552**	-.605**	-.089	-.209	.127	.001	.020	-.115	-.435†	-.236	-.078	.030
Reagan Era	-.726***	-.799***	-.117	-.279	.202	.013	-.010	-.183	-.647**	-.381	-.094	.051
Anomie	-	.137*	-	.308***	-	.398***	-	.314***	-	-.404***	-	-.281***
R ²	.321	.335	.085	.146	.070	.195	.121	.196	.292	.384	.171	.224
N	199		188		175		188		198		202	

NOTE: Table reports regression coefficients. All models are statistically significant at the .1 level or less with the exception of sabotage (1).

†p<.1 *p<.05 **p<.01 ***p<.001