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## Workplace surveillance: an overview

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This article attempts to review the proliferation of research findings about surveillance in the workplace and the issues surrounding it. It establishes a number of points of departure when considering the issue of workplace surveillance, before reviewing some of the more critical issues. First, it establishes that organizations and surveillance go hand in hand; and that workplace surveillance can take social and technological forms. Personal data gathering, Internet and email monitoring, location tracking, biometrics and covert surveillance are all areas of development. There is also evidence that groups of employees are appropriating information and communication technologies to stare back at their employers, exposing unsavoury practices and organizing collectively, prompting new thinking about resistance. Organizations watch employees primarily to protect their assets, although the nature and intensity of surveillance says much about how a company views its employees. Workplace surveillance has consequences for employees, affecting employee well-being, work culture, productivity, creativity and motivation. If no alternative can be found, managerial attention to task design, supervisory processes, employees' expectations about monitoring, and an appraisal of the company's operating environment can mediate its downsides. It is argued that in many ways the normality of workplace surveillance, and the prevalence of arguments about how to 'do it better', make it difficult to radicalize. As part of what is seen as 'good' management practice, it can confer benefits on the employee if conducted in a humane, balanced way, and is considered on a case-by-case – organization-by-organization – basis. However, the introduction of broader debates around information use, rights, power and social structure highlights how surveillance in the workplace may serve to perpetuate existing inequalities and create new ones.

### Introduction

This article gives an overview of the current practices, developments, and controversial issues surrounding surveillance in the workplace. In the context of work, surveillance refers to management's ability to monitor, record and track employee performance, behaviours and personal characteristics in real time (for example, Internet or telephone monitoring) or as part of broader organizational processes (for example, drug testing in recruitment). The application of surveillance

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practices in organizations generally functions as a way of controlling access to different levels of the organizational hierarchy, and to the organization itself.

The topic of surveillance in the workplace has been debated since the early 1980s, when work commissioned by the US Office of Technology Assessment culminated in a report published in 1987, which combined political, economic, sociological and psychological perspectives on workplace surveillance. The report was entitled *The Electronic Supervisor: New Technologies, New Tensions*. Since then, academics in these respective organizational behaviour disciplines have embarked on a number of projects to measure the 'impact' of monitoring, and to examine the power and influencing processes 'under surveillance'. Before proceeding, it is worth noting the differences between the definitions of 'monitoring' and 'surveillance' in the workplace, as these terms are often used interchangeably. While monitoring and surveillance denote similar practices and both can have positive and negative consequences, monitoring and surveillance have different connotations to their audiences.<sup>1</sup> Organizational sociologists and occupational psychologists have investigated the effects of monitoring and surveillance, but tend to write about the phenomena in different ways in their respective publication venues. For example, the often (but not in principle, necessarily) dystopian character of surveillance has been noted by P.E. Agre and others who are influenced by Foucault and like-minded thinkers such as Graham Sewell and James Barker.<sup>2</sup> Many industrial and organizational sociologists are concerned with power, politics, resistance and meaning-making by employees under surveillance. But for many psychologists who write about monitoring, there are no explicitly political or social-theoretical issues raised by it, or by direct observation by supervisors. That is, monitoring, as used by (most) psychologists, has none of the dystopian baggage of surveillance; it is neutral. For psychologists, it is a question of how monitoring is used: whether it is effective and at what cost (e.g. stress, 'playing the system'). These connotative differences and their associated epistemological and political commitments serve to split research on workplace surveillance in an unhelpful way. In many respects it is more useful to think about workplace surveillance as operant at different levels of analysis, with particular implications for different groups of employees.

Moving on to surveillance practices by employers, the information collected by monitoring employees is used in a number of ways. Conclusions can be drawn about employees' performances which have implications not just for their behaviour inside the workplace, but sometimes for their lifestyle outside it. The range of techniques used varies from computer and telephone logging to drug testing, mystery shopping, closed-circuit television, mobility tracking and electronic recruitment. The widest range of monitoring techniques is found in the service sector, although manufacturing and some primary industries also monitor their employees. Whilst comprehensive figures as to the extent of employee monitoring do not exist, it is acknowledged that the Internet is largely responsible for an increase in employee monitoring in the last five years. In 2006, Proofprint and Forrester surveyed 294 US companies and found that more than a third with 1000 or more workers employed people to read through other employees' outbound email in search of rule-breaking.<sup>3</sup> Nearly seventy-five percent of US companies monitor worker communications and on-the-job activities, and it has been estimated that 27 million online employees are monitored worldwide.<sup>4</sup> The gambling, retail, logistics and contact-centre industries are noted

for the exacting and extensive employee surveillance techniques they employ. Moreover because these industries have low union density, consistent opposition or resistance to surveillance is not widespread. Unions publish voluntary codes of practice for their members, but, with some exceptions, surveillance techniques are rarely the subject of collective bargaining.<sup>5</sup>

Any discussion of workplace surveillance begins with the idea that surveillance and business organizations go hand in hand, and that employee monitoring is nothing new. Clocking in, counting and weighing output and payment by piece-rate are all older forms of workplace surveillance. Business organizations are hierarchies, and hierarchies function by superordinate positions monitoring and controlling positions below them in the hierarchy. The word ‘supervisor’ – a common job title for those in charge of work processes – means ‘overseer’, and since the earliest theories of management, going back to Henri Fayol’s ‘Administration industrielle et générale’ (1916), controlling and monitoring has been understood to be a central part of the task.<sup>6</sup> Histories of early large-scale organizations emphasize how the development of information ‘systems’ gave businesses the ability to police their internal structures on a grand scale and gain competitive advantage.<sup>7</sup> More recently, a combination of available technologies and management culture which emphasizes individual measurement and management has resulted in an extension and intensification of individual monitoring, rather than that of a group, department or business unit.

The implication is that surveillance at work is, first, a necessity, and second, a normal, taken-for-granted element of working life. Employees expect to have their performance reviewed, objectives set, and information gathered on their activities and whereabouts – indeed, this is seen as good management practice. Controversies generally arise in three situations: first, when employee monitoring goes beyond what is reasonable or necessary (i.e. when employers use intrusive monitoring to delve into the lives employees lead outside work); second, when they demand exacting and precise information as to how employees use their time; and third, when the application of monitoring compromises working practices and negatively affects existing levels of control, autonomy and trust. As such, workers can simultaneously support some of the protective aspects of surveillance and oppose some of its more intrusive aspects. This makes understanding resistance to surveillance difficult, when it comes to identifying what is legitimate and what is not. A further concern is the lack of specific policy provision by employers, a lack of audit or review as to how employee information is used, and a subsequent lack of awareness of monitoring practice and policy on the part of employees. The following pages will explore the form, function and consequences of employee monitoring.

### **Key developments**

This section will begin by reviewing the range of surveillance practices undertaken by organizations. It will then explain the reasons why organizations monitor their employees, and discuss some of its less savoury consequences. Whilst surveillance is always applied for the benefit of the business, and hence is not politically neutral, it is shaped by various contextual factors, and these will also be presented. Finally, some future developments will be discussed.

Figure 1 shows the range of surveillance practices which occur in the workplace. The practices focus on measuring employee performance, their behaviours or their personal characteristics. Monitoring of performance and behaviours as part of ongoing production processes is more likely to take place in real time. The monitoring of personal characteristics is more likely to occur as a one-off event as a way of controlling access to the organization. This may take the form of physical access to organizational premises, or access to roles within the organization through recruitment. The monitoring of personal characteristics is more pervasive because of the conclusions employers can draw about the lifestyles of their employees, and this raises questions as to the extent to which employers have a right to use this information. A further aspect of workplace surveillance which is illustrated by Figure 1 is ‘function creep’: how one particular surveillance technique can reveal more than one kind of information about employees. For example, use of mystery shoppers will not only tell managers how well retail staff are performing their tasks, but will also reveal information about how they behave towards customers and each other.

Whilst Figure 1 focuses on techniques and tools which can be used by management, other forms of surveillance exist in the workplace which are just as pervasive and much less easily identifiable or regulated. Graham Sewell, in his article ‘The Discipline of Teams’ for *Administrative Science Quarterly*, highlights how, with the rise of team working, peer surveillance (watching one’s colleagues’ performance, behaviours or characteristics interpersonally), reinforced through social norms and culture, is growing.<sup>8</sup> Surveillance techniques used in peer-to-peer evaluation lend rationality to the assessment process. Self-discipline and self-surveillance are also central to management systems which aim to ‘empower’ their staff and encourage

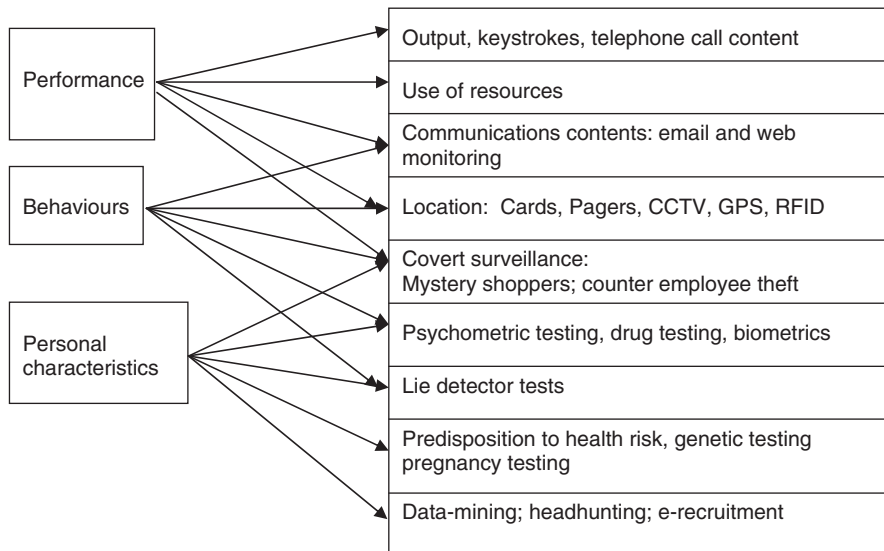


Figure 1. The range of employee surveillance techniques used by organizations (adapted from Regan, ‘Genetic Testing’).

them to be enterprising, creative and innovative. This means that organizations now use a raft of surveillance-based techniques that are embedded not only within specific tools, but also within the social processes of managing. Surveillance in the workplace not only produces measurable outcomes in terms of targets met or service levels delivered, but also produces particular cultures which regulate performance, behaviours and personal characteristics in a more subtle way.

Surveillance in the workplace is developing in three directions – namely, in the increased use of personal data, of biometrics and of covert surveillance. The use of actual and prospective employees' personal data has grown in recent years with the widespread use of Human Resource Information Systems. Within organizations, survey evidence has indicated that electronic employee records are used in fairly routine ways and that the data are not subject to a great deal of analysis or manipulation.<sup>9</sup> However, with Internet-based recruitment on the rise, some companies now engage in data-mining of CV databases and electronic snooping on potential candidates and competitors' websites.<sup>10</sup> Third-party providers have now emerged who will conduct these kinds of searches for employers. Increasingly covert means are being used to search for potential applicants by accessing user chat rooms, or to gain covert access into organizations' Intranets (termed 'flipping'). E-recruitment is growing in the UK, but in 2004 only seven per cent of the total recruitment market was Internet based. In the US there are 20 million CVs stored in databases, and the US Internet recruitment industry has attained the dubious accolade of being the second-largest source of income for providers after pornography.<sup>11</sup> Whilst RFID (Radio Frequency Identification) tags are controversial in and of themselves when used for location tracking, the tags are also linked to records in time and attendance databases, which are typically part of larger human resources databases. Recent research has highlighted that the uses of these data are not made clear to employees, policies outlining their use are not in place, and information practices are not subject to any third-party audits or checks.<sup>12</sup>

The same is true if biometric information (e.g. retina and iris scans, electronic fingerprinting, hand geometry, and drug and alcohol testing) is to be used for access control, recruitment, promotion or performance management purposes. Biometrics are now seen by employers as one of the ways in which the identity of employees can be authenticated, and as a way of managing health and safety in the workplace. Like e-recruitment, drug and alcohol testing is growing in the UK and is used where employees are in safety-critical jobs (e.g. driving vehicles). In the USA it is far more widespread but has recently started to decline because of the lack of evidence that it improves safety or productivity. Because drug testing is seen by many as a violation of bodily privacy, it deters many from applying for jobs where they are likely to be tested. Moreover, drug tests do not distinguish between heavy and recreational drug users, and abstinence for a few days before the test will usually yield a negative result. Drug tests merely indicate the presence of various recreational drugs. Commentators refer to them as 'intelligence tests': to fail one, the candidate would need to be very stupid! In a development which is significantly more pervasive, Microsoft recently filed a patent for a piece of software which monitors worker well-being through a series of biometric measurements.<sup>13</sup> The patent application referred to how the system would have wireless sensors which could read 'heart rate, galvanic skin



response, EMG, brain signals, respiration rate, body temperature, movement facial movements, facial expressions and blood pressure'. The system could also 'automatically detect frustration or stress in the user' and 'offer and provide assistance accordingly'. The patent raises massive privacy concerns around the right of organizations to probe the bodies of workers and invoke private aspects of the self into management processes. Developments like this must change the way in which resistance is to be conceptualized, which will be covered later in the article.

Informing and involving employees in monitoring practices is difficult if an organization wants to employ covert surveillance techniques to monitor Internet activity, service levels or competitor behaviour. Particularly with the emergence of the blogosphere, organizations are keen to protect themselves from defamation, and employees' web activities are checked for offensive or libellous content, sometimes even when they are posted on private servers outside company time. Cases such as that of Catherine S, who is also known as 'La Petite Anglaise', are now beginning to be heard by employment tribunals from applicants who have been dismissed for blogging about their employer.<sup>14</sup> Catherine, who used pseudonyms to blog about her work experiences at a company in Paris, was eventually fired for breaching employment contract terms concerning 'loyalty to the company'. Other notable dismissals – the majority of which are female – include Delta Airlines cabin crew member 'Queen of Sky' who was summarily dismissed for allegedly posting 'inappropriate' photographs of herself in company uniform on her blog. As a result, the Electronic Frontier Foundation has now published a set of guidelines telling bloggers how to preserve their anonymity so they can avoid being fired (<http://www.eff.org/Privacy/Anonymity/blog-anonymously.php>). Universities are now routinely advising students not to post lewd details of their social lives on social networking pages because prospective employers are now beginning to consult those sites as part of graduate recruitment programmes.

Employees' email communications are also a target of covert surveillance. Employers' capacity to record and store employee communications raises privacy concerns, first, because private conversations may contain confidential information (e.g. a credit card number), second, because this information may be stored on offshore servers which fall under different jurisdictions, and third, because of the relative coverage and broadcast of relevant policy. Appropriate policy is difficult to define in respect of covert surveillance. There is some debate as to whether organizations are required to provide a general notice to staff that they may be subject to it, or whether this can be avoided altogether. In Australia, for example, employers are required to get permission to conduct covert surveillance on employees from a magistrate. In the UK, under the Regulation of Investigatory Powers Act (RIPA) 2000, if the business is protecting a 'legitimate interest' it can covertly intercept employee communications, although it does have to comply with Data Protection Act requirements too. In the case of mystery shopping, for example, opinion is split between those who argue that the practice is unethical because of the levels of deceit, compromise and the lack of consent involved.<sup>15</sup> Others argue that employers need to present the results of mystery shopping to staff, to raise awareness of it in a way which will not compromise the research.<sup>16</sup>

### Surveillance in practice: the issues

In this section the arguments in favour of monitoring and those highlighting its negative consequences are discussed. Psychological research which examines how consequences can be 'mediated' at different levels of analysis is also reviewed.

#### *For or against monitoring?*

On a very pragmatic level, there are three main reasons why employers monitor their employees. First, businesses are keen to maintain productivity and monitor resource use by employees. Second, they want to protect corporate interests and trade secrets. Email, Internet monitoring and information access control are all deployed against risks of defamation, sabotage, data theft and hacking. Finally, monitoring can protect the company from legal liabilities. The results of employee monitoring can provide evidence in legal actions, and monitoring can become a risk-management tool. Businesses therefore use employee monitoring to limit cost and risk, protect value and maintain quality.

Excessive monitoring, however, can be detrimental to employees for a number of reasons – first, because privacy can be compromised if employees do not authorize the disclosure of their information, and it is broadcast to unknown third parties.<sup>17</sup> David Zweig and Jane Webster, in a study of teleworkers, identified that employees felt certain information regarding their physical whereabouts was off limits to employers.<sup>18</sup> The second reason excessive monitoring can be detrimental to employees is because, like all surveillance technologies, employee surveillance technologies can exhibit 'function creep'. This is because monitoring technologies can sometimes yield more information than intended, and management need to avoid the temptation to extend monitoring practice without consulting employees first. This is particularly important if the information is being used in decisions about pay or promotion. The third reason is that if employees realize their actions and communications are monitored, creative behaviour may be reduced if employees are worried about monitoring and judgement. The fourth reason is that exacting surveillance sends a strong message to employees about the kind of behaviours the employer expects or values. The organization sends a message to its workers simply by the tasks it chooses to monitor. Research finds that monitored tasks are deemed more valuable or critical than non-monitored ones, so workers will pay greater attention to the former tasks and afford greater importance to the behaviours that monitoring reinforces.<sup>19</sup> Additionally, the form monitoring takes also gives messages about the importance of quality over quantity and the importance of working as a team.<sup>20</sup> This can produce 'anticipatory conformity' – where employees behave in a docile and accepting way, and automatically reduce the amount of commitment and motivation they display.<sup>21</sup> Trust levels are also at risk of being reduced. For example, a qualitative study by Alan F. Westin in 1992 observed that poor management communication and the failure by management to implement monitoring in a participatory way damaged trust relations.<sup>22</sup> However, there have as yet been no systematic studies which measure the trust impact of increased surveillance. This is primarily because of difficulties in measuring trust as a variable.

Finally, excessive monitoring can sometimes produce the behaviours it was designed to prevent. If workers perceive surveillance practices as an intensification



and extension of control, it is likely that they will try to subvert and manipulate the boundaries of when, where and how they are measured.<sup>23</sup> Studies of call centres demonstrate that intense surveillance increases resistance, sabotage and non-compliance with management.<sup>24</sup> Here, workers are extensively monitored not only in terms of their quantitative outputs, but also in terms of their qualitative manner on the phone, and their overall competence. They work their way around surveillance by manipulating measures by dialling through call lists, leaving lines open after the customer has hung up, pretending to talk on the phone, providing a minimal response to customer queries and misleading customers. Where call-centre managers are also under surveillance, they sometimes collude with workers to produce the desirable results. Incidentally, any resistance that has been observed in call centres so far has involved getting the better of monitoring (sometimes referred to as the application of ‘tacit knowledge’), but not actively challenging, breaking, or sabotaging the overall practice, except for one case where resistance subverted managerial values.<sup>25</sup>

A further development in worker resistance is the emergence of counter-institutional websites (known as ‘gripe’ or ‘sucks’ sites) which allow disenfranchised and aggrieved employees and customers to post about their experiences. There are currently 7000 corporate-focused sites with ‘sucks’ or ‘sux’ in the URL.<sup>26</sup> Such websites are growing in significance in terms of institutionalizing resistance, as they enable opinions which would not be voiced inside the organization to be expressed. As such, they are also a significant development in terms of counter-organizational surveillance by employees, emerging as a form of synopticism. ‘Synopticism’ is defined as a situation where the many watch the few, or where they focus in common upon ‘something which is condensed’.<sup>27</sup> Loril M. Gossett and Julian Kilker, who study the ‘radioshacksucks’ website, argue that as well as providing a means for individuals to let off steam, they also have enabled isolated or fragmented groups of workers to connect and organize collectively. Other examples of such work include Daphne Taras and A. Gesser’s study<sup>28</sup> of a website which allowed lawyers to publicly and anonymously discuss wages and benefits. Kevin Real and Linda Putnam<sup>29</sup> showed how dissatisfied trade union members challenged their union leadership with a splinter campaign website, and Dan Baum in *The New Yorker*<sup>30</sup> identified a number of websites where US soldiers were exchanging information about conditions in Iraq which was not available through official channels.

### ***‘Mediating’ the negative effects of surveillance and monitoring***

Psychological research has widely acknowledged that the relative effects of surveillance on employees are not a foregone conclusion and are shaped by a number of factors. These factors concern the way in which supervisors and managers design work in such a way as to limit or balance the emphasis on monitoring, and how they relate to their employees during the monitoring process. Jeffrey M. Stanton outlines how task design, supervisory style, and employee cognition of monitoring are all important. He also shows how organizational characteristics can affect how monitoring is carried out.<sup>31</sup>

Aspects of task design concern whether the employee has a choice in the pace and timing of their tasks or not. Further, monitoring which is constant is likely to have more of an adverse effect than if it is intermittent and at regular intervals. Monitoring also has to be appropriate for the task: if the task is easily measurable, then it is easily monitored, and any aspects which are difficult to measure must be evaluated in other ways. Similarly, if the employee is measured as part of a group, rather than as an individual, monitoring will be less stressful for the individual. More importantly, the person doing the monitoring should be tuned in to the psychological and emotional states of the employees rather than passing any blanket judgement based on figures alone.<sup>32</sup>

Supervisory style is extremely important. Keeping an open mind as to performance fluctuations is a good starting point. Previous research by Kulik and Ambrose has shown that if a supervisor rates an employee negatively using monitoring, they are less likely to revise that judgement.<sup>33</sup> This finding is consistent with studies that demonstrate a greater amount of attention paid to, and a greater amount of influence and strength of, negative (compared with positive) information and attitudes (including impressions).<sup>34</sup> As important as this is the fact that workers tend to reach the same conclusions under these conditions.<sup>35</sup> Such distrust can lead to employee resistance and retaliation.<sup>36</sup> These dynamics could result in an escalating cycle of monitoring and resistance.<sup>37</sup> David Zweig,<sup>38</sup> among others, discusses the potentially serious organizational consequences that such a situation entails. Hence, it is critical for supervisors to show consideration towards their subordinates<sup>39</sup> and to recognize that employees may need to interact with and identify with co-workers who are similarly monitored.<sup>40</sup>

As such, the results of monitoring should be balanced by other wider feedback processes, such as appraisal and coaching.<sup>41</sup> Assigning a heavy workload to monitored tasks will result in stress, as will an approach to feedback which punishes, rather than develops, staff in the event of performance shortfalls.<sup>42</sup> Supervisors also need to communicate monitoring criteria clearly,<sup>43</sup> and ensure that employees are adequately trained so that they have a fair chance of hitting their targets. Involving employees in the design and implementation of monitoring systems<sup>44</sup> will ensure that they have a better chance of being accepted, and it helps being absolutely clear about where the monitored information goes and how long it is kept.<sup>45</sup> Nevertheless, Gary T. Marx, in the *Harvard Business Review*,<sup>46</sup> warns against the persuasive rhetoric used by managers to gain acceptance of monitoring practices. Also, if employees' job security is threatened, then it is unlikely that more monitoring will be welcomed.<sup>47</sup>

Cognitive factors refer to employees' predispositions towards monitoring itself. If employees have a prior level of trust in their supervisors, monitoring is less likely to be stressful.<sup>48</sup> However, if employees perceive monitoring as something which is invasive of privacy,<sup>49</sup> is unreasonable,<sup>50</sup> or places too much emphasis on reward<sup>51</sup> – in other words, if they feel they have a lot to lose or gain by monitoring – then the opposite effect will occur. Supervisors should also be careful how they emphasize the importance of monitored tasks in relation to other, non-monitored tasks. This applies equally to different elements of the same task and to the relative intensity of monitoring between different tasks.

Broader organizational factors extend beyond the realm of the task and address the things that might cause an organization to monitor its employees closely in the

first place. Paul Attewell argues that when an organization is competing in a mature product market with mature technologies and competing on the basis of price and producing high quantities of similar goods, there is more of an incentive for it to keep a close eye on resource use and employee activity.<sup>52</sup> Similarly, if there is an abundant supply of labor and low unionization (as in the case of some call centres), close monitoring is likely to meet with less opposition and resistance. If the organization's culture does not support a developmental approach to its employees, then it is likely that work and monitoring will be punitive and militaristic.

### *Social processes around monitoring*

The significance of the social processes around monitoring, with specific reference to the workplace, was developed in a critique by Graham Sewell. Using empirical data in his study for *Administrative Science Quarterly*,<sup>53</sup> Sewell demonstrated that there were often powerful cultures supporting the use of monitoring, which resulted in strong social norms concerning peer scrutinization of the effort and investment put into work by employee peers. When combined with previous observations about the importance of social facilitation by supervisors, it is clear that the social processes that influence monitoring in organizations serve a number of critical functions in terms of how monitoring processes occur.

A key finding about the social processes surrounding monitoring is how it becomes appropriated by worker groups and embedded within workplace cultures that afford it different meanings<sup>54</sup> and how it becomes an issue in negotiations over working conditions.<sup>55</sup> Like any element of organizational life, work-monitoring practices are subject to worker sense-making and become embedded within organizational histories as workers compare them with previous procedures. They also use monitoring as a way of policing team members' behaviours if they are not doing their fair share of work. Brian L. Zirkle and William G. Staples<sup>56</sup> termed these examples 'idiocultural' responses aimed at circumventing monitoring, developing informal social ordering, and having some fun in the workplace. They argue that, while monitoring is not something that completely dominates workers, and while it is shaped by the reactions of employees, workers are left with only small pockets of space to negotiate compliance. Crucially, the authors reflect on the limited effects these idiocultural behaviours have in challenging the dominant application of monitoring. Horseplay and informal social ordering, they argue, do not supplant the more institutionalized opposition to monitoring as represented by, for example, a trade union or labor legislation.

Kirstie S. Ball and David C. Wilson<sup>57</sup> found that contrasting configurations of work monitoring and workplace culture matched. In the language of Zirkle and Staples, they found contrasting idiocultures were co-produced alongside varying configurations of monitoring. In one case, where monitoring was less emphasized, there was relatively more opportunity for personal development, challenge, self-pacing and promotion. There, workers described monitoring practices and workplace relationships using ideas relating to the whole person within the workplace. This was in stark contrast to a machine-monitoring scenario which provided workers with little room for manoeuvre. In this case, workers spoke about monitoring and work relationships in terms of rule-based compliance.

There were still incidences of resistance in these two cases. In the former, those whose 'whole person' did not fit with the idea of personhood adopted in workplace culture were excluded and formed their own social circles. In the latter, employees hid work, took longer breaks, and simply left their jobs in search of better ones. Several employees were on anti-depressants and had musculoskeletal problems. The two cases highlight how monitoring is embedded in overall control strategies which qualitatively differ, but are similar in that they are never total or complete.

Implicit within Ball and Wilson is the idea that cultures around monitoring can be mobilized in order to legitimize, problematize, or afford monitoring a distinctive purpose within a social setting. Sewell and Barker<sup>58</sup> make precisely this suggestion in relation to the workplace, alluding to ideas that monitoring practices, like any other element of the employment relationship, are often subject to negotiation at a micro level. Employees work to understand monitoring on their own terms, as well as what it means to their peer group, managers and organization. Managers and workers afford it different meanings at different times. In call centres, for example, it has been shown that employees and their unions have labelled monitoring as 'caring' (to use Sewell and Barker's term)<sup>59</sup> if the introduction of surveillance measures is done in parallel with a recognition of more consultation rights for the health and safety issues of workers.<sup>60</sup>

As such, supervisors are pivotal in shaping workplace social relations in specific terms, and have to work hard to maintain both task completion and the social well-being of their supervisees. This is particularly the case because early research suggested that monitoring could dictate a more coercive supervisory style.<sup>61</sup> Moreover, C.T. Kulik and M.L. Ambrose<sup>62</sup> found that once supervisors classify an employee as a poor performer, supervisors tend not to revise those categorizations of employees and instead scrutinize their output more closely.

The key message of the majority of this work which concerns the group and organizational level of analysis is that surveillance is embedded within organizations, signifies different meanings, and can be appropriated by both workers and managers in the negotiated reality of working life. The tasks which are monitored, and the social relationships which surround them, are almost a form of organizational paralanguage that is assimilated and evaluated by all who come into contact with it. Whilst many of these findings were generated through the study of performance-monitoring technologies, it is likely that they could be applied to the use of any surveillance technique at work. Principles concerning task design, communication and supervision, employee expectations and the organization's position represent a set of parameters by which the operation of any workplace surveillance technique can be understood. Moreover, they present a set of practical guidelines by which managers can shape surveillance in a way which is less harmful to worker health and well-being.

### **Surveillance at work: the critique**

At this point the article examines whether it is worth questioning why workplace surveillance emerges as an important contemporary issue if it is a normal, everyday part of organizational life. The reason for such concern is that the practice of surveillance has impacts on several broader debates which arise in the context of any

general surveillance practice: it has an impact on privacy, ethics and human rights; power and empowerment; and social exclusion.

Privacy; ethics and human rights issues are endemic to workplace surveillance. For example, does the public nature of blogging trump any employee privacy rights, even if an employer discovers an employee blog through the covert surveillance of their Internet activity outside the workplace? Moreover, does the lack of due consultation on the introduction of biometric surveillance, or indeed any kind of surveillance which crosses new bodily or personal boundaries, mean that employees have to comply with it? When discussing privacy issues in this domain, it is important to focus on the full range of privacy concepts: privacy and the human body, privacy in social relations, and privacy and personal space, as well as information privacy.<sup>63</sup> It is also important to consider fully the implications of disclosure: whether the employee had given their authority for boundaries relating to their body, social relationships, personal space and information to be crossed; and whether they were aware of who was going to be party to that information. As well as challenging privacy rights, some of these employment practices also challenge rights concerning the freedom of expression. Surveillance also has particular employment ethics implications. Using the concepts of distributive and procedural justice, surveillance practices are likely to be more controversial if they undermine existing processes of consultation and have an impact on the relative distribution of reward. Distributive justice refers to the equity of reward (material or otherwise) for effort and punishment for non effort, and procedural justice refers to matters of employee voice, communication, trust, involvement and mutual responsibility between management and workers for performance.<sup>64</sup>

Allied to questions of distributive and procedural justice are questions of choice, power and empowerment. Of particular interest in the employment relationship is the role of surveillance (and its intensification) within the effort–reward bargain between employer and employee. This is significant because of the way in which modern management discourse emphasizes the importance of metrics, evaluation and review in practically every area. So if an automatic upgrading of an access control system to biometrics is perceived by employees as an intensification and extension of control, their attitude and motivation to work will be adversely affected. Ensuring adequate and responsible consultation is a bare minimum if employment relations are not to be adversely affected. This is also the case for call-centre employees who have little control over work pacing, system speed or task design and yet can be disciplined if the system indicates they are not complying with agreed standards. A more sinister facet of choice, power and empowerment arises when we step back and look at who is usually the subject of monitoring. In the early 1980s, the US National Association of Working Women conducted a survey of call-centre workers and ran a telephone helpline for stressed-out workers.<sup>65</sup> They concluded that surveillance is generally (but not always) used at the bottom of organizations to cover high-volume service and manufacturing operations, and because of the nature of occupational structure, electronic monitoring is said to cover disproportionately large amounts of female and minority workers. When female workers felt unfairly treated under this technology, they frequently used images such as rape or sexual abuse to describe how they felt. Ultimately the intensification of workplace



surveillance confers massive benefits on the employer, but relatively little benefit on the employee, perpetuating wider power asymmetries.

With the proposed use of more pervasive biometrics and location tracking in the workplace, the impact of surveillance on the worker needs systematic attention: how it affects their identity and their body,<sup>66</sup> and not only how they are empowered to resist it, but where resistance can occur. Earlier in this article it was noted that accounts of resistance to surveillance, particularly in the call-centre setting, did not involve sabotage of monitoring technologies. In most cases, workers circumvented or manipulated the monitoring process in order that they might have a little more freedom on the job. Monitoring has sometimes been appropriated as a bargaining chip in workplace negotiations and has different meanings in different workplace contexts. Significantly, however, workers in some organizations have appropriated the means of surveillance to stare back at their employers to expose any malpractice and voice their dissent. All of these incidences of resistance can be accounted for under traditional labor process theory arguments about the oppressive nature of technical and ideological control,<sup>67</sup> as well as under Foucaultian arguments about the totalizing impulses of institutions and their desires to 'outflank' resistance.<sup>68</sup> However, if we are thinking purely in terms of surveillance, each of these instances of resistance has one thing in common: they occur when there is a break, or 'gap', in the technology-mediated relationship between the watcher and the watched.<sup>69</sup> Primarily underpinned by Deleuze's postscript on control societies in *Negotiations* (1995), the significance of the 'gap' in surveillance process is premised on his assertion that in order to resist this constant extraction and circulation of information under surveillance, we should 'create vacuoles of non-communication, circuit breakers, so we can elude control'.<sup>70</sup> In other words, we should seek to break circuits of knowledge, information, and threat by silencing ourselves – by not giving up information in an age where it is so valued as a commodity. This lends greater significance to the resistant actions of workers using counter-institutional websites which are away from internal corporate networks, or to their giving of inconsistent signals to a monitoring system. Recent additions to surveillance theory by McGrath, Koskela, and Ball<sup>71</sup> also underpin this view. Exploring the prevalence and nature of these 'gaps', at the individual and group level, may provide a more fruitful account of resistance to surveillance than could be currently offered by labor process or post-structural views.

A final point concerns workplace surveillance and social exclusion, particularly because one area of workplace surveillance is beginning to stratify opportunities for employment: e-recruitment. Sifting through large volumes of CVs and searching for potential candidates raises the question of discrimination in two ways – first, because, in a similar manner to traditional recruitment processes, e-recruitment is subject to the biases and 'rules of thumb' used by recruiters when they face complex choices between a range of candidates.<sup>72</sup> Left unchecked, such biases may develop into the exclusion of particular groups of candidates from recruitment processes through the use of particular keywords, and hence leaves the organization open to discrimination claims. Keyword searches are now routinely being used as selection tools, and researchers observe that the use of particular keywords varies between recruiters and hence yields different results.<sup>73</sup> Whilst it may be argued that eliciting the right results with particular keywords is indicative of the professional expertise and tacit knowledge of the recruiter, it may also reflect their own biases. Further



complexity arises when one considers that CV writing skills vary so much between candidates. The use of standard forms goes some way to remedying this problem, as does the use of multiple words to search for a qualification, and tight policy regulation of the practice does as well.

The question of discrimination in e-recruitment is raised in a second way, too: it is discriminatory in the sense that certain social, economic and ethnic groups do not have easy access to the Internet. Hence a concentration on e-recruiting effectively excludes these groups from the labor market altogether. Whilst many niche websites have now developed, initially its use was directed towards white, male, middle-class occupations in IT and engineering.<sup>74</sup> There is a strong temptation for companies to standardize and formalize e-recruitment processes which will yield 'more of the same' rather than a diverse set of applicants. Indeed, Marconi Capital revised its e-recruitment strategy when it found that it didn't attract the ethnic or social mix of people it wanted, and it has also been reported that women were more likely to deselect themselves from online recruitment processes because of the impersonal nature of such processes.<sup>75</sup> The UK disability rights commission investigated 1000 websites and found that 81 percent failed to satisfy the most basic web accessibility guidelines, which means that 8/10 websites in the UK exclude 1.3 million people of working age applying for jobs online. Explicitly using varied recruitment channels, advertising on diversity websites, and reflecting diversity requirements are key steps organizations can take.

## Conclusion

From the proliferation of research findings about surveillance in the workplace emerge a number of basic points, and a number of critical issues. Before embarking on a critique of surveillance in the workplace, the following points should be acknowledged: first, that organizations and surveillance go hand in hand; and that workplace surveillance can take social and technological forms. Personal data gathering, Internet and email monitoring, location tracking, biometrics and covert surveillance are all areas of development. There is also evidence that groups of employees are appropriating information and communication technologies to stare back at their employers, exposing unsavoury practices and organizing collectively. Organizations watch employees primarily to protect their assets, although the nature and intensity of surveillance says much about how a company views its employees. Workplace surveillance has consequences for employees, affecting employee well-being, work culture, productivity, creativity and motivation. If no alternative can be found, managerial attention to task design, supervisory processes and employees' expectations about monitoring, and an appraisal of the company's operating environment can mediate its downsides.

In many ways the normality of workplace surveillance and the prevalence of arguments about how to 'do it better' make it difficult to radicalize. As part of what is seen as 'good' management practice, it can confer benefits on the employee if conducted in a humane, balanced way, and is considered on a case-by-case – organization-by-organization – basis. However, the introduction of broader debates around information use, rights, power and social structure highlights how surveillance in the workplace may serve to perpetuate existing inequalities and create new

ones. As employees begin to discuss their work lives in public fora, either as individuals or as groups, there remains a question over how much a company has the right to 'clamp down' on employee voice away from the workplace and use information posted there to curtail the careers of specific individuals. As surveillance extends into the bodies and minds of workers, rather than simply their performance, how are they to resist it and negotiate its application? Where are the gaps? And as it polices the boundaries and internal hierarchies of organizations, how is it shaping the accessibility of work for future generations?

## Notes

1. See Agre, 'Surveillance and Capture'; Sewell and Barker, 'Coercion versus Care'.
2. Ibid.
3. See Proofprint and Forrester Research, 'Outbound Email'.
4. *Business Week*, 10 July 2000, particularly Larry Armstrong, 'Someone to Watch Over You', for the estimate of nearly three-quarters of US companies 'actively' engaged in monitoring worker communications. For the worldwide estimate of 27 million workers under regimes of computer monitoring, see Schulman, 'The Extent of Systematic Monitoring'. At the time of his report in 2001, he cited data showing that out of 3 billion workers worldwide, approximately 100 million were online workers. Twenty percent globally were under communication surveillance.
5. See Schulman, 'The Extent of Systematic Monitoring'.
6. Fayol, *General and Industrial Management*.
7. Beniger, *The Control Revolution*.
8. Sewell, 'The Discipline of Teams'.
9. See Ball, 'Elements of Surveillance'.
10. Searle, 'Organizational Justice'.
11. Kay, 'Recruiters Embrace the Internet'.
12. See Balkovich, Bikson, and Bitko, '9 to 5'.
13. 'Microsoft Seeks Patent for Office "Spy" Software', *The Times*, 16 January 2008. [http://technology.timesonline.co.uk/tol/news/tech\\_and\\_web/article3193480.ece](http://technology.timesonline.co.uk/tol/news/tech_and_web/article3193480.ece) (accessed May 2009).
14. See [http://commentisfree.guardian.co.uk/catherine\\_s/2006/07/sec\\_gets\\_dooiced.html](http://commentisfree.guardian.co.uk/catherine_s/2006/07/sec_gets_dooiced.html) for more on this controversy.
15. Shing and Spence, 'The Limits of Competitive Intelligence'.
16. Wilson, 'Mystery Shopping'.
17. Lloyd, 'Management Email Monitoring'.
18. Zweig and Webster, 'Where is the Line'.
19. See the following works from the 1990s: Brewer, 'The Effects of Monitoring'; Carayon, 'Effects of Electronic Performance Monitoring'; and Larson and Callahan, 'Performance Monitoring'.
20. For the ways monitoring gives messages about the importance of quality over quantity, see Brewer and Ridgeway, 'Effects of Supervisory Monitoring'. For the effects on working as a team, see Aiello and Kolb, 'Electronic Performance Monitoring and Social Context', and Brewer, 'The Effects of Monitoring'.
21. Zuboff, *In the Age of the Smart Machine*.
22. Westin, 'Two Key Factors'.
23. McCahill and Norris, 'Watching the Workers'.
24. Frenkel et al., 'Beyond Bureaucracy?' and Callaghan and Thompson, 'We Recruit Attitude'.
25. For 'tacit knowledge', see Clergeau, 'ICTs and Knowledge Codification'. For the ways monitoring results in not actively challenging, breaking or sabotaging worker-management collusion, see Ball and Wilson, 'Power, Control and Computer-based Performance Monitoring'; Russell, 'You Gotta Lie to It'; and Winiecki and Wigman, 'Making and

- Maintaining the Subject'. For the one case that was the exception, see Richardson and Howcroft, 'The Contradictions of CRM'.
26. Gossett and Kilker, 'My Job Sucks'.
  27. See Mathiesen, 'The Viewer Society', as well as Mathiesen's book *Silently Silenced*.
  28. Taras and Gesser, 'How New Lawyers Use E-voice'.
  29. Real and Putnam, 'Ironies in the Discursive Struggle of Pilots'.
  30. Baum, 'Battle Lessons'.
  31. See Stanton, 'Reactions to Employee Performance Monitoring'.
  32. See the following articles and research: Stanton and Barnes-Farrell, 'Effects of Electronic Performance Monitoring'; Niehoff and Moorman, 'Justice as a Mediator'; Aiello and Kolb, 'Electronic Performance Monitoring and Social Context'; Chalykoff and Kochan, 'Computer-aided Monitoring'; Lund, 'Electronic Performance Monitoring'; Larson and Callahan, 'Performance Monitoring'; and Brewer and Ridgeway, 'Effects of Supervisory Monitoring'.
  33. See Kulik and Ambrose, 'Category and Feature-based Processes'.
  34. For example, Breckenridge and Zimbardo. 'The Strategy of Terrorism'; Dodge 'Negative Beliefs', and Muthukrishnan and Chattopadhyay, 'Just Give Me Another Chance'.
  35. Botan and Vorvoreanu, 'What Do Employees Think'.
  36. Philip Bain and Philip Taylor, 'Working in the Call Centre'; Deutsch-Salamon and Robinson, 'Does Trust Deter Organizational Deviance?'
  37. Sewell and Barker, 'Coercion versus Care', 942 and 944.
  38. Zweig, 'Beyond Privacy'.
  39. Chalykoff and Kochan, 'Computer-aided Monitoring'.
  40. Aiello and Kolb, 'Electronic Performance Monitoring and Social Context'.
  41. Amick and Smith, 'Stress, Computer-based Work Monitoring'.
  42. Carayon, 'Effects of Electronic Performance Monitoring'.
  43. Nebeker and Tatum, 'The Effects of Computer Monitoring'.
  44. Westin, 'Two Key Factors'.
  45. Aiello and Kolb, 'Electronic Performance Monitoring and Social Context'.
  46. Marx, 'The Case of the Omniscient Organization'.
  47. Hales et al., 'Musculoskeletal Disorders'.
  48. Strickland, 'Surveillance and Trust'.
  49. Office of Technology Assessment, *The Electronic Supervisor*.
  50. Niehof and Moorman, 'Justice as a Mediator'.
  51. Brewer, 'The Effects of Monitoring'.
  52. Attewell, 'Big Brother and the Sweatshop'.
  53. Sewell, 'The Discipline of Teams'.
  54. Zirkle and Staples, 'Negotiating Workplace Surveillance'; Ball and Wilson, 'Power, Control'; Sewell, 'The Discipline of Teams'.
  55. Sewell and Barker, 'Coercion versus Care'.
  56. Zirkle and Staples, 'Negotiating Workplace Surveillance'.
  57. Ball and Wilson, 'Power, Control and Computer-based Performance Monitoring'.
  58. Sewell and Barker, 'Coercion versus Care'.
  59. Ibid.
  60. Bain and Taylor, 'Working in the Call Centre'; Ezzamel, Willmott, and Worthington, 'Accounting and Management-Labour Relations'.
  61. Smith, Cohen, and Stammerjohn, 'An Investigation of Health Complaints'.
  62. Kulik and Ambrose, 'Category and Feature-based Processes'.
  63. Electronic Privacy Information Center, 'Privacy and Human Rights 2003'.
  64. See Ball, 'Situating Workplace Surveillance'.
  65. Nine to Five, *Computer Monitoring*.
  66. Ball, 'Organization, Surveillance and the Body'; Ball, 'Exposure'.
  67. Thompson, 'Fantasy Island'.
  68. Clegg, 'Power Relations'.
  69. Ball, 'Elements of Surveillance'.
  70. Deleuze, *Negotiations*, 175.
  71. McGrath, *Loving Big Brother*; Koskela, 'Webcams'; Ball, 'Exposure'.

72. Tversky and Kahneman, 'Judgement under Uncertainty'.
73. See Mohamed, Orife, and Wibowo, 'The Legality of Key Word Search'.
74. Sharf, 'As If G-loaded Adverse Impact isn't Bad Enough'.
75. See Smethurst, 'The Allure of Online'; and Czerny, 'Log On Turn Off for Women'.

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