

Wearing Out:
Digital Precarity in Just-in-Time Retail

A Dissertation
SUBMITTED TO THE FACULTY OF
UNIVERSITY OF MINNESOTA
BY

Madison Van Oort

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

Teresa Gowan, David Naguib Pellow, Co-Advisors

May 2018

Acknowledgements

I owe this dissertation first and foremost to everyone I encountered in my fieldwork, especially my interviewees and coworkers.

My co-advisors, Teresa Gowan and David Naguib Pellow, provided me unbelievable support as I waded in and out of graduate school. Teresa's words—*be bold, be wrong*—guide my writing, and I imagine the phrase will stick with me for years to come. David serves as an exceptional model of scholar-activism, showing me how to practice critical solidarity with the movements we study. Both Teresa and David push me theoretically and ultimately challenge me to overcome my persistent imposter syndrome—although I'm still working on that. My other committee members and faculty mentors—including Lisa Sun-Hee Park, Tracey Deutsch, and Claudia Neuhauser—likewise leave an indelible mark on this dissertation, and I am infinitely grateful for their discerning engagement and encouragement.

The University of Minnesota's Institute for Advanced Study gave me time and resources to write this dissertation while I simultaneously dove into the uncertain waters of the academic job market. I am additionally grateful for financial support from the Minnesota Department of Sociology, the Diversity of Views and Experiences fellowship, the IAS/Informatics Institute "Where is the Human in the Data?" fellowship, and the Ronald E. Anderson Technology and Social Cohesion fellowship. I especially appreciate the support staff at both IAS and the Department of Sociology, including Christina Collins, Kerri Deef, Becky Drasin, Jennifer Gunn, Karen Kinoshita, Brianna Menning, Hilda Mork, Hollis Schoonover, and Susannah Smith.

I consider myself profoundly lucky to have too many colleagues and family members—of origin and of choice—in Iowa, Minnesota, New York, and beyond, who have made this journey not only bearable, but, heck, sometimes even enjoyable, to list all by name. One who cannot go without mention, however, is Jesús Estrada Pérez, whose commitment to queer joy and defiance I sorely miss. It seems fitting that what sustained me through this project about digital precarity, when little else did, was a simple text message from him—“your book is going to be so good.” Thank you.

Table of Contents

List of Figures	iv
Introduction.....	1
Laboring in an Era of Fast Fashion	
Chapter I.....	29
Applicants On-Demand: Making the Fast Fashion Precariat	
Chapter II	51
The Automated Heart: Digitization of Interactive Service Work	
Chapter III.....	80
Policing Precarity: Big Data and Biometric Surveillance	
Chapter IV.....	111
Collective Mobilizations toward a Critical Data Praxis	
Conclusion	139
Fashioning Futures	
References.....	145

List of Figures

Figure 1: H&M Herald Square (photo by author)	6
Figure 2: Frequency count of specialty apparel retailers in media publications that mention fast fashion.....	9
Figure 3: Fast fashion inventory (photo by author)	10
Figure 4: Time between Application and Hire (in weeks).....	50
Figure 5: Get Captured.....	80
Figure 6: Applications of Facial Recognition.....	81
Figure 7:Kronos Workforce Scheduling Equation	86
Figure 8:Kronos Workforce Management Dashboard.....	87
Figure 9: Analog Time Work (photo by author).....	90
Figure 10: Kronos Biometric Scanner Advertisement.....	93
Figure 11: Exception-Based Reporting.....	99
Figure 12: Retail Labor Process and Surveillance	108
Figure 13: Banner Drop at National Retail Federation Big Show	122
Figure 14: Black Lives Matter at Mall of America.....	133
Figure 15: Fuck H&M Graffiti	139

Introduction

Laboring in an Era of Fast Fashion

What needs to be said is not that one way of life is better than the other, but that this is a place of the most far-reaching conflict; that the historical record is not a simple one of neutral and inevitable technological change, but is also one of exploitation and of resistance to exploitation.

-EP Thompson, "Time, Discipline, and Industrial Capitalism," 1967

What we're talking about is low-key violence, before the spectacular and after it. The banal, the bureaucratic, the everyday, the business-as-usual that's not only in our legal codes but in our financial codes and our computer codes. We don't wanna talk about one without the other.

-Ruha Benjamin, Opening remarks, Data 4 Black Lives Conference, 2018

My foray into studying fast fashion began at school. During the fall of 2014, I worked as a teaching assistant at a Manhattan community college. I often sat in a desk near the classroom's entrance, so I could, reluctantly, ensure students signed the attendance sheet. On one occasion, I spoke with one of my students, a tall, shy 19-year-old with braces, about her consistent tardiness. "I had to work until 4am last night," she told me with a sigh. "At Forever 21?" I asked. I was shocked. I knew she and several of her classmates worked retail, but had no idea their jobs required such demanding hours. In fact, she told me the store where she worked was open until 2am each day, and she regularly stayed until 4am processing incoming shipments. On other occasions she mentioned how stressed she was about her work schedule, which changed weekly; she never knew how many hours she'd be assigned nor what her paychecks would amount to. She lived in the Bronx with her mother, spending hours on the train each day, rushing from home to school in lower Manhattan to work near Times Square and back again. As Black Friday approached, she told me she feared not only high customer traffic but also

“riots” in her store; fall 2014 marked the eruption of Black Lives Matter protests across New York City and around the United States. Protestors blocked roads, occupied police precincts, and in many places, disrupted retail stores, making powerful, embodied connections between racism, policing, and capitalism.

Through these conversations, I began to consider the significance of fast fashion as a point of inquiry, an object of study that would allow me to explore several overlapping and pressing phenomena: global logistics and the circulation of capital, just-in-time production, automated scheduling, digital surveillance, precarity, gentrification and policing, and labor organizing and resistance, to name a few. Over the course of the next few years, I took a step back from teaching in order to immerse myself in the world of fast fashion as shopper, job applicant, worker, and labor organizer and activist. My intention was understand the landscape of life and labor in the twenty-first century through this seemingly non-political space, and ultimately—if loftily—offer a foundation for imagining and pursuing more equitable horizons.

In what follows, I utilize ethnography, participant observation and interviews with front-line workers and activists to answer three primary questions: First, how does technology help produce and discipline this retail workforce? Second, how do feminized and racialized workers experience and respond to new forms of digital control? Finally, what practical and theoretical conclusions might be drawn from recent intersectional struggles for racial, gender, and economic justice in and around retail spaces? I argue that fast fashion represents a distinct regime, in which fast fashion retail companies take advantage of big data and biometric technology to perfect just-in-time (or “lean”) production practices in the retail workplace both boosting profits and deepening the

precarity of retail work. This *digital precarity* is entangled with broader forms of precariatization, digitization, and policing throughout society, compounding insecurity for already marginalized populations. Finally, *Wearing Out* reveals how individual and collective efforts to transform society must critically engage this increasingly cybernetic terrain. For example, at 34th St. Herald Square in New York City, sits Macy's, a retail institution and department store par excellence. The 9-level historic landmark is known not only for its high-quality goods and superior customer service, but for its central role in the holiday shopping season. The Macy's Annual Thanksgiving Day Parade is one of the largest in the world; the store's elaborate holiday window displays line 34th street, a destination in and of themselves; and the location serves as a backdrop for one of the most famous Christmas films, *Miracle on 34th St.* Despite its beloved status, the company's outlook could barely be grimmer. In early 2017, the chain announced amidst the rise of online and fast fashion retailers, it would shutter nearly 70 stores nationwide and lay off almost 4,000 workers (Mele 2017). And Macy's isn't alone. Payless, The Limited, Wet Seal, JCPenney, American Apparel, Guess, and Sears are just some of the many retail companies shuttering hundreds of stores in recent months, if not liquidating all together. Analyses from the Atlantic, Business Insider, and the Financial Times all blame the mass closings of department and branded apparel stores on the rise of online retailing (Peterson 2017; Thompson 2013, 2014; Wigglesworth 2017)—“people simply buy more stuff online than they used to” (Thompson 2017a). But I've witnessed firsthand the boom of another kind of data-driven apparel retail that deserves critical attention—fast fashion.

One need only cross the street from Macy's to witness these changes. On May 20, 2015, the world's largest H&M opened in New York City's Herald Square. 34th street already housed two other H&M locations, just a few blocks east and west in either direction, meaning that in this stretch of the city, the retailer's density surpassed even Starbucks (Kell 2015). Nearly ten thousand people RSVPed on Facebook to H&M's flagship ribbon cutting ceremony, which included performances by music star John Legend, cash prizes of up to one thousand dollars to the first thousand shoppers, and 20% off coupons to any customer who brought in a bag of recyclable clothing—a devious ploy for the company to profess its commitment to sustainability and convince customers their addiction to shopping actually does good. In reality, less than 1% of the collected garments are re-used; the rest go to landfills or incinerators (Wicker 2016). By 11:26am opening day, one hopeful attendee commented on the Facebook event page: “I wanted to go so I can get a gift card & give it to person as a bd [birthday] gift but I guess there's already the first 1000 people 😞 😞.” The event epitomized fast fashion's mission: enticing a gigantic crowd into a celebration of ever-more continuous consumption.

Sadly, I was unable to attend the Grand Opening in Herald Square, but I stopped by the store during its first Black Friday sale in November 2015. The store seemed busy, but to my surprise, not substantially busier than usual. Indeed, in fast fashion, busy is business as usual. I wandered around, trying to peruse each of the four stories. Circling each level required maneuvering myself around garment racks stuffed to the brim and tables overflowing, almost always in a state of half disarray. Daniel Kulle, president of H&M North America, once said of the store, "As we continuously are producing and having new item styles coming into fashion, we are replenishing every day" (Kell 2015).

Workers and shoppers engaged in the ongoing tussle: while workers attempted to keep the store organized, shoppers desperately rifled through the mounds of cheap stuff. I overheard two young women with the phrase “gift advisors” scrawled across the back of their black t-shirts commiserate about how exhausted they were. I crouched on the third-floor balcony next to the live DJ, peering down at the main floor below and through the glass walls to the street outside. Both were bustling with people, and police vans lined the surrounding intersection, a testament to the state’s investment in protecting capital, especially on this most sanctified shopping day. As I floated down the escalator toward the bottom floor, dizziness washed over me. Light bounced off the mirror-lined ceilings, and I began to feel as if I couldn’t tell up from down (see Figure 1). I wondered if this feeling was all part of the plan: good deals lure customers in, while the store’s built environment—at first enticing but soon disorienting—pushes those customers out in due time, making room for a new batch of precarious patrons, whose desperate desire for cool clothes exacerbates the exploitation of similarly precarious employees in an spiraling vortex of desire, discipline, and domination.

Figure 1: H&M Herald Square (photo by author)



Algorithmic Capitalism & Just-in-time Production

Glancing at any list of the world's wealthiest people presents a fascinating portrait of the global economy. Alongside Bill Gates and Mark Zuckerberg sit people like Amancio Ortega, founder of the multinational retail behemoth Inditex, parent company of the fast fashion giant Zara. Also on the list is Stefan Persson, the main shareholder of H&M, a Swedish clothing store now found in almost every major city in the United States. This particular sector of retail, called fast fashion, is known for quickly producing and selling a tremendous amount of trendy, cheap clothing. It is also an increasingly important player in the global market. If figures from leading companies prove correct, fast fashion will not be slowing down anytime soon. Forever 21 says it will add 600 stores globally in the next three years (Anon n.d.), and Zara and H&M each aim to open 300 and 390 stores in 2018 respectively (Anon n.d., Anon n.d.).

Journalistic exposes have revealed the exploitative and sometimes deadly working conditions within garment factories (Bonacich and Appelbaum 2000; Carracedo 2007), which, as Minh-Ha T. Pham rightly points out, afflicts the majority of apparel retail, both “high” and “low” (Minh-Ha T. Pham 2017). Others demonstrate how fast fashion both relies on and turbocharges 24/7 consumption (Crary 2014). Everyday people own more clothes now than ever before, expecting nothing from the retail experience *if not* a bargain (Cline 2012). Throw-away consumption holds disastrous consequences for workers along the supply chain and across the planet (Bonacich and Appelbaum 2000; Morgan 2016; Schor and White 2010). Yet surprisingly, scholars, journalists, and activists have focused little if any attention on everyday routines and experiences of the people who work *inside* fast fashion retail stores. These workers, too, are significant actors in this industry, and as I’ve learned over the past several years, the conditions and conflicts on the fast fashion sales floor reveal valuable lessons about the nature of precarious service work in the context of twenty-first century digital capitalism.

According to industry experts, fast fashion represents the “long-awaited realization” of just-in-time production in clothing retail (Caro and Martínez-de-Albéniz 2015:238): top stores now boast more than 50 seasons, spearheading the pace at which retailers design, produce, circulate and sell trendy, yet inexpensive clothing. Fast fashion retailers have benefitted from, and pushed forward, a so-called global logistics revolution, in which the production and circulation of goods across the supply chain occurs faster and more cheaply than ever before. This transfer of both goods and power has been made possible in part by what Harvey calls a “time-space compression” (Harvey 1989:149). Transportation and communication technologies shrink the time it takes to move a

commodity from production to market, thus allowing companies to more easily seek out the cheapest areas of production. Yet fast fashion supply chains have emerged not only through perpetual “spatial fixes.” Key to this transformation has been an altogether different orientation to production and circulation.

Adopted from the Japanese Toyota Production System, Just-In-Time (JIT) production manufactures only as much as consumers demand. While department stores or branded retailers long relied on a *push model* of production, in which factories send retailers large shipments which stores would then get rid of with sales and coupons, fast fashion instead exemplifies a *pull model* of production, in which data, such as that shared from retailer’s point of sale system, helps calculate exactly *how much* of which product should be replenished and *when*. Jasper Bernes writes, “Derived in part from the Japanese and in part Anglo-American cybernetics, JIT is a circulationist production philosophy, oriented around a concept of ‘continuous flow’ that views everything not in motion as a form of waste (*muda*), a drag on profits.” He continues, “speed alone is insufficient. Timing is crucial” (Bernes 2013:179).

In practice, while traditional branded retailers or department stores receive large shipments of garments a few times per year, fast fashion stores receive inventory a few times per week, and H&M prides itself for putting new pieces on the sales floor each day. While the boundaries between fast fashion and branded retail or department store retail are becoming increasingly blurry as more and more retailers have “adjusted their supply chain practices to be more responsive to the ever-changing fashion whims of U.S. consumers” (Anderson 2015, 2012), Figure 2 demonstrates that a few key brands, including Zara and H&M, stand out as forerunners of the industry (Caro and Martínez-

de-Albéniz 2015). In these stores, staple or basic items might be produced with longer-lead times in more far-away locations, while trendier pieces are manufactured closer to the company's 'home'; Inditex, Zara's parent company, runs garment manufacturers in Morocco near its Spain headquarters, while Forever 21 produces some of its looks in Los Angeles (and pays its workers notoriously low wages (Kitroeff 2016:21)).

Figure 2: Frequency count of specialty apparel retailers in media publications that mention fast fashion

(from Caro and Martínez-de-Albéniz 2015)

Specialty apparel retailer	Number of appearances in Factiva search		Number of appearances in PDF online search	
	Rank	% appearances	% appearances	Rank
H&M	1	31.7 %	41.0 %	2
Zara/Inditex	2	29.2 %	45.9 %	1
Gap	3	11.9 %	18.2 %	3
Uniqlo/Fast Retailing	4	9.9 %	9.4 %	8
Topshop	5	9.3 %	13.7 %	4
Forever 21	6	7.5 %	11.2 %	6
Mango	7	4.3 %	12.4 %	5
Wet Seal	8	3.2 %	0.6 %	16
Benetton	9	3.1 %	10.1 %	7
New Look	10	2.8 %	6.2 %	9
Esprit	11	2.8 %	4.7 %	10
C&A	12	1.9 %	4.7 %	11
American apparel	13	1.2 %	2.6 %	13
Urban outfitters	14	0.9 %	2.8 %	12
Peacocks	15	0.5 %	1.1 %	15
Charlotte Russe	16	0.5 %	0.2 %	17
Armani Exchange	17	0.3 %	1.5 %	14

The search in the Factiva database was among 7,587 articles published in the last 2 years that mentioned fast fashion. The PDF search was among 466 PDF files available to download in Google.com that mentioned fast fashion

These distinct approaches to supply chain management have meant notable differences in profits. In 2015, the *New York Times* reported that through an unseasonably warm winter, many retailers suffered; customers simply weren't buying

heavy winter coats and bulky sweaters. The only companies that were able to “weather the weather” so to speak were those in fast fashion, which could quickly respond to unexpected shifts in consumer demand, restocking stores with more weather-appropriate garments (Tabuchi 2015). In one of my early ethnographic jaunts to a Forever 21 store, I noted the mounds of boxes, an object lesson tucked away not far from consumer’s sight, but which often remains far from consumers’ minds (see Figure 3).

Figure 3: Fast fashion inventory (photo by author)



Following geographer Deborah Cowen’s assertion, scholars must attend to the “profoundly political life of forms of knowledge and calculation that present themselves as purely technical” (Cowen 2014:4). *Wearing Out* attempts to map some of the lived consequences of these shifts, using fast fashion retail as a starting point for documenting how exploitation has been “raised to a new peak by global cybernetics,” in the current “digital vortex” (Dyer-Witheford 2015:13). The social consequences of digital capital can

be observed where I conducted my fieldwork, in one of the most networked yet vastly unequal global cities, New York.

Neoliberal/Networked New York

Manhattan is home to many of the largest fast fashion retailers in the world. Zara set records in 2015 when it purchased space for its newest location in New York's SoHo district for a staggering \$280 million, or nearly \$20,000 per square foot (Weiss 2015). In Herald Square, sits the world's biggest H&M, which caused widespread commotion when it opened in 2015. 34th street alone is home to three separate H&Ms within just .2 miles of each other, meaning that in this sector of the city, H&Ms density surpasses Starbucks (Kell 2015). Less than ten blocks north in Times Square, tourists flock to the world's largest Forever 21, which opened in 2010 and spans an astonishing four stories. For a period of time, an old, yellow, graffitied taxi cab anchored bottom floor of the store as a haunting relic of Times Square's past.

How did New York City, once known for its gritty street life, come to be a shiny, Disney-fied shopping center for tourists and families around the globe? The explosion of fast fashion in New York is part of a longer story of capitalism and urban development. David Harvey makes the case that these shifts in the city's landscape go back several decades. Substantial flight to the suburbs, as well as the movement of capital away from the city center, left New York desolate and engendered conditions that would spark 'urban revolt' of the 1960s (Harvey 2005). In the 1970s, Nixon haphazardly declared the crisis over, laying the foundation for the city's bankruptcy and subsequent bailout, resulting in a "coup by the financial institutions against the democratically elected government of New York City" (Harvey 2005:45). Rather than prioritizing social

welfare, government deals worked almost exclusively in the interests of capital, investing in telecommunication infrastructure and rebranding the city as a bourgeois lifestyle and tourist destination. “The class power of capital was to be protected at the expense of working-class standards of living, while the market was deregulated to do its work” (Harvey 2012:10).

Sharon Zukin similarly demonstrates in her book, *Naked City: The Death and Life of Authentic Urban Places*, how the sanitized look and feel of much of New York City is the result of specific kinds of collaborations between government and business. In Union Square, for example, which currently houses Forever 21 and Urban Outfitters, as well as H&M nearby, a Business Improvement District (BID) collected extra property taxes to ‘clean up’ the area, making it welcoming to businesses and appear safe to consumers. Zukin argues: “Most important, if rarely stated, these associations work to raise property values in and around public spaces, which cannot be done if homeless men and women sleep on park benches, muggers threaten shoppers, walls and lampposts are covered with graffiti, and cities fail to provide the basic services of street cleaning, trash collecting, and policing on which the urban public, including the businesses that rent commercial real estate, relies.” (2010: 127-128). To achieve these urban makeovers, BIDs rely on a combination of analog and digital surveillance, including local police, neighborhood watch people, CCTV, and an evolving array of high-tech apparatuses: surveillance scholars Randy Lippert and David Murakami Wood state, “the social sorting implications of these newer urban forms, ranging from radio-frequency identification in stores in retail strips, to biometric technologies in condominium complexes, remain largely unexplored” (2012:258).

The cultural impact of these shifts has been palpable. It was during New York's neoliberal makeover that the slogan "I love New York" was invented (Harvey 2005); one might ask who that "I" really was, and why they felt so glowing about this city. Sam Delany describes: "Because our new city developments, such as Times Square, are conceived largely as attractions for incoming tourists, they are being designed to look safe to the tourist, even if the social and architectural organization laid down to appeal to them is demonstrably inappropriate for large cities and promotes precisely the sort of isolation, inhumanity, and violence everyone abhors" (1999:155). Re-designing Manhattan's landscape into a networked global city (Sassen 1994) and a beautified shopping destination is therefore a political economic issue, sewn out of the threads cybernetic neoliberalism and infusing the fabric of everyday experiences and opportunities of people living in New York.

Unequal Precarity in the "Digital Vortex"

The story of fast fashion is not only one of changing practices of production but also labor practices. Scholarship on precarious work describes how jobs in the Global North have become increasingly feminized and insecure, regularly lacking benefits, decent wages, or union representation (Butler 2006; Harvey 1989; Kalleberg 2011, 2011; Standing 2016). According to sociologists, the rise of precarity indicates massive shifts in the labor market since the 1970s. Compared to the post-World War Two era, in which workers often possessed "lifetime" careers as embodied in the "Organization Man" wedded to the company (Whyte 2013), people now cycle through work with increasing regularity (Erickson and Pierce 2005; Kalleberg 2009). In white collar and professional industries, this churn stems from and is reproduced

though a combination of political economic forces and personal choices, in which workers envision and perform movement within and between companies as a career advancement (Ho 2009), leading some to identify as a “company of one” (Lane 2011). As Arne Kalleberg (2009) and others note, however, turnover can have more detrimental consequences for lower-tiered workers, who depend on their connections to the employment contract for benefits such as health insurance.

Despite the seeming widespread nature of these phenomena, not all social theorists agree on the utility of the term “precarity.” Some have argued that insecurity is in fact the norm under capitalism, and that it was really the New Deal era that was aberrational (Post 2015; Sunkara 2012). Others, however, point out that specific conditions of the present moment, including an increase in the amount and duration of unemployment, make this moment unique (Benanav 2015). Joshua Clover argues that critics of precarity mistake the arc of capitalism, equating ascension and descension: “The conditions that historically enable the socialist vocabulary—real accumulation, a taut labor market, the possibility of gaining power by appropriating a share of that accumulation, an expanding industrial proletariat—no longer obtain” (Clover 2016:145). Kim Moody contends precarity’s conceptual utility lies less in its ability to describe the changing duration of employment (which Moody argues may be illusory), but in its ability to explain an overall degradation of working-class jobs and a re-composition of the so-called working class. In Moody’s words, “If employment tenure is not much less than twenty years ago, economic precariousness certainly is much greater for the vast majority of those who must work for a living” (Moody 2017:37). Similarly, Nick Dyer-Witford, who recalls Marx’s articulation of the insecurity inherent in proletariat life:

“‘Proletariat’ thus includes not only the human material that has been picked up by capital’s vortex and is whirled around in its core as waged work, but also that which has been plucked off the land by mechanization, without necessarily being able to find employment, or has been ejected from production by cybernetic automation and communication and is forced to find unwaged subsistence in various forms of dependent labour, or is just dropped to the ground as so much living debris” (Dyer-Witford 2015:126). While I agree with both Moody and Dyer-Witford’s clarifications, , I tend to use the terms “precariat” and its variations to describe the current moment of capitalism. In my experience, “proletariat” tends to (if, albeit, inaccurately) conjure images of anachronistic marxists unattuned to the contemporary natures of exploitation and its intersections with citizenship, race, gender, and sexuality.

Indeed, the *digital* nature of just-in-time retail labor is central to my theorizing. As summarized above, fast fashion supply chain logistics emerged in the shift toward an information society (Castells 2015), the growth of financialization (Harvey 2005, 1989), and new heights in cybernetic capitalism (Dyer-Witford 2015). In contrast to both techno-capitalists who hyped digital technology’s miraculous ability to foster equality of opportunity (Florida 2014), as well as the vague and overly optimistic conceptualizations of “immaterial labor” and the resulting “multitude” (Hardt and Negri 2001), I follow Nick Dyer-Witford and critical/feminist scholars (Browne 2015; Dubrofsky and Magnet 2015; Eubanks 2018a; Federici 2006; Scholz 2012) who instead focus on the contradictions of cybernetic capitalism, which simultaneously ease the ascension of some to power while relegating others to precarity, poverty, and suffering.

Capitalism and current iterations of precarious labor are formed in and through racial domination (Combahee River Collective 1977; Davies 2007; Davis 2011a, 2011b, 2016; Du Bois 2017; 2015). In his forward to Cedric Robinson's *Black Marxism*, Robin DG Kelley says, "Capitalism and racism... did not break from the old order but rather evolved from it to produce a modern world system of "racial capitalism" dependent on slavery, violence, imperialism, and genocide" (Robinson 1983). In this rendering, racism is not merely a phenomenon created by capitalism, but an enduring feature of social relations constitutive to capitalism's development which is strategically and fluidly deployed in the interests of capital and the state. Racialization goes hand in hand with the creation of surplus populations, or those deemed superfluous to the waged labor market. Expressed as the "general law of capitalist accumulation," Marx writes in Volume I of *Capital*: "the laboring population therefore produces, along with the accumulation of capital produced by it, the means by which it itself is made relatively superfluous, is turned into a relative surplus population; and it does this to an always increasing extent" (Marx 1967:604). Capital accumulation and racialized exclusion hence unfold in tandem (Cacho 2012; Ferguson 2004). As Chris Chen writes, "Racial disparities have been reproduced as an inherent category of capitalism since its origins not primarily through the wage, but through its absence" (Chen 2013:215). In other words, racialization can be explained as a function of capital's tendency to create and rely upon surplus populations.

Such connections have become all the more salient over the past several decades, in which capital and the state have responded to mass unemployment in communities of color with incarceration, quality-of-life policing (introduced by former New York Major Rudy Giuliani and Police Commissioner William Bratton to focus on low-level "quality

of life offenses such as graffiti writing, loitering, public urination, public drinking, aggressive panhandling, turnstile jumping, and prostitution” (Harcourt 2009:1)), and state-sanctioned violence (Gilmore 2007; Rakia 2016; Wacquant 2009). Alton Sterling sold CDs outside convenience stores, while Eric Garner sold loose cigarettes. Together, their deaths at the hands of police denote the racialized criminalization of poverty; both men had a history of police encounters, and Garner was disabled. Amidst exclusion from the formal labor market, working under-the-table carries its own risks. As Salar Mohandesi comments: “Those deemed superfluous live in an existential bind: when they look for support, they are ignored; when they find ways to get by, they are harassed. In Garner’s unforgettable words, ‘every time you see me, you want to mess with me.’” (Mohandesi 2014). Further, while cyber-capitalism pushes more people out of work through automation or simply makes work more contingent, new technologies increasingly automate policing and catch growing numbers in the sprawling carceral dragnet (Brayne 2017; Wang 2017). Critiques of the criminal justice system, the police, or prisons, must therefore be done in and through a critique of algorithmic capitalism, and vice-versa.

What place does a discussion of police violence have in a study of fast fashion retail labor? While sociologists have a long tradition of theorizing the “underclass” in relation to the formal labor market, the forms of exclusion have become increasingly blurry. As I will unpack throughout the dissertation, an array of emerging technologies have reshaped retail labor, including by easing the ability of large-scale employers to hire workers on an as-needed basis, avoiding providing full-time benefits and health insurance. As a result, a growing portion of the retail labor force can be categorized as

“involuntary part-time,” meaning they would like full-time work but cannot find it (Luce and Fujita 2012). The shift to an increasingly on-demand service economy even among so-called formal employers (as opposed to more widely acknowledged forms of app-mediated labor like Uber, Lyft, or Task Rabbit) thus increases the pool of who we might categorize as precarious, as the line between employed and unemployed, secure and insecure, worker and criminal continually blurs. In sum, digital capitalism is both rendering more people surplus as well as automating the policing, capturing, and sometimes killing of these surplus populations, including in New York City. In this way, not only is police violence *not* a distraction from this study, but I contend that critical investigations of data-driven precarious work, including fast fashion retail labor, must be articulated through more spectacular instances of and collective responses to algorithmic state violence. As new technologies increasingly track and control the lives and life chances of people across spaces and contexts, sociological analysis must become similarly nimble; only in doing so can we more accurately understand twenty-first century precarity and potential social change.

Sociology of Retail Work

Sociologists help articulate the story of retail work as both a racialized and a gendered one. While the growth of capitalism has long relied on women’s unpaid reproductive labor (Federici 2004), the expansion of white and middle-class women to enter the labor market in the 1970s relied on the work of marginalized women: poor women, immigrant women, and women of color (Davis 1981; Ehrenreich 2001; Hill Collins 1992; Hochschild 1983; Nakano Glenn 2004). The industries that most often employ these workers—including healthcare, domestic work, and retail—are among the

few sectors citing growth following the 2008 economic crisis (National Employment Law Project 2012). Overall, 62% of retail workers are women, and 21% are people of color (Luce et al 2015); the vast majority of fast fashion employees I encountered in my fieldwork were women and/or people of color, a substantial portion of which identified as queer/trans/gender-non-conforming.

Retail is a particularly interesting location for examining workplace subjectivities, since one must examine not only the association between workers and bosses, but also consumers. Historically, throughout department and luxury stores a rift has existed between staff and patrons, since staff could rarely afford the goods they sold (Benson 1986). In such cases, employees were incentivized to work through special discounts (Williams and Connell 2010) and association with the company's brand (Besen-Cassino 2014) or customer base (Smith 2011). Retail ethnographers have demonstrated how the manipulation of employees' subjectivity relies on their presentation of taste and often stratifies workers across race and class. Basing their theories on Pierre Bourdieu's idea of "distinction," these researchers find that retail staff must "look good and sound right" to reflect the store's ideal customer, an expectation that often privileges those who embody middle class aesthetics, affects, and tastes (Williams and Connell 2010; Gruys 2012) and enforces occupational segregation, relegating men and people of color to back-end stocking positions (Williams 2006).

While these studies offer significant contributions to scholarly understandings of the retail industry, they are outdated, failing to explain fast fashion employees' subjectification in a moment in which the demands of digitally-induced flexibility and speed reign supreme. The dearth of research on fast fashion retail is especially

disconcerting considering the significance of the retail industry in spurring low-wage labor management trends (Luce et al 2013). Moreover, fast fashion radically shakes up the relationship between production and consumption by making trendy items widely affordable, including to low-wage workers themselves. As one of the first sociological investigations inside this burgeoning industry, *Wearing Out* seeks to fill this significant gap. I build on extant sociology of retail work to demonstrate the distinct logics of fast fashion. I investigate front-line fast fashion workers' roles and identifications simultaneously as lean employees with "bad jobs" (Kalleberg 2010), as potentially fast-acting consumers able to nab the best deals as soon as they hit the sales floor, and as both networked and surveilled subjects with potential to avoid or subvert complete control through individual and collective capacities.

Methodological Notes: Researching Retail

Between 2015 and 2017, I conducted IRB-approved covert (e.g. undercover) workplace ethnography at two of the nation's largest fast fashion stores near Times Square. As I already mentioned, New York City is home to a number of flagship stores, making it an ideal place to document the industry's cutting-edge labor administration. Because companies would have been unlikely to hire me if I were forthcoming about my project, and because my coworkers might face negative ramifications from employers if associated with my research, my IRB suggested that I go covert (that is, undercover) for that portion of the project. I have thus given pseudonyms to my coworkers and interviewees, and changed identifying information of my employers—which I here call Talia's and Spark. During the summer of 2015, I became employed as an entry-level sales associate at Talia's and took rigorous field notes on my experiences working in the

store, jotting on my phone during breaks and commutes home and elaborating on my notes the following night or next day. By participating in and observing the application and hiring process, new employee orientation and training, and practices of sales associates in this store, I gained an intimate sense of daily life in the fast fashion industry.

The following spring, I found myself back on the retail job market. At this second location, Spark, I hoped to gain employment in the stocking department, allowing me to more fully explicate the different components of the labor process. Although I was again hired on as a sales associate, this store trained workers “globally.” That is, all entry-level employees worked on the sales floor, in the fitting room, at the cash register, and in the stock room. This also meant that my schedule fluctuated even more dramatically at Spark, since people who worked in the back room had to start as early as 6am; some days I would wake up as early as 4:30am, but could be working as late as 11 the next night. My sleep, and my mental health, suffered.

In documenting my experiences working in these stores, I made a point to record details that seemed to exceed the labor process, which I experienced beyond the physical and temporal boundaries of waged work. For example, I took note of how I had to ‘hurry up and wait’ to catch the A train to Midtown in time for my shift; the standing-room-only rush-hour subway rides; the glowing florescent lights and pulsing store soundtrack that cued headaches and nausea with remarkable staying power (I vomited after one shift); the long walks to and from the subway (I was mugged on my way to the train one early morning/late night, an experience with which my coworkers commiserated); and the anxiety of trying to pay rent in New York City on such scrappy pay. While I in no way attempt to make my own personal life or experience stand in for those of my coworkers, I

also cannot easily draw a line between my research and my personal life. When I worked in fast fashion, I was not merely a researcher attempting to gain an insider's perspective on low-wage labor; I was also a graduate student with no safety net. I was privileged to receive supplemental funding from my graduate program, without which I am unsure of how I would have gotten by. In my writing, I attempt to remain aware of both the distinctions and points of overlap between my coworkers and myself.

In order to supplement my field notes, to access personal narratives more difficult and less ethical to obtain through covert ethnography, I conducted semi-structured interviews with twenty workers about their lives and their experiences working in the industry. While some interviewees I connected with through word of mouth, the vast majority of people I interviewed I recruited online. I do not always hide the name of the companies my interviewees worked for, but I do change interviewee names and other identifying information. Interviews generally lasted around one hour, and covered general life history, work experiences, and perceptions of movements to raise the minimum wage and Black Lives Matter. Most of the people I talked to were located in New York City, but a handful lived in other cities throughout the US and one lived in Canada. Among those who lived in other locations, some had worked in fast fashion in New York City, while others had not. As I coded my interviews in the qualitative analysis software Atlas.ti, I was not surprised to find that what I heard from other cities was similar to New York. Additionally, while companies based outside the US (such as Zara, H&M, and Uniqlo) adhere to different labor laws in their home countries than those based domestically (such as Forever 21), my findings indicate that entry-level working conditions across different fast fashion companies are more similar than different. An

interview with an executive director of a retail labor workers' center confirms this finding. "If you stripped away the name of the company and you listened to two different workers talk...you wouldn't know who's talking about who." In a sense, then, I attempt to generalize from my interviews and experiences how fast fashion exists as a dominant player of global capitalism, which imparts a shared and distinct logic onto the ways in which millions of people now shop and work.

Like many well-intentioned ethnographers, and especially given my training in feminist ethnography (Stacey 1988; Visweswaran 1994; Wolf 2018), I entered the field with notable trepidation. On the one hand, I follow Teresa Gowan and Leslie Salzinger who insist ethnography "provides a ringside perch on the processes through which subjects act and are made in the asymmetrical interactions of daily life" (Salzinger and Gowan 2017:61). But I likewise follow Judith Stacey in acknowledging that feminist ethnography, while able to "achieve the contextuality, depth, and nuance," cannot be undertaken without "difficult contradictions between feminist principles and methods" (Stacey 1988:22). I know, for instance, that by seeking employment, I competed with other people in potentially more precarious positions than myself for waged work. My meager attempt to at least partially ameliorate ethnography's exploitative potential, exacerbated by the covert nature of the ethnography, included focusing my fieldnotes primarily on the labor process and my own embodied experiences rather than seeking to 'know' my coworkers' subjectivities. My ethics also justified, to a certain extent, my short duration in each field site. I felt that in each location I was able to reach sufficient saturation in terms of my understandings of the labor process and lived experiences of being employed by each company, while avoiding developing deep connections with my

coworkers. Especially at Spark, opportunities arose to socialize with my coworkers outside of the workplace, and while I would occasionally walk with my coworkers to the train and chat during lunch breaks, I refrained from pursuing time with them beyond that.

At the same time, I sit with the potential of sociological findings to bolster the interests of power. Documenting forms of resistance risks making tactics legible to capital and the state and subjecting marginalized communities to further policing (Sharpe 2014). To mitigate these possibilities, I changed the details of some tactics, while omitting others altogether. I also attempted to make myself useful to both my coworkers and the organizations and movements I studied beyond any supposed knowledge production this dissertation project and its related publications might achieve. I prioritized assisting coworkers over customers, offered to cover my coworkers when they need bathroom breaks, and occasionally gave away shifts to my coworkers whose requests for more hours—scrawled in pencil and pinned to the break-room bulletin board—consistently reminded me that they would benefit from the hours more than me.

Throughout the duration of my fieldwork, I also volunteered with the Retail Action Project, a retail workers' advocacy group—which I discuss in more detail in chapter four—and I strove to make my presence there as mutually beneficial as possible. Through volunteering, I became familiar with the terrain of struggle, but I also showed up for regular meetings and rallies, helped survey retail workers around the city and phone-banked to RAP members and contacts to remind them of upcoming events. Again, in order to achieve more in-depth perspectives, I interviewed four of five RAP organizers with whom I worked closely, as well as the RAP director. These interviews covered their work histories (the majority of RAP organizers were former retail workers) and

perspectives on the retail labor movement. Additionally, since my earliest encounters with fast fashion workers—my students—pointed to connections with movements for racial justice, I took notes on BLM protests I participated in during the course of my fieldwork and interviewed six BLM activists recruited online, speaking specifically with those who had participated in protests in or around retail spaces. These interviews sought participants’ recollections of BLM actions, their perceptions of retail’s relevance to Black Lives Matter and vice-versa.

My ethnography was thus iterative and multi-sited, as much an urban as a workplace ethnography, taking seriously the “fluid rather than solidly implanted” (Harvey 2012) nature of precarious life and dissent. I informally shared my reflections of working at Talia’s and Spark with RAP organizers; my volunteering with RAP—and specifically participation in an annual protest at the National Retail Federation, which I describe in chapter 4—inspired additional fieldwork at retail industry conferences, which appears in chapter 3; my engagement with BLM infused my informal fieldwork interactions and formal interviews; and many RAP organizers had themselves participated in BLM protests and most BLM protesters I interviewed were at least aware of movements to raise the minimum wage if not RAP.

Outline

The text begins as I did in the field, illustrating just how difficult it can be to get a job in the industry. If sales workers are “made, not born” (Benson 1986), the practice of making on-demand retail employees begins far prior to the first shift. Chapter one, “Applicants On-Demand: Making the Fast Fashion Precariat” describes my first-hand experiences of searching and applying for jobs, going through multiple rounds of group

interviews, and frantically watching my savings account diminish as I desperately sought employment. I update the sociology of retail literature for the data-driven era, illustrating how fast fashion places temporal and subjective demands on its workers throughout the application and interview process. Employability in this context means not acquiring the skills of selling, nor even proving brand loyalty, but, most importantly, demonstrating total flexibility.

Chapter two, “The Automated Heart,” takes us inside the store, where I show how the rise of automation and just-in-time retailing have radically altered the labor process and eliminated most of interactive emotional labor found in stereotypical service jobs. I begin by providing a brief background of fast fashion and situate it within the history of retail labor. I present my findings as journey through the fast fashion retail store, where I follow the workers and commodities throughout the store. I describe how at four zones—in the stockroom, on the sales floor, in the fitting room, and at the cash register—workers must actively neglect interactive customer service in order to juggle the speedy flow of garments and maintain the appearance of the store. While automation has not yet completely eliminated retail work—it has deeply transformed the labor process, deskilling work and increasing anxiety.

While the work of fast fashion has not yet been fully automated, data-driven retailing has demonstrable impacts on front-line workers. Chapter three, “Policing Precarity: Big Data & Biometric Surveillance,” explores how fast fashion retail companies harness digital monitoring to transform in-store operations. I consider: in collecting metrics about sales and employee performance, how do computerized management systems actively shape how employees relate to the workplace? I begin with

a brief foray in to a national retail “loss prevention” conference, illustrating how surveillance technologies are deeply imbricated with the military and police, and may hold especially pernicious consequences for heavily policed populations. I then go inside the fast fashion store, where I find automated scheduling systems encourage additional forms of digital worker control, from biometric scanners to cashier analytics. I argue that alongside the demise of interactive emotional labor, I observed the presence of another kind of emotion work—that of laboring under vast, and often invisible, digital surveillance.

While the previous chapters catalogue various tactics of individual subversion, chapter four, “Collective Mobilizations toward a Critical Data Praxis” transitions to considering collective struggle. I draw on my participation in and interviews with key activists in two social movements that created an active political presence in and around precarious retail spaces between 2014 and 2017—a workers’ center called the Retail Action Project (RAP) and the Black Lives Matter (BLM) movement. These two movements, while employing at times vastly different tactics and demands, open up space for what I call a *critical data praxis*, which identifies the role of technology in perpetuating inequalities. By analyzing retail labor and anti-police violence movement together, critiquing everyday techno-governance of the poor in tandem with more pernicious predictive policing tools, I show how critical data praxis holds the potential for advancing unexpected alliances across twenty-first century social movements.

In “Fashioning Futures,” I conclude that fast fashion is both exemplary of life under algorithmic capitalism and challenges many existing conceptions about retail, labor organizing, and the future of low-wage work more generally. All of this adds up to my

argument that fast fashion reflects twenty-first century *digital precarity*, in which digital tools place a central role in disciplining just-in-time labor, reinforcing economic insecurity among feminized and racialized populations, evolving in rhizomatic entanglement with more spectacular instances algorithmic state violence. Building off the final chapter, I conclude that taking fast fashion seriously helps highlight potential paths forward, unfolding both “with and against” (Benjamin 2016) new technologies and toward more just futures.

Chapter I

Applicants On-Demand: Making the Fast Fashion Precariat

It took me a really long time. I had to keep calling them, hounding them, coming into the store to tell them to hire me.

-Interview with Susana, former H&M employee, July 2016

Precariatization means more than insecure jobs, more than the lack of security given by waged employment. By way of insecurity and danger it embraces the whole of existence, the body, modes of subjectivation.

-Judith Butler, "The Government of the Precarious: An Introduction," 2015

Michel Foucault argues that in producing new economic and social orientations, neoliberalism should be investigated as an "internal rationality, the strategic programming of individuals' activity" (Foucault 2008:223). But as Judith Butler describes in this chapter's epigraph, the lived experiences of economic insecurity, of attempting to make one's self *employable* to twenty-first century precarious labor markets, can physically manifest itself in the body. In this chapter, I recount the social, psychic, and bodily manifestations of seeking employment and making myself employable to fast fashion retailers. I argue that the transition to fast fashion retail has relied on the production of precarious subjectivities, a process that begins well before a retail employee's first shift.

Pre-employment practices have long been central to cultivating the retail workforce. Historian Susan Porter-Benson says in the world of early twentieth century department stores, saleswomen were "made, not born" (Benson 1986:124), and the craft of making retail workers has evolved over the course of the past century. In their 2010 article, Christine Williams and Catherine Connell report that upscale clothing employers regularly force their applicants to wait upwards of a month before hiring them (Williams and Connell 2010). This practice ensures that employees identify primarily as *consumers*,

committed to association with the store brand and access to the discount, as opposed to identifying as *workers* who might attempt to assert their rights on the job. These stores rely on the “cultural interpellation” of workers into “Gap’s ‘iconic American style,’ Anthropologie’s ‘humble luxury,’ Williams-Sonoma’s ‘casual elegance,’ or Abercrombie & Fitch’s ‘classic cool’” (Williams and Connell 2010:354). I therefore wondered, how might these workforce cultivation practices be similar or different in the fast fashion context, in which low-priced trends and fast-paced inventory turnover—as opposed to consistent, stable, legible brands—played a more central a role in the companies’ success? In other words, what sort of pre-employment practices might be necessary for interpellation into fast fashion precarity?

In what follows, I illustrate how fast fashion places temporal and subjective demands on its workers far prior to the first shift, in which employability in this data-driven, “standardized, contingent work-regime” (Ikeler 2016:145) indicates not “acquiring new skills and knowledge” (Smith 2010:287) but, more importantly, demonstrating total flexibility. Networked logistics, just-in-time production processes, and data-driven retailing may conjure images of well-oiled machines, of total and harmonious synchronization between computers, human laborers, and consumers. The reality, I discovered, is much messier, and highlights the enduring “paradoxes and contradictions” of cyber-capitalism (Dyer-Witford 2015:2) in which high-tech efficiencies exist alongside, and in fact deeply rely on, the inefficiencies and daily anguishes of low-wage work.

Talia's

The Job Fair

I began applying for fast fashion jobs in June 2015. Since I was undercover, I feared being outed, but I also questioned my ability to hack it even if everything went according to plan. Despite my working-class roots, service labor has never been my strong suit. To assuage my fears, I undertook some pre-job-application sleuthing by doing what all rigorous academics do: I turned to Google. A search for “job interview Talia’s” generated their listing on Glassdoor.com, a website where employees rate and describe their experiences working with employers. I learned many employees had applied online first, so, that’s what I did. At the very least, I figured an online application would help me gain comfort with the application process; I had witness in my previous ethnographic project how job searching was almost always also a practice of self-making, and this proved no exception (Van Oort 2015). The web portal asked expected questions about my work history, and since I had negligible clothing retail experience, I practiced sculpting my history into something mildly applicable. I played up my time as a volunteer sales associate at Bluestockings, a feminist bookstore in Manhattan. I also listed my recent internship at a local book publisher, highlighting my marketing experience and the fast-paced nature of the work.

After several days without response to my online application, I stepped things up a notch, deciding to go into the store during one of their bi-weekly job fairs (an early indicator of the workforce’s constant churn), where they were hiring for sales associates and overnight stockers. According to a Glassdoor testimony, one applicant had recently gone to this same location for the very same job fair, only to find that none of the employees had even heard of such a thing. Disorder, I expected, was the norm. My

interviewees had had similar experiences. Ashley, who had worked at Zara, wasn't surprised that her it took her over a month to get hired and that her application had been lost in the process: "I had heard that un-organization [sic] was, like, a continuous thing."

I arrived at Talia's around 6:30pm on a Monday evening. Getting there was its own adventure. Times Square is almost always jam-packed with ogling tourists carrying several children in tow, street performers in grimy Sesame Street and super hero costumes, and disgruntled workers trying to maneuver their way back to the office. In the sweltering summer heat, the wafts of air conditioning escaping from Talia's revolving doors lured me inside, where black-suited guards stood silently by the entrance. The blasting pop music drowned out the sounds of the crowds, and the grit of the street stood in stark contrast to Talia's gleaming linoleum floor, tall white walls, sparkling chandeliers, and artfully displayed bright clothes. But while it looked good from a distance, close-up everything was a mess. Garments were strewn over clothing racks, sometimes entire racks had been knocked on the floor, and the music made it difficult to hear one's self think.

I headed down the three flights of escalators to the bottom floor, and after waiting in line behind a few customers, I asked the cashier for an application. He couldn't find one but asked to see my resume. "They're going to stop doing interviews soon and I happen to be a supervisor. Do you have experience?" he asked. "I have some retail experience. I've worked at a bookstore but never in fashion." He reviewed my application. "Give me five minutes. Let me get my manager. You seem like a good candidate." I moved to the side so other customers could continue to check out, and meanwhile, another employee brought me an application which I began to fill out. I saw

the supervisor walk back over with his manager, Stacy, who appeared to be around 40, with braids that hung just past her shoulders and a flannel shirt tied around the top of her perfectly ripped jeans. After the supervisor told Stacey I might be a good candidate, she looked me up and down, presumably judging my aesthetic fit with the job. “Ok,” she said positively, and motioned me to follow her. She reached her hand back behind her as she walked. I hesitated, unsure what she was doing. “Resume. You got one?” I handed it to her, realizing she had mastered the art of multi-tasking, surveilling the store operations while simultaneously judging my fit with the job.

Then, abruptly, we stopped. “Let me ask you this. Have you ever been to this store?” she asked skeptically. Oh no, I’m blowing it! I thought. Maybe I should have omitted my teaching experience from my resume. “Yeah, Talia’s is actually one of my favorite stores.”

“Really.” The skepticism in her voice was clear.

“Yep, Talia’s, Spark and thrifts stores are where I shop most.”

“OK. And what times have you been to this store?”

“Various times, actually. I’ve been here in the late afternoon, late night.”

“Good, so you know how busy it gets.”

“Yes, and actually I know someone who has worked here before, so that’s why I considered applying.”

“Ok, go find a place to sit by the escalators. Finish filling out your application and I’ll go get you some paperwork.”

After at least twenty minutes, I started to wonder if the manager would ever come back. When I saw Stacy reappear, I chased her to the dressing rooms where she addressed

the staff. I smiled and attempted to hand her my application, thinking that would be the end of it. “I still need to get your paperwork. I didn’t forget about you!” I sat back down, waiting another 10 minutes or so before she returned, and I followed her to the escalator. “Are you another interviewee?” Stacey asked another woman. The woman said no, but I didn’t think too much of it.

“You sure you still wanna work here?” Stacey asked as we reached the intimates section. “Yep!” I replied. “Just checking. Wait here.” She went into a back office and returned with a stack of papers, which she laid out on a display table among piles of frilly undergarments and pajama tops. She walked me through the packet, highlighting what I needed to fill out, when suddenly she yelled hello to a young woman walking by. “Do you still work here?” Stacey asked. “Um, yeah!” the young woman replied with a laugh. It became clear how regularly lines blurred between worker, customer, and applicant.

Stacey told me to expect a phone call from her the following day to arrange a time to come back to Talia’s.

“So I should be prepared to come into interview?”

“No darling, there’s no interview. You’re hired.”

She showed me the way out. “What’s your name again?” I asked. She reached out her hand and gave me a firm handshake. “Stacey. Nice to meet you.”

These early encounters with Talia’s presented early lessons on the unequal scaffolding of precarity and selfhood. Making one’s self employable meant not demonstrating identification with the fast fashion brand or inventory, as might be common in the branded retail context (Williams and Connell 2010), but more importantly, comfort with chaos—a flexible, and anonymous, disposable subjectivity in

the service of capital. Further, as I quickly advanced toward paid employment, I experienced how precarity unfolded across difference through perceived categories of race, class, and gender (Benanav 2015; Hollibaugh and Weiss 2015).

But even on the fast track, I encountered serious bumps in the road.

Waiting Games

By the following Tuesday, I still hadn't heard from Stacey, so I called the store, finally reaching someone after two rounds of busy signals. Stacey was not in that day, so the person on the phone took my name and number and claimed someone else would call me back that night or the following day. When I hadn't heard anything by 7:30pm Wednesday, I called again. When no one answered after six minutes of being on hold, I hung up and called back. This time someone else told me orientation was tomorrow at 11, but said that if no one had called and told me that, then I wasn't eligible. I felt confused and frustrated. I told him Stacey had hired me and given me the new hire packet, but she never called me back. He then told me that I *was* hired, but they needed to put my information in the system first, which can take anywhere between two weeks and a month.

Thursday morning, I took the hour-long subway back into the city, my completed employee information packet in tow. I was directed to the lingerie section, where about thirty young applicants stood in a steadily growing line. "I hope this doesn't take long," one person said. Another asked, "Do you think we get paid for this?" Two people behind me had already turned in their paperwork; one said it took Talia's a month to get back to them, another said two weeks. Finally, an employee emerged from the office and I asked her what I should do with my packet. That employee waved down a manager, who said she couldn't deal with me right now, but could I come back at 10am Monday morning? I

told her I could and asked her if I would be doing orientation then (I assumed the answer was no but figured it couldn't hurt to ask). She told me no, that it would take a few weeks, but I should bring in a copy of my passport or driver's license and social security card.

That morning, I spent over two hours and five dollars in subway fare just to get sent home. This waiting time is crucial; not only does it delay the period between application submission and start-date, but it requires new employees to put in unremunerated labor of repeatedly travelling to the store and bearing the costs of childcare and transportation. Research has shown that pricey commutes disproportionately affect the poor (White 2015); at the time of my research, a single ride cost \$2.50 and increased to \$2.75 in March 2017. As Javier Auyero writes in his study of welfare recipients, and as Pierre Bourdieu documents of medical patients, waiting is a tool of governance, the "exercise of power over other people's time both on the side of the powerful (adjourning, deferring, delaying, raising false hopes, or conversely, rushing, taking by surprise) and on the side of the 'patient' as they say in the medical universe, one of the sites par excellence of anxious, powerless waiting" (Bourdieu quoted in Auyero 2011:5). Anxious powerlessness is a common affect in the context of precarious labor (Plan C 2014), and appears endemic to the fast fashion job search.

I returned the following week to submit my paperwork, finding the store surprisingly pleasantly calm upon arrival. This should be a quick process, I thought, foolishly. I made my way down to the office, tucked away in the back of the lingerie department on the second floor. I was stunned to see that, like last week, a line of people preceded me, this time about twenty deep. Six to eight were male-presenting, and I was

the only white person. I approached the woman at the back of the line, and I saw the manila folder in her hand, as well as in the hand of the woman in front of her. A wave of relief rushed over me; at least I was in the proper place this time.

After ten minutes, a woman approached the line and told us that the operations manager was running late—he had been stuck on the train for an hour and a half. She then gave us each a slip of paper with a number on it so that we could step out—use the restroom, get a drink—and not lose our place in line. I took the opportunity to leave the store to get a coffee, letting the sugar coat my sore throat while I considered the irony of the situation. I wondered if such leniency would be applied to employees who were late because of the train. This temporal regime was another opportunity for the chopping block; if applicants were late or missed one round, they were out of luck. Jayla, who had worked at another Talia's location, shared a similar experience:

At first you have to do a group interview and then they narrowed it down to smaller groups at first. Yeah you did a group interview first. Then once they picked you from that point, it was like you were kind of hired but they were still kind of testing you. You had to go in and learn about the stores. A lot of people did drop out, those little training sessions. Because for whatever reason they couldn't make it. And it was kind of like if you couldn't make it, then we uh, you know you weren't gonna make it into the store. So you did the group interview, they picked the people from there you did a few training sessions. If at any point you were late or whatever, you weren't working there.

When I returned fifteen minutes later, the operations manager had just arrived and took in the first five applicants. In total, I waited two hours for my turn. As Jayla noted, it was like a test: if we couldn't make it through this time discipline, there's no way we'd make it as employees. The stakes became painfully clear when an older applicant, who had difficulty standing long, was chastised by a passing security guard for sitting on one of the display tables. "That's for clothing only."

Finally, around 12:15, it was my turn to go into the office with four other women. We sat on metal folding chairs, huddled around the table. “How are you ladies doing? Thank you for waiting.” The operations manager, Chris, was quite charming, but also had a sternness to him; he reminded me of an affable gym teacher on the first day of class, who would soon show his true colors once the semester started. He took our IDs and social security cards. “Does anyone know why we’re all here today?” A woman to my right said, “to hand in our packets?” to which Chris laughed. “That’s not the only reason, otherwise we wouldn’t have you wait for so long. This is what we call your information audit. It’s not orientation, which confuses some people. What we’re doing today is going through all your paperwork line by line to make sure you have all the necessary information there. Because after you hand it in, I’m going to input it and submit it to corporate, and if you’re missing a signature somewhere, I’m going to have to call you and have you come back in to sign it. And that’s not any fun for anyone. For some people it’s a trek just to get here. So today we’re making sure you’ve got everything you need as quickly as possible so we can get you out enjoying this beautiful day.” As usual, the strict rules of the store were framed as promoting workers’ best interest, without acknowledging the role of the company in creating these conditions of insecurity.

Before we left, Chris told us the next step was to be called back for orientation. “It will take anywhere from two to three weeks. Sometimes less, sometimes more. One guy turned his paperwork in on Monday, was called back on Tuesday, and came in for training that Thursday. So be ready, and answer your phone, ‘cause I do NOT email.” I had been into the store three times, waited unexpectedly for hours, and already felt like I

was already on call. I couldn't make any travel plans, or much of any plans, not knowing when the training would occur.

My orientation occurred one full month later, in July.

In their analysis of luxury retailers, Williams and Connell warn of the shuffling schedules that await newly-hired workers, writing, "In addition to being subjected to long waits, retail workers rarely have control over their schedules *once they are hired*" [emphasis mine] (Williams and Connell 2010:361). However, I found that the demands of open availability began far prior to the official start date. Work commands more of our subjectivities even as it's harder to come by, including an increasing totality of our lives far prior to hire.

My next round of job hunting was even more dramatic.

Spark

By the next spring, I had long quit Talia's but was looking to re-enter the fast fashion game. I walked up and down Broadway in SoHo one dark, rainy, evening, asking nearly every clothing store if they were hiring. A small, more traditionally branded retailer nearly hired me on the spot, while another fast fashion company sent me through the loop, having me undergo an extensive series of interviews only to never hear back. "You have to really hound them," my friend, a retail labor organizer, advised me. Apparently.

At first, Spark seemed more promising. The store associates told me the best way to apply was online, and after doing so I received a call-back just two days later. "This process seems like it will be so much easier!" I wrote in my fieldnotes. Yet when I tried to return the call, it went straight to voicemail. Here we go again, I thought. Thankfully,

someone answered the second time, and I was able to schedule an interview, though not until three weeks later. Anxiety set in as I knew my bank account was dwindling.

By the time the first interview rolled around I had almost forgotten about it (in part because I was still chasing around a job at another retailer). The Spark office on Broadway looked modern but worn, and was partitioned into three sections: a waiting room, a conference room, and an open meeting room with large bay windows. Still, this was a step up from Talia's, which conducted the interviews inside the store's shopping area itself. Small bags of chips and mini bottled waters sat in the middle of the table.

Eight other applicants joined me that day, far less than what I had experienced at Talia's, I supposed because these were by invite only. The demographic was similar in apparent age and race, although the other interviewees dressed more conservatively; most of the women wore all black, while the men donned button ups and slacks. We were guided into the meeting room, where four different Spark employees asked us challenging, but not inherently difficult questions, which foretold the nature of the work at Spark:

What's a time you had to deal with a difficult customer?

What was a time you had to make to with few resources?

Tell us about a time you had to complete a project with a deadline, and what was the result?

When is a time you had difficulty with a coworker and how did you handle it?

From these prompts, I gathered that working at Spark would fast-paced, stressful, and tense. For the most part, I was right. But this was only the first round of interviews.

The following week, I returned to the Spark SoHo office to endure a second group interview. I thought perhaps I was interrupting a meeting when I saw so many people in the waiting room. One of the interviewees piped up: “It was really cold out today right? I thought it was gonna be warm but I was freezing when I took my kids to school.” It was the first time I heard anyone mention having kids. For her, and any others with care taking duties, the demands of on-call and erratic scheduling can be especially intense (Luce et al. 2014). I wondered how she would manage it.

Joe, whose slicked back black hair matched his midnight black outfit, announced with the cadence of a game show host, “Okayyy is everybody ready to get started? Are you all ready for a *fun* two, two and half hours? This is going to be like no interview you’ve ever experienced before. This is going to be an interactive interview. We’re not just going to sit and ask you questions, you’re actually going to get to see and experience what it’s like to work at Spark, and we’ll get to know a bit about you.” Two and a half hours! I wanted to back out.

We were escorted to the main room where chairs were arranged in a large circle. Atop each chair lay a uniquely-colored ribbon. We were instructed to creatively attach the ribbons to ourselves, and throughout the day we would be referred to by our ribbon color. I immediately tied my ribbon around the crown of my head like a headband, an instinct that I carried with me from my younger, more feminine self. I noticed the interviewers watching us and the interviewees watching each other. To my surprise, each person managed to come up with something different: one person tied theirs like a tie, another like a necklace, a bracelet, a pageant sash, a belt. I felt like we were beginning a secret ceremony, a rite of passage... hopefully not a hazing. With this first activity, the

employer impressed in us the importance of our aesthetic labor. Even if we weren't going to be able to develop a knowledge of the products we were peddling, we at least needed to perform the fashionista role. If branded apparel companies seek employees who *fit in* (Mears 2014; Pettinger 2004; Williams and Connell 2010), fast fashion companies recruit people who *stand out*, modelling for the customers as wide a variety of looks as the stores offered. There remain, of course, limits to marketable difference. For example, while certain forms of gayness might be welcomed (evidenced in recent attempts by Zara and H&M to "break barriers" by venturing into gender-neutral clothing (Ergas 2017; Peyser 2016)), trans customers and workers continue to face discrimination (Rooney 2016; Squire 2016). And as my interview as Talia's makes clear, hiring practices still privilege light skinned applicants.

At that point, we were introduced to each of the interviewers. Joe had been with Spark five years. Anastasia, a middle-aged Eastern European woman had been with Spark several years as the head of hiring. Dante, who would later be my manager, had only been with Spark 12 weeks. Then the games really began.

We split into two groups and followed Dante into what had been the waiting room, where we were instructed to move the chairs to the walls. Around the center table were three large plastic containers and a clothing rack. Anastasia told us she would give us directions for a task and we could ask questions, but after she started the clock we weren't allowed to ask any more. Dante, who stood in the corner with a clipboard, would be watching silently, taking notes. Anastasia explained that we were to unpack all of the clothes, put them on the clothing rack, and make a nice display as quickly as possible. For this, we would have ten minutes total. At the same time, there was a piece of paper

with a list of questions on it. Throughout the activity, we were to take turns pretending to be the customer by reading from the questions listed on the paper, asking other employees for help. It didn't matter if we knew the right answer, we were told, just be as courteous as possible.

"Ready, go!" We all rushed to the boxes and began unpacking. I grabbed a handful of green flannel shirts and flung them on a hanger. "Make sure they look nice!" Anastasia warned, so I jumbled with the buttons, fearing I wasn't moving fast enough. "Where's the customer? I don't hear the customer!" Anastasia shouted. We took turns yelling questions into the melee, waiting for someone to answer. *Where's the bathroom? Can I return this? Where'd you get your pants? Can I keep the hangers?* Anastasia yells: "I don't see a neat display! You have 6 minutes left!" A herd of us rushed over to the table, attempting to straighten the garments. Everyone was panicking, talking across each other. Anastasia: "The manager called, she doesn't want any jeans on the table!" We started hanging the jeans back up. Anastasia: "Where's the neat display? I still need a neat display!" Anastasia: "I want to see a nice outfit on the table!" I asked the woman next to me: "So then we can have one pair of jeans on the table for the outfit, right?" As she rushed to put a shirt on hanger, she responded, panting, "I don't know, she said no pants on the table." Was this a job interview, or retail boot camp? I felt like Anastasia was our abusive parent, and we were her children, too scared to make a wrong move, but also too meek to ask questions. I resigned to the fact that she would never be satisfied. "Only one more minute left!" Thank god.

"OK, times up!" We all stood around the table, smiling and fanning ourselves to cool down. "In one word, what are you feeling right now? Let's go around. You"

Anastasia pointed. *Tired. Hot. Excited.* I said “invigorated,” attempting to put a positive spin on it.

“Do you think this is how Spark works?” she asked.

Was this a trick question?

Anastasia: “I hear some people saying yes and some people saying no. Well, no, we won’t have managers yelling at you to change something this quickly, unless maybe there’s a sale going on. You *will* be expected to juggle many things at once, but our customer should always remain our top priority. Ok, nice job everybody. You can sit down while we prepare our next activity.” Anastasia’s words made clear a central bait-and-switch of fast fashion rhetoric. Official discourse continues to prioritize customer service, whereas the demands of the garments almost always take precedent. In the last activity, as in the work itself, customer service was an impossibility, a literal distraction. We were to feign positive affect, but never were we to veer from our organizing tasks, nor were we encouraged to provide helpful or accurate answers to customer inquiries.

After a few minutes, we were herded into the other room, where several cardboard boxes sat stacked against the wall. I assumed it was going to be similar to the last activity, but Joe instructed: “You are in charge of creating a window display for Spark’s new line called ‘fashion.’ You need to make sure your display conveys a clear message, is visually pleasing, and appeals to the brand’s targeted customer, which is teenagers. Any questions?” I felt like a player in the Hunger Games, attempting to solve a challenge with our team members, all the while prioritizing our individual performance. After Joe yelled, “Ready, go!” we briefly strategized, but our strategy soon evaporated. Upon moving the boxes, we discovered paper taped to two sides, which had up to that

point remained concealed to us. Some papers had symbols on them (blue stars, red hearts, or green dots), while some had letters. The letters, we soon realized, spelled “fashion” and “Spark.” We arranged them in the middle of the room, attempting to make a visually pleasing display. Joe announced, “The manager called and he actually wants the display against the wall.” We all rushed to put the pieces against the wall while keeping the display in-tact. Another announcement: “I just heard from the manager, and they said we can’t have any letters on the bottom of the display!” We rearranged the boxes, putting the letters on the second layer. Joe: “Hey guys, the manager says no red stars on the bottom!” I could barely hear my own thoughts over the sound of boxes shuffling around.

“OK guys! Time’s up!”

Once again, Joe asked, “How do you feel in one word?” The responses this time to a more obviously negative turn. *Tired. Exhausted. Awake. Hot.*

“Can someone sell this display to me?” Joe asked. One applicant calmly explained this was our new look for spring, with stars for summer and green for our eco-friendly clothing. We all nodded, impressed. “And who is our customer?” “Teenagers!” someone shouted. “Good, you were paying attention. What did you find difficult about this exercise?” Joe asked. One person mentioned the confusing directions, someone else complained about the changing prompts, and I said I felt like we started out strong by strategizing but could have checked in with each other more throughout. “Keep these lessons in mind as we continue the interview.” I sighed, exhausted.

While we were waiting (quietly this time; the excitement had worn off), Dante told us, “this next activity is what sealed the deal for me. I knew after doing this activity that Spark was different and I really wanted to work for them.” The setup for the final

included tables surrounded by chairs facing away from the tables. Atop each chair was a Tupperware container full of toy blocks, and on the table in front of each chair sat a container of Legos. A Lego mat lay in the center of each table. There was also, inexplicably, a tennis ball.

This activity was the most complicated, and, on the surface, least clearly related to the job. We were to collectively build a Lego castle, with each layer alternating colors, as well as one door and one window on each side. At the same time, we were to build towers on our individual chairs with the toy blocks. But that's not all. Finally, we were to bounce the tennis ball around the table in a clockwise direction. If at any point we dropped the ball, we were to shout, "STOP!" and all work should cease until the ball was put back in rotation.

After Joe shouted *go*, I tried to yell to my teammates to come up with a plan. But the sudden commotion made verbal communication nearly impossible. I heard Joe's voice: "Keep the ball moving! Keep the ball moving! Keep the ball moving!" I felt like we were starting to get the hang of it, when came another command: "You should be building a tower! You should be building a tower! You should be building a tower!" I couldn't concentrate. I tried to build the Lego castle with one hand and the toy block tower with the other. However, I had learned from the previous activities that anything we do will be wrong, so I may as well just keep up the *appearances* of working. "Manager says no red Legos are allowed." Someone tore the whole thing apart and shouted, "Let's start over! Build a smaller tower, it doesn't have to be so big!" At one point, I think I started mindlessly attaching Legos to the castle and pretending to build a tower with the blocks on my chair.

“OK time’s up!” How did we feel this time? No bones about it—not good. I said sweaty.

Joe approached the other group. “What were the guidelines given?” Someone sheepishly responded, “It was supposed to have alternating colors.” “And did you do that?” “No, but we do have the windows here and here,” the person said, pointing. “So, you didn’t follow directions?” They responded, shamefully, “No.” Joe then approached our group and scolded us similarly. The lesson, we were told, was that at Spark, we would always have to balance multiple tasks. The Lego castle supposedly represented group tasks, the toy block tower represented individual tasks, while the tennis ball represented customers. Although they didn’t say so, as in the first activity, the customer could never be top priority; they were merely a distraction to the more taxing demanding of handling and re-arranging mountains of stuff.

We gathered all the materials and put them away, rearranging the room so all the chairs were around one long table. Joe said, “This was *fun* right? Have you ever had an interview like this before?” Someone mumbled, “I never want to do this again.” Joe asked if we had any questions for them. “Will there be another interview after this?” someone asked. “There could be a third interview yes.” I felt my eyes bulge out of my head. Joe justified: “Spark is a difficult company to work for and we want to make sure we select the proper candidates.” Apparently a proper candidate was one who could endure stress and humiliation with very little reward. One applicant asked, “If we don’t get a call-back this time, how soon can we apply again? ‘Cause I applied to multiple stores, and the others told me to wait and see how this one goes.” Joe explained, “The company will respect the decisions we make here across the board, so you need to wait

awhile before you apply again. Maybe this time is not right for you, or maybe the positions were filled, or maybe you don't have the right kind of big box experience. So maybe you want to get a different job to get that kind of big box experience and then apply again."

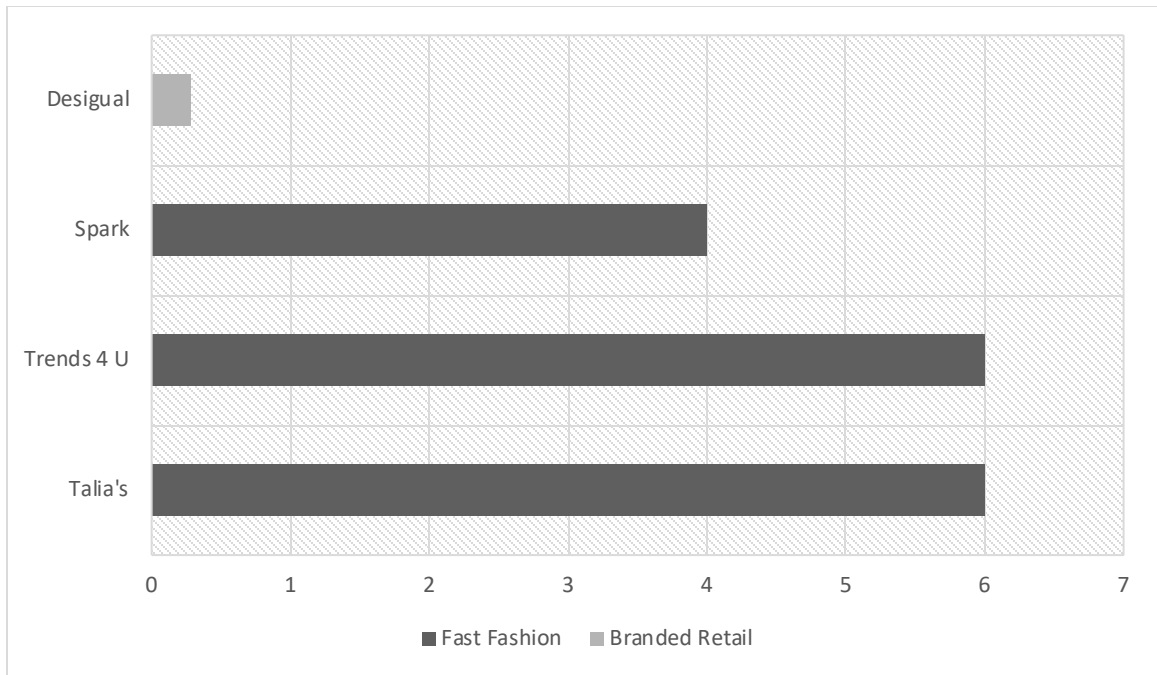
After one final interview the following week—which was less demanding but still unbelievably disorganized—I made the cut. My only question to my new manager was, "Can I hold a second job? I've also been interviewing at another store," to which I received a firm no. They would help current employees work around school schedules but a second job was not allowed. Several interviewees shared this experience. Jess, for example, hoped to work at both Forever 21 and CVS, "but they were like this is your primary job, even if you only get fifteen hours per week, you know? Don't tell us you have to work another shift somewhere else because in your contract this is your primary job."

Precarity by Design

Whereas just-in-time manufacturing and production processes may rely on sophisticated coordination and logistics, workplace relations are frightfully inefficient and disorganized, highlighting the contradictions of cyber-capitalism. The process of creating the new subjects of the fast fashion precariat, begins well before the first day of work, enacting a combination of Foucauldian confession (through verbal interviews) and examination (through participatory group interviews with strict, unpredictable scheduling) (Townley 1993). In my application and interview fieldwork, which I've summarized in Figure 4, time between several rounds of interviews ranged from weeks to months, and applicants risked being lost in the churn: missing paperwork or honest scheduling conflicts meant elimination from the applicant pool.

Throughout the process, applicants learn to provide employers complete flexibility and while accepting total disposability. Even if workers submit to these demands, embodying just-in-time subjectivity, paid work may still elude them. This dynamic between work and non-work, and the threat of getting by *without* waged labor, is in fact fundamental to Marx's conception of the proletariat: "If his capacity for labour remains unsold, the labourer derives no benefit from it, but rather he will feel it to be a cruel nature-imposed necessity that this capacity has cost for its production a definite amount of the means of subsistence and that it will continue to do so for its reproduction. He will then agree with Sismondi: 'that capacity for labour... is nothing unless it is sold'" (Marx 1967:127). The threat of wageless life is even higher for many fast fashion applicants who belong to heavily policed populations. While reflecting Marx's lessons, fast-fashion has developed novel ways of shaping subjectivity, and the on-demand worker becomes crafted through deep insecurity, alienation, competition, and performing comfort with chaos. This subjectivity is further refined in the fast fashion labor process and digital surveillance, the focus of the next two chapters.

Figure 4: Time between Application and Hire (in weeks)



Chapter II

The Automated Heart: Digitization of Interactive Service Work

We don't call them "salespeople" or "sales associates" because that's not what we do. Our Sales Advisors are here to ensure that our customers enjoy a fantastic shopping experience, whether it's offering them garment options or answering simple questions such as locating the fitting rooms. Because, in the end, we believe that our clothes will sell themselves.

-H&M job ad, 2018

If jobs that call for emotional labor grow and expand with the spread of automation and the decline of unskilled labor—as some analysts believe they will—this general social track may spread much further across other social classes. If this happens, the emotional system itself—emotion work, feeling rules, and social exchange, as they come into play in a 'personal control system'—will grow in importance as a way through which people are persuaded and controlled both on the job and off. If, on the other hand, automation and the decline of unskilled labor leads to a decline in emotional labor, as machines replace the personal delivery of services, then this general social track may be come to be replaced by another that trains people to be controlled in more impersonal ways.

*-Arlie Russell Hochschild, *The Managed Heart: Commercialization of Human Feeling*, 1983*

To work today is to be asked, more and more, to do without thinking, to feel without emotion, to move without friction, to adapt without question, to translate without pause, to desire without purpose, to connect without interruption.

*-Stefano Harney and Fred Moten, *The Undercommons: Fugitive Planning and Black Study*, 2013*

In this chapter, I explore the labor that keeps fast fashion stores running, which, I would come to discover, resembled with frightening similarity the group job interviews I endured at Spark. Following the flow of commodities throughout the store, I describe the *material labor* required of workers and how they must, by design, background the needs of customers and instead foreground the demands of the materials themselves. I use the term "material" multiply, indicating at once the centrality of garments in the retail labor process—of receiving, sorting, and organizing an unprecedented amount of *stuff*—as well

as engaging with Marxist debates about the shifting nature of work under digital capitalism.

Many sociological studies of retail focus on emotional labor (Besen-Cassino 2014; Misra and Walters 2016; Williams 2006), in which “the emotional style of offering the service is part of the service itself... Seeming to ‘love the job’ becomes part of the job; and actually trying to love it, and to enjoy the customers, helps the workers in this effort” (Hochschild 2003:5). Rather than producing a tangible good, emotional labor describes how workers are required to produce experiences and feelings. More recently, other scholars have focused on the import not only of workers’ emotions, but their bodies as well, in terms of how their physical appearance and aesthetic choices demonstrate one’s embodied commitment to the brand. Ashely Mears describes this phenomenon as ‘aesthetic fit’, “in which the body principally communicates belonging in the classed culture of the organization” (Mears 2014:1331). Aesthetic labor additionally determines the positions into which workers are funneled (Williams and Connell 2010) and also shapes how workers interact with customers (Gruys 2012). These empirical findings are supported by the political theories of Michael Hardt and Antonio Negri (Hardt and Negri 2001) which focus on “knowledge, information, communication and affect” (Hardt 1999:91) “as the main site for contesting capitalism” (Dyer-Witford 2015:10). However, critics have lambasted theories of affective labor for downplaying the undersides of information economies (Federici 2006; Mies 2014) and “deny[ing] the persistence of hard, corporeal, and all too material toil” (Dyer-Witford 2015:11). In the context of retail, Lynne Pettinger argues that in focusing so heavily on its affective aspects, scholars ignore the ways in which sales associates perform manual labor to

prepare stores for self-service. She writes, “retail workers are involved in the production of consumption: in creating the shop as a selling space and retail goods as desirable objects of consumption” (2006:48). Fast fashion, I found, relied tremendous effort of its workers to receive and organize its always evolving inventory. As with Just-in-Time production, the fast fashion labor process is made possible in part through the collection of a vast amount of data.

The journey as I’ll describe it begins at dawn, in the stock room, where workers arrive early each morning to process incoming garments and where fast fashion most explicitly resembles the factory. Once the clothes flow onto the sales floor, however, the work of “maintaining” the store and the stuff within it remains—against common conceptions of service work—a top priority. Sales assistants must limit if not actively avoid customers in order to keep the floor in functioning order. When we peer into the fitting room, we see an astonishingly similar dynamic. Even as customers explicitly ask for help, workers must often deny it in lieu of “garment caring,” or preparing the clothes for return to the sales floor—a revealing term indicating the true target of employee concern. Finally, chaos culminates at the cash register, where shoppers must decide, once and for all, if the deal of the day makes up for a lack of service and painstakingly long lines.

Each zone highlights the unique characteristics of this latest iteration of apparel retail. The disposability of the clothes is made possible by the interchangeability of employees, who turnover as fast as the garments they’re shuffling. The skilled selling of early department stores is nowhere to be found, and even the rote emotional labor of

branded retail stores like the Limited or Ambercrombie & Fitch has little place here. This transition encounters frequent snags, however, in resistance from both customers and employees. Throughout this chapter, I thus follow retail historian Susan Porter Benson in documenting the “existence of an oppositional set of rules which simultaneously challenged and sustained the functioning of the store” (Benson 1986:255). Fast fashion retail relies less on the *managed heart* so paradigmatic of interactive service labor (Hochschild 2003), than an *automated heart*, wherein customer behaviors and desires are computed and analyzed in aggregate. Consequently, in the words of Harry Braverman, “a revolution is being prepared which will make of retail workers, by and large, something closer to factory operatives than anyone had ever imagined possible” (1998:257).

“The Heart of Our Store”: The Stockroom

Given the centrality of producing and circulating garments with fine-tuned speed and precision, some of the most significant retail labor happens off the sales floor, in the stock room. Stock room associates occupy a crucial role in the company’s success, connecting local stores with the global supply chain. With shipments arriving a few times per week, stock associates ensure garments hit the sales floor just as they’re needed.

During my fieldwork, I came across a job ad at Zara that describes the stock position well:

We are looking for a very energetic, hardworking, reliable and effective Stockroom Associate. We need a professional and detail oriented person with a sense of urgency and motivation. Our large stockroom requires a lot of time and dedication. It is the heart of our store! We receive large shipments twice a week with different garments and we need to price them, organize them, and sensor them in a very effective and FAST way.

From this quote, we learn that stock associates, not often seen by shoppers, are “the heart of the store,” the pulse that keeps the garments circulating, without which the store could not survive. At Talia’s, associates were hired to work explicitly in the stock room, while Spark trained associates “globally,” in which all entry level workers each rotated working in the stock room, on the salesfloor, in the fitting room and at the cash register.

Not surprisingly, working in the stock room feels most explicitly like a factory. The back room, with its the dull cement floors, towers of plastic bins, and austere plastic tables for processing clothes offers none of the glitz and glam of the sleek shopping area just a few feet away. There is no pulsing soundtrack, and the smell of plastic and unidentifiable chemicals permeate the space. Thick lines of tape guide one’s walking path, a legal requirement to ensure fire safety in what is an ostensibly hazardous room, overflowing with goods. Sales associates regularly zoom in and out, as customers demand they search in the back for their desired size—an almost always futile and sometimes dangerous endeavor. “Don’t get lost in there!” a manager once playfully shouted to me as I disappeared into the jam-packed double-decker racks of blouses.

Stock shifts at Spark began at 6am each morning. For workers commuting from New York City’s outer boroughs, as most were, wake-up times could be as early as 3 or 4 am, especially on weekends when public transit was particularly unreliable. Based on my interviews, employees at other stores began their stock shifts at 3am. Unsurprisingly, my coworkers and I remained alienated from the workers across the supply chain: no discussion ever occurred about garment factories or warehouses from which the garments originated nor the work that went into making or distributing them (see Cowen 2014; Moore 2016; Siddiqi 2015). Each shift, we unloaded and processes two kinds of

shipments. “New pro” was new product, which was much easier since it was shipped to the store in larger, more organized batches. “Call offs” in contrast, were shipments to replace garments that had been recently sold, and here the “just in time-ness” became visible, as call-off bins were completely disorganized. At the very least, the bins’ contents were usually separated by major department: women’s, men’s, kids’, and accessories, but the contents within the bins had no rhyme or reason, other than the algorithms that remained invisible to us.

To “process” the garments, employees arranged themselves in a line on either side of a table. One worker would open a bin, pull out the clothing, unfold it, and lay it out on the table. The synthetic odors were strongest here, as the scents wafted out with each opening lid and escaped the plastic bags within which more delicate items were packed. To my knowledge, no one ever complained about the smells, but I, for one was concerned: a 2012 Greenpeace report, “Toxic Threads,” found that chemicals used in a number of leading retailers can be “hormone disrupting and even cancer causing” (Krupnick 2012). The environmental consequences, the report points out, are even more pernicious in fast fashion’s super-sized production cycles. And here we were, unloading bin after bin. Further research should document these invisible and potentially long-term occupational hazards.

The next worker in line applied the two-pieced security tags. A sharp pin in one segment of the tag was poked through the garment and then inserted into the other half of the tag, resembling a miniature golf ball, halved, with a pin in the middle. We regularly poked ourselves in the fingers, but again, rarely registered these mundane occurrences through the lens of workplace safety. Informal guidelines dictated where tags should be

placed: lower left corner for shirts, under the right belt loop for pants. New workers, especially, struggled to cognitively make sense of the price of security, or what George Ritzer might call the “inefficiencies of efficiency” (Ritzer 2014). The delicate fabric of many garments would almost certainly suffer a noticeable hole when the security tag was removed. At other times, I noted the vulnerabilities which remained: attaching a tag to one pair of socks in a multipack, for example, left the other pairs available for pilfering.

The final position in the assembly line was the least desired: putting the garments on hangers and organizing them according to store section, such as basics, professional, junior, swim, trend, which may go by special names like “Heritage,” “Girly Girl,” or “Divided.” Most sections have their own tag, making sorting somewhat easier. Still, attaching the hanger could be difficult and walking the garments to the metal rolling racks (called “ponies”) and arranging them in the proper section took longer than the other positions on the line. Sorting the “call off” inventory was especially onerous. Since these bins consisted not of new product but rather replacements for items sold, their contents were determined by a distant algorithm and contained a disorganized mess which in-store workers had to organize. Whoever was last in line—usually associates newest to the job—regularly confronted a growing backlog of clothes and a sense of never moving fast enough.

Without customers to get in the way, speed was overtly a top priority. Some minor collective solidarity did emerge: I regularly received tips on the most efficient ways to tag garments (techniques that were more comfortable weren’t always efficient, I was told), and I quickly learned my mothers’ method of inserting a hanger from the bottom of a shirt was a big no-no. Even lacking a piece-rate system of traditional factory

work, competition still reigned. More senior employees regularly commented on the need for faster coworkers, and numerous interviewees admitted they tried to avoid the stock room for precisely those reasons.

Zarina: It was a little like a sweatshop. It was kind of weird. There was an analog clock on the wall. We were standing there doing things in the line order. One person's taking all the items out of, I can't remember what they're called, the containers. Another person's hanging them, and one person's putting security sensors on them. So yeah it was kind of weird. It was a lot physically. Cuz you're repeating the same movements over and over.

Susanna: I didn't do it super fast. And you had to be SUPER efficient. They had this whole system...If you're not doing it in order they'll be like, you have to do it in order, that's the fastest way to do it.

M: Did you like doing that work?

Susanna: I liked it before they told me I need to go faster, faster, faster.

Certainly, working stock varied considerably from actually existing garment factories. Some of H&M's garments were manufactured at the Rana Plaza factories, where a building collapse killed over 1,000 people (Akhter 2014). H&M was one of the first companies to sign an accord to improve conditions, but improvements several years later remain lackluster at best (Kasperkevic 2016). In Cambodia, H&M's garment workers experience mass fainting (Thul 2011) and are regularly fired for becoming pregnant, among numerous other violations (Bain 2016); several Cambodian garment workers have been killed in clashes with police following demands for higher wages (Anon 2014). In Istanbul, Zara customers have found garments with messages sewn into them: "I made this item you are going to buy, but I didn't get paid for it" (Associated Press 2017).

While the work process was at its most Taylorized here, it at the same time felt the most free, since coworkers could spend their shifts actually talking to one another.

Indeed, sales assistants, scurrying to the stock room in search of a garment, briefly relished being surrounded by peers with genuine smiles on their faces, laughing uproariously at each other's jokes. Conversation regularly took more serious tones as well; some of my deepest interactions happened while processing clothes, usually a few hours after everyone had enough time to wake up. Life histories and the changing landscape of New York City were regularly discussed alongside music and pop culture. One morning, my coworker Christina, said, "Gentrifiers want to experience the culture [of New York] but then they just steal from it." My coworker David looked at me, the only white person and non-native New Yorker in the room, and laughed. "It's true!" I agreed. Christina qualified: "But it's not just white people who are gentrifiers. It's companies. Like the Bronx has a Starbucks now, so you know it's over." I added, "And here we are, working at Spark." David raised his eyebrow in agreement: "Right?"

The stock room similarly took on a unique character without the official store soundtrack. As Marek Korczynski describes in his ethnography of a blinds factory, music plays a central role in worker subjectivity, injecting bodies with energy to maintain the status quo, while simultaneously de-alienating the work process, allowing employees to forget, if for a brief moment, that their time belongs to someone else (Korczynski 2014). Jayla, who worked at Forever 21 in New York City, described: "the basement wasn't part of the sales floor at all... Once you went downstairs it turned into a completely different zone. Because people were listening to music or whatever. So it was like a nice little escape every time you got the chance to go down there and look for an item."

During my own summer at Spark, I felt haunted by Rihanna's hit song "Work." While the thrumming of Rihanna's voice helped me keep pace with my tasks on the

salesfloor, the repetition grated on me—both in its regular rotation in the official store soundtrack and in its lyrics:

Work, work, work, work, work, work
You see me I be work, work, work, work, work, work
You see me do me dirt, dirt, dirt, dirt, dirt, dirt
There's something 'bout that work, work, work, work, work, work
When you a gon' learn, learn, learn, learn, learn, learn
Me na care if me tired, tired, tired, tired, tired, tired (Rihanna 2016)

As one music critic notes, the song “doesn’t really go anywhere. It approximates what work feels like” (Kornhaber 2016). I dreaded encountering subway passengers streaming the single from their phones, as hearing it made my heart race in Pavlovian response. In contrast, the stock room that summer pulsed to the likes of Beyonce’s “Sorry,” an unapologetic tune that articulated a no bosses/no boyfriends resistant refrain: “Sorry, I ain’t sorry.” My coworkers pranced around the store wishing each other “Happy *Lemonade* Day” when Beyonce’s much anticipated album dropped. *Lemonade* in many ways marked the mood not just of the stock room, but of the moment: a sense of frustration with the status quo and a Black feminist desire for new ways of being in the world. *Lemonade* likewise evinced the “cruel optimism” (Berlant 2011) of trying to find a way to survive while being stuck in systems of exploitation; just as Beyonce returns to her “boo” [boyfriend] in the end, so too did most of us remain tethered to the employee-boss relation, as well as exploitative systems of white supremacy, capitalism, and heteropatriarchy.

Possessing a soundtrack of one’s own in the back room allowed workers to create a collective and oppositional culture, which ensured, somewhat paradoxically, the survival both of the workers and the corporations that employed them. While the factory

form was most salient in the stockroom, it remained surprisingly resonant as the clothes moved onto the salesfloor.

“A Flow of Chaos” on the Salesfloor

The critically-acclaimed film *Brooklyn* (2015) depicts a young Irish woman, recently migrated to New York City, overcoming her intense shyness and blossoming as a department store saleswoman, engaging her customers with polite, articulate conversations. The work of selling, the movie demonstrates, was part and parcel of early twentieth century white working-class womanhood, allowing them to occupy a respectable public space and interact with sophisticated consumers (see also Benson 1986; Mills 1951). Over the course of the last century, the clothing retail industry has grown to massive scale, hugely expanding the consumer base and proletarianizing the retail work, transforming, if not eliminating, any remaining skill. The craft of selling, performing an intimate knowledge of the goods being sold, and developing relationships with customers, are all foreign to most people working in fast fashion.

My interviewees helped articulate this point. Here is how some interviewees responded when I asked them to describe their primary tasks:

Kya: Mostly working on the floor and putting the clothes back in the section they belonged to. That was the main task I would do when I was there.

Zee: Mostly just cleaning, organizing, being efficient about getting everything done on a certain schedule, mostly my job honestly was cleaning up after others, helping them finish their tasks.

Rachel: To me the biggest thing that was stressed was keeping the store clean. And the store did have visual standards, which I appreciated. Everything had to have, you know, they wanted the size run [ordering garments by size] and they wanted the hangers facing the same way and they wanted the face-outs [garments on the end of a rack which are visible to customers] to look a certain, you know. I remember even my first week there were a couple days I literally spent 6 hours

folding pants. Cuz there's like 7 ways to fold pants. Which I had no idea! So I mean, I feel like that was the first goal.

One of my interviewees, Zee, articulated the overall confusion of the salesfloor aptly:

Zee: While you're on the floor, it's like swimming. 'Cause you're trying to clean up trash, and you're customer servicing at the same time. So you get into this flow, of where you walk around. So that there's a standard for, like, how you fold you shirts, how all the various fixtures and tables should look. Things sort of like, there's sort of a flow of chaos, where we know, like, oh, that tables' gonna get messed up, let's keep an eye on it. Or, oh, a huge group [of customers] went into that corner, I'm gonna keep tab on 'em. Very organized. Very organized.

In Zee's rendering, customers always come second to the primary task of keeping up a clean and orderly store. His final few snippets—"Very organized. Very organized."—sounded to me like an attempt to verbally manifest something which remains immanently out of reach. And in Kya and Rachel's descriptions, nowhere do customers appear, for, as the H&M job ad which opens this chapter reiterates, "We believe our clothes will sell themselves."

Managers instruct sales associates to spend the first few minutes of each shift simply walking around their section to get a sense of the salesfloor—since the internal geography is constantly changing, workers must re-develop a situational awareness of where garments are located or what might have been moved since the last shift. Most stores are overflowing with clothing, with racks bursting with garments in an explosion of styles and colors. Rachel, who worked at Zara, told me: "[The store's] entire floor set changes every two weeks. So one of managers, who trained me so well, she was like, the first thing you do when you come into this store, when you go on the floor to start working, take just like two seconds and walk the floor and just visually see what's going on." The remainder of the shift consists of doing "go-backs," meaning returning unwanted garments from the fitting room to their proper spot on the salesfloor and

putting away garments that have been processed by the stock room, all the while dealing with (or avoiding) customers.

Rachel describes the thorough exhaustion that can result from go-backs:

“Sometimes, like, I would be doing go-backs and I would have a shirt in my hand and I would look for it for like twenty minutes. I would look at my friend and be like where the *hell* is this dang shirt. And he’d be like, it’s two feet, it’s right there. And I’d be like, *ohhh*, what? Just, of course it is. So it was hard to kinda know like *every* single thing.” I smiled as Rachel told me this, since I could relate. I often told friends that working in fast fashion made me feel crazy: I would meander in circles around my section, determined to find a blouse I knew I had seen just moments before. I would think I saw the blouse out of the corner of my eye, for a split second enjoying the rush—ah yes, I finally found it! Soon I would discover that what I had located was not the blouse in my hand, but rather another, viciously similar design: a *different* white frilly shirt, or a shirt of the same pattern but in a tunic rather than a crop top style. “Do you work here tomorrow?” one of my coworkers asked me toward the end of a particularly stressful shift. I told her I didn’t, to which she replied, “Well that’s good, ‘cause you would get really frustrated. They’re gonna change it all around tonight.”

The swirl of go-backs illustrates how factory retail doesn’t necessarily equate to twenty-first century Taylorism. Following Jeffrey Sallaz’s study of call-center workers, the fast fashion retail experience is governed less by despotic management overseeing every move in attempts to enact standard precision than by what Sallaz calls “permanent pedagogy” (Sallaz 2015) or what Peter Ikeler, in studying Target, calls “contingent control” (Ikeler 2016). Sallaz finds in the call center context, employees are given very

little training, requiring consistently high effort from workers who must navigate ever-changing customer inquiries with little long-term rewards. Of the employee turnover this work process engenders, Sallaz writes, “No matter. By now, a new batch of agents is ready to enter the queue, and the system of permanent pedagogy continues to churn” (Sallaz 2015:28). Similarly, in fast fashion, the work of maintaining the salesfloor requires re-orienting one’s self to the inventory with each and every shift, never gaining full knowledge of the floor and without any long-term incentive to keep playing the game other than desperation for menial wages or some comfort of coworker camaraderie. The constant rush of the sales-floor sorting game comes with notable mental and physical costs: I, as well as the workers with whom I spoke, regularly experienced complete exhaustion, head and body aches, and hand pain and redness from garment hangers digging into one’s palm.

Sallaz’s discussion leaves out the everyday opportunities for subversion that permanent pedagogy engenders and indeed requires. When one can never conquer the game, one can at least find shortcuts, and I found both employees and management openly acknowledged some of these tricks. For instance, workers who cannot determine the proper location of the go-back are to “blend” the garment, putting it alongside similar colors or styles so as to at least not appear too out of place. Although this tactic is meant to create an appearance of organization when stock for particular garments runs low—a lone white, ruffled shirt doesn’t look so bad if it is placed next to other white shirts—it is also a key survival tactic for the exhausted worker who simply cannot bear to wander around her section once more.

Jesse, a former Forever 21 employee, practiced similar tactics. Although Forever 21 was much more fast-paced than the discount store where he previously worked, he said he had more leeway to get things done on his own terms.

Jesse: Even after six months there we still spent so much time looking at clothes being like is this [section a]? Is this [section b]? We're just gonna put this here [chuckles].

M: Did you ever get reprimanded for that at all?

Jesse: Let me think. Not, no, not reprimanded for putting something in the wrong section, but I know other people were for sure. and I think that's because they would say, oh this is in the wrong section, who did this? [lowers voice] I wouldn't say anything even if it was me.

...

M: When you were a sales associate, did you come up with tricks to get things done efficiently?

Jesse: Um, [laughs], I was really good at hiding things. I was really good at reorganizing racks so they seemed less full. Condensing was also a big thing. In the men's department something that really helped me was, on the racks, building outfits. So not on mannequins but on the racks themselves, you would style something and I was really good at just like really layering that.

One of the most important skills, Jesse learned is how to hide his mishaps, using the abundant inventory to his own advantage. In Sallaz's case of call center workers, permanent pedagogy arose from the unpredictability of the customer service encounter. In contrast, the constant rotation of inventory created the primary concern and main source of unpredictability for fast fashion workers. By design, workers will never fully be in synch with their central task of putting away clothes. At first blush, we might imagine employees like Jesse, who feel comfortable hiding clothes rather than seeking out their proper location, as fast fashion's antagonists, refusing the demands of a sped-up, under-remunerated workplace. And yet, as with worker-controlled soundtracks, these subaltern forms of refusal simultaneously ensure the survival of both the worker and the employer.

In fast fashion, a perfectly organized salesfloor is an unattainable ideal, toward which managers push their team, but even without which the store can continue to flourish.

Material Labor and Shifting Meanings of Service

Customers have not completely disappeared from the equation, however. In fact, there are probably more customers than ever, zooming in and out and around the store. While Talias and Spark managers constantly reminded us that our employment deeply relied on customers—one claimed to respond to customers by saying, “No, *thank you*, without you I wouldn’t have a job!”—on the salesfloor customers often felt more like a distraction from, if not a direct threat to, the task of maintaining the order of the floor. A few workers I interviewed told me they were trained to refrain from providing too much customer service:

Zee: For instance I was being kinda weird at first, in the beginning saying hello to everyone, and a couple coworkers found that annoying. So they pulled me aside and were like you need to sort of chill out.

Zee discovered “being weird” meant actively approaching every customer. Elijah similarly became visibly frustrated during our interview, raising his voice as he explained his desire to help out at the cash register when the lines grew long: “[Managers] had certain people they would send for help. They would say, beyond that, we can’t spare anybody else. Which was a lie. I would say screw that!” From the perspective of the manager, prioritizing the customer in this case distracts from the work of keeping the floor in order. While Elijah saw this decision as an abomination, there is some truth to it: ignoring the floor for even a few minutes could lead to frustrating messes and stuffed ponies with a back-log of go-backs draped over the top. At non-unionized stores, evening shift employees endure the consequences of this back-log, staying several hours after closing to put all the garments in their proper place.

Elijah's desire to interact with customers was somewhat rare among people I spoke with, and differed from my own experience. Associates commonly felt that shoppers got in the way of work, either asking questions that took away from the worker's current task or messing up the clothes they just organized. A cruel lesson, which I learned immediately at Talias:

In another instance in the girls' section, a group of four or five girls, maybe around 12, walked around the department. "This is SO CUTE!" they exclaimed to each other. One of the girls knocked over a pile of denim shorts and walked away. I made eye contact with her friend, and though I managed to prevent myself from glaring, I must have looked at her sternly enough, because she picked up the shorts and put them back as best as she could. (Fieldnotes 071515)

Zarina, who worked at Forever 21 in Canada, said:

Zarina: When I first started, I wanted to do things the right way and wanted to take my time. Make sure everything was organized, neat folded properly. Then realizing it was a fast fashion store. So people would see you folding, and like, come and knock the entire table over. [M laughs] And you're just like what the hell. I just spent 15 minutes doing that. So after a while I just learned that as long as it looked presentable and nothing was on the floor, it was fine.

In this context of customer as the enemy of order, worker shortcuts again become key. A manager might reprimand a worker if an entire table looks messy, so rather than folding every shirt—which shoppers tear apart in matter of seconds—the employee may instead ensure the table is generally neat, folding only the top few blouses to provide superficial organization.

According to customers' online testimonies, workers' pressures to put things in their proper location as quickly as possible creates dangers for shoppers as well. One customer remarked: "Was all-but-bodychecked by people working the floor while I shopped. No one helped me reach an item that was high up, despite the fact that I was obviously trying for several minutes." Another warned: "An angry little man salesperson

almost hit me with a clothing rack. Beware if you're pregnant." In contrast to these reviews, managers recited the refrain that excellent customer service can set a store ahead of the pack. At Talia's and Spark, the legacy ideal of service, of smiling, of connecting with shoppers, hung in the air, casting a shadow on the more immediate needs of fast turnover and exerting an impossible demand on already over-stretched sales associates.

"Garment Caring" in the Fitting Room

One might expect much more direct customer interaction in the fitting room. Yet, even here, the work of the fast fashion fitting room attendant has been largely reduced to logistics: regulating the number of customers coming in and the number of items they try on, taking their unwanted garments, and preparing items to be re-stocked on the sales floor.

Known colloquially as an easy place to shoplift, Talia's indeed provided workers lessons in shoplifters' tricks. Fitting room attendants began each shift by making their rounds to each dressing room, gliding their hands behind each mirror and collecting the tags hidden by shoplifters. My partner in the fitting room, also a newbie, took a spin, returning with a smile on her face as her hands overflowed with tags. It was true. Talia's was somehow kind enough to assign two workers per fitting room shift—allowing one employee to escort guests to the fitting rooms while the other sorted garments and prepared them to return the floor. This generosity came to bite me at Spark—David, my mentor the first few weeks, burst out laughing when I asked him if I would have another person helping me out. I was soon overwhelmed with the deluge of customers, and as usual, standards remained virtually impossible to reach, especially during high traffic periods. Customers approached the fitting room, we counted their items (only seven maximum allowed), escorted them individually to an available room, placed their

garments inside, and hung their item number outside each room. I fumbled and quickly became physically exhausted walking back and forth. If customers had more than seven items we hung the extras on a pony near the front of the fitting area, usually precariously close to the items that needed to be returned to the salesfloor.

One woman I interviewed, Kya, in New York on a film internship, had worked at a Forever 21 in Columbus, Ohio. She told me about a few especially tense moments after she accidentally returned a customer's garments to the salesfloor: "I remember [the customer] was yelling because her stuff was like [gone], and there's no process for like, who knows where it could be, in the whole store." Kya added sarcastically, "[customers] got very upset about their Forever 21 clothes." We both laughed at the absurdity of the customers caring about such poorly made goods, and of shoppers' naiveté about the social contract of fast fashion, in which good customer service is rarely part of the equation. Negative online reviews of fitting room attendants abound, while others read like warnings:

Staff is always tidying up the floor/fitting room so maybe that's why they're not so pleasant (they seemed fine to me).

Normally there is zero service at [these stores] and the associates in the changing rooms are just futz-ing around.

I've had fine service here. It's [fast fashion], I'm not expecting anything amazing but it's been good.

While I was there, the dressing rooms were pretty crowded...The workers there are also have that "I really don't care" attitude, but who can blame them? It's retail and they probably have to deal with more tourists than Ellis Island.

These reviews in some ways reflect the growing pains customers go through as they must re-learn the price they pay for such cheap goods; some customers appear angry, others ask, "What do you expect?"

Off the internet and away from keyboard, workers shoulder the consequences of these growing pains (see also Sperber 2014). During one particularly busy shift, as I raced up and down the fitting room walkway, a petite elderly woman peeled back her fitting room curtain, peered her head out, and asked gingerly, “Can you find this in a small?” I replied with a sigh, “I’m so sorry, I can’t leave the fitting room right now.” Store policy dictated that an attendant should always remain in the fitting room while customers were inside, though attendants made exceptions during periods of unusually slow traffic (a more common occurrence in the men’s section). Lynn Pettinger writes, “Workers’ ability to give personal services to the few who demand them is posited on sales organised so that the majority of customers serve themselves” (Pettinger 2006:56). Pettinger argues that retail employees do the work of making self-service possible: the role of the fitting room attendant is no longer to attend to every person trying on clothes, but to make sure rooms are available and clean so that a customer can attend to themselves (see also Ritzer 2014).

Although we instructed customers to return unwanted garments to us, we more regularly collected unwanted piles from the fitting rooms. Unwanted clothes were left inside-out, unbuttoned, unzipped, etc., and subsequently had to be “garment cared” (made presentable for the sales floor), before being hung on the pony in the correct section. The term “garment care” is significant here—indicating the proper target of worker’s attention. A manager making her rounds in the fitting room once muttered “nobody garment cares” as she buttoned a blouse. While I didn’t respond to her comment, I felt indignant. It was yet another impossible demand, an a regime of flexible control intended to push workers infinitely harder (Sennett 2011; Sewell and Wilkinson 1992); for one

simply could not attend to customers, re-hang items and garment care simultaneously. At some point, something had to give. Equally significant, never did she, nor any other manager, reprimand me for poor customer service, revealing the ways in which fast fashion has shifted the “market for emotional labor” (Hochschild 2003:91).

Significantly, the fitting room served as a critical site of escape for sales associates and shoppers alike, one of the few areas throughout the store removed from the panoptic gaze of Closed Circuit Television and with relatively little human oversight, save the stressed out fitting room worker or managers sporadically bopping in and out. Filipe, a muscular sales attendant who reportedly shed massive amounts of weight by working out every day, regularly absconded to the fitting room, pulling his cell phone out of his khaki pant pocket as he looked at himself in the mirror. “What are you doing back there?” Some interloping coworkers jokingly shouted. “I’m sending a text! What do you think?” Filipe shouted back like an annoyed sibling. Filipe clearly had no regard for other customers who might notice his behavior. Susanna, a former H&M employee, once rushed to the fitting room to cry after a terrible encounter with a homophobic customer.

Fitting room attendants likewise have more leeway than the more actively-monitored sales associates. Throughout one afternoon shift on the salesfloor, I fetched go-backs from the fitting room attended by Dana, a middle-aged woman and one of the few full-time Spark employees. Dana regularly refused the imperative to rush, rarely performed ‘garment care,’ often sent items back to the wrong sections. “This is completely against store regulation, but I don’t care,” she said slowly as she wrapped a silk robe around her torso and admired herself in the floor-length mirror. “I look good in this.” She had me cover her bathroom break, something other associates rarely took.

When it was busier, a gaggle of customers rushed at Dana with armfuls of unwanted clothes; “I only have two hands,” she sternly reminded them. Later, I watched a customer emerge from the fitting room and holding out her garments with her arms extended, looking at no one in particular. “I’m over here!” Dana shouted. “We’re invisible to them,” she muttered when the customer walked away. C. Wright Mills might have called Dana an “old-timer,” who “seems to focus upon neither herself nor her merchandise, but upon the store: she is against its policies... and often she turns her sarcasm and rancor upon the customer” (Mills 1951:177). I admired Dana’s demeanor, and the shadows of the fitting room allowed her space to demand dignity and customer respect.

The fitting room occasionally offered a means of escape for customers as well, as it was one of the few places where shoppers could sit inside the store. Exhausted customers regularly took a moment’s rest on tables on the sale’s floor, but this was explicitly against store policy—constant consumption required effort of the shoppers as well. In the fitting room, husbands quickly snatched the chairs near the back, and on more than one occasion I encountered worn out shoppers resting their eyes while slouched on a small bench tucked away in the corner. I made a conscious effort not to disturb them, especially as I could tell these individuals probably didn’t fit the privileged clientele that often perused this particular location. In those fleeting moments, I hoped this space of consumption, exploitation, and alienation could also serve as a site of refuge—recalling what Simone Browne calls “the productive processes of being unseen” (2015:163)—a hideaway for all those bodies not willing or able to incessantly work or shop.

Lines at the fitting room are themselves overwhelming, but nothing quite compares to the constant queues at the cash register.

Cash Register Queues

If a customer survives their trip through the store, makes it through the wait at the fitting room, and ultimately decides to make a purchase, the cash register presents the final challenge, the last hurdle standing between them and their trendy outfit. The price and quality of the commodity in these cases can swing the customer in two directions: they may either decide that the bargain is worth enduring the long lines, or (as I have admittedly done) second-guess the entire pursuit, realizing they do not in fact *need* this garment badly enough to wait in line. The cash register thus serves as a choke point in the fast fashion transaction, where the tension between customer service and material labor come to a head.

Because of this pressure, cashiers take on one of the most stressful roles in the store, in which customers expect speed, accuracy, and some semblance of politeness. I was, much to my relief, rarely assigned to work at the register, but training for the position proved stressful enough. At the beginning of each shift, the Talia's register needed to start at \$200 and not one penny off. I attempted to count my register and had to repeat the process three or four times: the first time I forgot to include the rolls of change stored underneath the drawer, and the other times I simply miscounted. "What's taking everyone so long?" our manager, Stacey, asked, annoyed. Thankfully others struggled alongside me. As I watched one of the trainers count the drawer for one of the other trainees, I noticed he utilized a specific method of counting change (for instance, putting half of the pennies in each hand and then quickly dropping pennies in alternating intervals), reminding me that all these 'common sense' tasks were in fact acquired skills. Adding to my anxiety, Stacey warned us that because of Talia's return policy, which says customers may only receive store credit (not cash or even money back on a credit card)

for returns, cashier mistakes can only be returned to the customer with store credit. “All because the cashier wasn’t paying attention,” she warned us. This scenario represents yet another negative externality carried by low-wage workers, a downfall of the fast fashion model framed as worker inefficiency.

My training at Spark didn’t feel any better. I expressed my nervousness to my coworker, who said, “You’re young, you’ve used a cash register before, right? You’ll be fine.” Little did she know I was in fact nearly ten years her senior and hadn’t used a register in at least fifteen years. My trainer, Sofia—a short, sweet woman with dark eyeliner and dirty fingernails (which I appreciated in this world of aesthetic perfection)—brought with her a packet that said the training should last two hours. Sofia breezed through, reading directly from the packet and often skipping entire sections. We talked about how to ring people up, the importance of making sure each item scans, the order in which items are rung up (scan them, take the hangers off, take the sensors off, fold them, and then put them in the bag), how to correct mistakes, and the distinction between different forms of payment. Sofia clarified applying discounts to single items versus the whole purchase—if it’s buy two get one free all the items must be grouped together when we ring them up. We also talked about how to ring up a gift card (amounts range from \$5-\$300 I think?) and how to perform returns or exchanges. To do an exchange one must do a complete return, put the amount on the gift card, and then ring up the item they want to purchase with the gift card. If the item doesn’t have a price tag we have to look it up by the number on the garment tag. To do a return we have to check the receipt, make sure the purchase occurred within the last 30 days, make sure they are returning the proper item, scan the receipt, select the proper item on the computer, then redeem the money on

the original form of payment. If a person making a return doesn't have their ID, or if it's not within 30 days of the purchase, they only get store credit.

Not only was this a huge amount of information to retain, but the surrounding environment significantly added to the disorder—Sofia herself became visibly flustered. How could one not? The register beeped when the security tags were too close to the tag remover; sometimes both our register and the one next to us would beep loudly at different intervals. Meanwhile, the music blared so loudly that at certain moments, I literally could not hear myself think. Another worker approached Sofia and asked her when her shift was over. "I'm supposed to be gone already but I gotta finish this training!" "Oh no I'm so sorry!" I apologized. "It's fine, I knew this would take a while." Meanwhile customers approached the counter, expecting her to help them; but she just refused to make eye contact and avoided their glares, a classic strategy.

My interviewees and coworkers often found working the cash register anxiety inducing. One coworker who from a distance appeared cool as a cucumber, raced over to me from the register one afternoon. "Do you know how to do gift cards?" he frantically asked, beads of sweat forming on his forehead. I sent him to one of our more senior coworkers around the corner. Many of my interviewees shared similar stories:

Zarina: It took me awhile to get cash trained after getting hired there. It was a little more stressful because the line ups would be constant. Especially during the holidays or when we would have collaborations with designers. It would just be a lot to keep going. Deal with one customer, they make a \$300 purchase, then deal with another customer. Also diffusing situations, when things come up. That's supposed to be on sale but it's not on sale. Having to contact someone on the floor to look up the price or confirm the price. So that was a little stressful.

Kya: And they tried to train me on it [the register] but it was just bad. Somebody gave me a \$100. I dunno if I didn't realize it, or I put it in the thing wrong, but I gave them the incorrect change back. And so they were very [upset], and the person [supervisor] had to come in. So at the end of the day, when I was done, my

till was all the way off. The first time I did it, it was way off, and the second time I did it, it was less. But they were just like, OK we're just not gonna have you there.

Rachel: Yeah, it was crazy.... I had never been on a register before. There's lines down and around the corner. People usually buy like a hundred things at once. So check the credit card, check the IDs, take the sensor off, you know, talk to them, also like, it was just like counting the register. All of this, it was like, and I am not good at math. I went to a fashion school for Christ sakes. It was a lot of pressure and it just made me really anxious. So after my training, I simply told my manager, I don't wanna do that. It's too much.

Although Rachel successfully refused the cashier role, in my fieldwork, employees had little autonomy over where they would be assigned to work that day. Part of the stress of the cash register stemmed from the tension that workers could never perform as quickly as the customer desired. When a customer returned something, we had to “garment care” it, or make sure it was ready to be properly restocked on the sales floor, which meant turning our backs to the growing lines so we could zip zippers and button buttons, tasks which, to a customer, may appear tangential to the cashier role. And while managers at Talia's sometimes told it us it was OK to jump on a register for a few minutes if we noticed lines getting long, doing so would put our work on the sales floor at risk of coming completely undone.

Sampling the online customer comments about cashiers is telling, and criticisms revolved around three themes. First is the abundance of sales associates but concurrent lack of cashiers. “There were 5 employees walking around aimlessly looking at us like we're dumb while we're on line waiting with no one providing the only cashier with help.” Comments in this vein indicate the extent to which shoppers remain largely unaware of the material labor required to keep the store running. Along with the maxim

the customer is always right, customers assume their own needs should always be the worker's top priority.

The second theme of complaints focuses on cashier speed, or lack thereof. Comparisons with animals abound, likening cashiers to snails and turtles: "The cashiers are slower than a snail unaware that you have places to go, clothes to put on..." "It's highly unpleasant shopping here. I'm always with a baby and we literally wait 30 minutes in line to pay for just a couple of items." These reviewers imply the slow workers are subhuman, but one wonders if anything other than a super-human, or indeed a machine or a robot, could keep up. In addition, these reviewers invoke a long-running precedent of rebuking workers, especially black workers, for being slow, for dragging their feet, for enacting any subtle form of resistance against either the boss or the customer (Benson 1986; Kelley 1993).

Finally, the third source of customer frustration centered on the lack of customer service:

There ought to be a zero star rating to properly rate this place! I get better service in a South Bronx bodega...I asked [the manager] if he ever said thank you to customers (after watching him dispassionately ring up the five women in front of me without a single hello, bit of eye contact or a thank you) and he said no. Wow! It's true.

Unfortunately is ALWAYS a miserable experience when you get to check out. Most of the time there's only 2 people working at check out and they are beyond slow. Every time I've been the person cashing me out is chatting away with fellow coworkers. Not just chatting but complaining about how much their life sucks for having this job. Save it for later when customers aren't around.

These reviews show how in this "sharing economy," customers have seemingly replaced mystery shoppers. Any patron can now leave a negative review, and can even, if they're vindictive enough, mention the clerk by name for all of the Internet (and the bosses) to

see (Sperber 2014). The extent to which fast fashion retailers take these online reviews seriously is another question altogether. Nevertheless, these comments reveal the lingering consumer demand for service with a smile, even as it becomes rendered increasingly burdensome to the fast fashion labor process.

Sociological Implications of the Automated Heart

Like other iterations of retail, whether department store, branded apparel, or big box retailing, fast fashion attempts to manage a series of pressures endemic to the labor process: balancing customer service with store upkeep, pushing the pace of work while somehow incentivizing employees, creating a veneer of workplace community while suppressing collective worker struggle. If Benson (Benson 1986) describes department stores as a product of “mass consumption,” then fast fashion is a product of 24/7 capitalism and constant and on-demand consumption (Crary 2014). In the drive to offer shoppers an incessant stream of trendy, low-priced goods, retail laborers increasingly prioritize the shuffle of commodities in and through the store.

The shift away from customer service in the retail setting has numerous sociological implications. First, it challenges how researchers conceptualize service work, moving away from the dominant frameworks of interactive labor. Second, it brings up questions regarding the future of low-wage service work in general. The White House last year released a report on automation and the future of work, noting interactive occupations are least likely to face elimination due to automation. In their report, former President Obama’s chief economics and technology advisors discuss the example of bus driving: while the actual driving of the bus may be automated by self-driving vehicles, school busses may still require a paid employee to watch over the riders. And yet, as we’ve seen with Amazon Go stores, in which all unnecessary labor has been removed,

the only remaining human employees stock shelves. By digitizing knowledge of consumer desire, fast fashion marks a similar trend: as the “market for emotional labor” (Hochschild 2003) shifts in apparel retail, workers bodies add value by performing the aesthetic labor of modeling the *cheap chic* lifestyle, and perhaps most importantly, preparing goods for self-service (Pettinger 2006).

In the next chapter, we’ll see how these shifts have been made possible in part by, and engendered, a vast array of data collection and digital worker surveillance.

Chapter III

Policing Precarity: Big Data and Biometric Surveillance

In June 2016, I boarded a bus to Philadelphia for the nation’s largest annual retail “Loss Prevention” conference. This sector of the retail industry—LP for short—attempts to prevent any form of “shrinkage,” whether by accident or on purpose, from customers or employees. Shrinkage can include handling errors, theft, or “sweet hearting,” which is when employees provide customers unauthorized discounts or free merchandise. When I arrived, at the convention center, I was greeted with thumping pop music—a similar soundtrack to what I had been subjected to for months on end as a fast-fashion employee—and vendors drew in conference goers with games and contests, engaging in what Rachel Hall calls “discipline as entertainment” (Hall 2015:129); one company was even giving away personal drones. Near the front of the exhibit hall I encountered one of the more perverse set-ups, offering passersby staged mug-shots, complete with a faux line-up backdrop and props like mustaches and cowboy hats (see Figure 5).

Figure 5: Get Captured



In essence, the conference was a festival of the retail criminal, obsessed with detecting and sorting out bad seeds, rogue shoplifters, and insurgent time stealers. As I discovered, the Loss Prevention industry remarkably overlaps with and is reliant on the growing area of retail analytics, which gathers massive amounts of data in order to more efficiently utilize labor and cut costs. Between break-out sessions about prescriptive analytics, social media monitoring, and exception-based reporting, representatives from over one hundred Loss Prevention companies hawked their latest systems that tracked both customer and employee behavior alike. What, I wondered, might be the consequences of such efforts for front-line workers?

The longer I remained at the conference, the more overt the connection between “optimizing labor” and policing it became. Figure 6, an advertisement from a facial recognition software company I encountered, reads: “While the main markets for face recognition technology remain identity management and physical security, use cases now also include commercial/service-based applications for business operations and personal use.” This brochure was just one of many that revealed how much of the technology on which the retail industry now relies was in fact pioneered for law enforcement and the military.

Figure 6: Applications of Facial Recognition

APPLICATIONS

While the main markets for face recognition technology remain identity management and physical security, use cases now also include commercial/service-based applications for business operations and personal use.

 ID issuance Biometric photo capture and ID fraud prevention utilize face recognition.	 Law enforcement Fast identification of suspects supports efficient crime investigations.	 Physical security Analysis of faces in video streams enables real-time identification of persons.
 Border control Face recognition technology is employed in eGates for automatic passport checks.	 Commercial Face recognition applications are gaining ground in everyday life.	 Products Our products are designed to facilitate all face recognition applications.

On top of that, the conference housed a central “fusion center” in which retailers could meet and build relationships with representatives from city police across the country. During one breakout session, a St Louis-based shoe retailer implored the audience to “take your local police chief out for lunch. It could be the best thing you do.” Surely, retail and police have always worked hand in hand—Guy Debord once said, “What is the policeman? He is commodity’s active servant” (quoted in Clover 2016:125). But as this conference made clear, digital workplace monitoring technology facilitates that relationship and makes waged labor even more tenuous: more seamlessly subjecting low-wage employees to surveillance, reprimand, firing, or even arrest.

I open with this extended ethnographic vignette to illustrate just how dramatically retailers are attempting to track and manage their front-line employees with the same kind of precision and flexibility as the clothing itself, often with pernicious consequences. Indeed, new technologies and practices collect an unprecedented amount of information about everyday life. Insurance companies, law enforcement, and retailers all aggregate data about health, criminal behavior, and consumer preferences and purchases (Lyon 2015; Marx 2016). But as Sarah Brayne writes, “we actually know very little about how big data is used in surveillance activities and to what consequence” (Brayne 2017:977). While recent research advances knowledge on how data collection and surveillance impact the lives of white-collar professionals (Ajunwa, Crawford, and Schultz 2016; Gregg 2011) and the poor (Eubanks 2018a; Monahan 2017; Soss, Fording, and Schram 2011; Willse 2010), there remains as of yet little empirical evidence of how surveillance and data collection shape experiences of low-wage work. Nearly twenty years ago, Robin Leidner celebrated the potential for scholarship on service work to

illuminate “ongoing reformulations of academic understandings of work necessarily to keep pace with the transformations in the economy and in the nature of work” (Leidner 1999:82). This chapter investigates how the growing ubiquity of digital monitoring and surveillance technologies impacts employees in fast fashion retail.

Most broadly, I think through how workplace metrics simultaneously *objectify* and *subjectify* humans, both measuring behavior as well as influencing how people relate to the workplace (Ball 2010; French and Smith 2016; Kitchin and Lauriault 2014). More specifically, I follow scholars who argue that data is often “gathered under profound power imbalance” (Brunton and Nissenbaum 2011). As Franz Fanon’s lectures at the University of Tunis on workplace surveillance suggest, “control by quantification” can have distinct “embodied psychic effects” (Browne 2015:6). Building on Fanon, Simone Browne conceptualizes a “critical biometric consciousness” (Browne 2015:116) by remaining mindful of how data collection and worker monitoring are situated in legacies of racialized, gendered, and classed forms domination and control. Fast fashion employees—many of whom are women, people of color, and queer or gender non-conforming—are not merely low-wage workers who have been abstracted into twenty-first century data points, but are members of populations that have been tracked and policed by both the state and capital for many years. As such, in simply trying to *improve* methods of data gathering and workplace monitoring—by asking, for instance, how we might make such technologies “better,” more “objective,” or even “inclusive”—we actually risk *exacerbating* rather than *ameliorating* systems of inequality.

In what follows, I take an intersectional approach to studies of worker surveillance, attending to how big data and biometric monitoring impact the most

marginalized sectors of the labor force. I argue, first, that scholars must analyze worker monitoring technologies in dynamic relationship with one another to have a fuller grasp of both their “*structural* and *cultural* dimensions” (Monahan 2017:192). In my observations, automated flexible scheduling helps fine-tune a just-in-time workforce. In combination with the discourse of the ‘suspect flexible worker’ who cannot be tracked through analog means alone, automated scheduling spurs additional forms of digital control, including biometric timekeeping and point-of-sale metrics. While these technologies exhibit regular limitations, including failure and vulnerability to sabotage, they nevertheless have the cumulative effect of exacerbating worker insecurity and reinforcing inequality. Second, amidst the decline of interactive emotional service work in low-wage retail demonstrated in the previous chapter, I note the presence of another kind of affective labor—managing the emotional weight of often invisible, yet increasingly pervasive monitoring and digital surveillance. If classic theories of emotional labor are concerned with “the surveillance of our behavior... [and the] surveillance of our feelings” (Hochschild 2003:229), I am here concerned with the *feelings of surveillance*.

Automated Scheduling, Unstable Lives

Our results suggest that the old adage of having ‘the right product at the right time and place’ could be true of employees as well.

- Serguei Netessine, Marshall L. Fisher, and Jayanth Krishnan. “Labor Planning, Execution, and Retail Store Performance: An Exploratory Investigation,” (2010)

In the early 20th century, retail meant working long, insufferable hours. As Susan Porter Benson describes: “At Macy’s, sitting while at work was forbidden and ‘unnecessary conversation’ could lead to instant dismissal. Hours were inhumanly long,

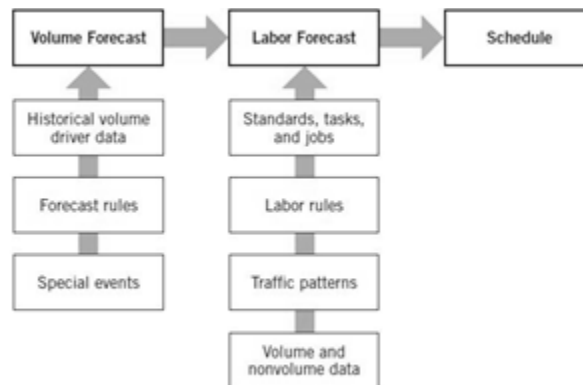
stretching to sixteen hours per day in the busiest seasons; employees' facilities were unsanitary and even squalid. Low wages were the scandal of the industry, and even further reduced by fines which placed 'a value upon time lost that is not given to service rendered'" (Benson 1986:25). Thanks to the help of labor unions and government intervention, department stores and traditional fashion retailers of the twentieth century were forced to limit the length of the working day to 8 hours, lest employees receive overtime wages.

But now, twenty-first century retail workers, especially those in fast fashion, struggle with a different problem: instead of working too many hours, they often work too few, and at extremely low wages. Research indicates that flexible scheduling carries profoundly negative consequences for low-wage hourly workers who have little autonomy over their schedules, more seamlessly transferring the risk of the market onto front-line workers (Clawson and Gerstel 2014; Lambert 2008). Employees lack stable hours, and thus stable pay, from week to week, leading to a growth of "involuntary part-time" work (Luce et al. 2014), which may doubly burden those with caregiving duties (Jacobs and Padavic 2015). Not often discussed in these accounts of flexible scheduling is the role of technology.

As fast fashion companies begin to hit bottom limits for their garments—customers can now routinely purchase a blouse for under \$5—skimming labor costs has become a key component of profit accumulation. One of the most well-known companies attempting to automate workplace management across a number of industries—including retail, health care, and even law enforcement—is called Kronos. Go to their website, and you'll see a link for a "Time and Attendance Solution Guide" in which readers can "learn how automated time tracking improves daily operations, cuts

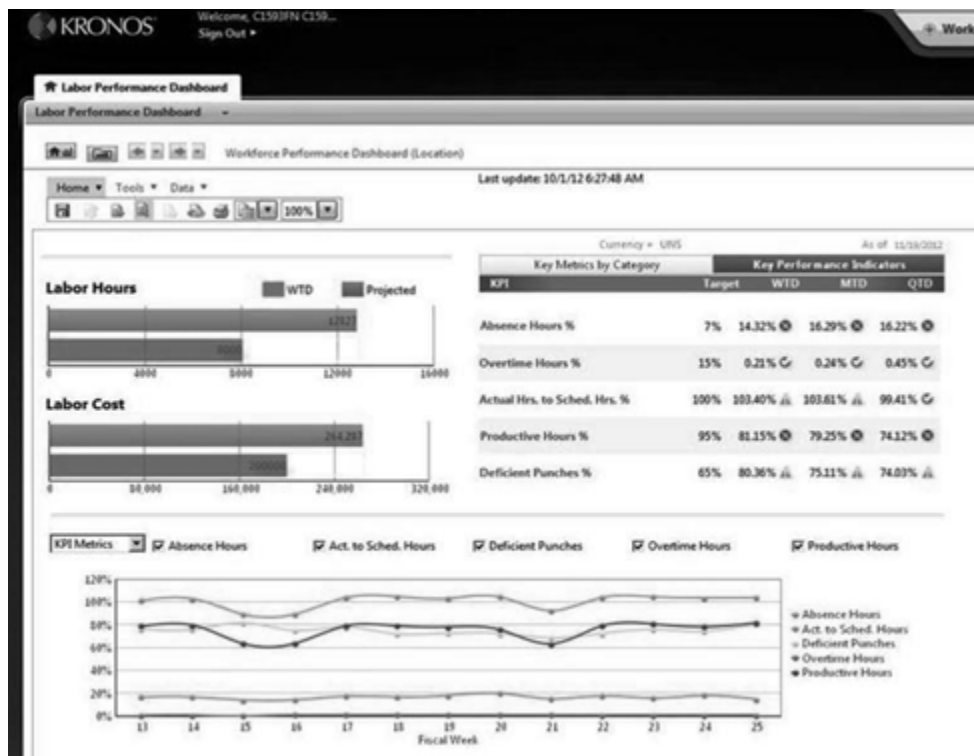
payroll waste, and creates a culture of compliance.” With the help of this software, retail managers can track vast sets of data which allow them to more closely align employee scheduling with consumer demand, calculated in as little as fifteen minute increments¹. Figure 7, for instance, illustrates the variables that might go into a scheduling algorithm: “Working with the historical data from your point-of-sale (POS) system — items such as units sold, customers, transactions, traffic, and sales — Workforce Forecast Manager predicts weekly business volumes using the amount of historical data you have available” (Anon n.d.). In the workforce management dashboard shown in Figure 8, labor hours are always measured in relationship to labor cost. As Antonio Negri points out, the word “Kronos” originates from a Greek myth meaning quantitative, chronological or sequential time (Negri 2004), and it’s clear that with software like Kronos, the needs of the employees themselves are entirely absent from the equation.

Figure 7:Kronos Workforce Scheduling Equation



¹ In her 1993 book *Fast Food, Fast Talk: Service Work and the Routinization of Everyday Life*, Robin Leidner describes how McDonald’s relied on “highly specialized equipment” which “calculated yields and food costs, keeps track of inventory and cash, schedules labor, and breaks down sales by time of day, product and worker” (49). At the time of her writing, schedules were allocated in thirty minute increments, indicating the extent to which schedule creation has become an even more fine-tuned calculation.

Figure 8:Kronos Workforce Management Dashboard



Kronos claims their workforce management platforms leads to “higher satisfaction for employees and managers.” However, as journalist Esther Kaplan reports, “In August 2013, less than two weeks after teen fashion chain Forever 21 began using Kronos, hundreds of full-time workers were notified that they’d be switched to part-time and that their health benefits would be terminated” (Kaplan 2015:36). Since then, it seems that unpredictable scheduling has become a norm in fast fashion; not a single job I applied to offered full-time positions, yet all desired applicants with “open availability.” Along with a just-in-time inventory, fast fashion and other low-wage retailers have harnessed big data to achieve just-in-time retail workforces in which employee schedules parallel shopper traffic. As I’ve already mentioned, Solon Barocas and Karen Levy have

coined the term “refractive surveillance,” to explain how data about one party—such as consumers—can lead to additional surveillance of another party—such as workers (Barocas and Levy 2016). As I discovered, refractive surveillance can have serious consequences.

At both of the fast fashion retailers I worked at, Talia’s and Spark, employees were scheduled to work at all hours of the day, some arriving as early as 3 am to help process incoming shipments, others staying as late as 4am to help close a store. “They want it, like, perfect in the morning,” one worker, Kya, told me. My coworkers chugged coffee and RedBull to make it through the early sprees processing clothes in the stockroom, sometimes making themselves sick. Hours varied so much, even the most on-top-of-it workers lost track of when they were and were not on the schedule. While a union forced Spark to post its schedule a week in advance, we were lucky to have just a few days’ notice at Talia’s. For many, then, the only constants were unpredictability and exhaustion.

One of my first shifts at Spark, I was being mentored by David, a long-time sales associate who regularly trained new hires. That evening, a manager approached us to check in, clipboard in hand. At the end of our conversation he said to David, “Ok sounds good. You leave at 8?” “No, 6,” David replied confidently as he leaned against a garment rack. “Says here 8,” the manager said, showing him a copy of the schedule. “Well I’m gonna go check in back. I swear it said 6.” David returned a few minutes later, admitting his mix-up. This was the first time I’d ever seen him in the wrong about something, and I felt some comfort, since I myself was new at the job and continuously flustered. Later, in the breakroom, David sipped on a juice smoothie and mused, “If I had the money, I’d move out to California. Live on my own.” Instead, he lived in

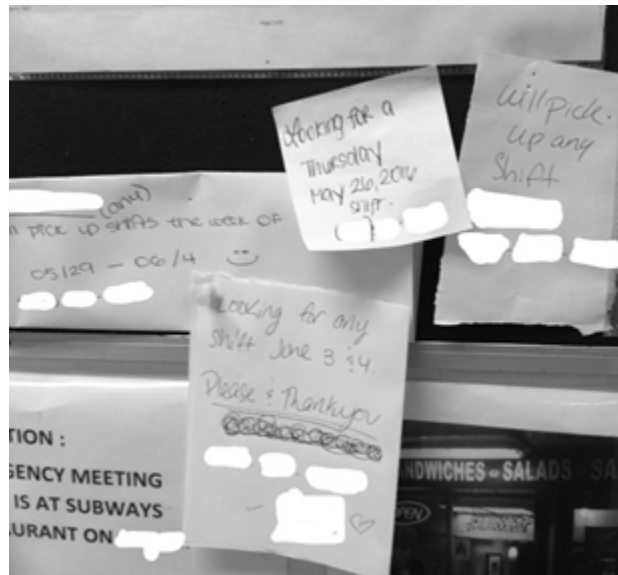
Williamsburg, Brooklyn, a once vibrant Latino neighborhood formerly known as Los Sures, with his mother. Over the past few decades, his neighborhood has been overrun by artisanal coffee shops and tech start-ups; it's been said that one can now find cheaper rent in Manhattan.

While not formally submitted to “on-call” scheduling, workers still have no idea when they'll be asked to come in. During my short time at Spark, I was called and asked to come in that same day at least three times. Each time I said no. My manager, Dante, would quip, “I hate you!” and hang up the phone before I could respond; he would also approach me while I was at work and ask if I wanted to stay late. Although technically voluntary, he would be visibly disappointed when I would deny the request. “I'm just tryin' to pay your bills, girl!” he would shout. While I do not doubt Dante's intentions, Spark frequently presented itself as always having its workers' best interests at heart, obfuscating the ways in which the industry and company themselves were responsible for our exploitation.

Sara Sharma (Sharma 2014) uses the term “time work” to talk about how precarious workers do not experience a uniform speed-up in time, but must attune their daily rhythms to the demands of others. Like the taxi drivers she profiles, waiting around for their next customer and then racing their passengers to the airports, in New York City, fast fashion workers too must attune themselves to the constantly shifting pace of modern retail. As I described in the first chapter, the job application and interview process initiates applicants into the lifestyle of on-demand retail. Near the official schedules at most stores, you'll see white sheets of paper, either taped to a table or tacked to a wall, where workers scribble their names and numbers if they “want more shifts” or if they have a shift they're looking to give away (see Figure 9). Long-term workers were well

adept at this game; retailers are known for drastically cutting shifts of more senior workers while continuing to bring on new hires (see also Lambert 2008). Private Facebook groups allow workers to swap shifts or post schedules online— a critical piece of “time work” when employers sometimes post the schedule as little as a day or two in advance of the coming week. Before I was privy to these insider forms of sharing information and re-distributing hours, I made special trips to Times Square, simply so I could check the Talia’s schedule.

Figure 9: Analog Time Work (photo by author)



As I anticipated, the constant vacillation of worker schedules infused workplace relations. My coworkers chugged coffee and energy drinks to endure 6am shifts, while others frantically arranged childcare from their phones in the break room. I was shocked that even those in power had difficulty keeping track of employees. Managers regularly forgot when I had clocked in, and my coworkers taught me to advocate for myself when my break was due or my shift over. As I would come to find, computer-generated flexibility undergirded the idea of the ‘suspect worker’, who came and went too often to

be kept track of ‘the old-fashioned way,’ meaning through human oversight alone. As I detail below, incessant employee turnover throughout the day and fluctuating weekly schedules justified additional forms of automated control, compounding anxiety and insecurity among front-line workers. This often occurred as soon as employees clocked in.

In Touch and On Time: Biometric Fingerprint Scanners as Time Management

In order to enforce [an attendance] policy, companies should use time keeping devices that objectively determine when employees have violated the policy. Similarly, managing employees’ workload to ensure that they have a sufficient amount of tasks may reduce their ability to engage in time theft. Finally, managers should encourage coworkers to police each other.

-Christine A. Henle, Charlie L. Reeve, and Virginia E. Pitts, “Stealing Time at Work: Attitudes, Social Pressure, and Perceived Control as Predictors of Time Theft,” Journal of Business Ethics (2010)

Automated schedulers re-shape worker schedules as well as the mechanisms through which employees account for their time worked. At both Talia’s and Spark, I was required to scan my fingerprint to clock in and out for shifts and lunch breaks. Fingerprint scanners are a form of biometric technology, or “the application of modern statistical techniques to measure the human body and is defined as the science of using biological information for the purposes of identification.” (Magnet 2011:8). As Shoshana Magnet (2011) explains, in the workplace, rudimentary fingerprint scanning technology first appeared in Wall St. investment firms as a time-clock mechanism. These scanners were put on the market by the company Identimation, which was acquired in the 1990s by Wackenhut, now known as G4S, one of the world’s largest private security companies. Dubbed “the chaos company” (Langewiesche 2014), G4S has received criticism for its involvement in torturing Palestinian prisoners in Israel, operating deplorable private prisons in the US, and most recently for working with Dakota Access LLC against

protestors in Standing Rock, North Dakota (Lazare 2016). The acquisition of Identification by Wackenhut/G4S should come as no surprise, as police and prisons have advanced biometric fingerprinting technology perhaps more than any other industry. Magnet writes: “prisoners themselves represented ‘acres of skin’ to a biometric industry in its infancy, and one requiring a broad population upon which to test its products. Fingerprinting remains the technology most closely associated with law enforcement and the prison system, and thus biometric fingerprinting was a primary focus of the early industry” (Magnet 2011:50).

Biometric technology has become common across social landscapes, including prisons, welfare offices, and national borders. Now, required in the low-wage workplace, workers are cast as immanent threats to retailers, potential “time thieves” who can be tracked and potentially caught by new technology; Figure 10, an advertisement for Kronos’ biometric scanner, reads, “Looking to prevent employees from buddy punching? In Touch incorporates new Touch ID Plus Biometric Technology to identify and validate an employee’s true identity.” Biometric fingerprint scanners work in conjunction with scheduling software to cut down any ‘unnecessary costs’ by more accurately accounting for time on or off the clock. Jim Manfield, Product Marketing Manager at Kronos, writes for the Kronos Blog, “What if your managers had the ability to quickly and easily identify schedule conflicts, view and approve time-off requests, or find replacements for absent or tardy employees? What if a system could track employee attendance and produce violation documentation for them? What if employees were no longer able to game the system and punch in early or punch out late, or for each other? How much money would this save you? Enter workforce management automation” (Moreno 2013).

Indeed, Kronos bills biometric fingerprint technology as “the first timeclock built for today’s modern workforce” with “rock solid reliability” (Anon n.d.). In this case, a “modern workforce,” indicates one that is ever-changing and requiring digital management, while “reliability” is framed as protecting corporate interests.

Figure 10: Kronos Biometric Scanner Advertisement



Despite their supposed reliability, biometric technology regularly malfunctions (Browne 2015; Magnet 2011). During one of my first shifts at Spark, my manager, Emily, and I encountered numerous difficulties trying to register my information in the scanning system. Two biometric scanners hung on a wall in between the seating area and the staff lockers in the breakroom. After my manager punched a few buttons, the machine instructed me to place my finger on the scanning pad. “No finger detected,” the machine read. “Try again,” Emily told me, wiping the pad with a tissue. Still no finger detected. “Maybe try a different finger,” she advised. This time I used a different finger, but still, no finger detected. “Let’s try this machine,” she said, entering her employee id number

and scanning her own finger on the machine next to us. I placed my finger on the second machine, attempting to apply more pressure, to no avail. “Put, like, your whole finger on there,” she said. Alas, still no finger detected. “Go wash your hands,” she quipped, annoyed but not overtly frustrated, as if she had encountered similar difficulties before. I scanned my finger once more after thoroughly washing my hands. The machine then displayed the following message: “Error, no employee scheduled.” To my confusion, but also relief, Emily told me, “Ok that actually means it worked. You’re in the system now. But since your schedule hasn’t yet been put in, it says that error. But it does log when you clock in and out, so just do that like usual and we’ll be able to pay you that way.” After all that trouble, the error was apparently derived from my own sweat-induced anxiety (one might say the sweat was itself a haptic outcome of engaging with the scanner). I trusted that the machine was properly counting my hours all that week, even as it beeped loudly each time I clocked in or out. Biometric fingerprint scanners are also prone to “demographic failures,” regularly failing to scan prints of elderly people, Asian women, people who work in manual or clerical industries, or people whose fingers are too large (Browne 2015; Magnet 2011).

At Talia’s, the scanners malfunctioned weekly. Workers waited in long lines at shift change, hastily scrawling their hours in a notebook by pen or pencil. We hoped managers would input our time correctly, if at all. My interviewees shared similar experiences. One said, “I remember a lot of times [the scanner] didn’t work. Sometimes it didn’t, sometimes it did. So you’d have to put it in manually.” I also had the following exchange with Susanna, who had worked at multiple fast fashion locations along the East Coast.

Susanna: It was annoying, sometimes [the fingerprint scanner] didn't work.

M: What would you have to do when it didn't work?

Susanna: You'd have to let a manager know, and then they'd put in the time for you. And that was really annoying because, like, everything's really hectic, everything's really busy. You'd have to like, hound them for it.

M: Did that ever happen to you?

Susanna: Yeah, a lot of times. When I first started working there, I didn't get paid for like weeks of work.

In these examples, the ease and efficiency of biometric scanners almost exclusively operated in employers' interests, amplified worker anxiety, and made them prone to wage theft.

Like other technologies, biometric scanners remained vulnerable to worker sabotage. Jesse shared: "It was hard to have someone sign in and out for you. But I know we would definitely [tell each other], just don't sign in, just say the system was down and just put your time on the paper. We'd do that for each other every now and then. Especially when we were late or things like that." Another sales associate, Vanessa, told me management at her store had become stricter about where people could clock in "because they don't want people to steal hours." When I asked if many people did that, she laughed and said yes; "I was one of them." While some might categorize Vanessa and her co-workers' behavior as deviant, she quite clearly articulated it as a collective response to the stresses of automated flexible scheduling. Not only would she partake in minor subversion, such as going to the bathroom before clocking out, but she and her coworkers began arriving as much half an hour early, clocking in and then hanging out in the breakroom. She said, "They were sending us home early because they didn't have

enough work [for us] to do... So it was like...if anything, we just clock in, not clock out for 30 minutes.”

My intention here is not to diminish the seriousness of wage theft, nor the ways that employees can and have leveraged automated record keeping to dispute wage theft (Dombrowski, Alvarado Garcia, and Despard 2017), but to instead document the conflict inherent these technologies (Thompson 1967), or how, in surveillance theorist Kirstie Ball’s words, “strategies of resistance occur at the boundary of the body and surveillance and at an intersubjective level” (Ball 2005:104). In my observations, employees regularly engaged in daily attempts to take back time for themselves, for instance by absconding to the fitting room—one of the few spaces free from CCTV’s threatening gaze—to send texts, take selfies, or simply admire themselves in the mirror. Compared to the masculinist interventions that Karen Levy notes in her study of truck drivers, who would go so far as to smash their in-truck performance monitors (Barocas and Levy 2016), the tactics of resistance to digital surveillance I encountered were less overt, indicative of more feminized and precarious subject positions.

These tensions reflect increasingly widespread debates on this largely unregulated form of surveillance. Current class-action lawsuits against hotel and grocery chains in Illinois—one of the few states with regulation on biometric data collection—claim the employers failed to acquire written consent for the collection of biometric data and did not disclose how long such data would be stored nor how it would be destroyed. “Unlike, say, a stolen company ID, which can be replaced, individuals can’t order up a new body part, raising concerns about what could happen if scans of their fingertips’ arches, loops, and whorls fell into the wrong hands” (Yerak 2017). Despite the growing ubiquity of

fingerprint scanning in everyday life—fingerprints commonly unlock personal cell phones, for example—among retail workers, biometric fingerprint scanners reinforced the idea that workers were always already potential criminals. Engaging with biometric systems cues bodily reactions (hearts racing, palms sweating), while their failure exacerbates anxieties of an already hectic environment.

Even after clocking in, employees continue to be monitored as they move throughout the store. In my fieldwork, this happened most extensively at the point of sale.

Point of Sale Surveillance: “You Know We Track That, Right?”

Working at the cash register is one of the most exasperating duties for an entry-level fast fashion retail employee. Lines grow long, sensors beep at multiple registers simultaneously, and music blares, making it difficult to think straight, let alone check out customers quickly, efficiently, and with a pleasant demeanor. As my interviewees shared:

Rachel: It was crazy.... I had never been on a register before. There's lines down and around the corner. People usually buy like a hundred things at once. So you check the credit card, check the IDs, take the sensor off, you know, talk to them, also like, counting the register.... It was a lot of pressure and it just made me really anxious.

Zarina: [The cash register] was a little more stressful because the line-ups would be constant. Especially during the holidays or when we would have collaborations with designers. It would just be a lot to keep going. Deal with one customer, they make a \$300 purchase, then deal with another customer.

Most people working at the register were well aware of the multiple security cameras observing their every move, but fewer with whom I spoke understood the extent to which their interactions were followed digitally. At the beginning of each shift, workers logged into the register's computer system, and with this information, analytic software could

then generate performance reports, collecting behavior at the aggregate level, while also identifying individual transactions, as illustrated in the figure below. Invoking Foucaultian normalization (Foucault 1995), the retail industry has dubbed this approach “exception-based reporting,” flagging workers who, for instance, might be taking too long to complete transactions or have logged a suspiciously high number of customer returns. According to the company RetailNext, which produces the software illustrated here, this image shows an “alert of a high-risk transaction that took place without a customer being present [highlighted in the center of the image]. One click on the transaction brings up not only the receipt [middle right], but the corresponding video as well [bottom right].” The top two segments aggregate information at the company and store level, pinpointing both “highest risk stores” (top center) and “highest risk cashiers” (top right). This platform is sold to retailers not only on its accuracy, but its efficiency. According to its website, “Just like that – what used to take all morning now takes a couple of clicks... It’s not only easier for the LP [Loss Prevention] professional, but it allows increasingly tight personnel resources and budgets to be allocated more efficiently, more effectively.” (Hartjen n.d.). Such software automates retail management, combining new and previously distinct sets of information to identify company-level trends as well as mark individual employees.

Figure 11: Exception-Based Reporting



Industry figures vary on how much “internal theft” by employees compares to external theft theft by customers, but most statistics hover around 30% of total loss (Pierce, Snow, and McAfee 2015). Richard Hollinger, a criminologist who studies “employee dishonesty” and helps administer the National Retail Security Survey, offers a surprisingly cogent analysis, when he tells *Loss Prevention Magazine* that employers might reduce internal theft by providing workers with “increased hours and increased wages... They want jobs that pay well. And that’s still a problem with retail, where many retail employees are still paid minimum wage” (Lee 2016:37). Hollinger’s insights are not widely shared, however: a flyer for Gunnebo Cash Management Solutions, an automated money counting system, warns: “Shrinkage is not just a problem for your rivals. Globally for example, recent surveys show that retailers lose \$128.5 billion in cash a year, with almost one-third due to internal theft and an additional 20% due to error. When you are hiring students or other temporary and inexperienced workers,

shrinkage can become a headache” (emphasis mine). For companies like Gunnebo, the solution is not to provide better jobs, but increased automation and surveillance.

Combined with other practices, new forms of workplace monitoring reinforce the idea that flexible workers are always already potential criminals. Often, when I would ask my interviewees about how their cashier performance was tracked, they immediately noted the presence of security cameras. Only upon further pressing did they reflect on the role of automated surveillance. Exchanges like the one below with Elijah were common.

M: Would you log into the register with your employee card or something?

Elijah: No, you have a pin and your employee number so a six or seven digit code, it might be up to seven now. Seven digit code, type in a pin that you set.

M: And why did you do that? Do you know?

Elijah: Why did we do that versus [what]? That’s just what the system was.

M: Do you know why they had people log in?

Elijah: I guess so they can say, if you make a mistake it’s on you. Or if a customer got double charged, it’s on you.

Elijah’s comment—“that’s just what the system was” reveals the extent to which various forms of surveillance have become a normalized aspect of work and life in the 21st century, especially for people of color and in cities like New York (Lippert and Wood 2012). While Elijah understands this monitoring as an everyday part of the job, he simultaneously concludes that its ultimate objective is to place additional burden on employees; as he emphasized, “It’s on you.”

While often invisible, digital point-of-sale monitoring can have detrimental impacts on low wage workers. During my cash register training at Talia’s, a current employee told me and my fellow trainees of a button to correct transactions, which we

could use as often as necessary. Our floor manager spun to her, blurting, “You know we track that, right?” The employee’s eyes grew wide in distress. In another case, one of my interviewees, Jesse, had worked at Talia’s in Los Angeles. He told me that he once put five dollars—half an hour’s wages—from his own pocket into the register when his drawer came up short; being reprimanded for previous mistakes, he said, had been “terrifying.” Similarly, Elijah told me: “The rule with them is, if you’re under anything more than \$75 dollars, it’s automatic termination. If you have someone under \$40 it might not be their fault. It’s an honest, slight mistake. But they’d still fire them because they’d see it as they’d have the potential to do it again.” These examples from Jesse and Elijah illustrate how worker monitoring can increase workers’ sense of insecurity in a context of big data surveillance: while they might not be aware of exactly how they are being monitored, they know being even a few dollars off is a risk they can’t afford to take, especially when they are both trying to pay their way through school and their labor power is easily replaceable.

While surveillance proliferates at the point of sale, again, so too do employee responses. Jesse shares, “Learning all the codes [for clothes] was very important. You know I was really fast at getting customers in and out, in and out. And if I made a small mistake I would just, like, not do anything about it, and just get it done. That was really important in the holiday season, to keep our lines down.” Maintaining the flow of customers was essential in this setting, since long lines tend to stoke customer dissatisfaction, which front-line workers must bear the brunt of. When I asked Jesse to provide a specific example of tricks he used to help keep the lines flowing, he expressed reliance on what Gary Marx (Marx 2003) calls “distorting moves” and what Finn

Brunton and Martha Nissenbaum (Brunton and Nissenbaum 2011) have more recently dubbed “obfuscation” by entering technically valid, but inaccurate, information at the cash register: “A lot of times the clothes wouldn’t scan in, so you’d have to type in the code. I’d type in the code and, you know, it would not really give me anything, or I’ll search and I’ll pick and choose. Like oh I’ll just pick this shirt ‘cause it has the same design on it, you know?” In this way, the code he punched to ring up a particular garment was incorrect, but it was close enough to allow him to keep lines moving. Jesse was additionally required to solicit personal email address from customers, which he sometimes avoided by entering his own email address instead: “The funny thing is I’ve put in my email a thousand times.” While I laughed along, this anecdote highlights an important dynamic. Distorting moves here operated as a form of labor, less resistance than a survival mechanism in a sped-up, hyper-surveilled, and under-compensated line of work.

At the cash register, fast-paced work is monitored intermittently by managers who count the drawers, as well as continuously and visibly by video cameras, and continuously but *invisibly* by digital point-of-sale monitoring. Most employees had spent little time reflecting on this digital surveillance, but when they did, they appeared startled or resigned to the reality that it made their work more stressful and more unstable. What at first blush appears resistant is in fact a form of coping, invoking humor to pad the very serious consequences that could result if their performance is identified as an exception to be investigated.

Watching beyond the Workplace: The Rise of Social Media Monitoring

Workers are additionally followed online in less obvious ways. One sales

associate I interviewed told me of an app called Slack, which allowed him and his coworkers to post all sorts of things, from pictures of the work schedule to general conversation. “It’s sort of like Twitter,” he explained as he showed me the interface on his phone. Here, managers might post announcements, and while he told me employees were not required to be on the app, there was an implicit expectation. “So if you didn’t read it on there,” he said, “[the managers are] like, oh you didn’t read it? Who’s on Slack? And majority of the time that’s where you get your schedule. You can get your schedule the same place you clock in but *that’s such a hassle*” (emphasis mine). Hence, while apps like Slack might bring with them a sense of convenience, they could also potentially create a form of wage theft if workers are expected to check the app while off the clock. In addition, Slack is in fact an acronym, standing for “Searchable Log of All Communication and Knowledge” (Kim 2016). Apps like Slack are part of a growing sector of “sentiment-analysis” which attempts to quantify and measure how workers are feeling and giving rise to legal and ethical concerns over how corporations use data and to what ends (Waddell 2016).

Sentiment analysis could be used to predict worker dissatisfaction, or as a variable in calculating a store’s theft risk. For example, one company called The Retail Equation attempts to measure and analyze what customers and employees say about retail companies on the internet. As I read in *STORE Magazine*, an official publication of the National Retail Federation that I picked from the Loss Prevention conference which opens this chapter, “If the tweets around a store are found to be more negative than the average for the country — more references, for example, to statements like ‘I hate my job’ — then those stores showed a higher shrink [rate] than the rest of the

country” (Parks 2016). Thus “riskier” stores, perhaps where employees have more often voiced their discontent or rebelliousness online, receive a higher risk score, and are consequently assigned additional Loss Prevention resources. According to the article, “The same was true for tweets that showed poor grammar and slang.” Sentiment analysis may be in fact measuring socio-economic status of the surrounding area. And so again the loop begins to close: as workers experience more alienation and financial insecurity, employers feel more justified enacting near “limitless worker surveillance”(Ajunwa et al. 2016). When I asked Elijah if he had ever been warned about social media use, he said, “yes. Which I thought was a breach of my privacy. Because when does my employment stop? When I go home you’re gonna monitor me to make sure I don’t back-talk the company?”

When I trained to be a sales associate at a major clothing store in New York City, I caught a glimpse of how front-line workers are socialized into a world of digitally surveilled work. As I sat in the back of the store on a cold, metal fold-out chair with the forty or so other new-hires, our supervisor, a young woman who had only been employed there a few months, walked us through the employee handbook, peppering the information with her personal advice and anecdotes. The store’s policy on social media was relatively vague, but the supervisor warned us of its dangers. One sales associate, we learned, had posted a selfie on Instagram while tending the fitting room; she apparently captioned the photo, “Supposed to be working haha #timestealing.” The worker quickly realized her error—cell phones were banned on the sales floor and her manager was one of her Instagram followers—and deleted her post. However, the manager/Instagram follower had taken a screenshot of the post, confronted the worker,

and subsequently fired her. In another example, we were told of an employee who called out sick but then was later seen posting photos on Facebook from a nightclub.

As my supervisor attempted to communicate the gravity of these situations, I struggled to keep the smirk off my face. In an age in which work is increasingly unstable, it takes courage to so blatantly undercut one's employer, perhaps especially on the internet.² Orwellian bosses of the analog era have not so much disappeared as much as they have become appended and in many ways extended through social media monitoring. Part of what makes this form of surveillance new, according to political theorist Bernard Harcourt, is that the means by which people give up their information is also a source of pleasure: social media users post updates, tweets, and photos in order to get likes, because it can feel good. To relate to others in the current moment, to share in our misery of work online, is also to make ourselves subject to surveillance and control. Harcourt calls this new form of governance "the expository society" (Harcourt 2015). This framework builds off the work of philosophers Gilles Deleuze and Felix Guattari, who so crucially theorize the role of pleasure in control. It's also indebted to Kevin Haggerty and Richard Ericson's conception of a "surveillant assemblage," which describes the abstraction of human bodies into a multiplicity of data flows that produce "data doubles" through information assemblages which can then be marked or targeted for intervention. Likes or retweets from a cool supervisor might stimulate the

² Recent instances indicate "labor law [may be] catching up to social media" (Wattles 2016) The fast-food Tex Mex chain Chipotle was found by the National Labor Relations Board in violation of an 80-year-old labor law protecting worker speech when it told an employee to remove Tweets criticizing the company. The Tweet read, in response to a customer posting about a free burrito, "Nothing is free, only cheap #labor. Crew members only make \$8.50 [per] hr how much is that steak bowl really?"

hypothalamus as much as from a friend or even a crush; that is, of course, until the supervisor decides to report your post to the manager, which might itself have been assigned based on risk scoring software, and you are reprimanded, or worse, fired.

How Data Fashion Precarity

From NRF Protect to front-line retail, technoscience, capital, and the state work together to normalize surveillance, exacerbate inequality, and predispose certain bodies to state-sanctioned targeting. 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 additional methods of automated control. In settings where the employee base changes as quickly as the store inventory, the propensity to treat workers like potential criminals becomes amplified. Biometric fingerprinting purports to provide objective time keeping for today's "modern" (i.e. flexible) workforce by preventing time theft and buddy punching, while software that tracks and aggregates cash register transactions encourages employers to quickly pinpoint "exceptions" within a large pool of cashiers, exerting more pressure on an already stressful task. These findings suggest that researchers should take a more holistic approach technology in the workplace, investigating how distinct forms of tracking are not simply additive but exist in particular relation with one another.

Although my opening vignette shows how the surveillance industry sells their products to retailers through the valences of both entertainment and objectivity, these tools have the cumulative effect of intensifying anxiety and insecurity among front-line employees. Biometric fingerprinting cues physical and emotional responses, while its regular malfunctioning causes workers to worry about the accuracy of their paychecks.

Point-of-sale monitoring amplifies an already stressful task, and reminds workers that they—not the company—are to shoulder the burden of any mistakes. As the circulation of data aids the transition to just-in-time retail, the labor process itself has shifted.

Although workers rarely engage in skilled or even semi-skilled selling, a less obvious form of emotional labor helps keep the store running. Amid life-jumbling automated schedulers, sweat-inducing biometric scanners, and anxiety-provoking point-of-sale monitoring, front-line workers must resist becoming overwhelmed, keeping clothes and customers moving. This work can be understood as the *emotional labor of surveillance*.

Surveillance and retail work always in some respect go hand in hand. Combining these findings with my discussion in the previous chapter, as well as extant sociology of retail labor literature, demonstrates how tactics of surveillance tend to shift alongside the retail labor process. I've illustrated these distinctions in the figure below (this schematic should be imagined as Weberian ideal types rather than rigid temporal or categorical boundaries). In early twentieth century department store contexts, workers were trained to engage in skilled selling, and managers expected deep engagement with customers. Susan Porter Benson deftly describes the contradictions of cultivating saleswomen, as “the more managers urged their saleswomen to become experts on their merchandise and fashion, the more likely clerks were to resist the demand for deference” (Benson 1986:159). Benson finds that salesfloor discipline was too often “all stick and no carrot” (Benson 1986:138): photos from women’s magazines depict salesgirls congregating in small groups, sharing gossip or grievances usually as a male figure—presumably either “store detective, spying floor manager, [or] undercover agent” (Benson 1986:138)—

lingers ominously in the background, his physical presence portending direct if uneven discipline.

Figure 12: Retail Labor Process and Surveillance



Store Model	Labor Process	Surveillance Method
Department Store	Skilled Selling	Managerial Oversight
Branded Apparel	De-skilled Emotional Labor	Secret Shoppers
Fast Fashion	Just-in-Time Retail	Digital Surveillance

The shift from department store to the proliferation of branded apparel retail chains engendered a proliferation of de-skilled affective and emotional labor. More important than knowing the product is and providing a positive and formulaic interaction (Hochschild 2003; Leidner 1999; Ritzer 2014) with customers while embodying the brand (Mears 2014). Abercrombie & Fitch customers, for instance, may easily identify the worker not only because of their location in the store or their standard uniform, but because they have a certain *Abercrombie & Fitchness* about them; and they are likely wearing their own Abercrombie and Fitch clothes. In these the retail chain context, shopkeepers can no longer visually track every worker, and interventions such as secret shoppers help keep modern retail employees in line. These undercover customers can

appear unannounced at any moment, and are usually hired by the company through a third party. After each shopping trip, they produce quantitative evaluations based on the service they receive, thus creating a stereotypically Foucauldian threat of surveillance without constant supervision. Willie Osterweil writes, “As long as workers are forced to smile, politely greet customers, and point them toward a special deal, capital will need to send out mystery shoppers to keep them in line” (Osterweil 2012).

In recent years, however, big data and fast fashion have altered the terms of retail labor. Following my argument in the previous chapter, the primary tasks of fast fashion retail work require more “material” than immaterial labor—with carrying, folding, and sorting a constantly changing stream of stuff being of the utmost import. Another former employee I talked to said, “I’ve shopped here for years. I have never really felt like I’ve ever once been like serviced here, to be really honest with you. Mystery shoppers would probably benefit their business, but at the same time I almost feel like this store is such a vehicle for money they almost just don’t care.” As customer service takes a backseat to the work of maintaining the store, the need for “affective Pinkertons” (Osterweil 2012) in the form of mystery shoppers wanes, and worker behavior, like everything else in the store, becomes more easily tracked digitally.

Finally, theorizing the emotional labors of digital surveillance complements emerging scholarship on how privacy operates differently for the underclasses (Adler-Bell 2018; Eubanks 2018a). Women of color, indigenous women, and gender or sexual deviants have rarely been afforded individual privacy by the state (Mogul, Ritchie, and Whitlock 2012; Smith 2015). Invasions of privacy or unregulated data sharing can also have amplified consequences for members of marginalized groups, leading to arrest,

deportation, or worse. Biometric data could potentially be shared with law enforcement, and targeting someone for employee theft could increase potential points of contact between them and police.

How might critiquing the variegated experiences of worker surveillance help forward a critical data praxis? I explore that question in the next chapter.

Chapter IV

Collective Mobilizations toward a Critical Data Praxis

I had to stop by Times Square before heading to the march. I was already heading into Manhattan for the action commemorating the one-year anniversary of the killing of Eric Garner, so I figured so I should stop by Talia's, where I was working at the time. Even though computer software used sophisticated algorithms to fine-tune our weekly schedules to mirror shopper demand, somehow no formal platform existed for workers to check their hours online. I wondered to myself, who said technology made life easier? Once inside the store, I darted through packs of roving customers, past cramped clothing racks, and down two flights of a congested escalator to reach the break room. About fifteen of my coworkers, most of whom were young people of color, slumped on metal folding chairs, taking a brief respite from the hours of standing, sorting clothes, and appeasing entitled tourists. I found my name among the hundreds listed on the bulletin board; the automated scheduler had assigned me eighteen hours for the following week, broken into four shifts. Like nearly all of my coworkers, I was scheduled part-time, despite having promised open-availability in order to get hired. I typed my hours into my iPhone4, weaseled my way out of the store, and headed north to meet the other demonstrators at Columbus Circle.

After the requisite speeches, the crowd took the streets, with hundreds of us marching through Central Park and weaving our way down 6th avenue. Together, we repeatedly shouted, "I can't breathe": the infamous phrase Garner yelled eleven times at the Staten Island cops who attacked and killed him for selling loose cigarettes. The demonstration culminated in a die-in in the middle of Herald Square, under the glowing

lights of the recently-opened, world's largest H&M. Police stood at the ready, batons in hand, while shoppers weaved through the unusually dense crowd. While I had participated in other protests that went through major shopping centers, something about this one felt especially significant. Maybe it's because this was the first time I related to an area simultaneously as protester, consumer, and worker; but I got the sense that we were in the streets, enacting our "public will," in Judith Butler's words (Anon 2011), making historical and political connections with the collective presence of our bodies—and our phones. Garner had died in part because he labored in the informal economy in a working-class Staten Island neighborhood—a prime target in an era of predictive policing. He was punished for being structurally surplus to capital and "daring to survive" (Mohandesi 2014). Ramsey Orta had wielded his own phone as a powerful weapon, documenting Garner's death for all to see; despite the footage, Garner's killer, Officer Daniel Pantaleo, would still roam free. And here we were, screaming about his death, and so many other deaths, in a nexus of capitalism, surveillance, and precarious labor.

Fast fashion retail labor and state-sanctioned police violence seem at first glance fundamentally distinct from one another, informed by different logics and requiring unique responses. Yet, in participating in Black Lives Matter protests in and around retail spaces, hearing how other people related to the Movement for Black Lives, and volunteering with a retail workers' center, I began noting how often these struggles converged. First, they overlapped spatially and temporally, with Black Lives Matter protests regularly targeting retail spaces across the US during the course of my fieldwork. They additionally overlapped demographically, with many of my coworkers comprising

the same populations targeted by police violence, and many of my comrades organizing against both unjust working conditions and unjust policing. I thus wondered, what theoretical or analytic connections might be made from these convergences?

The digital connections between retail labor and anti-police organizing stem from their entanglement with what Shoshana Zuboff calls “surveillance capitalism” (and what Nick Srnicek similarly calls “platform capital”) in which digital companies extract data from user to predict and profit from future behaviors. This insatiable hunger for data mirrors Karl Marx and Frederick Engel’s conception of capital, as described in *The Manifesto of the Communist Party*: “The need of a constantly expanding market for its products chases the bourgeoisie over the entire surface of the globe. It must nestle everywhere, settle everywhere, establish connexions everywhere” (Marx and Engels 1848). Under platform or surveillance capital, online companies constantly seek new sources of information. Srnicek argues, “The platform business model is predicated upon a voracious appetite for data that can only be sated by disregard for privacy (and often workers’ rights), and constant outward expansion” (Srnicek 2017:254).

As discussed in the introduction, Information capital, as with other forms of capital, unfolds with the systemic and systematic capturing of surplus populations (Davis 2016, 2011a; Gilmore 2007). As literature on networked social movements suggests that as much as technology has aided social movements, it has also in some ways extended and amplified the surveillance prowess of the state (Tufekci 2014a, 2017, 2014b). Sarah Brayne’s research with the Los Angeles police department concludes that the ‘wide and deep’ reach of big data surveillance, including “inter-institutional integration of data and proliferation of dragnet surveillance practices-including the use of data on individuals

with no direct police contact and data gathered from institutions typically not associated with crime control—represent fundamental transformations in the very nature of surveillance” (Brayne 2017:996). In other words, the rise of surveillance capitalism and big data surveillance indicate the movement of data across institutional contexts for purposes of profit and control. Social movements should respond accordingly.

In this chapter, I explore how technologically-mediated labor market insecurity connects to broader struggles for racial, gender, and economic justice. I pursue the intersection of everyday techno-governance with more pernicious predictive policing tools, as they work together to criminalize marginal labor and lives. I draw on my participation in and interviews with key activists in two social movements that created an active political presence in and around retail spaces between 2014 and 2017—the Black Lives Matter (BLM) movement and a workers’ center called the Retail Action Project (RAP). These two movements, while employing at times vastly different tactics and demands, help advance what I call a *critical data praxis*, which unmask, connects, and potentially organizes around the role of technology in perpetuating inequalities. For both RAP and BLM, I provide an overview of the organization/movement and describe two illustrative snapshots: for RAP, a direct action on the National Retail Federation’s annual conference and exhibition hall where vendors peddled their latest retail management technologies. For BLM, I focus on the 2014 and 2015 protests at the Mall of America in Minneapolis, Minnesota, which highlights digital connections between *selling* goods and *securing* space in the twenty-first century surveillance cities. By analyzing retail labor and anti-police violence movement together, I show how critical data praxis holds the

potential for advancing unexpected alliances across social movements against capital and the state in the twenty-first century.

The work of both the Retail Action Project and Black Lives Matter is informed by long legacies of struggle—including but not limited to labor organizing among marginalized workers (Frank 2014; Georgakas and Surkin 1998) as well as battles for black power and against white supremacy (Bloom and Martin 2013; Kelley 2002). While those histories likewise inform this chapter, I would be remiss to claim that I adequately engage those rich legacies here; in fact such an attempt would require another book project. Nevertheless, I contend that the following comparison allows us to look at two burgeoning, and at times complementary, attempts to organize the twenty-first century precariat.

The Retail Action Project

In the mid-century era of department stores and the initial rise of mass consumption, several factors conspired against the organization of retail workers, including high turnover, promotion of senior employees, staunchly anti-union retail managers and paternalistic union organizers. Given these circumstances, historian Susan Porter Benson writes, “it is remarkable not how little but how often saleswomen tried to organize” (Benson 1986:269). Several of the aforementioned conditions, especially worker turnover, continue to hinder unionization today. Between 1983 and 2013, retail worker unionization has shrunk from 11 percent to a mere 4.6 percent; the rate of union density in apparel is lower than almost all other retail sectors, at a mere 0.7 percent (department stores boast 2.4 percent while grocery stores are among the most highly organized at over fifteen percent) (Ikeler 2016).

According to its website, the Retail Action Project (RAP) “is a member-based organization with the mission of building worker power, elevating industry standards, and promoting family-sustaining jobs. We achieve this through engaging in collective action, highlighting worker voices, growing workers’ professional capacity, and nurturing member leadership.” RAP is a part of a coalition of workers’ centers, growing increasingly common in New York City and across the United States (Fine 2006; Milkman and Ott 2014). Part of a long trajectory of non-union worker organizing, workers’ centers attempt to provide services and act as a hub for community organizing for flexible, and often largely immigrant workforces in an era of austerity and low union membership. Labor scholar Janice Fine defines worker centers as “community-based organization that engage in a combination of service, advocacy, and organizing to provide support to low-wage workers” (Fine 2011:45). The first workers’ centers emerged in the 1970s in New York, North Carolina, South Carolina, Texas, and California among black, Latino, and Asian immigrant workers, with the numbers growing in succeeding waves in response to new immigrant workforces. As of 2007, there were at least 160 workers’ centers across the US. According to critics, workers centers’ campaigns against wage-theft may prevent more ‘offensive’ organizing, while reliance on foundation funding rather than union dues hinder long-term institutionalization. In addition, workers’ centers’ practice of community building and small, workplace-based campaigns contrasts with union’s attempts at “large-scale industry-based” campaigns (Fine 2011:48). For these reasons, among others, unions and workers’ centers have historically shared a somewhat antagonistic relationship.

Alongside rising precarity, union membership has fallen and organizing tactics have shifted. Workplace strikes have become increasingly obsolete in “the nation’s legal regime... employers...[can] ‘permanently replace’ workers who go on strike over economic issues and imposes crippling penalties on traditional unions that violate the many legal restrictions on strike activity” (Milkman and Ott 2014) (although recent teachers’ strikes across the United States offer a stunning exception to this pattern (Fraser 2018)). Unions and labor organizers now more commonly focus on neighborhood or identity-based activism, attempting to ‘organize the unorganized’ by focusing on sectors that have historically been left out of the organizing process (Kalleberg 2009; Silver 2003). In her introduction to the anthology *New Labor in New York*, Ruth Milkman describes how this approach can be traced in worker mobilizations across New York City, a global metropolis known both for its uniquely high union density and exorbitant inequality. In this setting and amidst post 2008 neoliberal austerity politics, organizers have drawn on new structures—such as like worker centers—and new tactics—putting aside cumbersome formally recognized bargaining processes in favor of direct action, confrontation, and worker advocacy.

The Retail Action Project differs from other worker centers in that it was seeded from the Retail, Wholesale, and Department Store Union. RWDSU was founded in the late 1930s in New York City but generally stagnated following “anti-Communist tension after the passage of the Taft-Hartley Act” (Ikeler 2016:35). RAP began in 2005 through a partnership between the RWDSU and a tenants’ rights organization called the Good Old Lower East Side (Singh 2016). RAP organized small, independent retailers in Mahattan’s SoHo shopping district; targeting Yellow Rat Bastard for wage violations and launching

similar campaigns at Shoemania, Scoop NYC, and Mystique Boutique. As Peter Ikeler has written in his profile of the organization, RAP relies on a combination of what Dorothy Sue Cobble calls “occupational organization” and advocacy. RAP attempts to exert force on the retail industry as a whole by providing service trainings to help workers forge a sense of occupational identity, holding hiring events to “control labor supply” (Ikeler 2014:116), and allocating benefits based on organizational membership rather than location in a specific work site.

As large retailers and fast fashion chains proliferated throughout the city, RAP’s organizing strategy shifted as well. Paloma, who has been an organizer with RAP for a year and a half, said, “RAP has definitely changed in a sense, but so has the retail industry....I think RAP had a hold of the retail industry when it was smaller in the city. Of course Soho was huge, and like 5th avenue, maybe Herald square a little bit, but it wasn’t this much. So they had it on lock. But now the industry is so insidious and prominent, bringing in so much money.” Throughout the previous chapters, I demonstrated how fast fashion retailers have created a just-in-time labor force, dramatically de-skilled retail work, and subjected employees to widespread monitoring and surveillance. These shifting labor conditions make organizing exceedingly difficult. As Dolly, a member organizer told me, “I organized retail workers for three and a half years and honestly turnover was the hardest thing I faced while organizing retail workers in general. Because I would meet awesome people that had so much potential but they just couldn’t take it anymore.” With the rise of fast fashion, high turnover combined with a large employee base. Dolly explained: “You also need more organizers if you have over a hundred employees you’re trying to organize. Versus when you have forty you may just

need two organizers.” Dolly learned this lesson the hard way. When RAP launched a campaign against Zara in 2015, four organizers covered seven different locations across the city. “We got burnt the fuck out.” These conditions took their toll on Dolly and other RAP organizers, demanding as much flexibility and over-work from them as from front-line employees.

Although women of color are now more likely to be union members than any other demographic group (Bronfenbrenner and Warren 2007; Moody 2017), fast fashion retail organizing is situated in long tensions between labor unions and racial minorities. Throughout US civil rights struggles—including the March on Washington, the Memphis sanitation worker’s strike, or the Poor People’s Campaign—many mainstream labor organizations remained absent if not adversarial (Cowie 2010). The Revolutionary Union Movements of the 1970s saw mainstream unions like the UAW “as equally oppressive” in both furthering managerial interests, speedups, and racial hierarchies (Cowie 2010:60; Georgakas and Surkin 1998). Similar difficulties mark the trajectory of LGBTQ union movement (Frank 2014). RAP did not escape the aforementioned tensions, as employment across RWDSU versus RAP cohered largely though not exclusively along racial lines. Nevertheless, RAP remains worth investigating by way of its notable gains in organizing “queer class and race” issues (Hollibaugh and Weiss 2015).

As I have elucidated throughout the previous chapters, digital technology and just-in-time production processes facilitated these changes in the labor force. RAP would attempt to confront these issues head on at the annual meeting of the National Retail Federation.

Snapshot: National Retail Federation

Jedidiah, dressed in all black, pulled the dark ski mask over his face. “Man, I didn’t sign up for this!” he shouted. About twenty of us had just left the Retail Action Project main office near Penn Station, walking down the blustery Manhattan streets that frigid January morning. Jedidiah’s ski mask served less to protect his anonymity than to shield him from the sub-freezing temperatures. It was Martin Luther King Day, and political rallies were planned across the city; the holiday carried extra weight this year following the ongoing wave of Black Lives Matter Protests throughout New York City and across the country. But before any of us headed to those events, we had another task before us.

“Where exactly are we going again?” I asked one of the labor organizers shuffling next to me. “It’s the biggest meeting of all the retailers, where they talk about all the latest technology and stuff.” That was putting it lightly. We were headed to the National Retail Federation (NRF), the world’s largest retail trade association known for generating industry projections (many journalistic investigations of the retail industry cite numbers generated by NRF) and lobbying in favor of corporate interests. NRF holds conferences throughout the year, and in the previous chapter I describe my trip to its “loss prevention” conference, NRF Protect. But the federation’s most well-known and widely attended event is The Big Show, held each January. In 2016, The Big Show hosted 35,000 attendees and nearly six hundred exhibitors at the sprawling Jacob Javits Center on Manhattan’s West Side.

We finally made it to 11th avenue, where we met up with those who had taxied with their picket signs and banners. “We need to spread out!” someone yelled. I asked

Stephanie, one of the organizers, what the plan was once inside. She said some folks were going to do a banner drop (which usually entails unveiling a banner in a highly visible location) and a mic check (in which one person will yell a statement or chant, and the group will repeat it in unison, thereby creating a “human microphone”), and the other volunteers and I were there to support the mic check and do chants. I followed the crowd inside the glass complex, and most of the group scampered off. I introduced myself to two young women, RAP volunteers like myself, who stood close to each other in awe. “This is so weird,” one said, stuffing her hands in her oversized puffer jacket. Huge corporate banners hung all around the periphery, emblazoned with logos of giants like American Express, IBM, and Starbucks or business-ease slogans such as, “Be More Productive with Every Step.” Meanwhile, white-collar professionals zipped about, presumably networking as they rushed from corporate exhibits to breakout conference sessions. We followed others in our group up the escalator, where we noticed more of ‘our people’ already staked out, dressed in business casual and blending into the buzzing cafeteria overlooking the main floor. An organizer discretely distributed fake lanyards. “They’re blank, so just hide them under your jackets.” Paloma told me, “I was here for ComicCon last year, and this is way more intense. I guess the only difference is that people aren’t in costume.” I responded, “Oh, they’re in costume, just a different kind.” Paloma turned to me with a grin, “Right, a different kind of costume.”

Then we heard it. “Mic check!” “Mic check!”

“Here we go!” someone said. I tossed my banana peel in the garbage, wove my way through suited men and tried to get close enough to the protestors to hear the chants. Although the plan was to spread out more to make the chants echo, our voices were

dampened by the center’s sprawling size, so we instead stayed close together. Paloma and Kim, proudly donning bright red Retail Action Project bandanas around their faces, dropped a banner reading “Retail Workers Need \$15/HR & Full Time” over the edge of the balcony (see Figure 13). Together we chanted, “9 an hour, it’s time to fight the power!” and “Unite! To fight! This minimum wage is not alright!”

I looked around me, nervous about what I might observe. There were a lot of people filming, including action participants and conference attendees alike, and I was happy that people seemed to be paying attention. Within a few short minutes, security approached and told us to leave. We quickly cooperated, picking up the banner and making our way down the escalator. We continued to chant as we slowly marched out.

Figure 13: Banner Drop at National Retail Federation Big Show



Critical Data Praxis in the Labor Movement

During that day at the Javit's Center, I made small talk with some of the union organizers about the rise of automated scheduling, the makers of which were surely represented at NRF conference. Discussions of data-driven labor management rarely entered into conversations between organizers and members or front-line employees, perhaps because the technology remains largely invisible to front-line workers, or because it may be easier to simply target retail corporations and policy makers. On top of that, their banner, chants, and speak outs regularly referenced the need for not just stable, but *full-time* hours. Those chants are captivating and in many ways makes sense in contrast to part-time workers who can barely survive. Yet, clearly, technology plays a key component in the climate in which RAP is engaging.

At first, I got the impression that RAP was simplifying the terrain. But in working with the Retail Action Project for over a year, I came to learn that what the organization wanted of the industry is much more complex than that. Organizers and activists do not simply desire full-time, stable schedules. Rather, in this data-driven economy, they fight for technology deployed in the interests of workers, not corporations. I spoke with Rachel, RAP's director at that time, about these issues. She said:

When you hear the flowery talk about [automated schedulers like] Kronos and how this is a win-win for the employer and the employee. You would imagine that, it almost you know, creates this image of managers and all of their employees sitting down at the close of the week to figure out what the next two weeks look like, and inputting availability into this software and popping out this incredible schedule. The truth is, that's not how it works at all. The software is used to track peak sales and then provide the scheduling manager with a base or minimal number of staff needed to cover how many people might come into the store. There's *no* conversation with employees.

Acknowledging that technology is never neutral, but rather an instrument of power, Rachel also praised New York City's 2017 ban on on-call scheduling—which RAP and RWDSU heavily lobbied in favor of—as a method of shifting the scales in favor of workers' interests.

While RAP has repeatedly held protests at the NRF Big Show, their campaigns have not directly targeted *automated* scheduling or digital surveillance. Yet recent campaigns may unintentionally impact how managers engage with said software. The 2017 Fair-Scheduling Act requires employers to assign schedule hours to existing employees before hiring new ones. Schedules must also be posted two-weeks in advance and workers must be paid for at least four hours for shifts cancelled within 72 hours of the scheduled start time (Anon 2017). Further research should explore how retail managers, HR professions, and Loss Prevention teams engage with automated management and big data surveillance in these contexts; retailers may attempt to use programs like Kronos to provide workers more autonomy over schedules (as Rachel told me the Container Store supposedly has), but they may also lean on software to squeeze more out workers and cut costs in new ways.

Clearly, contemporary retail labor organizing needs to take seriously the ways in which technology exacerbates exploitation, as RAP is beginning to do. In fact, many of the same technologies involved in digitally managing and monitoring workers, and many of which were on display at the NRF Big Show, are found in or were pioneered for potentially more sinister contexts: policing.

Disrupting Business as Usual: Black Lives Matter in Retail Space

During the course of my fieldwork, RAP was not the only group targeting retail as a site of political struggle. The Movement for Black Lives, or Black Lives Matter, stemmed from a long lineage of struggles against the carceral and police state, especially after the murder of Trayvon Martin by vigilante George Zimmerman in 2012 and erupting into a nationwide movement following the killing of Michael Brown by police officer Darren Wilson in 2014 in Ferguson, Missouri. The hashtag originated from queer black activist Alicia Garza, along with Patrisse Cullors and Opal Tometi, (Garza 2014), and the broader movement includes an array of organizations and actors, who regularly block freeways, occupy police stations, and disrupt everyday life, calling for everything from police reform and punishment of police misconduct to police and prison abolition. In many ways, the movement represents the twenty-first century iteration of a decades-long battle between politicians, non-profits, celebrities, professional organizers, academics, and activists (Endnotes 2015; Rakia and Cantu 2015; Taylor 2016).

At first, it seemed like Black Lives Matter's focus on shopping centers was simply a matter of timing. Since Darren Wilson's non-indictment in 2014 closely preceded the holiday season, it made sense that protesters would disrupt the Macy's Thanksgiving Day Parade (Politi 2014), hold nation-wide protests on Black Friday (Madhani 2014), conduct die-ins at retail giants H&M and Forever 21 (Figuroa 2014). Over the course of 2015, though, retail spaces continued to be a key protest target, including Black Friday actions in Chicago, New York City, Los Angeles, Portland, and Seattle, as well as a national call to boycott Black Friday altogether. The Chicago Tribune reports that protests costs stores twenty-five to fifty percent of Black Friday sales

(Janssen 2015). In Maryland, Mondawmin Mall served as ground zero for the 2015 Baltimore Riots, when police shut down the local bus system and stoked the anger of black youth who gathered at the space following the funeral of Freddie Gray, who died in police custody (McLaughlin and Brodey 2015). In an interview with *PBS Newshour*, historian N.D.B. Connolly commented:

This mall is where the riots began [on April 27]. It's the Mondawmin Mall, here in Northwest Baltimore. It's just across from Frederick Douglass High School, and it actually sits in the middle of three big narratives about the city's history. One is the most recent riot. The second is the story of prices and the everyday life of living in Baltimore and what this mall represents for everyday people trying to shop here. And the third is that this mall actually began as one of the city's first shopping malls that used to primarily serve white customers. And it suffered white flight, and had to basically repurpose itself to deal with a black clientele. And so the history of segregation, the history of price gouging, and the more recent history of the riot are all built here, around the Mondawmin Mall. (Solman 2015)

As Connolly points out, shopping centers are a cornerstone of urban and suburban geography and, racial capitalism, more generally. In the United States, shopping centers reproduce inequality as well as serve as a public square of sorts, where people can gather, celebrate, consume, and in theory, protest.

Urban theorist Mike Davis says shopping malls provide “an especially disturbing guide to the emerging liaisons between urban architecture and the police state” (Davis 1992:157). Since Davis wrote that piece in the early 90s, the ties between retail and policing have become even more far-reaching. At the neighborhood level, malls, department stores, and shopping areas are key nodes of capitalist restructuring, regularly justifying sweeping gentrification (Delany 1999; Sorkin 1992; Zukin 2010). Keeping these areas safe and clean for consumers – meaning free of those deemed dangerous or surplus – often relies on quality-of-life policing, which has led to so many black and

brown deaths (Mohandesi 2014). Each day I exited the subway to go to work in Manhattan, I encountered NYPD vans, cruisers, and mobile surveillance towers, highlighting so clearly the non-spectacular, mundane ways in which twenty-first century policing and consumer capitalism go hand in hand.

Stores also overtly profile shoppers, utilizing the police's stop-and-frisk tactic as a means to protect these sanctified sites of consumption. In 2015, Zara faced ridicule when a survey by the Center for Popular Democracy revealed they used the term "special order" to verbally mark suspicious customers; 46% of workers surveyed claimed "black customers were called special orders 'always' or 'often' (Klausner 2015). One of my interviewees, a black woman, described: "I'm sure you're aware but loss prevention was a lot of times a pretty racialized thing. Keep your eyes on the black girl dressed a certain way. Or black girls period." As I demonstrated in the last chapter, workers themselves are regularly criminalized, subjected to bag checks and tracked through biometric monitoring and big data surveillance. Digital policing and surveillance have not replaced human control, but social anthropologist Shaka McGlotten argues analog methods of racialized control exist *alongside* the evolution of increasingly digital "technologies for capturing and recording the body" (McGlotten 2016:270). These combinations of crudeness and sophistication, of analog and digital methods of capture and collective refusal, can be seen in BLM actions that swept the country, including in the Eric Garner protests I describe at the beginning of this chapter. Arguably one of the most dramatic politicizations of retail occurred at the Mall of America.

#BlackChristmas: BLM at MOA

The Mall of America was erected in 1992 just outside of Minneapolis, Minnesota, and while it is no longer the largest mall in the United States—Philadelphia’s King of Prussia Mall now claims that title at 2.9 million square feet—it remains significant for several reasons. In the words of Johnathon Sterne, “The Mall’s utter extremity on one hand and everydayness on the other offer a unique perspective on a place where consumerism is conflated with nationalism” (Sterne 1997:27). These days, the Megamall represents both an apex of leisure consumption, and a quickly dying breed, as malls across the country continue to fail amid the rise of online retailing (Smith 2016). But with the Mall’s unique success, it has transformed alongside the rest of the retail industry. Forever 21 grew to a staggering 80,000 square feet when it took over Bloomingdale’s former department store space in 2012, and a two-story Zara opened in 2016 to wide acclaim.

The Megamall is additionally notable for its security apparatus. According to a profile in *Foreign Policy*, “unlike many other retail establishments, which hire inexperienced rent-a-cops to enforce security (think Paul Blart), the Mall of America has its own anti-terrorism task force” (Francis 2015). In a 2008 testimony given to the US House of Representatives’ Committee on Homeland Security’s Hearing, “The Challenge of Protecting Mass Gatherings in a Post-9/11 World,” Douglas Reynolds, Director of Security for the Mall said, “because of the sheer number of visitors to the Mall of America and our status as a symbol of consumerism and capitalism, security remains a top priority for us.” The mall’s symbolic role as both national pride and conspicuous consumption justifies excessive surveillance. One of its most well-known programs, Risk

Assessment and Mitigation (RAM), relies on an Israeli technique called “behavior profiling,” which purportedly locates and intervenes in suspicious behavior; RAM leaders are trained directly in Israel. While in some ways alarming, the Mall is not unique in this respect; *The Intercept* reports that US police departments are turning to Israel with increasing regularity for tactical guidance and the latest surveillance technology, despite (or, perhaps, because of) the country’s long record as an occupying force (Kane 2016; Speri 2017). While the Mall and other security experts deem RAM a success, shopper testimony and several accounts of racial discrimination suggests otherwise (Zwerdling 2011). Bobbie Allen, a black man, sued the Mall after he was questioned by security guards and Bloomington Law Enforcement in a food court for over half an hour. Allen’s suspicious behavior was sitting alone at a table, writing in a notebook, waiting for his lunch date to arrive (Smetanka 2009), “symptomatic of the ways in which US society devalues the lives and labor” of marginalized groups (Cacho 2007:183).

In addition to analog tactics of surveillance, the Mall of America has likewise latched on to state of the art technology that blurs the lines between marketing and policing. A team called the “Enhanced Service Portal” follows social media posts mentioning the Mall, and regularly responds to shoppers (Kumar 2015). Even without directly mentioning the mall, software by Geofeedia allows the mall to follow Instagram, Twitter, and Facebook posts made within geographic proximity of it. Together, this strategy allows the Mall to create its own online presence, almost instantaneously responding to user posts, altering and extending its panoptic gaze into cyber space. According to the Mall’s social media strategist, “We’ve had people say, ‘Oh that’s really

creepy and cool that they saw my message. How did you see my message?” (Kumar 2015).

Geofeedia in particular possessed concerning capabilities. The company was the target of widely publicized critique by the American Civil Liberties Union for its role in working with police in tracking Black Lives Matter protesters across the country (Gurman 2016). According to the ACLU, Geofeedia emailed the San Diego Sheriff in 2014, claiming their software could be useful in tracking anti-police protesters. Before it received such negative attention, the company boasted itself as a boon for retailers by aggregating Facebook, Instagram, and Twitter posts based on geographic location. In a demonstration video, which has since been removed from Geofeedia’s website, the company details its relationship with the Mall of America. Not only could Geofeedia aggregate patrons’ posts (Kumar 2015), but in one highlighted instance, the software was able to detect an employee of Nickelodeon Universe, the Mall’s amusement park, posting a picture on Instagram of himself smoking marijuana before work. Although the post did not mention the Mall or Nickelodeon Universe by name, Geofeedia aggregates all posts within a certain geographic proximity of the mall. Plus, the narrator points out, one can see the user’s employee shirt in the photo. Although the narrator did not specify how the mall then intervened in the situation, Geofeedia says elsewhere that “the team works with the local police department when necessary, providing them with social media content that assist with preventing or investigating crimes”(Anon n.d.). Conveniently for Geofeedia, an outpost of the Bloomington Police Department sits on the second floor of the Mall itself. It should come as little surprise that the Nickelodeon Universe employee was a young black man. If he was not arrested, was he fired or otherwise punished?

Could that worker have been further targeted by Geofeedia's investigations of Black Lives Matter protesters?

Investigative reporting outlet *The Intercept* indicates the mall relied on various monitoring platforms—including Topsy, Monitor, and Kurrently—to monitor Idle No More protests by indigenous activists in 2012. This early practice with digital surveillance would come to serve mall officials well a few years later when the Black Lives Matter protests would target the shopping space during one of its busiest shopping weekends of the year. By December 2014, Ferguson, Missouri had erupted over the killing of Michael Brown, and protests reverberated across the country with news of subsequent injustices, including the non-indictment of Daniel Pantaleo for killing Eric Garner, announced on December 3. Over 2,000 protesters flocked to the Mall of America on December 20, 2014, filling the main rotunda and reclaiming the space as almost a public square (Lindeke 2015). “Join us at the Mall of America in solidarity with #BlackLivesMatter. It will surely be a #BlackChristmas,” the Facebook event page read. Organizers warned protesters to prepare for heavy security, to refrain from bringing signs, and to fit in with the mall patrons. After circulating a call via text loop, protesters who had already entered the mall congregated around the Christmas tree. Trained marshals guarded the periphery of the rotunda for the short duration of the formal event, and upon ending, the crowd did not immediately disperse, but instead spilled out across the mall's winding hallways and throughout the three shopping floors where they chanted, staged die-ins, and confronted police.

Of the seven people I spoke to who attended this event, most reiterated the intent to “disrupt business as usual.” Accounts like Cassandra's or Gabe's were common:

Cassandra: I'm kind of using one of the lines, but like, there won't be any more business as usual, you know, if this is what's happening to our black, uh neighbors. You know that people get shot. So like, sorry, your shop's gonna be closed for a couple hours, you know. Um, yeah, just to annoy people...

Gabe: Because I think that's like part of the purpose of most protests is to disrupt the status quo and what I saw as a main influence was to trouble people's very comfortable sensibilities about how they live their lives and go about their everyday mundane activities in terms of like, um, shopping, eating, whatever activities they may do at the mall.

In this sense, as Gabe notes, this protest could have taken place at nearly any other location, to similar effect. At other times, the "business" in "business as usual" took on a different meaning, one tied more directly to capitalism, commerce, and policing.

Javier: there was a targeting and honing of specific economic sites and workplace sites. So come fall 2014, what had been like the pinnacle of occupying public space within a couple of weeks, people very rapidly had you know, were taking over highways and bridges and tunnels and swarming places that were symbolic or otherwise centers of commerce.

Gabe: [I] was really excited about this site for this particular rally slash protest, um, in thinking about the links between capitalism and racism. And what is, like, racial capitalism.

Lori: One thing that I took away from it, from the consumerist culture of it too was kind of harsh so disrupting something that's consumerist when there's that big tag that oh it's all about family, but it also about things. And kinda bringing that there are people that are missing out on their family that will never get them back, so doing it in a large public space that engages that consumeristic culture was also I believe a big part of it.

One organizer, who was subsequently banned from the mall, told reporters, "When you disrupt the flow of capital... they actually start paying attention. That's the only way that they'll hear us" (Associated Press 2015). In swarming the Mall of America, Black Lives Matter protesters were simultaneously reclaiming what supposedly operates as a public square, while disrupting a symbol of surveillance capitalism and white heteronormativity.

Figure 14: Black Lives Matter at Mall of America



The spectacle was made all the more dramatic by the police themselves, who projected on a large screen: “THIS IS A FINAL WARNING: This demonstration is in clear violation of Mall of America policy. All participants must disperse immediately. Those who continue to demonstrate are subject to arrest” (see figure 14). One participant, Lori, reflected:

Lori: it was pretty 1984. It was really creepy. They continued to display the screen that said, like this is an unauthorized protest and you’ll be asked to leave and trespassing and blah blah.

M: Can you say a little more about that and what that felt like? Or why that reference?

Lori: just to have an autonomous voice coming down from above saying that you’re not authorized to gather there was, it was creepy for one. But it was also, it was also weird because it felt like your rights were being stripped of you. Because this place has such a perception of being a public space. Our tax dollars go towards it.

Similarly, Eli, a friend of mine told me, “the disruption wasn’t just of the space-time of the stores but also of people’s subjective dispositions as consumers – both at the protest

and through circulation of images of the protest – for example, highlighting the '1984' dystopian character of the giant TV screen telling people to leave.” Gabe noted through one of common chants he heard that day—“Who do you protect? Who do you serve?”—it became clear that the police operated not only as an apparatus of the state, but also of capital.

Tensions percolated as some organizers and attendees were targeted even after the protest ended. Days later, Black Lives Matter Minneapolis posted on the event page: “City of Bloomington attorney Sandra Johnson says she will seek restitution for “loss of profits” and police resources from young people of color she claims to identify as organizers.” As with the Idle No More round dance, mall officials relied heavily on social media to track activists. This time, they created a false Facebook account, friending key organizers, liking pages of local protests groups, and creating dossiers of at least ten people (Fang 2015). The mall pressed charges against seventeen protesters, although a judge dismissed several charges—including aiding and abetting trespass, aiding and abetting unlawful assembly, and aiding and abetting disorderly conduct (Reinan and Olson 2015).

Media scholar John Fiske writes, “Shopping malls are where the strategy of the powerful is most vulnerable to tactical raids of the weak” (Fiske 2000). This claim remains true nearly two decades later, even as technology has transformed the landscape of struggle. While in many ways serving the interests of capital and the state, these changes may allow new opportunities for rebellious alliances.

Entanglements of Surveillance Capital and Predictive Policing: Toward a Critical Data Praxis

The Retail Action Project and Movement for Black Lives, making unique demands and employing distinct tactics, shared much in common. They both included, organized with, and advocated in the interest of precarious people of color, often on the margins of the economy and targets of the police state. Both movements politicized retail spaces, from the National Retail Federation to the Mall of America. While technology was not a central frame of either group's engagement with retail, my research indicates new technologies, most notably big data and biometric surveillance, indirectly if not directly shapes the field within which these groups operated, and point toward potential opportunities for future alliance.

If "surveillance capital" helps trace the digital characteristics of inequality, feminist and critical data theorists help envision more just horizons. In the previous chapter, I mentioned how feminist scholars have shown the limits of privacy as an analytic or organizing framework. Aside from eliding the violent histories of the state, privacy claims may also simply not work: Shoshana Zuboff argues asking digital companies to grant its users privacy is "like asking for suicide (Zuboff 2016). Instead, critical feminist scholars and activists imagine a more encapsulating anti-capitalist and anti-state critique of surveillance. In her 2016 article, "Catching Our Breath: Critical Race STS and the Carceral Imagination," Ruha Benjamin builds on Simone Browne, conceptualizing an "abolitionist consciousness," as a "way of conceptualizing efforts to exercise freedom and agency with and against sciences and technologies" (Benjamin 2016:151). In drawing on RAP and BLM to forward a critical data praxis, I am therefore *not* claiming that data, automation, and surveillance were critical, or the most central

aspects of this organizing, but rather thinking through what spaces of *possibility* and *alliance* emerge when thinking these movements technologically.

What might a critical biometric of abolitionist consciousness look like in practice? Surveillance studies scholars use the term *sousveillance* to describe efforts of people who are typically the subjects of surveillance to watch those who watch them (Marx 2003). One example of *sousveillance* is Cop Watch, efforts deriving out of the Black Panther movement, in which policed communities follow and monitor police activity. In recent years, data studies scholar Joan Donovan has followed how activists “turn to the web and shareable spreadsheets” to track police misconduct (Donovan 2017b). But if lived testimony and surveillance theorists alike point to the complex assemblages of surveillance parties and practices (Ball and Haggerty n.d.; Barocas and Levy 2016; Martin, Van Brakel, and Bernhard 2009), linking seemingly disparate movements, such as labor and police brutality, might offer unique combination of its own. Not necessarily as links in a supply chain (as one might, and should, connect retail workers in New York with garment workers in Bangladesh), but as nodes in surveillance cities, whose physical bodies are transformed into data as they move from their phones, to their tablets, to their streets lined with police and CCTV and mobile surveillance towers, to their workplaces with its own cameras and fingerprint scanners and social media monitoring apparatuses, and back again.

Like all forms of organizing, this approach comes with potential limits and pitfalls. Movements which themselves utilize digital tools risk surveillance or having their tools co-opted as tools of domination, in which activists become “prisoners of our own devices” (Donovan 2017a). Romanticizing the digital additionally risks sidelining

non-digital modes of suffering, surveillance, and resilience. Nick Dyer-Witheford writes: “Can the global proletariat use cybernetics against capital? Yes, but only by simultaneously being against what it uses” (Dyer-Witheford 2015:167).

A critical data praxis might produce fuller understandings of how data travel across institutional contexts. The approach would encourage labor organizations like RAP to differently articulate the phenomenon of precarity, focusing on how digital technology deepens insecurity and reinforces difference. By following data and surveillance practices beyond the workplace, this framework would further push labor to engage in community based organizing—a new iteration for a long-stemming divide. For instance, economic and racial just groups might draw on their shared histories, resources, and collective capacities to resist the growing phenomenon of facial recognition software, increasingly common in both retail and public settings (Frey 2016; Hassein 2017). Conceivably, racial justice organizers might also aid labor organizers in challenging and transforming digital management platforms like Kronos, which not only produces automated flexible scheduling software biometric fingerprint scanners as described in the last chapter, but is also being unrolled in law enforcement contexts to aid in “episodes of civil unrest, when a large-scale disruption requires rapid deployment of additional officers, including those with specialized training” (Anon n.d.)? A critical data praxis might also help mobilize young workers who are already tuned into issues of police brutality and digital surveillance beyond the workplace. In the words of Manuel Castells, twenty-first century social movements “fight the powers that be by identifying the networks that are” (Castells 2015). If, as Arun Kundnani remarked at the 2018 Subverting Surveillance Conference, “the antagonism of surveillance is not privacy but

the making of communities in struggle,” we must work to identify not only networks of control but also networks of opposition.

Conclusion

Fashioning Futures

It is so important that we fight for the future, get into the game, get dirty, get experimental. How do we create and proliferate a compelling vision of economies and ecologies that center humans and the natural world over the accumulation of material? We embody. We learn. We release the idea of failure, because it's all data.

-adrienne maree brown, Emergent Strategy: Shaping Change, Changing Worlds, 2017

Only a few weeks prior to writing this conclusion, H&M was the center of widespread controversy, this time for using graffiti artwork without permission in its recent designs. In response, graffiti artists and supporters tagged H&M stores across the United States (see figure below), including in my current town, Minneapolis, circulating the images on social media in networked confrontation (Du 2018). And a few weeks prior to that, shoppers stormed H&M stores in South Africa, enraged after the company circulated an ad featuring a sweatshirt reading “coolest monkey in the jungle” modeled by a black child (Fortin 2018). While brick and mortar retailers continue to close their doors and declare bankruptcy, fast fashion retail remains a contentious site of struggle.

Figure 15: Fuck H&M Graffiti



As my dissertation demonstrates, fast fashion invites questions not only of representation, but, in looking past the graffiti, of material relations across its supply chain, including inside its own stores. If we are truly living through a retail apocalypse, we might say fast fashion is retail's zombie, pushing the business of selling clothes to nightmarish excesses. These dangerous entanglements can be traced in the experiences of fast fashion workers described throughout this dissertation, who are socialized into a world of on-demand labor (chapter one), who toil in an almost entirely de-skilled labor context (chapter two), whose affective experiences of insecurity are compounded through digital surveillance (chapter three). Fast fashion is also an industry whose politicization may reveal avenues for combatting digital precarity (chapter four). Together, fast fashion represents a distinct form of retail capitalism, reflective of and imbricated with deepening digitization, precarity, and policing across society, with uniquely sinister consequences for racialized and feminized populations, and requiring creative, critical engagement from social movements.

Of course, what I have described in the preceding chapters should come as little surprise, for as Karl Marx warns us, capital is “vampire-like, only lives by sucking living labor, and lives the more, the more labour it sucks” (Marx 1967:342). But as I have also demonstrated, capital's current “lumbering, unstable, and dangerous” (Jones 2009) form is increasingly digital. Nick Dyer-Witheford says we can more accurately describe twenty-first century class relations as “vampires—but perhaps also vampire-slayers—with smartphones” (Dyer-Witheford 2015:9). Rather than commencing a mission of slaying the vampire or zombie capital, Bruno Latour instead says we should “love our

monsters” (Latour 2014). The mistake of Dr. Frankenstein, Latour writes, was not that he created a monster, but that he abandoned it. In this view, perhaps the worst thing we could do at this moment is to assume the fate of retail capitalism— or the technology that has helped it to morph into its franken-fashion form – is out of our hands, to resign and watch from the sidelines as ceaseless consumption, digital surveillance, and environmental destruction spiral exponentially.

Some may find promise in recent legislative action. Both California and New York City in the past few years approved regulations that would make retail work more stable and predictable, including by passing minimum wage increases to fifteen dollars an hour as well as ending on-call scheduling and requiring employers to post schedules at least two weeks in advance (Anon n.d., Anon 2017). Future research might thus look to California and New York City as a natural experiment of sorts, an opportunity to investigate how legislation that bans on-call scheduling and raises the minimum wage may unintentionally impact how managers engage with employee monitoring technologies, and the extent to which these policy changes impact entry-level workers’ health and well-being. Organizers, like the head of the Retail Action Project, see significance in these measures:

Banning on call, you know, protects retail workers in a far better way than any software was going to. It protects retail workers pockets, in terms of hours. It protects their ability to care for family members. It protects their ability to go to school and figure out what their next steps, either inside or outside of the retail industry look like. And those are not tied to the company’s bottom line, but real quality of life issues or questions that had to be dealt with. (Interview, June 22, 2017)

In other words, labor organizers place more faith in legislative actions than technocratic solutions to engender positive social change.

These reflections point to the complexity of social movement in an era of cyber capitalism. Many advocates are easily swayed by the promises of transparency, falling into an “algorithmic fetishism” that easily loses sight of the deeper structures of power underlying those systems: “The violence and prejudice of algorithms is, and always was, an extension of those qualities [human prejudices and politics] in societies. So, fetishizing algorithms, even from a critical position, risks sidelining the harder empirical, theoretical, and political work of tracing those links and creating a space for the emergence of more just alternatives” (Monahan 2018:2). While raising the minimum wage or advocating for a Retail Workers’ Bill of Rights will not fundamentally transform platform capitalism, these actions might be more generative first steps compared to hoping employers or police might use software toward beneficent ends. Recent studies reveal police cameras have not in fact decreased police violence and video footage more often aids criminal prosecutors (Donovan 2017a). So, while some hope employers will take advantage of the “opportunity to explore how to collect customer data in ways that both respect consumers’ privacy *and* advance the legitimate interests of workers” (Barocas and Levy 2016), the history of technological innovation has not unfolded so harmoniously. Warnings against algorithmic fetishism are especially significant in the contexts of work and policing, two fundamentally exploitative social institutions becoming more so—more exploitative, more entangled—in the digital age.

A similar critique might be made of consumer movements. When I present on my research, I am often met with eager questions about alternatives to fast fashion, including “slow” or “zero waste” clothing, which might have fewer disastrous consequences on the environment or workers. Here, too, we must take caution. Attempts at more ethical

consumption often, as Andrew Brooks argues, “offer a limited acknowledgement of the inequalities at the heart of capitalism [and] still depend upon the market and ordinary practices of commodity exchange” (Brooks 2015:224). Even second hand clothing comes with its own fallout; thrift store CEOs take home huge salaries while exploiting disabled workers (Adams 2013), sending only a small fraction of proceeds to charity and dumping unwanted garments on poor communities the world over (Goldberg 2016).

Outside of legislative changes or consumer actions, many workers are using technology of their own to fight back, taking photos of their work schedules or using their own methods of accounting time worked as a tactic of disputing wage theft (Dombrowski et al. 2017). These efforts build on the micro-subversions described in chapter three, such as my coworkers who regularly kept personal cell phones in their pockets, absconding to fitting rooms – often the only location in the store free from surveillance cameras – to send texts or take selfies as a means of informally taking back lost time. These efforts simultaneously illuminate opportunities for mobilizing defiance in pursuit of politicized resistance (Cohen 2004), in service of what Virginia Eubanks calls “digital self-determination” in which technology increases the autonomy of precarious populations (Eubanks 2018b). As scholars and activists continue to debate the potentials and pitfalls of re-appropriating technology for liberatory ends (Bernes 2013; Noys 2014; Srnicek and Williams 2015), I want to advocate for a kind of politics attendant to the complexity of data-driven capital, its multidimensional and networked forms of exploitation as well as the intricate connections and modes of resistance needed to confront it. I thus hope the examples mentioned here might cumulatively foreshadow a critical data praxis, as theorized in the previous chapter, or, perhaps more coherently, “a resistant human front

made up of all those who are small in relation to the gigantism of cybernetic capital... capable of care for one another and for the world” (Dyer-Witheford 2015:205). Could this—collective care in the face of cybernetic capital—be what Latour means by love?

References

- Adams, Susan. 2013. "Does Goodwill Industries Exploit Disabled Workers?" *Forbes*. Retrieved April 10, 2018 (<https://www.forbes.com/sites/susanadams/2013/07/30/does-good-will-industries-exploit-disabled-workers/>).
- Adler-Bell, Sam. 2018. "Privacy for Whom?" *The New Inquiry*. Retrieved February 23, 2018 (<https://thenewinquiry.com/privacy-for-whom/>).
- Ajunwa, Ifeoma, Kate Crawford, and Jason Schultz. 2016. "Limitless Worker Surveillance." *California Law Review* 105(3).
- Akhter, Shamima. 2014. "Endless Misery of Nimble Fingers: The Rana Plaza Disaster." *Asian Journal of Women's Studies* 20(1):137–147.
- Anderson, George. 2015. "Can Gap Learn To Do Fast Fashion?" *Forbes*. Retrieved July 14, 2017 (<http://www.forbes.com/sites/retailwire/2015/08/30/can-gap-learn-to-do-fast-fashion/>).
- Anderson, George. 2012. "U.S. Retailers Try to Get Faster with Fashions – RetailWire." Retrieved February 3, 2017 (<http://www.retailwire.com/discussion/u-s-retailers-try-to-get-faster-with-fashions/>).
- Anon. 2011. "# LIBERTY SQUARE /// Judith Butler at the Occupy Movement 'This Is a Politics of the Public Body.'" *THE FUNAMBULIST MAGAZINE*. Retrieved October 12, 2017 (<https://thefunambulist.net/philosophy/liberty-square-judith-butler-at-the-occupy-movement-october-23rd-2011>).
- Anon. n.d. "About Us | Forever 21." Retrieved July 18, 2017a (<http://www.forever21.com/Company/About.aspx?br=f21>).
- Anon. n.d. "Annual Reports - Inditex.Com." Retrieved July 18, 2017b (<https://www.inditex.com/en/investors/investor-relations/annual-reports>).
- Anon. 2014. "Cambodia Garment Workers Killed in Clashes with Police." *BBC News*, January 3. Retrieved March 30, 2017 (<http://www.bbc.com/news/world-asia-25585054>).
- Anon. n.d. "Case Study: Mall of America." *Geofeedia*. Retrieved (http://resources.geofeedia.com/hubs/Geofeedia_Resources/Geofeedia_UC_MallOfAmerica_Final.pdf).
- Anon. n.d. "Civil Unrest: Police Preparedness, Trends, and Staffing Software Solutions." *Kronos*. Retrieved January 5, 2018d (<https://www.kronos.com/resources/civil-unrest-police-preparedness-trends-and-staffing-software-solutions>).

- Anon. n.d. "H&M Group | Markets." Retrieved July 18, 2017e (<http://about.hm.com/en/about-us/markets-and-expansion.html>).
- Anon. n.d. "Learn More | Retail Workers Bill of Rights." Retrieved July 18, 2017f (<http://retailworkerrights.com/get-the-facts/>).
- Anon. 2017. "Mayor de Blasio Announces That NYC Is the Largest City to End Abusive Scheduling Practices." *The Official Website of the City of New York*. Retrieved July 18, 2017 (<http://www1.nyc.gov/office-of-the-mayor/news/372-17/mayor-de-blasio-speaker-mark-viverito-that-new-york-city-the-largest-city-end>).
- Anon. n.d. "Timeclocks; Automated Data Collection; Employee Time Clocks | Kronos Incorporated." Retrieved January 30, 2017g (<https://www.kronos.com/products/workforce-central-suite/data-collection>).
- Associated Press. 2015. "Arrests Made as Protest Blocks Roads to Minneapolis Airport." *MSNBC*. Retrieved October 20, 2017 (<http://www.msnbc.com/msnbc/mall-of-america-black-lives-matter-protesters>).
- Associated Press. 2017. "Zara Workers Hiding Tags in Garments with Pleas for Wages." *New York Post*. Retrieved April 8, 2018 (<https://nypost.com/2017/11/05/zara-workers-hiding-tags-in-garments-with-pleas-for-wages/>).
- Auyero, Javier. 2011. "Patients of the State: An Ethnographic Account of Poor People's Waiting." *Latin American Research Review* 46(1):5–29.
- Bain, Marc. 2016. "H&M, Gap, and Walmart Are Accused of Widespread Worker Abuse — Quartz." Retrieved March 30, 2017 (<https://qz.com/695763/a-web-of-terror-insecurity-and-a-high-level-of-vulnerability-hm-gap-and-walmart-are-accused-of-hundreds-of-acts-of-worker-abuse/>).
- Ball, Kirstie. 2005. "Organization, Surveillance and the Body: Towards a Politics of Resistance." *Organization* 12(1):89–108.
- Ball, Kirstie. 2010. "Workplace Surveillance: An Overview." *Labor History* 51(1):87–106.
- Ball, Kirstie and Kevin Haggerty. n.d. "Doing Surveillance Studies." *Surveillance & Society* 3(2/3):129–38.
- Barocas, Solon and Karen Levy. 2016. "What Customer Data Collection Could Mean for Workers." *Harvard Business Review*. Retrieved January 18, 2017 (<https://hbr.org/2016/08/the-unintended-consequence-of-customer-data-collection>).
- Benanav, Aaron. 2015. "Precarity Rising." *Viewpoint Magazine*. Retrieved November 3, 2017 (<https://www.viewpointmag.com/2015/06/15/precarity-rising/>).

- Benjamin, Ruha. 2016. "Catching Our Breath: Critical Race STS and the Carceral Imagination." *Engaging Science, Technology, and Society* 2:145–156.
- Benson, Susan Porter. 1986. *Counter Cultures: Saleswomen, Managers, and Customers in American Department Stores, 1890-1940*. Urbana: University of Illinois Press.
- Berlant, Lauren Gail. 2011. *Cruel Optimism*. Durham, NC: Duke University Press.
- Bernes, Jasper. 2013. "Logistics, Counterlogistics and the Communist Prospect by Jasper Bernes." 3. Retrieved February 6, 2017 (<https://endnotes.org.uk/issues/3/en/jasper-bernes-logistics-counterlogistics-and-the-communist-prospect>).
- Besen-Cassino, Yasemin. 2014. *Consuming Work: Youth Labor in America*. Philadelphia: Temple University Press.
- Bloom, Joshua and Waldo E. Martin. 2013. *Black against Empire: The History and Politics of the Black Panther Party*. Univ of California Press.
- Bonacich, Edna and Richard Appelbaum. 2000. *Behind the Label: Inequality in the Los Angeles Apparel Industry*. First Printing edition. Berkeley: University of California Press.
- Braverman, Harry. 1998. *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*. New York: Monthly Review Press.
- Brayne, Sarah. 2017. "Big Data Surveillance: The Case of Policing." *American Sociological Review* 82(5):977–1008.
- Bronfenbrenner, Kate and Dorian T. Warren. 2007. "Race, Gender, and the Rebirth of Trade Unionism." *New Labor Forum* 16(3/4):142–48.
- Brooks, Andrew. 2015. *Clothing Poverty: The Hidden World of Fast Fashion and Second-Hand Clothes*. Zed Books Ltd.
- brown, adrienne maree. 2017. *Emergent Strategy: Shaping Change, Changing Worlds*. Chico, CA: AK Press.
- Browne, Simone. 2015. *Dark Matters: On the Surveillance of Blackness*. Durham, NC: Duke University Press.
- Brunton, Finn and Helen Nissenbaum. 2011. "Vernacular Resistance to Data Collection and Analysis: A Political Theory of Obfuscation." *First Monday* 16(5). Retrieved January 29, 2017 (<http://firstmonday.org/ojs/index.php/fm/article/view/3493>).
- Butler, Judith. 2006. *Precarious Life: The Powers of Mourning and Violence*. Brooklyn, NY: Verso.

- Cacho, Lisa Marie. 2012. *Social Death: Racialized Rightlessness and the Criminalization of the Unprotected*. New York: NYU Press.
- Cacho, Lisa Marie. 2007. “‘You Just Don’t Know How Much He Meant’: Deviancy, Death, and Devaluation.” *Latino Studies* 5(2):182–208.
- Caro, Felipe and Victor Martínez-de-Albéniz. 2015. “Fast Fashion: Business Model Overview and Research Opportunities.” Pp. 237–64 in *Retail Supply Chain Management, International Series in Operations Research & Management Science*, edited by N. Agrawal and S. A. Smith. Springer US.
- Carracedo, Almudena. 2007. *Made in L.A.*
- Castells, Manuel. 2015. *Networks of Outrage and Hope: Social Movements in the Internet Age*. John Wiley & Sons.
- Chen, Chris. 2013. “The Limit Point of Capitalist Equality: Notes Toward an Abolitionist Antiracism.” Retrieved October 9, 2017 (<https://endnotes.org.uk/issues/3/en/chris-chen-the-limit-point-of-capitalist-equality>).
- Clawson, Dan and Naomi Gerstel. 2014. *Unequal Time: Gender, Class, and Family in Employment Schedules*. Russell Sage Foundation.
- Cline, Elizabeth L. 2012. *Overdressed: The Shockingly High Cost of Cheap Fashion*. New York: Penguin.
- Clover, Joshua. 2016. *Riot. Strike. Riot.: The New Era of Uprisings*. Brooklyn: Verso Books.
- Cohen, Cathy J. 2004. “Deviance as Resistance: A New Research Agenda for the Study of Black Politics.” *Du Bois Review: Social Science Research on Race* 1(1):27–45.
- Collins, Patricia Hill. 2002. *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. New York, NY: Routledge.
- Combahee River Collective. 1977. “A Black Feminist Statement.” na.
- Cowen, Deborah. 2014. *The Deadly Life of Logistics: Mapping Violence in Global Trade*. Minneapolis: University of Minnesota Press.
- Cowie, Jefferson. 2010. *Stayin’ alive: The 1970s and the Last Days of the Working Class*. The New Press.
- Crary, Jonathan. 2014. *24/7: Late Capitalism and the Ends of Sleep*. London: Verso.
- Davies, Carole Boyce. 2007. *Left of Karl Marx: The Political Life of Black Communist Claudia Jones*. Durham, NC: Duke University Press.

- Davis, Angela Y. 2011a. *Are Prisons Obsolete?* Seven Stories Press.
- Davis, Angela Y. 2016. *Freedom Is a Constant Struggle: Ferguson, Palestine, and the Foundations of a Movement*. Haymarket Books.
- Davis, Angela Y. 2011b. *Women, Race, & Class*. Vintage.
- Davis, Mike. 1992. "Fortress Los Angeles: The Militarization of Urban Space." in *Variations on a Theme Park: The New American City and the End of Public Space*, edited by M. Sorkin. New York: Hill and Wang.
- Delany, Samuel R. 1999. *Times Square Red, Times Square Blue*. New York: New York University Press.
- Dombrowski, Lynn, Adriana Alvarado Garcia, and Jessica Despard. 2017. "Low-Wage Precarious Workers' Sociotechnical Practices Working Towards Addressing Wage Theft." Pp. 4585–4598 in *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems, CHI '17*. New York, NY, USA: ACM. Retrieved July 17, 2017 (<http://doi.acm.org/10.1145/3025453.3025633>).
- Donovan, Joan. 2017a. "From Social Movements to Social Surveillance." *XRDS* 23(3):24–27.
- Donovan, Joan. 2017b. "The Ferguson Effect: Public Sociology and the Making of an American Statistic."
- Du Bois, William Edward Burghardt. 2017. *Black Reconstruction in America: Toward a History of the Part Which Black Folk Played in the Attempt to Reconstruct Democracy in America, 1860-1880*. New York: Routledge.
- Du Bois, William Edward Burghardt. 1999. *Darkwater: Voices from within the Veil*. Mineola, NY: Courier Corporation.
- Du, Susan. 2018. "Graffiti Artists Take Revenge on Uptown H&M over Ad Campaign." *City Pages*. Retrieved April 10, 2018 (<http://www.citypages.com/news/graffiti-artists-take-revenge-on-uptown-hm-over-ad-campaign/477283093>).
- DuBois, William Edward Burghardt. 2015. *John Brown*. New York: Routledge.
- Dubrofsky, Rachel E. and Shoshana Magnet. 2015. *Feminist Surveillance Studies*. Durham, NC: Duke University Press.
- Dyer-Witford, Nick. 2015. *Cyber-Proletariat: Global Labour in the Digital Vortex*. London: Pluto Press.
- Endnotes. 2015. "Brown v. Ferguson by Endnotes." Retrieved November 10, 2017 (<https://endnotes.org.uk/issues/4/en/endnotes-brown-v-ferguson>).

- Ergas, Talia. 2017. "H&M Breaks Gender Barriers By Launching a Unisex Denim Line." *Us Weekly*. Retrieved May 31, 2017 (<http://www.usmagazine.com/stylish/news/hm-breaks-gender-barriers-by-launching-a-unisex-denim-line-w471028>).
- Erickson, Karla and Jennifer L. Pierce. 2005. "Farewell to the Organization Man: The Feminization of Loyalty in High-End and Low-End Service Jobs." *Ethnography* 6(3):283–313.
- Eubanks, Virginia. 2018a. *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*. New York, NY: St. Martin's Press.
- Eubanks, Virginia. 2018b. "The High-Tech Poorhouse." *Jacobin*. Retrieved February 16, 2018 (<http://jacobinmag.com/2018/01/virginia-eubanks-interview-automating-inequality-poverty>).
- Fang, Lee. 2015. "Mall of America Security Catfished Black Lives Matter Activists, Documents Show." *The Intercept*. Retrieved (<https://theintercept.com/2015/03/18/mall-americas-intelligence-analyst-catfished-black-lives-matter-activists-collect-information/>).
- Federici, Silvia. 2006. "Precarious Labor: A Feminist Viewpoint." Retrieved (<https://womin.org.za/images/the-alternatives/ecofeminism-social-reproduction-theory/S%20Federici%20-%20Precarious%20Labour%20-%20A%20Feminist%20Viewpoint.pdf>).
- Ferguson, Roderick A. 2004. *Aberrations in Black: Toward a Queer of Color Critique*. U of Minnesota Press.
- Figuroa, Alyssa. 2014. "8 Developments of the Black Lives Matter Movement Most People Don't Know About." *AlterNet*, December 15. Retrieved November 6, 2017 (<https://www.alternet.org/activism/8-developments-black-lives-matter-movement-most-people-dont-know-about>).
- Fine, Janice. 2011. "Worker Centers: Entering a New Stage of Growth and Development." *New Labor Forum* 20(3):45–53.
- Fine, Janice Ruth. 2006. *Worker Centers: Organizing Communities at the Edge of the Dream*. Ithaca, New York: Cornell University Press.
- Fiske, John. 2000. "Shopping for Pleasure: Malls, Power, and Resistance." in *The Consumer Society Reader*, edited by J. Schor and D. Holt. New York: New Press, The.
- Florida, Richard. 2014. *The Rise of the Creative Class—revisited: Revised and Expanded*. Basic Books (AZ).

- Fortin, Jacey. 2018. "H&M Closes Stores in South Africa Amid Protests Over 'Monkey' Shirt." *The New York Times*, January 13. Retrieved April 10, 2018 (<https://www.nytimes.com/2018/01/13/world/africa/hm-south-africa-protest.html>).
- Foucault, Michel. 1995. *Discipline and punish: the birth of the prison*. New York: Vintage Books.
- Foucault, Michel. 2008. *The Birth of Biopolitics: Lectures at the Collège de France, 1978-1979*. Springer.
- Francis, David. 2015. "Inside the Anti-Terror Task Force at the Mall of America." *Foreign Policy*. Retrieved November 6, 2017 (<https://foreignpolicy.com/2015/02/23/inside-the-anti-terror-task-force-at-the-mall-of-america/>).
- Frank, Miriam. 2014. *Out in the Union: A Labor History of Queer America*. Philadelphia: Temple University Press.
- Fraser, Steve. 2018. "Teachers Are Leading the Working-Class Insurgency." *The Nation*, April 17. Retrieved April 25, 2018 (<https://www.thenation.com/article/teachers-are-leading-the-working-class-insurgency/>).
- French, Martin and Gavin JD Smith. 2016. "Surveillance and Embodiment: Dispositifs of Capture." *Body & Society* 22(2):3–27.
- Frey, Chris. 2016. "Revealed: How Facial Recognition Has Invaded Shops – and Your Privacy." *The Guardian*. Retrieved August 31, 2017 (<https://www.theguardian.com/cities/2016/mar/03/revealed-facial-recognition-software-infiltrating-cities-saks-toronto>).
- Garza, Alicia. 2014. "A Herstory of The# BlackLivesMatter Movement." Pp. 23–28 in *Are All the Women Still White? : Rethinking Race, Expanding Feminisms*, edited by J. Hobson. Albany, NY: State University of New York Press.
- Georgakas, Dan and Marvin Surkin. 1998. *Detroit, I Do Mind Dying*. Boston: South End Press.
- Gilmore, Ruth Wilson. 2007. *Golden Gulag: Prisons, Surplus, Crisis, and Opposition in Globalizing California*. Univ of California Press.
- Goldberg, Eleanor. 2016. "These African Countries Don't Want Your Used Clothing Anymore." *Huffington Post*, September 19. Retrieved (https://www.huffingtonpost.com/entry/these-african-countries-dont-want-your-used-clothing-anymore_us_57cf19bce4b06a74c9f10dd6).
- Gregg, Melissa. 2011. *Work's Intimacy*. Cambridge, UK; Malden, MA: Polity.

- Gruys, Kjerstin. 2012. "Does This Make Me Look Fat? Aesthetic Labor and Fat Talk as Emotional Labor in a Women's Plus-Size Clothing Store." *Social Problems* 59(4):481–500.
- Haider, Asad and Salar Mohandesi. 2013. "Workers' Inquiry: A Genealogy." *Viewpoint Magazine*. Retrieved March 30, 2018 (<https://www.viewpointmag.com/2013/09/27/workers-inquiry-a-genealogy/>).
- Hall, Rachel. 2015. "Terror and the Female Grotesque: Introducing Full-Body Scanners to U.S. Airports." Pp. 127–49 in *Feminist Surveillance Studies*, edited by R. E. Dubrofsky and S. Magnet. Durham, NC: Duke University Press.
- Harcourt, Bernard E. 2015. *Exposed: Desire and Disobedience in the Digital Age*. Cambridge.
- Harcourt, Bernard E. 2009. *Illusion of Order: The False Promise of Broken Windows Policing*. Cambridge, MA: Harvard University Press.
- Hardt, Michael. 1999. "Affective Labor." *Boundary 2* 26(2):89–100.
- Hardt, Michael and Antonio Negri. 2001. *Empire*. Harvard University Press.
- Hartjen, Ray. n.d. "LP Made Easy (-Ier): POS Exception Reporting with Integrated Video | RetailNext." Retrieved February 3, 2017 (<http://retailnext.net/en/blog/lp-made-easy-ier-pos-exception-reporting-with-integrated-video/>).
- Harvey, David. 2005. *A Brief History of Neoliberalism*. Oxford; New York: Oxford University Press.
- Harvey, David. 2012. *Rebel Cities: From the Right to the City to the Urban Revolution*. Brooklyn, NY: Verso Books.
- Harvey, David. 1989. *The Condition of Postmodernity*. Blackwell Oxford.
- Hassein, Nabil. 2017. "Against Black Inclusion in Facial Recognition." *Decolonized Tech*. Retrieved March 23, 2018 (<https://decolonizedtech.com/2017/08/15/against-black-inclusion-in-facial-recognition/>).
- Henle, Christine A., Charlie L. Reeve, and Virginia E. Pitts. 2010. "Stealing Time at Work: Attitudes, Social Pressure, and Perceived Control as Predictors of Time Theft." *Journal of Business Ethics* 94(1):53–67.
- Ho, Karen Zouwen. 2009. *Liquidated: An Ethnography of Wall Street*. Durham: Duke University Press. Retrieved January 30, 2017 (<http://public.eblib.com/choice/publicfullrecord.aspx?p=1170616>).

- Hochschild, Arlie Russell. 2003. *The Managed Heart: Commercialization of Human Feeling*. Berkeley: Univ of California Press.
- Hollibaugh, Amber and Margot Weiss. 2015. "Queer Precarity and the Myth of Gay Affluence." *New Labor Forum* 24:18–27.
- Ikeler, Peter. 2016. *Hard Sell: Work and Resistance in Retail Chains*. Ithaca, New York: Cornell University Press.
- Ikeler, Peter. 2014. "INFUSING CRAFT IDENTITY INTO A NONCRAFT INDUSTRY." Pp. 113–33 in *New Labor in New York: Precarious Workers and the Future of the Labor Movement*. Ithaca, New York: Cornell University Press.
- Jacobs, Anna W. and Irene Padavic. 2015. "Hours, Scheduling and Flexibility for Women in the US Low-Wage Labour Force." *Gender, Work & Organization* 22(1):67–86.
- Janssen, Kim. 2015. "Michigan Avenue Black Friday Protests Cost Stores 25-50 Percent of Sales." *Chicago Tribune*, November 30. Retrieved (<http://www.chicagotribune.com/business/ct-black-friday-mag-mile-fallout-1201-biz-20151130-story.html>).
- Jones, Jonny. 2009. "Zombie Capitalism." *Socialist Review*. Retrieved April 10, 2018 (/338/zombie-capitalism).
- Kalleberg, Arne L. 2011. *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s*. New York: Russell Sage Foundation.
- Kalleberg, Arne L. 2009. "Precarious Work, Insecure Workers: Employment Relations in Transition." *American Sociological Review* 74(1):1–22.
- Kane, Alex. 2016. "How Israel Became a Hub for Surveillance Technology." *The Intercept*. Retrieved November 6, 2017 (<https://theintercept.com/2016/10/17/how-israel-became-a-hub-for-surveillance-technology/>).
- Kaplan, Esther. 2015. "The Spy Who Fired Me: The Human Costs of Workplace Monitoring." *Harper's* 31–40.
- Kasperkevic, Jana. 2016. "Rana Plaza Collapse: Workplace Dangers Persist Three Years Later, Reports Find." *The Guardian*, May 31. Retrieved March 30, 2017 (<https://www.theguardian.com/business/2016/may/31/rana-plaza-bangladesh-collapse-fashion-working-conditions>).
- Kell, John. 2015. "H&M Locations Are Popping up All over | Fortune.Com." Retrieved February 3, 2017 (<http://fortune.com/2015/05/20/hm-store-locations/>).

- Kelley, Robin DG. 1993. “‘We Are Not What We Seem’: Rethinking Black Working-Class Opposition in the Jim Crow South.” *The Journal of American History* 80:75–112.
- Kelley, Robin DG. 2002. *Freedom Dreams: The Black Radical Imagination*. Boston: Beacon Press.
- Kim, Eugene. 2016. “Slack: Where Did It Get Its Name?” *Business Insider*. Retrieved January 30, 2017 (<http://www.businessinsider.com/where-did-slack-get-its-name-2016-9>).
- Kitchin, Rob and Tracey P. Lauriault. 2014. “Towards Critical Data Studies: Charting and Unpacking Data Assemblages and Their Work.” Retrieved January 30, 2017 (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2474112).
- Kitroeff, Natalie. 2016. “Factories That Made Clothes for Forever 21, Ross Paid Workers \$4 an Hour, Labor Department Says - LA Times.” Retrieved July 12, 2017 (<http://www.latimes.com/business/la-fi-wage-the-ft-forever-ross-20161116-story.html>).
- Klausner, Alexandra. 2015. “Zara Stores Accused of Racially Profiling Potential Shoplifters | Daily Mail Online.” *Daily Mail*. Retrieved January 30, 2017 (<http://www.dailymail.co.uk/news/article-3139350/Fashion-giant-Zara-accused-having-code-word-special-order-profile-black-customers-shoplifters.html>).
- Korczynski, Marek. 2014. *Songs of the Factory: Pop Music, Culture, and Resistance*. 1 edition. Ithaca: ILR Press.
- Kornhaber, Spencer. 2016. “How Rihanna’s ‘Work’ Works.” *The Atlantic*, January 27. Retrieved April 2, 2017 (<https://www.theatlantic.com/entertainment/archive/2016/01/work-work-work-work-work-rihanna-drake-single-review-anti/431532/>).
- Krupnick, Ellie. 2012. “Chemicals In Fast Fashion Revealed in Greenpeace’s ‘Toxic Threads: The Big Fashion Stitch-Up’ (UPDATED).” *Huffington Post*, November 20. Retrieved April 10, 2017 (http://www.huffingtonpost.com/2012/11/20/chemicals-in-fast-fashion-greenpeace-toxic-thread_n_2166189.html).
- Kumar, Kavita. 2015. “When MOA Shoppers Talk in Cyberspace, the Mall’s Likely to Talk Back.” *Star Tribune*. Retrieved January 14, 2017 (<http://www.startribune.com/when-you-talk-about-the-mall-of-america-in-cyberspace-these-days-it-s-likely-to-talk-back/352973201/>).
- Lambert, Susan J. 2008. “Passing the Buck: Labor Flexibility Practices That Transfer Risk onto Hourly Workers.” *Human Relations* 61(9):1203–1227.

- Lane, Carrie M. 2011. *A Company of One: Insecurity, Independence, and the New World of White-Collar Unemployment*. Cornell University Press.
- Langewiesche, William. 2014. "Meet G4S, the Contractors Who Go Where Governments and Armies Can't—or Won't." *The Hive*. Retrieved February 3, 2017 (<http://www.vanityfair.com/news/business/2014/04/g4s-global-security-company>).
- Latour, Bruno. 2014. "Love Your Monsters." *Next Nature Network*. Retrieved January 5, 2018 (<https://www.nextnature.net/2014/09/love-your-monsters/>).
- Lazare, Sarah. 2016. "Reckless Security Firm Hired to Protect Dakota Pipeline Company Has Dark Past in Palestine." *AlterNet*, September 9. Retrieved January 30, 2017 (<http://www.alternet.org/reckless-security-firm-hired-protect-dakota-pipeline-company-has-dark-past-palestine>).
- Lee, James. 2016. "Forty Years of Researching Retail Loss Prevention." *LPM*. Retrieved February 3, 2017 (<http://losspreventionmedia.com/loss-prevention-magazine/m-loss-prevention/forty-years-of-researching-retail-loss-prevention/>).
- Leidner, Robin. 1999. "Emotional Labor in Service Work." *The Annals of the American Academy of Political and Social Science* 561(1):81–95.
- Levy, Karen and Solon Barocas. 2018. "Privacy at the Margins| Refractive Surveillance: Monitoring Customers to Manage Workers." *International Journal of Communication* 12(0):23.
- Lindeke, Bill. 2015. "The Complex Role of Malls: Private but Sort-of-Public Spaces." *MinnPost*. Retrieved October 20, 2017 (<https://www.minnpost.com/cityscape/2015/03/complex-role-malls-private-sort-public-spaces>).
- Lippert, Randy K. and David Murakami Wood. 2012. "The New Urban Surveillance: Technology, Mobility, and Diversity in 21st Century Cities." *Surveillance & Society* 9(3):257–62.
- Luce, Stephanie and Naoki Fujita. 2012. "Discounted Jobs: How Retailers Sell Workers Short." Retrieved July 16, 2017 (<http://retailactionproject.org/2012/01/discounted-jobs-how-retailers-sell-workers-short-executive-summary/>).
- Luce, Stephanie, Sasha Hammad, and Darrah Sipe. 2014. "Short Shifted." Retrieved (http://retailactionproject.org/wp-content/uploads/2014/09/ShortShifted_report_FINAL.pdf).
- Lyon, David. 2015. *Surveillance after Snowden*. Malden, MA: John Wiley & Sons.

- Madhani, Aamer. 2014. "Arrests across Nation as Protesters Target Black Friday." *USA TODAY*. Retrieved November 6, 2017 (<https://www.usatoday.com/story/news/nation/2014/11/28/crowd-protests-grand-jury-decision-black-friday-st-louis/19624337/>).
- Magnet, Shoshana. 2011. *When Biometrics Fail: Gender, Race, and the Technology of Identity*. Durham: Duke University Press.
- Martin, Aaron K., Rosamunde E. Van Brakel, and Daniel J. Bernhard. 2009. "Understanding Resistance to Digital Surveillance: Towards a Multi-Disciplinary, Multi-Actor Framework." *Surveillance & Society* 6(3):213–232.
- Marx, Gary T. 2003. "A Tack in the Shoe: Neutralizing and Resisting the New Surveillance." *Journal of Social Issues* 59(2):369–390.
- Marx, Gary T. 2016. *Windows into the Soul: Surveillance and Society in an Age of High Technology*. University of Chicago Press.
- Marx, Karl. 1967. *Capital Unabridged Vol. 1 A Critical Analysis of Capitalist Production*. Vol. 1 edition. New York: International Publishers, Inc.
- Marx, Karl and Frederick Engels. 1848. *Manifesto of the Communist Party*. Retrieved March 27, 2018 (<https://www.marxists.org/archive/marx/works/1848/communist-manifesto/ch01.htm>).
- McGlotten, Shaka. 2016. "Black Data." Pp. 262–86 in *No Tea, No Shade: New Writings in Black Queer Studies*. Durham, NC: Duke University Press.
- McLaughlin, Jenna and Sam Brodey. 2015. "Eyewitnesses: The Baltimore Riots Didn't Start the Way You Think." *Mother Jones*. Retrieved November 6, 2017 (<http://www.motherjones.com/politics/2015/04/how-baltimore-riots-began-mondawmin-purge/>).
- Mears, Ashley. 2014. "Aesthetic Labor for the Sociologies of Work, Gender, and Beauty." *Sociology Compass* 8(12):1330–1343.
- Mele, Christopher. 2017. "Macy's Will Cut 10,000 Jobs After Poor Holiday Sales." Retrieved January 13, 2017 (<http://www.nytimes.com/2017/01/04/business/macys-jobs-layoffs.html>).
- Mies, Maria. 2014. *Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour*. London: Zed Books Ltd.
- Milkman, Ruth and Ed Ott. 2014. *New Labor in New York: Precarious Workers and the Future of the Labor Movement*. Cornell University Press.

- Mills, C. Wright. 1951. *White Collar: the American Middle Classes*. New York: Oxford University Press.
- Minh-Ha T. Pham. 2017. "The High Cost of High Fashion." *Jacobin*. Retrieved March 30, 2018 (<http://jacobinmag.com/2017/06/fast-fashion-labor-prada-gucci-abuse-designer/>).
- Misra, Joya and Kyla Walters. 2016. "All Fun and Cool Clothes? Youth Workers' Consumer Identity in Clothing Retail." *Work and Occupations* 43(3):294–325.
- Mogul, Joey L., Andrea J. Ritchie, and Kay Whitlock. 2012. *Queer (In)Justice: The Criminalization of LGBT People in the United States*. Boston, Mass; Enfield: Beacon Press.
- Mohandesi, Salar. 2014. "Who Killed Eric Garner?" *Jacobin*. Retrieved August 30, 2017 (<http://jacobinmag.com/2014/12/who-killed-eric-garner/>).
- Monahan, Torin. 2018. "Algorithmic Fetishism." *Surveillance & Society* 16(1):1–5.
- Monahan, Torin. 2017. "Regulating Belonging: Surveillance, Inequality, and the Cultural Production of Abjection." *Journal of Cultural Economy* 10(2):191–206.
- Moody, Kim. 2017. *On New Terrain: How Capital Is Reshaping the Battleground of Class War*. Chicago: Haymarket Books.
- Moore, Anne Elizabeth. 2016. *Threadbare: Clothes, Sex, and Trafficking*. Portland, OR: Microcosm Publishing.
- Moreno, Frank. 2013. "Transformation to Managing in the Moment." *Its About Time*. Retrieved January 30, 2017 (<https://itsabouttime.kronos.com/2013/01/10/transformation-to-managing-in-the-moment/>).
- Morgan, Andrew. 2016. *The True Cost*. Bullfrog Films.
- Negri, Antonio. 2004. *Time for Revolution*. A&C Black.
- Netessine, Serguei, Marshall Fisher, and Jayanth Krishnan. 2010. *Labor Planning, Execution, and Retail Store Performance: An Exploratory Investigation*. Rochester, NY: Social Science Research Network. Retrieved January 30, 2017 (<https://papers.ssrn.com/abstract=2319863>).
- Noys, Benjamin. 2014. *Malign Velocities: Accelerationism and Capitalism*. UK: Zero Books.
- Osterweil, Willie. 2012. "The Secret Shopper." *The New Inquiry*. Retrieved January 30, 2017 (<http://thenewinquiry.com/essays/the-secret-shopper/>).

- Parks, Liz. 2016. "Putting Buzz to Work | National Retail Federation." Retrieved January 30, 2017 (<https://nrf.com/news/putting-buzz-work>).
- Peterson, Hayley. 2017. "Warren Buffett Just Confirmed the Death of Retail as We Know It." *Business Insider*. Retrieved April 24, 2018 (<http://www.businessinsider.com/warren-buffett-just-confirmed-the-death-of-retail-as-we-know-it-2017-5>).
- Pettinger, Lynne. 2004. "Brand Culture and Branded Workers: Service Work and Aesthetic Labour in Fashion Retail." *Consumption Markets & Culture* 7(2):165–184.
- Pettinger, Lynne. 2006. "On the Materiality of Service Work." *The Sociological Review* 54(1):48–65.
- Peysner, Eve. 2016. "Zara's Unisex Line Spurs Larger Discussion About Gender." *The Cut*. Retrieved May 31, 2017 (<https://www.thecut.com/2016/03/zaras-ungendered-line-unisex.html>).
- Pierce, Lamar, Daniel C. Snow, and Andrew McAfee. 2015. "Cleaning House: The Impact of Information Technology Monitoring on Employee Theft and Productivity." *Management Science* 61(10):2299–2319.
- Plan C. 2014. "We Are All Very Anxious." *We Are Plan C*. Retrieved April 12, 2018 (<https://www.weareplanc.org/blog/we-are-all-very-anxious/>).
- Politi, Daniel. 2014. "Stop the Parade: NYPD Arrests Ferguson Protesters." Retrieved November 6, 2017 (http://www.slate.com/blogs/the_slatest/2014/11/27/stop_the_parade_nypd_arrests_ferguson_protesters.html).
- Post, Charlie. 2015. "We're All Precarious Now." Retrieved November 10, 2017 (<http://jacobinmag.com/2015/04/precarious-labor-strategies-union-precariat-standing/>).
- Rakia, Raven. 2016. "Alton Sterling, Eric Garner, and the Criminalization of Black Business." *Complex*. Retrieved August 30, 2017 (<http://www.complex.com/life/2016/07/criminalization-black-business>).
- Rakia, Raven and Aaron Cantu. 2015. "The Fight for The Soul Of The Black Lives Matter Movement." *Gothamist*. Retrieved November 10, 2017 (http://gothamist.com/2015/04/07/black_lives_matter_movement.php).
- Reinan, John and Rochelle Olson. 2015. "Charges Dropped against Black Lives Matter over MOA Protest." *Star Tribune*, November 11. Retrieved March 26, 2018 (<http://www.startribune.com/judge-dismisses-charges-against-black-lives-matter-organizers-of-moa-protest/344894812/>).

- Ritzer, George. 2014. *The McDonaldization of Society*. 8 edition. Los Angeles: SAGE Publications, Inc.
- Robinson, Cedric J. 1983. *Black Marxism: The Making of the Black Radical Tradition*. Chapel Hill, NC: Univ of North Carolina Press.
- Rooney, Caitlin. 2016. "Urban Outfitters Latest Retail Outlet to Refuse Trans Customer Access to Fitting Room." *ThinkProgress*. Retrieved May 31, 2017 (<https://thinkprogress.org/urban-outfitters-trans-customer-aab1ba7f1ca0>).
- Sallaz, Jeffrey J. 2015. "Permanent Pedagogy: How Post-Fordist Firms Generate Effort but Not Consent." *Work and Occupations* 42(1):3–34.
- Salzinger, Leslie and Teresa Gowan. 2017. "Macro Analysis." Pp. 61–94 in *Approaches to Ethnography: Analysis and Representation in Participant Observation*, edited by C. Jerolmack and S. Khan. New York, NY: Oxford University Press.
- Sassen, Saskia. 1994. *Global City*. New York, NY: Princeton University Press.
- Scholz, Trebor, ed. 2012. *Digital Labor: The Internet as Playground and Factory*. New York, NY: Routledge.
- Schor, Juliet and Karen Elizabeth White. 2010. *Plenitude: The New Economics of True Wealth*. New York: Penguin Press.
- Sennett, Richard. 2011. *The Corrosion of Character: The Personal Consequences of Work in the New Capitalism*. WW Norton & Company.
- Sewell, Graham and Barry Wilkinson. 1992. "Someone to Watch over Me': Surveillance, Discipline and the Just-in-Time Labour Process." *Sociology* 26(2):271–289.
- Sharma, Sarah. 2014. *In the Meantime: Temporality and Cultural Politics*. Durham, NC: Duke University Press.
- Sharpe, Christina. 2014. "Black Life, Annotated." *The New Inquiry*. Retrieved April 7, 2018 (<http://thenewinquiry.com/black-life-annotated/>).
- Siddiqi, Dina M. 2015. "Starving for Justice: Bangladeshi Garment Workers in a 'Post-Rana Plaza' World." *International Labor and Working-Class History* 87:165–173.
- Silver, Beverly J. 2003. *Forces of Labor: Workers' Movements and Globalization since 1870*. Cambridge University Press.
- Singh, Sonia. 2016. "Here's How Zara Retail Workers Won a Union." Retrieved October 13, 2017 (http://inthesetimes.com/working/entry/19423/heres_how_zara_retail_workers_won_a_union).

- Smetanka, Mary Jane. 2009. "Mall of America Patron Alleges Discrimination." *Star Tribune*, May 6. Retrieved (<http://www.startribune.com/mall-of-america-patron-alleges-discrimination/44505052/>).
- Smith, Aaron. 2016. "Abandoned Mall Photos Tell an Eerie American Story." *CNNMoney*. Retrieved May 17, 2017 (<http://money.cnn.com/2016/11/16/news/dead-mall-photos-seph-lawless/index.html>).
- Smith, Andrea. 2015. "Not Seeing: State Surveillance, Settler Colonialism, and Gender Violence." in *Feminist Surveillance Studies*. Durham, NC: Duke University Press.
- Smith, Vicki. 2010. "Enhancing Employability: Human, Cultural, and Social Capital in an Era of Turbulent Unpredictability." *Human Relations* 63(2):279–300.
- Solman, Paul. 2015. "Why the Freddie Gray Riots Began at a Shopping Mall." *PBS NewsHour*. Retrieved November 6, 2017 (<https://www.pbs.org/newshour/economy/answers-baltimores-economic-recovery-start-shopping-mall>).
- Sorkin, Michael. 1992. *Variations on a Theme Park: The New American City and the End of Public Space*. New York: Macmillan.
- Soss, Joe, Richard C. Fording, and Sanford Schram. 2011. *Disciplining the Poor: Neoliberal Paternalism and the Persistent Power of Race*. Chicago: University of Chicago Press.
- Sperber, Joshua. 2014. "Yelp and Labor Discipline: How the Internet Works for Capitalism." *New Labor Forum* 23:68–74.
- Speri, Alice. 2017. "Israel Security Forces Are Training American Cops Despite History of Rights Abuses." *The Intercept*. Retrieved November 6, 2017 (<https://theintercept.com/2017/09/15/police-israel-cops-training-adl-human-rights-abuses-dc-washington/>).
- Squire, Alexi. 2016. "Room For Change." *Equal Rights Center*. Retrieved May 31, 2017 (<https://equalrightscenter.org/press-releases/room-for-change/>).
- Srnicek, Nick. 2017. "The Challenges of Platform Capitalism: Understanding the Logic of a New Business Model." *Juncture* 23(4):254–257.
- Srnicek, Nick and Alex Williams. 2015. *Inventing the Future: Postcapitalism and a World without Work*. Verso Books.
- Stacey, Judith. 1988. "Can There Be a Feminist Ethnography?" Pp. 21–27 in *Women's Studies International Forum*, vol. 11. Elsevier.

- Standing, Guy. 2016. *The Precariat: The New Dangerous Class*. Bloomsbury Publishing.
- Sterne, Jonathan. 1997. "Sounds like the Mall of America: Programmed Music and the Architectonics of Commercial Space." *Ethnomusicology* 41(1):22–50.
- Sunkara, Bhaskar. 2012. "Precarious Thought." Retrieved November 10, 2017 (<http://jacobinmag.com/2012/01/precarius-thought>).
- Taggart, John and Kevin Granville. 2017. "From 'Zombie Malls' to Bonobos: What America's Retail Transformation Looks Like." *The New York Times*, April 15. Retrieved April 24, 2017 (<https://www.nytimes.com/2017/04/15/business/from-zombie-malls-to-bonobos-americas-retail-transformation.html>).
- Taylor, Keeanga-Yamahtta. 2016. *From# BlackLivesMatter to Black Liberation*. Haymarket Books.
- Thompson, Derek. 2013. "Death of the Salesmen: Technology's Threat to Retail Jobs." *The Atlantic*, June. Retrieved May 17, 2017 (<https://www.theatlantic.com/magazine/archive/2013/06/death-of-the-salesmen/309309/>).
- Thompson, Derek. 2017a. "The Great Retail Apocalypse of 2017 - The Atlantic." Retrieved May 17, 2017 (<https://www.theatlantic.com/business/archive/2017/04/retail-meltdown-of-2017/522384/>).
- Thompson, Derek. 2014. "The Sad, Slow Death of America's Retail Workforce." *The Atlantic*, April 15. Retrieved May 17, 2017 (<https://www.theatlantic.com/business/archive/2014/04/the-sad-slow-death-of-americas-retail-workforce/360635/>).
- Thompson, Derek. 2017b. "What in the World Is Causing the Retail Meltdown of 2017?" *The Atlantic*, April 10. Retrieved April 24, 2017 (<https://www.theatlantic.com/business/archive/2017/04/retail-meltdown-of-2017/522384/>).
- Thompson, Edward P. 1967. "Time, Work-Discipline, and Industrial Capitalism." *Past & Present* (38):56–97.
- Thul, Prak Chan. 2011. "Hundreds Sick in Mass Fainting at Cambodian Factory | Reuters." Retrieved March 30, 2017 (<http://www.reuters.com/article/us-cambodia-faintings-idUSTRE77O2TC20110825>).
- Townley, Barbara. 1993. "Foucault, Power/Knowledge, and Its Relevance for Human Resource Management." *Academy of Management Review* 18(3):518–545.

- Tufekci, Zeynep. 2014a. "Is The Internet Good or Bad? Yes." *Medium*. Retrieved January 2, 2018 (<https://medium.com/matter/is-the-internet-good-or-bad-yes-76d9913c6011>).
- Tufekci, Zeynep. 2014b. "Social Movements and Governments in the Digital Age: Evaluating a Complex Landscape." *Journal of International Affairs* 1–18.
- Tufekci, Zeynep. 2017. *Twitter and Tear Gas: The Power and Fragility of Networked Protest*. New Haven, CT: Yale University Press.
- Van Meter, Kevin. 2017. *Guerrillas of Desire: Notes on Everyday Resistance and Organizing to Make a Revolution Possible*. Chico, CA: AK Press.
- Van Oort, Madison. 2015. "Making the Neoliberal Precariat: Two Faces of Job Searching in Minneapolis." *Ethnography* 16(1):74–94.
- Visweswaran, Kamala. 1994. *Fictions of Feminist Ethnography*. U of Minnesota Press.
- Wacquant, Loïc. 2009. *Punishing the Poor: The Neoliberal Government of Social Insecurity*. duke university Press.
- Waddell, Kaveh. 2016. "The Algorithms That Tell Bosses How Employees Are Feeling." *The Atlantic*. Retrieved January 30, 2017 (<https://www.theatlantic.com/technology/archive/2016/09/the-algorithms-that-tell-bosses-how-employees-feel/502064/>).
- Walby, Kevin and Seantel Anais. 2015. "Research Methods, Institutional Ethnography, and Feminist Surveillance Studies." Pp. 208–20 in *Feminist Surveillance Studies*, edited by R. E. Dubrofsky and S. A. Magnet. Durham.
- Wang, Jackie. 2017. "'This Is a Story About Nerds and Cops': PredPol and Algorithmic Policing." *E-Flux*. Retrieved April 7, 2018 (<http://www.e-flux.com/journal/87/169043/this-is-a-story-about-nerds-and-cops-predpol-and-algorithmic-policing/>).
- Wattles, Jackie. 2016. "Chipotle under Fire for Illegal Workplace Policies." *CNNMoney*. Retrieved January 30, 2017 (<http://money.cnn.com/2016/08/24/pf/jobs/chipotle-social-media-nlrb/>).
- Weiss, Lois. 2015. "Inditex Buys \$280M Soho Building for New Zara Store." *New York Post*. Retrieved January 30, 2017 (<http://nypost.com/2015/01/08/inditex-buys-280m-soho-building-for-new-zara-store/>).
- White, Gillian B. 2015. "Long Commutes Are Awful, Especially for the Poor." *The Atlantic*, June 10. Retrieved May 24, 2017 (https://www.theatlantic.com/business/archive/2015/06/long-commutes-are-awful-especially-for-the-poor/395519/?utm_source=SFTwitter).

- Whyte, William H. 2013. *The Organization Man*. University of Pennsylvania Press.
- Wicker, Alden. 2016. "Fast Fashion Is Creating an Environmental Crisis." *Newsweek*. Retrieved March 28, 2017 (<http://www.newsweek.com/2016/09/09/old-clothes-fashion-waste-crisis-494824.html>).
- Wigglesworth, Robin. 2017. "Will the Death of US Retail Be the next Big Short?" *Financial Times*. Retrieved April 24, 2018 (<https://www.ft.com/content/d34ad3a6-5fd3-11e7-91a7-502f7ee26895>).
- Williams, Christine L. 2006. *Inside Toyland: Working, Shopping, and Social Inequality*. Berkeley, Calif.: University of California Press.
- Williams, Christine L. and Catherine Connell. 2010. "'Looking Good and Sounding Right' Aesthetic Labor and Social Inequality in the Retail Industry." *Work and Occupations* 37(3):349–377.
- Willse, Craig. 2010. "Neo-Liberal Biopolitics and the Invention of Chronic Homelessness." *Economy and Society* 39(2):155–184.
- Wolf, Diane L. 2018. *Feminist Dilemmas in Fieldwork*. Routledge.
- Yerak, Becky. 2017. "Mariano's, Kimpton Hotels Sued over Alleged Collection of Biometric Data: 'It's Something Very Personal.'" *Chicagotribune.Com*, July 21. Retrieved (<http://www.chicagotribune.com/business/ct-employers-biometrics-lawsuits-0723-biz-20170720-story.html>).
- Zuboff, Shoshana. 2016. "Google as a Fortune Teller: The Secrets of Surveillance Capitalism." *FAZ.NET*, March 5. Retrieved March 26, 2018 (<http://www.faz.net/1.4103616>).
- Zukin, Sharon. 2010. *Naked City: The Death and Life of Authentic Urban Places*. Oxford; New York: Oxford University Press.
- Zwerdling, Daniel. 2011. "Under Suspicion At The Mall Of America." *NPR.Org*. Retrieved November 6, 2017 (<http://www.npr.org/2011/09/07/140234451/under-suspicion-at-the-mall-of-america>).

