

Article



Media, Culture & Society
1–19
© The Author(s) 2018
Reprints and permissions:
sagepub.co.uk/journalsPermissions.nav
DOI: 10.1177/0163443718781985

journals.sagepub.com/home/mcs



The surveillant consumer

Luke Stark

Dartmouth College, USA

Karen Levy
Cornell University, USA

Abstract

We argue that modern technical and social infrastructures of surveillance have brought a novel subject position to prominence: the *surveillant consumer*. Surveillance has become a normalized mode of interpersonal relation that urges the person as consumer to manage others around her using surveillant products and services. We explore two configurations of this model: the *consumer as observer*, effectuated through products for use in the supervision of intimate relations as a component of a normalized duty of care; and the *consumer as manager*, effectuated through capacities for the customer to manage the labor of workers providing services to her. These models frequently intersect and hybridize as market logics overlap with intimate spheres: the surveillant consumer thus acts as an emotional manager of the experience of everyday surveillance. In turn, this managerial role reifies the equation of financial wealth with moral weight in a hierarchy of oversight, giving the wealthiest the most control and least accountability.

Keywords

care, consumer culture, digital media, neoliberalism, privacy, surveillance, work

Introduction

David Lyon (2007) defines surveillance as 'the focused, systematic and routine attention to personal details for purposes of influence, management, protection or direction' (p. 14). Digital technologies enabling such surveillance now proliferate, and many scholars have examined the ways in which these mediating devices enable longitudinal, granular, and personalized oversight by institutions over individuals in a variety of social

Corresponding author:

Luke Stark, Dartmouth College, Hanover, NH 03755, USA.

Email: luke.stark@dartmouth.edu

roles: as consumers, workers, and citizens (Andrejevic, 2013; Gandy, 1996; Zuboff, 2015). In this article, we highlight the emergence and development of a concomitant phenomenon: the discursive positioning of individuals not only as *surveilled* persons within digitally mediated systems of consumption—but also, simultaneously, as *surveillors* themselves.

Surveillance has become a normalized mode of interpersonal relation mediated by digital systems, as the technical affordances of such systems make such relations more and more 'focused, systematic and routine'. The range of technologies and practices from which the surveillant consumer as a subject position emerges, and through which it is normalized, are simultaneously alarming and banal (even 'creepy' in common parlance (Polonetsky and Tene, 2015)): the familiar experience of smart phone applications and digitally mediated care environments, online self-service and service sector customer feedback, consumer-grade surveillance products like Amazon's suite of home cameras and voice assistants, nanny-cams and baby monitors, and digital systems intended to enhance living for the elderly. In each of these cases, the purveyors of these products encourage would-be purchasers to act, and understand themselves, as surveillors, responsible for both the management and the care of others.

We argue that the technical, social, and affective infrastructures of these consumer products deepen familiar inequalities of power, access, and knowledge. They do so by positioning the ideal subject of late capitalism midway within hierarchies of everyday surveillance: just as the subject is herself surveilled, she is also positioned as responsible for managing others classed as subordinate (such as children, service workers, the elderly, and members of other vulnerable groups). The products and services marketed to the surveillant consumer demand that she serve as a social and emotional arbiter for the experience of these subalterns. As Andrejevic (2006) notes with regard to these forms of what he terms 'lateral surveillance', digital technologies are highly amenable to such a hierarchy. 'In an era of distributed surveillance', Andrejevic observes, 'the amplification of panoptic monitoring relies on the internalized discipline not just of the watched, but also of the watchers' (p. 405). This sociotechnical apparatus entices with the promise that possession of financial and technical wherewithal can be transformed into moral, emotional, and material authority. Individuals as consumers are promised social and psychological validation through their use of these products, while as subordinate workers they often struggle to cope, adapt, and resist while maintaining a degree of individual autonomy (Ball et al., 2012). The fact that individuals can find themselves in both these subject positions during the course of the working day (sometimes even simultaneously) is a central characteristic of the ongoing proliferation of these products and systems, and the social practices they encourage.

The increasingly ubiquitous subject position of the surveillant consumer is a conservative and reactionary one. Despite being cast as both manager and subordinate by surveillant products and systems, some individuals are kept more subordinated than others, due to hierarchies of racism, misogyny, class, and citizenship both embedded in the design of these apparatuses and extant as lived social forces. At the top of the hierarchy, managers and designers of these digital applications both set the material and social conditions of the surveillant relationship through the design of their products, and then reap the marginal returns in terms of both financial profit and the collection of data

about those who use their systems. Yet the architects of this hierarchy risk neutering the elements of social relations most conducive to what Julie E. Cohen (2012) terms 'semantic discontinuity' – the intellectual, emotional, material, legal, and technical spaces in which human flourishing as both individual and collective practice can thrive, and in which democratic politics are sustained.

In this piece, we unpack the sociotechnical conditions through which consumers as surveillors are produced in digitally mediated consumer societies. Doing so serves two distinct goals: first, to show how surveillance, consumption, and hierarchies of power are increasingly mediated in everyday life; second, to articulate a taxonomy of increasingly common situations in which the consumer is enlisted in the role of surveillor. This article thus aims to complicate previous scholarly models of top-down or bottom-up binaries in relationships of surveillance (Blackman, 2008; Haggerty and Ericson, 2000). We are interested in exploring how gradations within these relations begin to sustain, normalize, and further reify particular hierarchies of power in everyday spaces like the home, the workplace, and shared public spaces (Andrejevic, 2006). We focus on a continuum of emerging products and practices out of which the subject position of the surveillant consumer is developing: consumers as observers and caretakers of intimate life, and as managers of everyday surveillance practices in the service of convenience and comfort.

Situating the surveillant consumer

The consumer is perhaps the most generic subject position possible in a neoliberal economy: the term suggests, as Sarah Igo notes, a 'thin', plastic form of subjectivity.² The shallowness of the category requires a concerted ideological backstop on the part of economic actors in both business and government to maintain its cultural power. 'Neither [managerial] professionals nor employees', as Marie-Anne Dujarier (2008) observes, the consumer is 'a source of uncertainty' who must be made productive and legible above and beyond her status as a mere paying customer (p. 10). Yet the malleability of the consumer as a subject position equips it with tremendous versatility to veneer onto other, 'thicker' aspects of human social expression. Alvin Toffler's (1980) neologism of 'prosumer', a subject position in whom the functions of economic production and consumption are united, is symptomatic of this categorical flexibility. While Toffler claims increased 'prosumption' in late capitalism heralds a return to a pre-industrial norm in which the artificial separation between producer and consumer is no longer materially necessary, we suggest that it remains valuable to understand the 'consumer' as a discursive construct doing material work precisely because of how it parasitizes other forms of subjectivity and draws them into capitalist life.

Ritzer and Jurgenson (2010) observe that 'the trend toward putting consumers to work' encompasses examples ranging from pumping one's own gas to using a bank ATM; however, they distinguish these material forms of labor from the immaterial labor that is the hallmark of the digital economy (Hardt, 1999). Ritzer and Jurgenson suggest that in the context of digital media, prosumptive immaterial labor is not as exploitative as previous forms of capitalist production because of the affects involved: 'prosumers seem to enjoy, even love, what they are doing and are willing to devote long hours to it for no pay' (p. 22). Ritzer and Jurgenson also echo Zwick et al. (2008)

in arguing online 'co-creation' actually affords participants increased autonomy and enjoyment. Yet Zwick (2015) further observes the power of digital data collection and management to shape the choices of 'prosumers', warning that 'focusing our critical gaze on the effect (the prosumer) rather than the cause (capitalists' strategic efforts to disempower labor [...]) might misdirect our line of attack' (p. 495). We agree, and argue that within regimes of what Zuboff (2015) terms 'surveillance capitalism', the archetype of the surveillant consumer serves to harness the feelings of ordinary people in the course of their everyday lives. Through surveillant consumers, capitalist systems leverage everyday forms of care into a structured, surveilling mode of neoliberal socialization that extends across public and private realms of the domestic, the intergenerational, and the market. These mechanisms are strongly at work in many economies around the world; the rapidly developing Chinese Social Credit system is one well-known example (Chen and Cheung, 2017).

The interlacing of labor and leisure has always been intricate. Jacques Donzelot (1997) characterizes the development of 'the social' itself as a category grounded in the policing of human relations, particularly within and around the family. This creation of the social as 'a kind of hybridization of public and private' was predicated on the bureaucratic, institutional, and material differentiation enabled by the technologies of industrial modernity to create and reify hierarchies of social, economic, and political power (p. xiii). Though indebted to Foucault's (1995) analysis of Jeremy Bentham's Panopticon (well known and oft-discussed in surveillance studies), Donzelot's analysis of bureaucratic and techno-medical interventions within the family in late-19th-century France exposes the invention 'of an entire social economy', distinct from economics per se, that 'lays new foundation for marking the distinction between the rich and the poor' (p. x). These sociotechnical mechanisms give foundation to the contemporary links among surveillance, care, and capital.

In the context of digital mediation, data can become intimate, interpersonal, intrafamilial, domestic, or all-too-public depending on their context of use, transmission, and flow (Levy, 2013; Nissenbaum, 2010; Stark, 2016; Stark, 2018). As our social and emotional relationships become more commonly mediated by digital technologies and platforms, the management of data has increasingly become a form of relational work—and relational work is more and more a matter of data management (Levy, 2013: 74). Dujarier (2014) observes that 'organizational work' is one of the chief forms of labor that consumers are asked to perform: her interlocutors identified the work of choosing service providers or making 'virtuous' consumer decisions, work that is 'not directly productive but aims to produce a practical response, one which is also subjectively and socially acceptable' (p. 11). This insight extends to digitally mediated forms of labor. In social interactions, the 'relational' qualities of data loom large precisely because they give a metric, and thus quasi-objective gloss to relationships that have generally been structured around non-numeric, subjective systems of evaluation and exchange, reorganizing such relationships around the techniques and technologies involved (Gregg, 2015). To generate or transact data in intimate relation to one another is increasingly a normal part of the organization of family life. Data, in other words, change both the ways we manage and perceive our relationships with others, and the substance and trajectories of those relationships.

Workplace managers have used monitoring and surveillance technologies since the rise of the modern industrial firm to increase worker performance and productivity, curtail labor rights and organization, and expand the capacities of their business (Ball, 2010; Yates, 1993; Zureik, 2003); similar management and monitoring techniques were also taught to housewives as staples of domestic economy (Gregg, 2018). In the contemporary neoliberal 'knowledge' economy, work space, public space, and private space blur: home is made more like work, work made more like the home, and public places more like both, in each case the advantages in time, effort, and profit accruing to companies, and not the worker as producer or citizen (Ajunwa et al., 2017; Gregg, 2015; Hochschild, 2003a). As the workplace becomes increasingly social through team building and other forms of worker incentivization, both the home and the public sphere are saturated by the constant contact of digital communications and 24 hour connectivity (Sewell, 2005). Indeed, an individual labors in the subject position of a consumer as well as in the subject position of a worker.

These material changes in the media through which we relate to one another have transformed the ethos of digitally mediated capitalism within the domestic and private spheres: as such, care and consumption are difficult to disentangle within these sociotechnical contexts. We argue that these shifts have restructured power relationships among consumers, corporations, and those who are configured within neoliberalism as subordinate, subaltern, and 'infantilized'—children, the elderly, and service workers (often women or minorities) (Zelizer, 2007).³ The surveillant consumer's role in economies mediated by digital technologies is thus a change not in the underlying, asymmetric relations of power already present in domestic life, but in the scope of those power relations and their ability to extend—and bind—across time and space.

Configurations of the surveillant consumer

We describe two ideal-typical conditions under which the subject position of the surveil-lant consumer has emerged in contemporary digitally mediated economies. The first, the *consumer-as-observer*, is enabled through the market for surveillance products and systems to supervise intimate relations (children and, increasingly, the elderly) as components of a normalized, familial duty of care; the second, the *consumer-as-manager*, is effectuated through the rise of digitally mediated surveillance capacities in both the ondemand or gig economy and in traditional service sector arenas such as food service. This taxonomy is, of course, not exhaustive; in practice, these models often layer in hybrid forms, notably present in the case of domestic laborers—nannies, au pairs, babysitters, and other workers paid to provide intimate care. The hybridization of these models is especially salient in light of the contemporary tendency to overlay market logics onto intimate life and to 'outsource' personal and family care more broadly (Hochschild, 2003a, 2012).

Consumer-grade surveillance products and the consumer-as-observer

The marketing discourse supporting the *consumer-as-observer* both appeals to and frames consumption in relation to the provision of care. The consumer's goal is

represented as a practical omniscience: it is both duty and desire to provide for the safety, security, and well-being of intimate relations. The consumption of monitoring technologies should therefore be paired with their consistent, routinized use. In this paradigm, surveillance is constructed as being normatively essential to duties of care across the lifecycle. Watching and monitoring are construed not merely as the rights of a responsible parent, dutiful romantic partner, or loving child—but as obligations inherent in such roles.

This marketing position – in which consumers need new technologies to watch over their families—is not new, but the capacities and ubiquity of 'smart' sensors associated rhetorically with the Internet of Things (IoT), and of portable video recording devices, have changed the scope of these appeals (Moore and Robinson, 2015; Nafus and Sherman, 2014; Swan, 2012). While this marketing discourse often seeks out a particular demographic segment—the largely affluent, educated, and white Silicon Valley technology culture out of which many of these technologies stem—these technologies have found a wide audience deploying them for diverse ends. How these technologies are being used across a range of homes and families in different socioeconomic and racial contexts, including those with several generations of caregivers performing unpaid intimate labor, deserves further study. For now, the discourse surrounding these products is at least clear: digitally mediated observation is a necessary component of modern household care.

Surveillance of intimates occurs across the life cycle but is most acutely visible in parental supervision of children (Levy, 2015).4 Parents have, of course, always borne responsibility for watching over their children—but the recent wave of new, digitally enabled consumer products has reshaped the ways these processes are accomplished and the social relations around them. From infanthood on, parenting increasingly involves processes of data collection, quantification, and monitoring (Abreu, 2014). For instance, the LENA (Learning Environment Analysis) system consists of a small device to put in a child's pocket; it records every sound the child hears and approximates the number and length of words spoken in his or her vicinity in order to assess linguistic inputs. Audio files are cataloged and can be listened to by parents, clinicians, or others with access to the system. The Sproutling baby ankle bracelet senses a baby's movements, heart rate, temperature, and ambient light and sound. DataParenting's Baby Milestones app, which bills itself as '[t]he easiest and most fun way to track—and predict—your baby's milestones and development', compares milestones entered by its community of users to crowd source a baby's developmental status.

A plethora of other monitoring devices and services, from 'smart diapers' that detect dehydration and urinary tract infections to a 'Fitbit for kids' that incentivizes active play with a virtual pet, are on the market or in the works—most notably Amazon's Echo and Look smart home system, enabled by the Alexa virtual assistant (Purington et al., 2017). Connected children's toys also comprise an increasingly large market (Mozilla Foundation, 2017). Infamously, the wifi-connected Hello Barbie generated negative press upon its reveal in 2015 for its capacity to 'listen' and 'talk' to children: Barbie asks children questions about their preferences and goals, and uses speech recognition and machine learning algorithms to have tailored conversations with them

"Many thanks to Dropcam for literally saving our dogs and house from what could have been a horrible fire had we not seen it happening live and been able to get back in time!"

Figure 1. Testimonial from dropcam.com website.

(Hu and Hu, 2015; Singer, 2015). In so doing, Barbie transmits audio files to parents (as well as, potentially, other third parties) for their own review. Despite public outcry, Barbie sales rose 8% in the last quarter of 2015 for Mattel, and related toys have proliferated: more recently, a similar doll was recalled by the German Federal Network agency and banned from sale in Germany (Thomas, 2017).

A number of consumer-grade, web-enabled surveillance cameras are now actively marketed to parents. Among the best known are Amazon's Look, the Google Clips camera (Velazco, 2017), and the Dropcam (produced by Nest, itself owned by Google). Dropcam, along with its proprietary cloud storage service, advertises itself as a solution for home security, a baby monitor, and a way to check in on the well-being of pets (Figure 1). In one television advertisement, parents use Dropcam footage to bust their lying teenage son about the wild party he organized while they were out of town; in another, a lovably destructive toddler looks over his shoulder at his family's Dropcam and laments that 'the Dropcam is always watching, even when my folks are in the other room'.

As children grow older and attain greater independence over their communications and mobility, other tracking technologies become salient. Many of the largest automobile manufacturers (including Chevrolet, Ford, and Volkswagen) offer technologies that enable parents to track the behaviors of their teenage drivers (for instance, through a special microchipped car key) (Brandon, 2014; Russell, 2015; Stoklosa, 2015). These systems commonly include the capability to receive data in real time about a car's location and speed, and also to remotely enforce safety rules (e.g. limiting radio volume; requiring that seatbelts be buckled before the engine starts). In one recent survey, 84% of respondents aged 18–70 stated that they would favor parental controls to set speed limits, curfew times, and number of passengers in a vehicle (Stokes, 2015). Apps like MamaBear and TeenSafe, installed (wittingly or unwittingly) on teens' mobile phones, allow parents to track not only location but also social media activity, call logs, text messages (including those deleted by the teen), web search and browsing history, and contact lists; parents are encouraged to install these apps to protect their children from cyber bullying and other dangers (Figure 2).

At the other end of the lifecycle, parents are increasingly using digital technologies to observe a different set of intimates: their *own* parents. For elderly people, mobility, independence, and the ability to live safely in one's own home are often major challenges. Remote monitoring technologies (cameras, medical monitoring, wearable 'alert' systems, and the like) may facilitate independent living by the elderly for longer



Figure 2. Sproutling baby ankle bracelet; DataParenting's Baby Milestones app; Pixie Scientific's Smart Diaper; Chevrolet's Teen Driver interface; Mattel's Hello Barbie; website of baby monitoring sock Owlet (owletcare.com).

periods of time—but present challenges to privacy and autonomy, made more complicated by issues of diminished capacity for consent (e.g., in cases of dementia) (Kenner, 2002; Levy et al., 2018).

There is a lengthy history to the ideology that consumer purchasing is an essential component of domestic care and that monitoring is a key component of the work the domestic consumer—usually a woman—must do. Parents (in particular, mothers) have long been reminded by advertisers that their children are at risk—from external threats, poor nutrition, social exclusion, the mother's own failures as a parent (Coutant et al., 2011)—and that their surest route to protecting their children, and ameliorating their (newly provoked) anxiety about these dangers, is consumption (Theodorou and Spyrou, 2013). Surveillance technologies are a surefire route to calming such fears, leveraging parenting as a space of anxious care. As Fisk describes, parental surveillance tools

'reconfigur[e] ... adult and youth conceptions of ... practice in ways which establish "trusted adults" as final arbiters of risk and appropriateness, while casting suspicion on the everyday social practices of youth' (Wood and Fisk, 2014: 568).

Across these products and services, the dominant marketing rhetoric deployed by producers and retailers is *care*, a term tied directly to the structures of social differentiation suggested by Donzelot: the purchase and use of a monitoring system or service is an integral component of one's moral duties of care toward one's intimates in liberal capitalist society (Zelizer, 2010). As noted, this surveillance is not only a *right*, but a sociotechnical *duty*: not only is a parent entitled to intrude on his children's privacy in the name of care, but failure to do so might be construed as a failure to parent appropriately. In this discourse, we have moral, social, and economic responsibility to look out for the ones we love—from their own vulnerabilities and behaviors, as well as outside threats to safety and well-being. The purchase of a Dropcam or the use of Chevrolet's Teen Driver system can be understood (and is sold) as a means to this end. In a sense, this rhetoric aims to return 'Big Brother' to its literal small-b meaning; to surveil is to supervise, to protect, and to love.

Service-sector surveillance and the consumer-as-manager

In the service sector, the relationship between consumers and surveillance is defined less in the language of love and more in the language of 'Like'. Where intimate, observation-focused surveillance within the family is affectively powered by desires and emotions grounded in the broader social role of kinship relationships, the relationship between consumers and producers is especially 'thin' in terms of social and emotional ties. Here marketing discourse has resorted to constructing the *consumeras-manager*, tasked with overseeing the labor of workers rendering services to her. To power these consumer relationships, companies have developed an emphasis on consumer work and self-management as a positive emotional experience: as a relationship between the consumer and the brand that enables feelings of control over all aspects of the service experience, and yet is grounded in social norms of civic virtue and social politeness. This business insight has its roots in the notion of 'customer feedback'.

The concept of 'customer feedback'—suggestions for improvement written on cards or solicited via paper surveys—predates the Internet, but the idea that customers could and should provide public, instantly accessible reviews of products, businesses, and services has been made ubiquitous by digital media tools and platforms. Marketing and management professionals rapidly developed 'customer engagement' metrics to ensure businesses were not merely satisfying the customer's rational, and thus potentially changeable, needs (Bhalla, 2013). 'Customers', one author suggests, 'are becoming increasingly savvy and disloyal' (Bhalla, 2013: 147), a trend that requires customer engagement strategies for, among other mechanisms, permitting 'real-time analysis of positive and negative customer sentiments' (p. 150). Customer engagement seeks to draw that customer back again and again through appeals to non-rational factors such as sentiments, feelings, desires, memories, and attitudes about a brand.

The subject position of consumer-as-manager is encouraged by marketing rhetoric which repositions the old adage 'the customer is always right'—a proposition that inheres in the idea of customer feedback—for a digitally connected age, in which deepening and habituating the customer's engagement is the main marketing goal. These marketing discourses center on two key themes: consumer empowerment, a rhetoric that purports to give a consumer more immediate control over her commercial transactions; and the recalibration of knowledge asymmetries among the consumer, the worker, and the company. These two tropes are often packaged together in marketing language under the term *convenience*. Implicit in this notion of convenience is the idea of affective or emotional ease: the feeling of power produced by consumption gratifies the consumer's sense of autonomy. Yet in reality, the material benefits of customer engagement accrue to corporate management far more than to the consuming individual—and often come at the detriment of the workers who are the most direct part of the consumer's engagement with a product or service.

An exemplary case study in this form of consumer surveillance is the Domino's Pizza Tracker (see https://www.dominos.com.au/inside-dominos/technology/pizza-tracker), introduced by the eponymous Michigan-based pizza company in 2008. The Pizza Tracker purports to allow Domino's customers to see the steps being taken to make and deliver their order in real time via a digital interface. The company introduced the digital tracking system to replace its guarantee of a 'thirty minutes or free' delivery time; the tracking interface includes a five-stage status bar, information about the local franchise, and even the name of the employee preparing an order, and the ability for customers to rate and leave an 'encouraging' message for employees (like 'I don't know what I would do without you' or 'I love Domino's. You guys rock'). The company has developed a reputation in the service industry for its innovative use of digital technology to improve customer service: as one headline claimed, 'Domino's Becomes A Tech Company That Happens To Make Pizza' (Hu, 2014).

At first blush, the Domino's Pizza Tracker seems chiefly to empower consumers. It seems to diminish the information asymmetry inherent in waiting for a pizza delivery (when will my dinner arrive?) by rendering the preparation process more visible; Domino's seeks to reinforce this reading. 'The company emphasizes transparency', suggested NPR in a recent profile, 'especially in its metrics ... inside the store, a screen detailing stats like average amount spent per order, rank against other stores in load time, and weekly new customer count are displayed for all employees to see' (Hu, 2014).

Yet the relational work of managerial consumer surveillance built into the Pizza Tracker complicates this simple and salutary picture. The system's interface positions the customer in the role of manager, overseeing the production process. The inclusions of the names of in-store and delivery workers in the information available through the tracker, alongside its customer feedback elements (star ratings and messaging capability), serve as a way for the diner to connect *emotionally* with her managerial role. For of course, the customer has no active managerial power over the workers at her local Domino's outlet: it is the company that controls both the interactive systems through which the customer orders, and the metrics by which its employees are judged for their timely service. The customer is an observer who is being managed, and surveilled, in

her turn, by the interface: through the collection of her pizza pie preferences and ordering habits, and through the feedback she provides regarding her perceived quality of service. Just like a corporate middle manager, the customer in these interactive service systems is pushed into an implicit trade: the feeling of status in return for the monitoring of others.

In fact, the type of management the Domino's Pizza Tracker chiefly encourages is emotive: oversight by the customer over workers, and by both workers and customers over themselves. As Hochschild observes, the performance of emotional management by both customers and workers reifies those feelings as authentic ones: 'surface and deep acting in a commercial setting', Hochschild (2003b) writes, 'make one's face and one's feelings take on the properties of a resource' (p. 55). In the context of a digital interface like the Domino's Pizza Tracker, the period of interaction becomes the commercial setting, and the affordances of the tracker structure the emotional experiences of both workers and consumers. For the former, successfully completing an order depends on social and emotional relationships with her fellow workers; the consumer in her turn is prompted not just to rate the experience but to choose from a variety of pre-selected messages of encouragement to the workers from a drop-down menu. Under the flag of the 'convenience' of knowing when her order will arrive, the customer becomes the manager of her own Domino's experience (extending to calling the store if a pizza is late, or interrogating the delivery person if the Pizza Tracker does not seem to be accurate). But the metrics and defaults designed into the tracker are for the most part outside of the control of both customer and worker: their emotional labor takes pressure off the company to, for instance, increase the number of employees at each store, and by extension permits higher profits. Incorporating these forms of emotional management both makes consumers feel responsible as managers and deepens the surveillance to which low-wage workers are subject.

In 2015, the Australian division of Domino's announced they would add GPS tracking to their delivery vehicles. Domino's claimed that its GPS pizza tracking innovation was inspired by rideshare app Uber's real-time car tracking system, an unsurprising connection given that the so-called 'gig' or 'on-demand' economy is a burgeoning terrain for the forms of consumer surveillance we have identified above (Kelly, 2015). Businesses such as TaskRabbit, Airbnb, and Uber, and even micro-labor platforms such as Mechanical Turk, are built around rating systems that entail customer engagement as a management tool of both the consuming self and of the workers who provide the service (Calo and Rosenblat, 2017; Rosenblat and Stark, 2016). As the Domino's example suggests, managerial logics of surveillance are proliferating across the digitally mediated service sector, enlisting customers as both managers and cheerleaders for workers themselves pressured by systematic and metricized expectations also out of their control.

Hybridization: supervising the inside other

Consumers are enlisted as surveillors in many different configurations and contexts. The two models we have delineated here, the consumer-as-observer and consumer-as-manager, frequently overlap, recombine, and hybridize. While consumer surveillance

will entail some ratio of these modes, there are many contemporary socioeconomic situations in which the consumer is positioned strongly as *both* caring observer and convenience-conscious manager. These situations arise most readily in cases of remote supervision of domestic labor. The consumer, being neither omniscient in her awareness nor omnipotent in her ability to manage a situation, must strive instead to be omni*present* in the life of the 'inside other' via digital mediation. The subject position of the consumer as manager to service workers is often thin and aleatory: while encouraged to engage with feeling, most consumers do not build strong connections with their pizza delivery person (indeed, rideshare companies like Uber explicitly avoid giving their customers too much information about a driver before they are selected). The consumer as caring observer, in contrast, is often layered onto much more fundamental human roles of parent or caregiver. It is when workers are both performing this kind of domestic labor *and* are being surveilled by consumers that the impacts of this hybrid subject position become clearest (Hochschild, 2003a).

The most well-known mechanisms through which domestic workers are surveilled are so-called 'nannycams', through which parents can record the actions of childcare workers such as nannies, babysitters, and au pairs: these cameras are often concealed in a variety of otherwise innocuous household devices, such as stuffed animals, mirrors, or clocks. These devices had a popular vogue in the late 1990s and early years of the new century, either denigrated as 'creepy' or celebrated as useful safeguards against untrustworthy outsiders to the home; yet films such as 2014's *Nannycam* suggest anxieties regarding the surveillance of 'auxiliary' caregivers are still a pressing popular concern, perhaps heightened by the new technologies available to keep tabs on these workers. Parents using nannycams are responding to a high-stakes, dual anxiety. It is their normative social mandate to provide care for their children—and digital surveillance provides a means, facilitating care that takes place at a distance and via a 'care agent'. At the same time, that agent's status as a service worker in the intimate sphere provides parents with an independent normative mandate for surveillance of their labor.

Domestic workers such as childcare providers are often women, young, and/or members of a minority group, compounding the potentials for inequality and abuse. This danger is perhaps exacerbated by what some scholars have termed 'New Momism'—the notion that parents, and mothers in particular, exist within a state of generalized anxiety about their parenting skills which leads them to critically judge each other and themselves (Henderson et al., 2010). When these hybrid modes of surveillance are paired with social media platforms and other modes of data-based surveillance, the results can be socially cloying. For instance, websites like nannysightings.com provide platforms through which parents or strangers can report on the behavior of childcare workers within their circle. In these situations, the power inherent in the dual role of the surveillant consumer is most reductive: parents, often well-to-do, function as overseers of both their employees and their children, conflating the experience of both in ways that perpetuate inequalities of emotional labor.

This equation of financial power with moral weight produces social effects which reinforce socioeconomic hierarchies of class, race, ethnicity, and gender (Duffy, 2011). These concerns are especially trenchant in the context of the racial and

gendered realities of service and care labor. Care workers (such as those in childcare, teaching, and health services provision) earn less than those in other professions, even after controlling for numerous factors, including education and employment experience—and women, who are disproportionately represented in these professions, suffer the greatest effects of such devaluation (England et al., 2002). Research suggests that the emergence of 'the care economy' in the United States, in fact, accounts for a significant amount of job polarization, including gendered and racial job growth disparities (Dwyer, 2013). The consumer-as-surveillor paradigm contributes to the entrenchment of dynamics of social and economic inequality both within interpersonal relations and in the guts of the digital systems enabling these combined forms of surveillance. The examples we have described illuminate the fact that regimes require not only material infrastructures for the normalization of surveillance, but also ideological, emotional, and rhetorical infrastructures. In the case of the consumer-as-surveillor, the individual is configured as the *emotional manager* of the experience of surveillance—keeping a mindful eye over the child and encouraging the service worker are both ways of providing affective incentives to subordinate parties, for the sake of control over them.

Conclusion: responsibilizing surveillance

Interpersonal surveillance of all kinds is intricately bound up with existing regimes of top-down state- and commerce-driven surveillance; it both supports and is supported by these more institutionalized forms (Levy, 2015). The model of the surveillant consumer serves to further entrench individuals within a paradigm of neoliberal and neocolonial duties of care. This dynamic is captured by the inartful term 'responsibilization'. Responsibilization is a set of socio-moral expectations 'fundamentally premised on the construction of moral agency as the necessary ontological condition for ensuring an entrepreneurial disposition' in the service of successful self-governance (Shamir, 2008). By equipping a purchaser of products and services as 'middle management', charged with overseeing the physical and emotional activities of her subordinates, the consumeras-surveillor paradigm effectively outsources managerial responsibility away from government and commercial enterprises and onto the individual, while ensuring that that individual is still culpable to the legal and social expectations of the neoliberal state (Aaron, 2015).

The creation of the surveillant consumer subject position depends heavily on the mobilization of emotional labor—especially fear and anxiety—as mechanisms for control. These negative feelings draw their potency from their association with extremely positive emotions: the pleasure and joy of intimacy and social time with loved ones. Some previous forms of surveillance rhetoric have incentivized compliance by encouraging the surveilled to fear the surveillor (e.g. a powerful state or an all-knowing corporation—the 'look out, because Big Brother is watching you' model). The surveillant consumer model adds a more insidious, generalized rhetoric to the mix: not only should misbehavers fear the watcher, but the rest of us should fear the misbehavers, abstract though they may be. And this negative anxiety is also paired with a positive anxiety: to provide the best possible care. Thus, the toddler may be

anxious because Dropcam allows local authorities (her parents) to observe and discipline her; but in addition, the parents purchased the Dropcam in order to protect their child from dangerous, unknown outside forces. The Domino's customer similarly aims to empower himself against the unknown, even such a trivial unknown as whether pepperoni has yet been applied to his pizza. *Thus, the consumer-as-surveillor model relies upon and encourages a neoliberal culture of generalized anxiety*, the antidote for which is prophylactic surveillance in service of one's duties of care (Plan C, 2014).

In this piece, we have detailed the mediated conditions under which consumers become construed as surveillors, and the forms of emotional labor they are asked to perform in the process. In doing so, we argued that surveillance, care, and hierarchies of power are powerful trends in contemporary consumption and that detailing a taxonomy of everyday contexts in which this surveillance takes place—the home, service work, and care settings—helps to complicate top-down or bottom-up binaries in social models of surveillance. Yet the outsourcing of surveillance as everyday worry to individuals does not diminish state power. Instead, responsibilization extends the state's capacity to govern at a distance via new mechanisms. As Garland emphasizes, responsibilization reorients marketing rhetoric around what parties are responsible for oversight by 'erod[ing] the notion of the state as the public's representative and primary protector' (Garland, 1996). Furthermore, just as governmental actors have 'piggybacked' on various forms of market surveillance toward their own aims (e.g. law enforcement purchase of commercial datasets (Bartley, 2014) or National Security Agency's (NSA) use of tracking cookies and locative data from private companies like Google and Apple (Soltani et al., 2013)), consumer-driven forms of surveillance provide technical and social scaffolding for institutional power; another route through which government and commercial actors can themselves monitor and exert power over individuals.5

In addition to justifying consumers as surveillors, the rhetoric of surveillance-ascare is *backward-compatible*: that is, government and commercial actors, operating in more traditional surveillant paradigms, have begun to publicly frame some of their *own* surveillant activities as care practices, designed to protect the interests of the monitored (Figure 3). Governments and companies frame their collection of locational and video-surveillance data about users and employees not as ominous *watching*, but as attentive *watching out for*, invoking safety and imploring non-misbehaving users to smile and take comfort in knowing that they are being cared for in this manner.

This interpenetration of consumer and government surveillance is rarely obvious to individuals in their capacities as consumers, workers, or citizens, but adds a heightened civic and ethical stake to our analysis. If even seemingly banal acts of mediated consumer surveillance are refracted toward the ends of the state, the notion that 'the personal is political' takes on an additional and urgent resonance. These emerging mechanisms of digitally mediated emotional management deserve further scrutiny, and political and public examination, for their role in the perpetuation and entrenchment of the surveillance society of late capitalism.



Each year, more than 23 million U.S. citizens work alone and in high-risk environments. Every day these "lone workers" suffer serious injury and death from workplace accidents, falls, assaults, and robberies. These incidents cost companies billions each year in lost productivity, lawsuits, insurance premium increases, and medical payments.

Figure 3. Images displaying backward-compatibility of care rhetoric in government, institutional, and commercial contexts. From top to bottom: New York Metropolitan Transit Authority advertisement (author photo); CCTV sign displayed at University of Washington (courtesy: Bryce Newell); Chipotle Burrito-Cam sign (author photo); Dunkin' Donuts reward program sign (courtesy: Alex Rosenblat); excerpts from website of commercial GPS tracking system provider OmniLink (omnilink.com).

Acknowledgements

We would like to thank members of the 2014 Privacy Research Group at New York University, the organizers of the 2015 Theorizing the Web conference, and participants of the 2015 Privacy Law Scholars Conference in Berkeley, CA - especially discussant Julie E Cohen - who contributed feedback on early drafts of this piece, along with several anonymous reviewers.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

- 1. This hierarchy of oversight, increasingly common in neoliberal societies engaged in what Randy Martin (2002) terms *financialization*, is typified by the wealthiest few gaining the most control social through the introduction of new technologies of risk management, surveillance, and information processing while being subject to the least accountability.
- Personal communication, Privacy Law Scholars Conference (PLSC), 5 June 5 2015, Berkeley, CA.
- 3. Compare the rise of the data paradigm in domestic life to the infiltration of market logics into the home; see Zelizer (2007).
- 4. Although we focus on parent–child surveillance products and care relations in this article, other domestic relationships exhibit similar trends. Surveillance of spouses and romantic partners has become much more prevalent, and includes such disparate activities as couple-oriented fertility tracking, quantification of sexual practices, and abusive e-stalking. Adult children caring (often remotely) for elderly parents also increasingly have digital monitoring tools at their disposal, ranging from connected pill dispensers to vital sign trackers to video monitors. See generally, Stout (2010).
- 5. Consider, for instance, pressure placed by police on the romantic partners and kin of young men with active warrants for their arrest; family members are compelled to provide law enforcement with information about the men's whereabouts under threat of legal action against themselves, including eviction or loss of child custody (Goffman, 2009: 350).

ORCID iD

Luke Stark https://orcid.org/0000-0002-2537-846X

References

- Aaron J (2015) D.C. parents who left children during wine tasting take plea deal. WTOP. Available at: http://wtop.com/dc/2015/03/d-c-parents-who-left-children-during-wine-tasting-take-pleadeal/ (accessed 19 May 2015).
- Abreu A (2014) Quantify everything: a dream of a feminist data future. *Model View Culture*. Available at: https://modelviewculture.com/pieces/quantify-everything-a-dream-of-a-feminist-data-future (accessed 19 May 2015).
- Ajunwa I, Crawford K and Schultz J (2017) Limitless worker surveillance. *California Law Review* 105: 735–776.
- Andrejevic M (2006) The discipline of watching: Detection, risk, and lateral surveillance. *Critical Studies in Media Communication* 23(5): 391–407.
- Andrejevic M (2013) *Infoglut: How Too Much Information Is Changing the Way We Think and Know.* New York: Routledge.
- Ball K (2010) Workplace surveillance: an overview. *Labor History* 51(1): 87–106. Available at: http://www.tandfonline.com/doi/full/10.1080/00236561003654776
- Ball K, Daniel EM and Stride C (2012) Dimensions of employee privacy: an empirical study. *Information Technology and People* 25(4): 376–394.
- Bartley L (2014) Hidden surveillance powered by repo industry. *ABC7*. Available at: http://abc7. com/news/repo-industry-collecting-data-on-you/379656/ (accessed 19 May 2015).
- Bhalla R (2013) The 12-point customer engagement model. *Journal of Brand Strategy* 2(2): 146–154.
- Blackman J (2008) Omniveillance, Google, privacy in public, and the right to your digital identity. Santa Clara Law Review 49: 313–392.

Brandon J (2014) You can drive, you just can't have any fun: Ford MyKey curbs teen drivers. *TechHive*. Available at: http://www.techhive.com/article/2084003/you-can-drive-you-just-can-t-have-any-fun-ford-mykey-curbs-teen-drivers.html (accessed 19 May 2015).

- Calo R and Rosenblat A (2017) The taking economy: Uber, information, and power. *Columbia Law Review* 117: 1623–1690.
- Chen Y and Cheung ASY (2017) The transparent self under big data profiling: privacy and Chinese Legislation on the social credit system. *The Journal of Comparative Law* 12(2): 356–378. Available at: http://dx.doi.org/10.2139/ssrn.2992537
- Cohen JE (2012) Configuring the Networked Self: Law, Code, and the Play of Everyday Practice. New Haven, CT: Yale University Press.
- Coutant A, la Ville de V-I, Gram M, et al. (2011) Motherhood, advertising, and anxiety: a cross-cultural perspective on Danonino commercials. Advertising & Society Review 12(2). DOI: 10.1353/asr.2011.0017.
- Donzelot J (1997) The Policing of Families. New York: Pantheon.
- Duffy M (2011) Making Care Count: A Century of Gender, Race, and Paid Care Work. New Brunswick, NJ: Rutgers University Press.
- Dujarier M-A (2008) Le travail du consommateur. Paris: Editions La Decouverte.
- Dujarier M-A (2014) The three sociological types of consumer work. *Journal of Consumer Culture* 16: 555–571.
- Dwyer RE (2013) The care economy? Gender, economic restructuring, and job polarization in the U.S. labor market. *American Sociological Review* 78(3): 390–416.
- England P, Budig M and Folbre N (2002) Wages of virtue: the relative pay of care work. *Social Problems* 49(4): 455–473.
- Foucault M (1995) Discipline and Punish: The Birth of the Prison. New York: Vintage Books.
- Gandy OH Jr (1996) Coming to terms with the panoptic sort. In: Lyon D and Zureik E (eds) *Computers, Surveillance, and Privacy*. Minneapolis, MN; London: University of Minnesota Press, pp. 133–155.
- Garland D (1996) The limits of the sovereign state: strategies of crime control in contemporary society. *The British Journal of Criminology* 36(4): 445–471.
- Goffman A (2009) On the run: wanted men in a Philadelphia Ghetto. *American Sociological Review* 74: 339–357.
- Gregg M (2015) Getting things done: productivity, self-management and the order of things. In: Hillis K, Paasonen S and Petit M (eds) *Networked Affect*. Cambridge, MA: MIT Press, pp. 187–202.
- Gregg M (2018) Counterproductive: Time Management in the Knowledge Economy. Durham, NC: Duke University Press.
- Haggerty KD and Ericson RV (2000) The surveillant assemblage. *British Journal of Sociology* 51(4): 605–622.
- Hardt M (1999) Affective labor. Boundary 226(2): 89-100.
- Henderson AC, Harmon SM and Houser J (2010) A new state of surveillance? Applying Michel Foucault to modern motherhood. *Surveillance & Society* 7(3–4): 231–247.
- Hochschild AR (2003a) *The Commercialization of Intimate Life*. Berkeley, CA; Los Angeles, CA; London: University of California Press.
- Hochschild AR (2003b) *The Managed Heart: Commercialization of Human Feeling*, 2nd edn. Berkeley, CA: University of California Press.
- Hochschild AR (2012) *The Outsourced Self: Intimate Life in Market Times*, 1st edn. New York: Metropolitan Books.

- Hu C and Hu C (2015) Mattel's new 'Hello Barbie' records kids' voices and sends the Intel back to corporate. *Quartz*. Available at: http://qz.com/362891/new-hello-barbie-records-kids-voicesand-sends-the-intel-back-to-mattel/ (accessed 19 May 2015).
- Hu E (2014) Domino's becomes a tech company that happens to make pizza. NPR All Tech Considered. Available at: http://www.npr.org/blogs/alltechconsidered/2014/11/04/359829824/dominos-becomes-a-tech-company-that-happens-to-make-pizza (accessed 25 February 2015).
- Kelly R (2015) Australia's Domino's plans Uber-style pizza delivery driver tracker. *The Wall Street Journal*. Available at: http://blogs.wsj.com/digits/2015/05/03/australias-dominos-plans-uber-inspired-pizza-delivery-driver-tracker (accessed 6 May 2015).
- Kenner AM (2002) Securing the elderly body: dementia, surveillance, and the politics of 'aging in place'. *Surveillance & Society* 5(3): 288–302.
- Levy KEC (2013) Relational big data. Stanford Law Review Online 66: 73-79.
- Levy KEC (2015) Intimate surveillance. *Idaho Law Review* 51: 679–693. Available at: https://www.uidaho.edu/~/media/UIdaho-Responsive/Files/law/law-review/articles/volume-51/51-3-levy-karen-ec.ashx
- Levy K, Kilgour L and Berridge C (2018) Regulating privacy in public/private space: The Case of Nursing Home Monitoring Laws. *Elder Law Journal* 26. Available at: https://www.ssrn.com/abstract=3157134.
- Martin R (2002) Financialization of Everyday Life. Philadelphia, PA: Temple University Press.
- Moore P and Robinson A (2015) The quantified self: what counts in the neoliberal workplace. *New Media & Society* 18: 2774–2792.
- Mozilla Foundation (2017) *Privacy Not Included: A Guide to Make Shopping for Connected Gifts Safer, Easier, and Way More Fun.* Available at: https://advocacy.mozilla.org/en-US/privacy-notincluded/ (accessed 10 June 2018).
- Nafus D and Sherman J (2014) This one does not go up to 11: the quantified self-movement as an alternative big data practice. *International Journal of Communication* 8: 1784–1794.
- Nissenbaum H (2010) Privacy in Context: Technology, Policy, and the Integrity of Social Life. Palo Alto, CA: Stanford Law Books.
- Plan C (2014) We are all very anxious. *We Are Plan C*. Available at: http://www.weareplanc.org/blog/we-are-all-very-anxious/ (accessed 7 June 2015).
- Polonetsky J and Tene O (2015) A theory of creepy: technology, *privacy, and shifting social norms. Yale Journal of Law and Technology*. Available at: http://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1098&context=yjolt
- Purington A, Taft JG, Sannon S, Bazarova NN and Taylor SH (2017) Alexa is my new BFF. Proceedings of the 2017 CHI Conference. New York: ACM Press, pp. 2853–2859.
- Ritzer G and Jurgenson N (2010) Production, consumption, prosumption: the nature of capitalism in the age of the digital 'prosumer'. *Journal of Consumer Culture* 10(1): 13–36.
- Rosenblat A and Stark L (2016) Algorithmic labor and information asymmetries: a case study of Uber's drivers. *International Journal of Communication* 10: 3758–3784.
- Russell K (2015) Volkswagen's Apple Watch app will notify you when your teen driver speeds. *TechCrunch*. Available at: http://techcrunch.com/2015/05/05/volkswagens-apple-watch-app-will-notify-you-when-your-teen-driver-speeds/ (accessed 19 May 2015).
- Sewell G (2005) Nice work? Rethinking managerial control in an era of knowledge work. *Organization* 12(5): 685–704.
- Shamir R (2008) The age of responsibilization: on market-embedded morality. *Economy and Society* 37(1): 1–19.
- Singer N (2015) A Wi-Fi Barbie doll with the soul of Siri. *The New York Times*. Available at: http://www.nytimes.com/2015/03/29/technology/a-wi-fi-barbie-doll-with-the-soul-of-siri. html (accessed 19 May 2015).

Soltani A, Peterson A and Gellman B (2013) NSA uses Google cookies to pinpoint targets for hacking. *The Washington Post*. Available at: http://www.washingtonpost.com/blogs/the-switch/wp/2013/12/10/nsa-uses-google-cookies-to-pinpoint-targets-for-hacking/ (accessed 19 May 2015).

- Stark L (2016) The emotional context of information privacy. *The Information Society* 32(1): 14–27. Available at: http://www.tandfonline.com/doi/full/10.1080/01972243.2015.1107167
- Stark L (2018) Algorithmic psychometrics and the scalable subject. *Social Studies of Science* 48(2): 204–231.
- Stokes S (2015) Teens probably won't like self-driving cars, but their parents will. *Carnegie Mellon Engineering*. Available at: http://engineering.cmu.edu/media/press/2015/05_06_parental control cars.html
- Stoklosa A (2015) 2016 Chevrolet Malibu to debut new spyware targeting teen drivers. *Car and Driver*. Available at: http://blog.caranddriver.com/2016-chevrolet-malibu-to-debut-new-spyware-targeting-teen-drivers/ (accessed 19 May 2015).
- Stout H (2010) Technologies help adult children monitor aging parents. *The New York Times*. Available at: http://www.nytimes.com/2010/07/29/garden/29parents.html?_r=0 (accessed 19 May 2015).
- Swan M (2012) Sensor mania! The internet of things, wearable computing, objective metrics, and the quantified self 2.0. *Journal of Sensor and Actuator Networks* 1(3): 217–253.
- Theodorou E and Spyrou S (2013) Motherhood in utero: consuming away anxiety. *Journal of Consumer Culture* 13(2): 79–96.
- Thomas A (2017) Germany issues kill order for a domestic spy Cayla the toy doll. *The Wall Street Journal*. Available at: www.wsj.com/articles/germany-issues-kill (accessed 15 April 2017).
- Toffler A (1980) The Third Wave. New York: William Morrow.
- Velazco C (2017) Google clips hands-on: not just a camera, but a photographer too. *Endgaget*. Available at: https://www.engadget.com/2017/10/04/google-clips-hands-on/ (accessed 10 October 2017).
- Wood DM and Fisk N (2014) '... when no one is hearing them swear'. Surveillance & Society 12(4): 566–580.
- Yates J (1993) Control through Communication. Baltimore, MD: The Johns Hopkins University Press.
- Zelizer V (2007) The Purchase of Intimacy. Princeton, NJ; Oxford: Princeton University Press.
- Zelizer V (2010) Caring everywhere. In: Boris E and Parreñas RS (eds) *Intimate Labors: Cultures, Technologies, and the Politics of Care.* Stanford, CA: Stanford University Press, pp. 267–279.
- Zuboff S (2015) Big other: surveillance capitalism and the prospects of an information civilization. *Journal of Information Technology* 30(1): 75–89.
- Zureik E (2003) Theorizing surveillance: the case of the workplace. In: Lyon D (ed.) *Surveillance as Social Sorting: Privacy, Risk and Digital Discrimination*. London; New York: Routledge, pp. 31–56.
- Zwick D (2015) Defending the right lines of division: Ritzer's prosumer capitalism in the age of commercial customer surveillance and big data. *The Sociological Quarterly* 56(3): 484–498.
- Zwick D, Bonsu SK and Darmody A (2008) Putting consumers to work: 'co-creation' and new marketing govern-mentality. *Journal of Consumer Culture* 8(2): 163–196.