



Essay

## Surveillance in the Workplace: Past, Present, and Future

Kirstie Ball

University of St. Andrews, UK  
[kirstie.Ball@st-andrews.ac.uk](mailto:kirstie.Ball@st-andrews.ac.uk)

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### Abstract

As part of *Surveillance & Society's* twentieth anniversary issue, this short article explores the recent rise in interest in the phenomenon of workplace surveillance. It briefly reviews the latest findings and future research priorities. Recent developments in workplace datafication have foregrounded workplace surveillance as a more vital organizing force. A range of interdisciplinary research now addresses workplace surveillance in action, attesting to its observable effects, as it shapes how organizing and new forms of work emerge. Enhanced control over employee performance as well as behaviours, emotions, movements, and reputation is now possible. Surveillant means can also co-create new organizational forms and configure boundaries between work and private life. Alongside, trade unions and regulators have been explicitly campaigning to limit its effects and to promote ethical practice. Many opportunities for future research, regulation, and collective action now present themselves in the face of the increasing intensity of workplace surveillance.

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### Introduction

Surveillance is described in the *Routledge Handbook of Surveillance Studies* (2012) as an “organizing principle.” Its emergence is bound together with that of modern bureaucracies. Histories of early large-scale organisations emphasise how the development of these information systems gave businesses the ability to police their internal structures and their employees to gain competitive advantage. Clocking in, counting, and weighing output and payment by piece-rate are all older forms of workplace surveillance (Ball 2010).

With this history in mind, this short article explores the recent rise in interest in the phenomenon of workplace surveillance, the latest findings, and future research priorities. It observes that surveillant processes increasingly facilitate how the employment relationship is accomplished (Hafermalz 2020). Workplace surveillance now explicitly co-configures employment practices and their boundaries in real time and—advantageously for surveillance scholars—is far more easily observed. We have not only seen a rise in studies of the phenomenon but also an awareness of its effects by non-academic partners. Trade unions and regulators are beginning to evaluate more formally the legality and fairness of surveillance in the workplace. This richer empirical picture alongside a broader discussion about employment ethics in datafied times offers many opportunities for future research, regulation, and collective action.

### Earlier Studies of Workplace Surveillance: A Personal View

Before I launch into these arguments, there are a few personal views I would like to share. It is heartening to notice that there are many possibilities opening up for workplace surveillance scholarship. For the last forty years, scholarship that addresses workplace surveillance has fallen between the disciplinary stools of

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organizational psychology, work sociology, organization studies, and—for at least half of that time—surveillance studies. As an example, I recall what I now regard as one of my finest achievements. In 2011, Steve Margulis and I published the article “Monitoring and Surveillance in Call Centres,” an interdisciplinary synthesis of psychological and sociological treatments of surveillance in the workplace. It was unequivocally rejected from *Surveillance & Society*. All three reviewers said it made no contribution to the field whatsoever. We were discussing the intersection of surveillance with different organizational phenomena to chart a research agenda for studies of workplace surveillance. After this rejection, it was accepted immediately without corrections at *New Technology, Work and Employment*. Being told by three surveillance studies reviewers that my work made no contribution in my specialist subject within a journal that I co-founded was probably the lowest point in my career. In fact, it was such a low that it was almost a high.

On a more serious note, I would make a plea for anyone starting out in this area not to ignore these earlier studies. There are plenty of meta-analyses to use as a guide (for example, see Ravid et al. 2020). Those early studies document the psychological impact of workplace surveillance in fine detail. Over the years, I have stood up for this literature in all sorts of professional contexts. I have had funny looks, ridicule, and worse when I have told people to look to the business disciplines for material on the subjective experience of surveillance. That said, I have also lost count of the number of articles I have reviewed in the organization studies field that “reinvent the wheel,” ignoring this early work, and attempt to shoehorn the idea of surveillance into existing debates about control.

Happily, we seem to have moved on from this state of affairs. Workplace surveillance has established itself as an object of analysis with appeal across the social sciences. In the last ten years, publication rates on the topic have been more intense than in the preceding thirty. Since 2010, 167 journal articles that directly address workplace surveillance or employee monitoring have been published in the social sciences compared with 229 in the preceding thirty years. Since 2015, 114 articles have been published that specifically address surveillance in the datafied workplace and address new working arrangements such as remote work and platform work (Ball 2021). What, then, are the conditions of emergence for this surge in interest?

### **Surveillance as Organizational (Infra)Structure: New Controversies**

In 2006, Graham Sewell and James Barker argued that workplace surveillance disentangles itself from organization when it becomes controversial. These moments of controversy, they argue, disambiguate surveillance from its organizational context and render it more knowable because its meaning, significance, and impact are up for negotiation. Implicit in this important paper is the idea that workplace surveillance is sometimes veiled in organizing processes. In reading and re-reading their work, I am reminded of Susan Leigh Star’s (1999) characterisation of infrastructure as physically and metaphorically veiled beneath life’s surface. I was also reminded of Steve Graham and Nigel Thrift’s (2007) paper discussing how the repair and maintenance of broken infrastructures unveils their presence. One question is whether the more controversial aspects of workplace surveillance were veiled in earlier work by more pressing labour concerns. Research on call centres, some of the most heavily surveilled workplaces, focused much less on surveillance than on low pay, low autonomy, and job degradation. For employment relations scholars, it sank it into the background as a part of organizational infrastructure. Characterising it as “monitoring,” organizational psychologists focused on personal consequences and efficiency, and spent less time examining the controversies, disputed meanings, and power. Could there, however, be new controversies that foreground surveillance as a more vital, active organizational force? Controversies that once again open up research opportunities across the board?

Workplace datafication has given rise to two such controversies. The first is that surveillant means more readily organise employee effort, engendering employees’ heightened visibility in data. Second, surveillant means are also more explicitly redrawing the spatio-temporal boundaries of where work begins and ends. Schafheitle et al. (2020: 456–457) tell us that workplace datafication relies upon:

ubiquitous and low-cost data collection technologies, such as smart ID badges, wearable GPS devices, or bio–radio frequency ID (bio-RFID) chips, which all allow for increased employee tracking and the translation of analog data into a digitized form. In addition, contextual and unstructured data are collected by sensors in “smart things.”... [D]atafication is [also] driven by data interpretation technologies, which are based on algorithmic decision-making, [Machine Learning] ML, or [Artificial Intelligence] AI, to identify patterns, trends, and relationships in data. These technologies allow a more fine-grained description of digitized social action and, in some cases, a prediction, or even a prescription, of employee behavior.

The first controversy—heightened employee visibility in data—is a combination of datafied people management technologies and management cultures. The measurement, analysis, and modelling of a wider range of individual worker characteristics is emphasised, linking them analytically to enhanced future efficiency (Hafermalz 2020; Schafheitle et al. 2020). Indeed, over the last twenty years, workplace surveillance practices have developed in such a way that there are now four wide-ranging employee surveillance targets: thoughts, feelings, and behaviours; location; task; and reputation (Ravid et al. 2020; Ball 2021). Ravid et al. (2020: 1023) note:

employers who use EPM [Electronic Performance Monitoring] can track individual employees continuously, randomly, or intermittently; discreetly or intrusively; and with or without warning or consent.... As a result, EPM captures behavior in great detail, generating rich, permanent records that managers can quickly access and that may or may not relate directly to performance.... EPM can also target internal states and private behaviors. For example, e-mail monitoring allows organizations to track employee thoughts, feelings, and attitudes that are expressed in electronic exchanges but not outwardly. Social media monitoring allows organizations to track the social networks and relationships that employees build inside and outside of the workplace. Recent EPM technologies allow for the tracking of employees’ physiological states, providing organizations with biometric information, such as heart rates and body heat emissions.

Labelling heightened visibility as a *newly controversial* control paradigm is one of the ways in which workplace surveillance has disentangled from the organizational structures and systems with which it has been coterminous since the 1840s (Leonardi and Treem 2020). With organizations pursuing heightened employee visibility through datafied surveillant means, employees need to display the appropriate performance and behaviours that are captured in data, so that they are evaluated, acknowledged, and recognised for their efforts. Within such control structures, compliance stems from a fear of not being seen and resistance from the need to limit one’s exposure (Hafermalz 2020). Hafermalz (2020: 15) focuses on “what ‘counts’ as worthy of attention, as well as how visibility and privacy are managed... [as] central concerns.” Employees engage in multiple visibility practices: making themselves seen in order to be ontologically recognised (see also Sewell and Taskin 2015), as well as to expose their performance and limit the aspects of their person that are brought into the gaze. Resistant practices then take place in settings invisible to the organisation (Schoneboom 2011; see also Ball 2009; DiDomenico and Ball 2011; Wright, Heynen, and van der Meulen 2015).

The second controversy concerns how surveillance is reconstructing the boundaries around work itself. How these boundaries are shaped form the points at which employer and employee interests conflict with each other and are thus flashpoints for controversy (McDonald and Thompson 2016; Thompson, McDonald and O’Connor 2020). New organisational forms—such as labour platforms and remote working—have become widespread. In these contexts, physical organisational boundaries are broken down and reconnected via Information Technology (Anand and Daft 2007). The use of data flows as a way to organize labour in the platforms connects workplace surveillance with one of the most profound political-economic shifts of our times.

Three new controversies have arisen for both conventional and platform employees that concern profiling, employee voice, and working time. Through the use of applicant profiling, for example, information is used to facilitate employee recruitment and make judgements about how employees are likely to perform once in post. From the employees' point of view, this threatens aspects of their private identity that they claim should remain beyond employer scrutiny. For platform workers, analysis of their working patterns and performance determines the work and remuneration they will be offered in future. High profile legal campaigns to secure employee status for platform workers indicate the precarities inherent in these profiling practices. The exercise of employee voice is also impacted. Posting denunciatory accounts about employers online, such as those discussed by Johnston et al. (2019), is thought of by employees as a form of voice and as a means of expressing dissatisfaction externally. The ability to do this autonomously in non-work time and on non-work websites without being surveilled by employers is a crucial freedom. Nonetheless, studies of platform workers show how closely they manage what they do and do not post online, and on platforms, should their accounts be de-activated. The governance and use of working time, via social media and web use surveillance, is a final controversy. The extent to which all types of employees are expected to be "always on" outside of working hours, surveilled within their homes, is a recent and very pervasive debate that has sparked regulatory consideration.

### **Workplace Surveillance as a Vital Organizing Force?**

These controversies suggest that there is an intensification in the use of surveillant means to enact the employment relationship. Following its historical, veiled infrastructural presence, evidence shows that surveillant means are more explicitly co-constructing the minutiae of work itself—effort, control, performance, and reward—as well as where the boundaries are. A rich range of observations about surveillance has now been established in the business and management disciplines, sociology, psychology, and geography. For example, we know that individuals encounter surveillance at different subjective registers: Their personality traits; their a priori attitudes; their emotional reactions, and their personal and social identities help to shape their responses. Feelings of outrage, privacy invasiveness, and exposure arise when excessive or purposeless surveillance is deployed. Responses may also be ambiguous depending on how monitoring serves the interests of management, workers, and collective bodies over time. Any resistant responses start with the minutiae of counterproductive behaviours during the task (such as sabotage or workarounds). Then they move through to diminished commitment towards colleagues, supervisors and, the organisation; to collective actions that challenge or denounce surveillance; and finally, to quitting altogether. We also know that surveillance has the potential to impact the quality of workplace relationships: Managing and supervising using surveillance is something that needs to be done with judgement, care, and skill for three reasons. First, so that not only downward but also upward organisational visibility is managed. Second, so that equality of all kinds is respected and, finally, that jobs are designed to ensure that the degree of surveillance is more tolerable. Extensions in surveillance practice signal that justice and fairness issues need to be explicitly considered. A common point of agreement in existing research is that the perception of surveillance as excessive is damaging on these fronts. Involvement with monitoring design, the ability to control it, and the ascription of wider employee voice in monitoring process and policy are seen as positive steps across the literature. Finally, we know that current surveillance practices that focus on the body and behaviours, and those without a clearly defined purpose, are more likely to be considered intrusive and excessive, as are those that extend into an employee's non-work time (Ball 2021).

Debates taking place beyond academia, in the labour movement and in regulatory circles, are also telling us that the power relations are shifting. The trade union movement in the UK, both at the national level with bodies such as the TUC and in specific trade unions such as the Communications Workers Union, is campaigning to raise awareness and change the law around workplace surveillance. From a regulatory point of view, techniques such as automatic facial recognition, communications scanning and analysis, location tracking, and the recording of remote workers' keystrokes, through webcams, screen activity, or voice recording are currently considered excessive in the EU, but are taking place all over the world. Not only is there an increase in the amount of information available about employees but there is also an increase in

the capacity to process that information and for automated decision-making about people as they work. Discrimination according to personal characteristics such as religion, gender, or sexual orientation is possible through network analysis. The discovery of a link to efficiency using people analytics may be interpreted as necessary and proportionate by a business organisation, without updating employees. Training data may be biased and minorities may be underrepresented as fewer data are generated about those groups. The decreasing cost of monitoring technology and new methods may thus “give rise to unjustified or abusive interference in workers’ fundamental rights and freedoms” (Todolí-Signes 2019: 469).

Supra-national bodies such as the European Union are already considering how to reform labour law in the face of algorithmic management, and it seems that it is currently not permissible to make automated decisions about employment—such as promotion, reward, or termination—without human intervention. Further, convincing arguments about the deployment of a “Right to Explanation” under the GDPR Articles 22(3), 13(2)(f), and 14(2)(g) of algorithmically-driven decisions in relation to employment have been made (European Parliament and Council of the European Union 2016). The EU Parliament also voted in favour of a “right to disconnect”—an employee’s right to disengage from work communication outside of working hours—in early 2021. To date, only France has enshrined this right in law.

### What’s Next?

With regulators and trade unions seeking to protect workers from the worst surveillant excesses arising from workplace datafication, what should happen next? Acknowledging that workplace surveillance has infrastructural elements indicates that it will always be present in organizing processes. Yet, if Sewell and Barker (2006) are correct, as a continuing controversy, it is always up for renegotiation. Observing its influence as a more vital structuring force via recent controversies allows us to negotiate the manner of its execution. Now is the time to think in a more principled way about how to challenge workplace surveillance. Visibility, Engagement with Technology, and Non-Discrimination—the Principles of Data Justice (Taylor 2017)—are the anvil against which current workplace surveillance practices could be re-worked. Respectively, they concern the equitable representation of individuals and groups within data; how individuals and groups are informed, understand, and can exercise control over data processing and take advantage of it for themselves; and the governance and challenge of bias. Organizational justice principles concerning distributive justice (equality in outcome of organizing processes), procedural justice (fairness of the process itself), and informational and interactional justice (how fairly people are treated as information recipients and whether they are treated with dignity as individuals) can be combined with the data justice principles to consider a wider range of issues (Colquitt 2001).

Examining these principles together can help define questions for practice, collective action, and research. Combining the data justice principle of visibility with distributive justice, for example, highlights that fair outcomes of surveillance processes for employees rest on necessary and proportionate data collection, equality of representation in databases, and equality in data processing. As such, using these combined principles, we may enquire as to the extent to which:

- workplace surveillance disproportionately targets certain groups or individuals with punitive or intensive surveillance without a legitimate purpose.
- there is equality in the manner of data processing for all employee groups.
- the outcome of surveillance—in the form of reward, development, and career opportunities—is appropriate given a person’s effort, contribution, and performance.
- the routine use of surveillance for purposes that extend beyond task performance (i.e., for criminal investigation or for the protection of commercial interests) can and should be limited. This includes the surveillance of reputations and profiles, location and movement, and thoughts, feelings, and physiology.
- employees can opt out of and opt into more invasive forms of surveillance if they occur routinely, without shame or social pressure.

- the legality can be established of any behavioural, body, emotion, location, movement, reputation, and profile as monitoring targets if you do have to do it.
- it is ever necessary and proportionate to target individuals in people analytics applications as compared to group or departmental based targeting. Anonymise employee data in analytics applications.
- technical and practical ways can be developed so that employees can gain autonomy over data collection and sharing.

Combining the data justice principle of engagement with technology with interpersonal and interactional justice allows us to highlight the importance of appropriate and respectful communication and employee empowerment in the face of workplace surveillance. In particular, we may enquire as to the extent to which:

- those subject to workplace surveillance are aware who has access to technology and data, who can control data collection, how data are secured, and who can then use the data.
- employees are trained in monitoring policy and empowered to exercise their rights under it at all times.
- employees are trained in the analysis of and have access to the use of their own data.
- employees are consulted should the purpose of surveillance change, so that function creep and perceptions of excessive monitoring are avoided.
- voluntary reporting may be used instead of continuous surveillance.
- workplace surveillance can be co-designed.
- it is necessary and proportionate to monitor staff over time, space, or territory that is outside working hours, online environments, or organizational premises.
- employee requests about monitored data are responded to promptly and respectfully by managers.
- employees may control data sharing and be adequately informed about what happens to their data so they can make a proper choice.

Finally, combining the data justice principle of non-discrimination with procedural justice highlights the importance of transparency and openness in challenging and preventing bias. We may enquire as to the extent to which:

- there are organizational mechanisms through which employee concerns about monitoring are expressed and heard. For example:
  - a representative sample of employees to assess the necessity and proportionality of the monitoring, as well as the logic and accessibility of the relevant policy (in some countries, prior consent of a Worker's Council is required).
  - A multi-stakeholder joint data protection committee that continually reviews monitoring practice.
- employees have a mechanism to challenge and/or appeal a decision that uses monitored data.
- biases—human and algorithmic—are not introduced into the interpretation of monitored data.
- rules about how monitoring data are interpreted and applied consistently.

## Conclusion

This short article has argued that recent developments in workplace datafication have foregrounded the phenomenon of surveillance in organizations as a more vital and structuring force on top of its infrastructural characteristics. It more explicitly co-creates control over employees' performance efforts as well as the type of behaviours, emotions, and movements that are sought. It also, more explicitly, co-creates new organizational forms and boundaries between work and private life.

A range of interdisciplinary research now addresses workplace surveillance in action, attesting to its observable effects as it shapes *how* organizing and new forms of work emerge. Concomitantly, trade unions and regulators have been explicitly campaigning to limit its effects and promote ethical practice. To inform our collective endeavours, I have identified a more comprehensive range of questions as a springboard for future research into workplace surveillance, premised on sets of ethical principles. Colleagues: over to you.

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