

## Frictions in the Future of Work

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*The concept of the "future of work", though widely-referenced in mainstream media and policy discourse, remains persistently ambiguous, making it ripe for ethnographic intervention. Contrary to the techno-determinism of industry research and the limited focus of some public policy, I trace the social complexities and frictions of the future of work through the example of worker surveillance in the retail industry. I begin by reviewing the history of retail worker surveillance and showing how the social dimensions of worker surveillance have evolved alongside labor processes. Then, I explore a recently-proposed US policy that aims to combat worker surveillance, and I explore how that proposal might look different if it were informed by ethnography. I end by considering speculative methods and design justice frameworks as potential avenues through which applied ethnographers might wrestle with these social complexities and contribute to collectively redesigning futures of work.*

*Keywords: Anthropology/Sociology/Cultural Studies; Power & Inequality; Retail/Ecommerce; Work & Labor*

### INTRODUCTION

“The future of work” has gained increasing prevalence in recent years and is commonly referenced in mainstream media. Key moments in near history—such as the many white-collar workers who clocked-in from home during the COVID-19 pandemic or the release of ChatGPT—have amplified this discourse. While the “future of work” is, as some suggest, a “floating signifier” that lacks precise definition (Schlogl et al. 2021), at the core of these debates are concerns about the relationship between work and technology. The socially significant yet stubbornly ambiguous nature of this topic makes it ripe for intervention from ethnographers and EPIC community members.

A review of contemporary literature by NGOs, think tanks, and industry consultants finds that much writing on “the future of work” focuses on technology as a key driver of changes in work. This techno-deterministic view treats history as linear and the future as the inevitable result of technological advancements instead of something that shapes and is shaped by social relations. On the topic of solutions, this literature takes a similarly narrow view, often placing the onus on individual workers to upskill (Schlogl et al. 2021) and ignoring the agency of workers to adapt to or resist evolving conditions of work (Carmody 2022; Moellenberg et al. 2019). Other critics note that an obsession with the future risks ignoring the need to transform the present (Tucker 2023). A social scientific lens into the “future of work” would center workplace *relations*, focusing on the complex dynamics between various workplace actors, organizations, tools and technologies. In doing so, the “future of work” becomes open to multiple possibilities.

The future of work is a familiar discourse, even if we don't always define what we're talking about. But as a review of the literature suggests, techno-deterministic views of the future of work have come to dominate. They have become perhaps too easy, however, too fluid, too commonsensical. We can introduce **friction** into the future of work discourse by placing workplace relations at the center of the conversation.

In this paper, I apply this lens to the phenomenon of worker surveillance in the clothing retail industry. A recent editorial in the *Journal of Management* points to digital management and surveillance as one of the main challenges in the future of work: the authors say that the increasing reliance on algorithms to organize work, assign schedules, and review performance may lead to “dysfunction” and a sense of “injustice” in organizations (Malhotra 2021). In addition, digital worker surveillance has been characterized by a rapid increase in the amount of data collected about workers. As these tools and practices evolve, there will be ongoing opportunities for ethnographers and members of the EPIC community to understand how these shifts impact the experiences, needs, and pain points of people in these digitally-mediated workplaces.

My thinking around the “future of work” as well as my approach to my current field of user experience research has been informed by my past academic research. For my dissertation and eventual book project (Van Oort 2023; Van Oort 2019a; Van Oort 2019b), I conducted ethnography between 2014 and 2018 on the fast-fashion clothing retail industry to understand how the sector was using technology to manage retailer workers in the United States in new ways. As a global industry that was on the cutting edge of using new technologies in the retail sector, fast fashion presents a useful springboard for exploring worker surveillance as well as for thinking through social relations of the “future of work.”

In what follows, I begin by reviewing the history of retail worker surveillance and tracing how the social dimensions of worker surveillance have evolved alongside labor processes. Then, I engage with a recently-proposed policy in the United States that would combat worker surveillance; I show how the proposal remains tethered to a simplistic focus on individual actors and consider how it might look different if it were informed by ethnography. I end by considering speculative methods and design justice frameworks as potential avenues through which ethnographers and EPIC community members might wrestle with these social complexities in the field of product design to build power with users, reduce harm, and contribute to collectively redesigning futures of work.

Ultimately, much contemporary 'future of work' discourse simplifies the complex landscape of technology and work/labor relations. Retail worker surveillance helps us understand the future of work from a different vantage, by challenging techno-deterministic and individualistic ways of thinking about the future of work. Leveraging the frictions that emerge from ethnography will help all stakeholders—from industry, academia, policy, and perhaps most importantly, those on the shop

floor or sales floor—wrestle with the tough questions of how to create futures that benefit everyone.

## **A BRIEF HISTORY OF RETAIL WORKER SURVEILLANCE<sup>1</sup>**

Understanding how the social dynamics and tools of worker surveillance have transformed alongside the labor process requires us to first look backward to try to understand how digital worker surveillance in twenty-first century fast fashion retail compares to earlier iterations. In early twentieth-century department store contexts, workers were trained to engage in skilled selling, and managers expected deep engagement with customers. Historian Susan Porter Benson describes department store sales-floor discipline as too often “all stick and no carrot.” Her book *Counter Cultures: Saleswomen, Managers, and Customers in American Department Stores, 1890–1940* includes archival photos from women’s magazines depicting salesgirls congregating in small groups, sharing gossip or grievances while a male figure—presumably either “store detective, spying floor manager, [or] undercover agent”—lingers ominously in the background. These managers operated without the assistance of technology; yet even simple time clocks were viewed as a threat to worker autonomy. Opponents warned, “[the time clock] was an invention of the devil to check prisoners into their cells at night, and not to check honorable boys and girls into their jobs” (Porter-Benson 1988, 232). In this era, surveillance was direct—individual bosses or detectives watching individual workers—but as the preceding quote indicates, these dynamics were situated in broader social structures of power and inequality.

The shift from department stores to the proliferation of branded apparel retail chains (such as the Gap, Abercrombie & Fitch, and The Limited) in the later twentieth century led to deskilled affective labor. More important than knowing the product was providing a positive and formulaic interaction to customers. Sociologist Arlie Hochschild coined the term “emotional labor” in this era to capture how corporations make money from the management of human feeling: workers sold not just a product, but a service and an experience (Hoschild 1983). Later, sociologist Ashely Mears applied the term “aesthetic labor” to how workers cultivate a specific look and way of being; they indeed embodied the brand (Mears 2014). Workers looked, sounded, and acted as if they belonged.

In this era, as the labor process evolved, the mechanisms of surveillance became more complex, involving third parties to not only prevent crime but also to rate employee performance. Here, secret shoppers, hired through a contracted agency, appeared unannounced as undercover customers. After each shopping trip, secret shoppers produced quantitative evaluations based on the service they received and what they observed of employees, thus creating a threat of surveillance without constant supervision. Vicky Osterweil writes, “Mystery shoppers are miniature thought police, affective pinkertons, mercenary management to whom real management outsources the legwork of everyday psychic control” (Osterweil 2012).

Mystery shoppers ensured standardization of service, affect, and appearance of branded retail workers.

In recent years, however, big data, digital surveillance, and fast fashion have altered the terms of retail labor (Chaudhuri 2018; Uberoi 2017). Alongside just-in-time clothing manufacturing, the industry has embraced just-in-time labor management practices. That is, fast fashion clothing retailers use automated scheduling systems to attempt to predict precisely how many—or more importantly, how few—employees are needed at any given moment. With the help of these tools, many retailers have transitioned from a significant portion of full-time staff to a workforce that is primarily part-time and lacks benefits (Kaplan 2015). For employees, this has led to deep unpredictability in how many hours they're assigned or what their paychecks will amount to. As customer service takes a back seat to the work of maintaining a non-stop flow of goods, and as the labor force becomes increasingly part-time with unpredictable schedules, the utility of the “affective pinkertons” in the form of mystery shoppers wanes. Worker behavior, like everything else in the store, becomes more efficiently tracked and managed by digital technology.

The National Retail Federation's 2020 National Retail Security Survey, which collected information from sixty-nine retailers, reflects these shifts. “Respondents say their organizations are devoting more resources to fight shrink [an industry term for loss of inventory] in the coming year, with a majority of those enhancements coming in technology investments.” One chart tracks “biggest year-over-year movement” in retail security: mystery shoppers, secured display fixtures, and static observation booths or mirrors are waning. Tactics on the upswing include live customer-visible CCTV, point-of-sale exception-based interfaces (which tracks cashier transactions and highlights potential “exceptions” to identify high-risk stores and high-risk cashiers), and internet protocol analytics. In other words, analog surveillance is out. Digital surveillance is in.

In her 1989 book *In the Age of the Smart Machine: The Future of Work and Power*, Shoshana Zuboff writes that technology has the potential to both “automate” work (by replacing workers) and “informatize” work (by empowering workers with new knowledge). In the twenty-first century, fast fashion retail managers have at their disposal more worker data than ever before. The growth of software used to automate employee schedules not only creates new norms of short shifts and fluctuating employee calendars, but also encourages employers to engage in other forms of automated management. The rise of just-in-time labor and automated scheduling has gone hand-in-hand with the proliferation of other forms of digital worker management and monitoring. With many more employees clocking in and out at unpredictable times, managers lean on digital technologies to keep tabs on their staff. Biometric fingerprinting purports to provide objective time keeping for today's “modern” (i.e., flexible) workforce by preventing time theft and “buddy punching” (referring to employees who might clock in or out for a coworker who

has not yet arrived or has already left in attempts to get paid for time not worked). Software that tracks and aggregates cash register transactions encourages employers to quickly pinpoint “exceptions” within a large pool of cashiers, attempting to prevent “sweethearting” (referring to employees providing discounts to friends or family) and other fraudulent or erroneous behavior.

With socio-economic shifts—including the emergence of digital technologies but also evolving forms of production and labor processes—worker management and monitoring has become increasingly complex. If some of the foundational frictions between employers and employees remain, the amount of information, the kinds of tools, and the number of actors involved have ballooned. As I’ll show in the next section, policy discourse has yet to catch up with these complexities of contemporary surveillance, and ethnography—with its attention to collectivities, collaborations, and networks—offers a more nuanced perspective.

## **CONTEMPORARY FRICTIONS<sup>2</sup>**

In the previous section, I argued that understanding the “future of work” requires taking seriously frictions that have evolved throughout history. But if the future of work has a history, it also has a present. In this section, I consider how recent legislation around worker surveillance sidesteps the social complexities of how contemporary digital worker surveillance operates. This legislation provides a prime example of how contemporary “future of work” discourse risks relying too heavily on simplistic tropes that might catch readers’ attention while flattening social realities. Bringing in ethnographic evidence paints a more complex picture of how surveillance operates and presents distinct opportunities.

Legislation proposed in early February 2023 by United States Senators Bob Casey (D-PA), Cory Booker (D-NJ) and Brian Schatz (D-HI) aims to put the federal brakes on worker surveillance. The one-pager for this proposed legislation, called the “Stop Spying Bosses Act” says, “data collection, workplace surveillance, and automated decision systems imperil workers’ autonomy, dignity, and, in some cases, their health and safety.” This bill is significant given that few restrictions currently exist in the US to limit worker monitoring, even as surveillance technology capabilities are increasing at unprecedented rates. The Stop Spying Bosses Act would:

- “require any employer collecting data on employees or applicants to disclose such information in a timely and public manner;
- prohibit employers from collecting sensitive data on individuals (i.e., off-duty data collection, data collection that interferes with organizing, etc.);
- create rules around the usage of automated decision systems to empower workers in employment decisions; and

- establish the Privacy and Technology Division at the Department of Labor to enforce and regulate workplace surveillance as novel technologies evolve and grow.”

While the Stop Spying Bosses Act is a good start, based on my ethnographic research, this bill may not go far enough in adequately addressing the social complexities of worker surveillance. First, by focusing squarely on how employers surveil and monitor employees, this proposed legislation implies a linear, one-way model of surveillance in which one party surveils another. But this is not how modern surveillance systems work. In reality, they are much more complicated, and surveillance of one group of people can directly and indirectly impact others. Karen Levy and Solon Barocas call this phenomenon “refractive surveillance” (2018). They note that in the retail sector, for instance, technologies built to track customer movements throughout stores required new ways to distinguish customers from employees, thus leading to more digital scrutiny of workers’ movements as well. In my own fieldwork, I observed this refractive surveillance in other ways. For example, the data collected about sales and customer traffic was incorporated in automated scheduling systems to create workers’ weekly schedules. In order to fully understand and take on worker surveillance, one would need to account for not only how managers monitor workers, but also how retailers are collecting data about other groups (including but not limited to customers) and how that information might impact worker management and monitoring.

Second, by framing the problem as one of bosses spying on employees, the Stop Spying Bosses Act avoids addressing the vast array of third-party tools and platforms that retailers use to manage and monitor their employees. When I worked undercover as a fast fashion retail employee, I regularly interacted with third-party scheduling software, biometric time clocks, surveillance cameras, and cashier tracking systems. And these were just the ones I was aware of. As part of my research, I also attended a retail loss prevention conference where tech companies that made these kinds of tools attempted to promote and sell them to retailers. When I asked one representative of a facial recognition software company about the ethical implications of their product, he told me his company simply makes the products, but they can’t control what retailers do with it. If, in this case, the company that made the technology avoids responsibility by saying their users—retailers—are the ones to blame for any ethical breaches, that logic can go both ways: even if legislation limits the data retailers directly collect about employees, retailers may attempt to sidestep these regulations with the help of third-party software. Efforts to control worker surveillance thus need to take stock of the full suite of products and tactics companies utilize to surveil their staff.

Third, the Stop Spying Bosses Act does not address the many ways that worker data can be shared beyond one’s employer. For example, worker data can potentially be shared across companies or with law enforcement, ICE, and other state and federal agencies. At the aforementioned loss prevention conference I attended, one

company advertised a database that retailers could join to share information about front-line employees accused of theft or other fraudulent behavior. Retailers at the conference were also encouraged to mingle with law enforcement representatives from around the country at the conference “fusion center.” As critical ethnographers have shown, such data-sharing and relationship-building can disproportionately impact marginalized workers by further surveilling already over-policed communities and potentially increasing points of contact with law enforcement (Benjamin 2016; Brayne 2017; Eubanks 2016).

Based on my own ethnographic research, the Stop Spying Bosses Bill– or any legislation or organizations attempting to address worker surveillance– needs to consider the many ways companies collect information about employees, customers, or other members of the public and consider how data collection about one party can impact another. This may require more expansive regulations of company data practices, such as supporting fair scheduling (as New York and Los Angeles have done). Second, any proposed legislation or action needs to account for and address employee data collected by third-party monitoring and surveillance technology companies. Third, limits on data sharing between employers and law enforcement, ICE, or other government agencies could protect workers against some negative consequences of worker data collection in other areas of their lives. At a minimum, employers should be required to disclose when employee data may be shared with other companies or institutions.

As I hope this engagement with the Stop Spying Bosses Acts indicates, researchers in industry and the EPIC community can use tools at our disposal to complicate and intervene in applied industry and policy discourse in ways that more accurately reflect current realities. But policy is just one path for creating change. In the next section, I look to speculative methods and design justice to support another path that might be closer to many EPIC community members’ day-to-day work: product design.

## **REFASHIONING FUTURES OF WORK THROUGH SPECULATIVE METHODS AND DESIGN JUSTICE**

As Todd Carmody writes in “Anti-Work Theory and Jobs Not to Be Done,” “ethnography, of course, is never just a means to an end. Being in the field is also a chance to rethink our preliminary assumptions and theoretical claims” (2022). In the previous sections, ethnographic research challenged techno-deterministic and individualistic ways of thinking about worker surveillance. Still, additional methodologies can be helpful for ethnographers and members of the EPIC community who want to translate insights into product design opportunities to collectively redesign the future. Speculative methods and design justice are two such techniques.

Speculative methods attempt to envision worlds that don't yet exist; in product spaces, speculative methods challenge practitioners to “design with users” to fully meet complex needs and anticipate future ones. In their article, “Leveraging Speculative Design to Reimagine Product Roadmaps,” Attari et al. point out user-centered design tends to focus on individual users, “and other actors, such as neighbors and visitors, are mostly neglected.” They go on to say that user-centered design tends to focus on users' interactions with one *specific product*. In contrast, speculative methods could encourage ethnographers to hold an expansive view of who or what constitutes a research subject. As I discussed above, to understand the complexities of contemporary surveillance, researchers need to attend to an array of actors— including front-line workers, managers, consumers, other companies, and state institutions— as well as the ecosystem of tools and technologies within which these actors and organizations operate. Speculative design thus offers a useful framework for beginning to address these social complexities.

Beyond who or what is studied, speculative methods and design research share distinct points of view on how to approach solutioning. Attari et al. argue for a shift from “human-centered design” to “designing with users.” They write, the “speculative design approach has a ‘with user’ mindset to design for the ‘what if’ state of the world.” (2021, 194). In their book *Design Justice*, Sasha Costanza-Chock suggests that people should “bring design skills to community-defined projects” (Costanza-Chock, 2020) to shift the landscape of design to not simply *include* but in fact be *led by* directly-impacted communities. In the field of labor, there is a long tradition of organizing front-line workers to research, map, and identify opportunities for creating change in their own workplaces (Haider and Mohandesi 2013). Employing a combination of speculative methods and design justice in the form of a *workers' design inquiry* could shift the conversations around the future of work by potentially empowering front-line employees with ethnographic skills to generate research questions or even conduct their own user research. This approach could help bring to life surveillance scholar Arun Kundnani's remark at the 2018 Subverting Surveillance Conference that “the antagonism of surveillance is not privacy, but the making of communities in struggle.”

At the same time, commentators on debates around AI also caution against placing too much emphasis on the ‘what if.’ In a recent interview with the Guardian, former Google employee and current president of Signal (the encrypted messaging service), Meredith Whittaker says, some “warnings [about AI]... project everything into the far future so they leave the status quo untouched. And if the status quo is untouched you're going to see these companies and their systems further entrench their dominance such that it becomes impossible to regulate” (Tucker 2023). In other words, the ethnographers of the “future of work” must be careful not to let a focus on the future block what could be (re)designed in the present.

With that caution in mind, combining the rigor of ethnographic research with the frameworks of speculative methods and design justice could combat the tendency to



narrate the future of work from individualistic and techno-deterministic perspectives by sitting with the frictions inherent in our social worlds, and especially in our working worlds— past, present, and future. Only then can we hope to collectively redesign the futures of work. That, I'd argue, is a future to look forward to.

## ABOUT THE AUTHOR

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## NOTES

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1. Portions of this section were adapted from Van Oort (2023b).
2. Portions of this section were adapted from Van Oort (2023a).

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