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Innovation and Precarity

Workplace Discourse in Twenty-First Century Capitalism

Sidney A. Rothstein



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Abstract

This paper analyzes discourse in the workplace in order to explain puzzling patterns of precarity in twenty-first century capitalism. Tech workers' central role in digital transformation endows them with labor market power reflected by their high wages, but during economic downturns, when demand for their skills decreases, even they are vulnerable to downsizing. Comparing workers' responses to downsizing at two sites of an American tech firm, this paper shows how management disempowers workers by framing the employment relationship in a financial discourse. Disposing workers to believe that their jobs are threatened by market forces beyond their control, rather than by managers' decisions, this financial discourse undermines labor's established power resources by persuading workers that mobilizing will be ineffective in protecting their jobs. Relying on detailed case study evidence, this paper demonstrates the importance of discourse to explaining variation in worker power. It argues that the workplace should play a larger role in comparative political economy, particularly in explaining labor market outcomes related to digital transformation.

Keywords: capitalism, discourse, hegemony, knowledge economy, power, workers

Zusammenfassung

Dieses Papier trägt zum Verständnis von Prekarität im Kapitalismus des 21. Jahrhunderts bei, indem es den Blick auf betriebliche Diskurse lenkt. Durch ihre zentrale Rolle bei der digitalen Transformation haben Arbeitnehmer der Technologiebranche auf dem Arbeitsmarkt eine starke Position, ausgewiesen durch ihre hohen Löhne. Aber auch sie sind bei Restrukturierungen verwundbar, wenn im Abschwung die Nachfrage nach ihren Fertigkeiten zurückgeht. Das Papier vergleicht die Reaktionen der Beschäftigten auf Restrukturierungen in zwei Niederlassungen eines amerikanischen Technologieunternehmens und zeigt, wie ihre Position geschwächt wird, wenn die Unternehmensleitung das Beschäftigungsverhältnis im Rahmen eines Finanzdiskurses darstellt. Sie schürt den Glauben, dass Mobilisierung auf Arbeitnehmerseite nicht weiterhilft, weil nicht etwa Entscheidungen der Unternehmensleitung, sondern unkontrollierbare Marktkräfte die Arbeitsplätze bedrohen, und unterminiert die Machtressourcen der Beschäftigten. Im Ergebnis verdeutlicht das Papier den Stellenwert diskursiver betrieblicher Faktoren zur Erklärung unterschiedlicher Reichweiten von Arbeitnehmermacht. Geht es um den Arbeitsmarkt im Kontext der digitalen Transformation, sollten am Arbeitsplatz ansetzende Analysen in der Vergleichenden Politischen Ökonomie stärker zum Einsatz kommen.

Schlagwörter: Arbeitnehmer, betriebliche Diskurse, Hegemonie, Kapitalismus, Macht, Wissensökonomie

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Innovation and Precarity: Workplace Discourse in Twenty-First Century Capitalism

1 Introduction

Tech workers are not invincible. When the dot-com bubble burst in 2001, downsizing in the American tech sector increased by 500 percent. More than 168,000 tech workers lost their jobs in 2001 (US Bureau of Labor Statistics 2003, 11), far outpacing the labor market volatility observed during the crisis of 2008–2009, when downsizing increased by 200 percent across the US economy (OECD 2010, 140). Against notions of a fluid labor market (Saxenian 1994), tech workers suffer significant welfare losses following dismissal, such as lower earnings for the rest of their careers, and extended unemployment, especially if they are older (Mann and Luo 2010; Xia and Kleiner 2001). Tech workers' vulnerability to job loss is puzzling because most accounts of contemporary capitalism expect tech workers' market power to insulate them from the challenges that workers face in other sectors. Precarity in the core sector of digital transformation suggests that existing approaches to political economy overlook important characteristics of capitalist development in the twenty-first century, namely, the constitution of worker power. This paper illustrates how analyzing discourse in the workplace helps fill this gap by providing a more coherent linkage between macro-level and micro-level features of contemporary capitalism.

Existing accounts of the political economy of twenty-first century capitalism approach digital transformation by focusing on the social effects of technological change. These approaches revolve around the observation that technological innovation has led to a shift in occupations (Oesch 2013), with the emergence of a new group of workers characterized by high pay, advanced technical skills, and preferences for flexible labor markets (Dancygier and Walter 2015). Extending the asset theory of politics, which views workers' labor market risks as shaping their preferences for social policy (Iversen and Soskice 2001), scholars argue that the emergence of this new group of workers explains some of the inequality in contemporary capitalism. High demand for technical skills leads the workers who drive growth in twenty-first century capitalism to form preferences against traditional institutions that redistribute wealth and protect job security (Iversen and Soskice 2015). Tech workers thus figure centrally in accounts of the politi-

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cal economy of digital transformation because, whether through electoral mechanisms (Beramendi et al. 2015; Wren, Fodor, and Theodoropoulou 2013) or coalitions (Ibsen and Thelen 2017; Thelen 2019), as the proportion of tech workers in a country's workforce increases, support for redistributive and protective institutions decreases, leading to reforms that undercut their effectiveness. Technological innovation thus privileges workers with advanced skills while exposing more workers to market forces, leading to inequalities in earnings and job loss.

These approaches are no doubt partly correct, but a closer look at tech workers highlights two important shortcomings common to comparative political economy. First, as statistics on downsizing in the tech sector show, tech workers are as precarious as workers in peripheral sectors. Precarity takes many forms (Kalleberg and Vallas 2018), but in its essence "worker insecurity and instability in an employment relationship or labor market" reflects an unequal balance of power in the workplace (Doellgast, Lillie, and Pulignano 2018, 1), and downsizing represents a clear case of a power conflict between workers and managers (Emmenegger 2015, 92). Tech workers' vulnerability to downsizing thus underlines that power in the labor market does not automatically entail power in the workplace (Dean 2015; Streeck 2005; Wright 2000). Second, institutional change is not the only cause of labor market outcomes. Over the last decades, management discretion has increased across the OECD through processes of conversion, whereby practices evolve but formal institutions remain intact (Baccaro and Howell 2011). Even the strictest institutions for economic governance rely on worker mobilization for enforcement (Rothstein 2018), so explaining labor market outcomes at the national level must account for how workers interpret and apply institutions in the workplace (Benassi, Doellgast, and Sarmiento-Mirwaldt 2016; Fine 2017).

This paper foregrounds discourse in the workplace to develop a more nuanced account of the political economy of digital transformation. It proposes a framework that contributes to existing approaches by highlighting a causal connection between digital transformation and labor market outcomes that goes beyond strictly institutionalist approaches. Instead, building on the insight that collective action is a necessary condition for worker power (Schulze-Cleven 2017), the analytical framework developed here shows how discourse is a constitutive element of worker power, providing important resources for collective action in some situations and limiting workers' ability to mobilize in others. I argue that digital transformation is characterized by a financial discourse that undermines labor's established repertoires of collective action, and I trace how managers' use of this financial discourse increases workers' vulnerability to downsizing.

Relying on two case studies of workers responding to mass dismissals at an American tech firm, the paper shows how workers perceive their labor market risks and form preferences for collective action on the basis of those perceptions. The case studies demonstrate that tech workers acquiesce to downsizing not because they prefer flexibility but because management establishes a discourse in the workplace that persuades workers that they have no choice. Setting workers' acquiescence to downsizing in the financial-

ized context of Silicon Valley against workers' resistance in a non-financialized context illustrates that management discourse is one of the factors that limits worker power in the digital transformation. When managers frame the workplace in financial discourse, they dispose workers to view the employment relationship as shaped by factors beyond their control. Believing that mobilizing will be ineffective, workers choose to abstain from collective action, which undermines labor's established power resources. The account developed here offers a framework that illustrates the discursive tactics that employers use to exercise discretion and limit worker power in the digital transformation. Specifying the context in which these causal mechanisms function helps explain why precarity has become the new normal not just in tech, but across many sectors in twenty-first century capitalism.

2 Discourse in political economy

Most approaches to political economy acknowledge that capitalist development involves more than structural forces unfolding according to a blind logic. Many highlight the role of interpretation in shaping the path of economic change, but there is an enduring gap between investigations of discourse at the national level and those that focus on the workplace. This gap leads scholars to overlook the discursive formations that distinguish different sectors and occupations and thus to underappreciate the role of discourse in capitalist development as particular sectors or occupations become more important to a country's economy. This section argues for more attention to discourse in the workplace. Foregrounding interactions between management and workers highlights the causal mechanisms that link occupational change to labor market outcomes, such as inequality and precarity. From the perspective of discourse in the workplace, tech workers' precarity may not in fact be so surprising.

The move toward "new institutionalisms" (March and Olsen 1983) renewed interest in the role of meaning in politics and has anchored a resilient vein of constructivism in political science. Constructivism takes many forms, but generally revolves around the processes by which actors interpret the world and then act on the basis of those interpretations, often highlighting that political behavior has more to do with perceptions than how the world "really" is (Hacking 2000). Discourse is central to constructivism because language mediates actors' perceptions, and its inscription in speech provides the evidence necessary for scholars to make arguments about actors' perceptions. Discursive institutionalists, for instance, investigate how discourse shapes the path of policy formation at the national level (Schmidt 2008). Others investigate how discourse affects policy formation by shaping actors' perceptions of crisis (Blyth 2002) or policy preferences (Martin and Swank 2012).

In addition to shaping policy formation, discourse also shapes the effects of policy. As Streeck and Thelen argue, the “gap” between a formal policy and its application invites an act of judgment, which depends on how actors interpret policy in its surrounding conditions (2005, 14). In order to navigate this gap, scholars writing from a pragmatist perspective illustrate the delicate balance between actors’ creativity and the constraints imposed by past experiences and surrounding conditions (Berk and Galvan 2009, 555; Berk, Galvan, and Hattam 2013). Herrigel, for instance, traces how the transition from Fordism has been propelled by employers’ and worker’s adaptation to changing economic conditions within particular institutional contexts, highlighting how actors creatively translate challenging conditions into new possibilities (Herrigel 2010). While pragmatist approaches provide the most advanced account of the role of discourse in politics, they also illustrate the limitations of existing approaches. While analyzing discourse in politics emphasizes actors’ creativity, existing approaches all too frequently overlook power. If workers had so much agency in the transition from Fordism, for instance, why did they lose their jobs in such high numbers (Herrigel 2010, 101)?

An alternative approach to discourse in politics that focuses explicitly on power is found in analyses of the workplace. Since Gramsci, scholars recognize that employers control the workplace in large part through hegemonic discourses that discipline workers to acquiesce to management’s authority (Gramsci 1971). While establishing such a discourse may require management to expend considerable effort (Kunda 2006), doing so allows them to avoid regularly resorting to violence. The resulting form of control is highly effective because workers’ fundamental ideas about how the world works disposes them to voluntarily submit their labor power to management’s control (Burawoy and Wright 1990). It is also flexible, with management’s hegemonic discourse varying between countries and economic systems, as well as over time (Bendix 2001; Burawoy 1985; Guillén 1994; Sil 2002). Workers are not passive recipients of managers’ discourse, and they can resist in some situations (Stark and Lukac 2011), but management always retains the upper hand because accepting managers’ framing of the employment relationship is a precondition for participating in production and, thus, for receiving a wage (Boltanski and Chiapello 2007; Burawoy and Wright 1990, 256).

Discourse in digital transformation

A discursive approach to the tech sector helps make sense of power and precarity in the digital transformation. While the occupational approach outlined above emphasizes tech workers’ labor market power, discursive approaches illustrate how the particular discourse surrounding the tech sector effectively traps workers in a mindset that prevents them from mobilizing against management discretion. Research suggests that management in the tech sector establishes a financial discourse in the workplace that frames the employment relationship as shaped ineluctably by market forces external to the firm, which is ironic given the central role of the state in constructing Silicon Valley

(Block 2008; Block and Keller 2011; Mazzucato 2014). Tech workers have internalized this discourse so that it constitutes a fundamental aspect of their identities. Barbrook and Cameron's account of the "Californian Ideology," for instance, notes tech workers' identification as individual actors in free markets (Barbrook and Cameron 1996). Other accounts provide further evidence of the dominance of market fundamentalism in the tech sector by situating tech workers' identities in historical context (Streeter 2011; F. Turner 2006). Quantitative studies of discourse in the tech sector identify market fundamentalism as one of its constitutive elements (Nachtwey and Seidl 2017).

Analyses of discourse in the tech workplace highlight two characteristics that help explain tech workers' precarity. First, this discourse originates with management. In a series of studies, Boes and Marrs trace how managers in the tech sector adopt a financial discourse that frames employment conditions as shaped by market forces beyond their control (Boes 2002; Marrs 2008). Tech workers' propensity to embrace this discourse indicates the effectiveness of management's hegemony. Second, management's financial discourse can lead tech workers to accept a higher degree of labor market risk than other types of workers (Lane 2011; Neff 2012). Believing that their working conditions are determined by market forces at the macro-level that neither they nor their managers can control, tech workers are disposed to accept management's justifications that downsizing is necessary for a firm to survive rather than protest against managers' threats. If managers cannot control the market forces that require downsizing, there is no point in mobilizing against management. Thus, managers' adoption of a financial discourse increases, rather than decreases (Kunda and Ailon-Souday 2005, 205), their power over workers.

Tech is not the only sector where management controls the workplace by relying on techniques related to finance, nor is it especially new. Framing the workplace in terms of financial markets is a key element of globalization discourse (Dunk 2002; Nash 1989), as well as of firms' overarching shift toward shareholder value (Fligstein 1993; Lazonick and O'Sullivan 2000). Disagreement ranges broadly on what preceded management's fixation on finance (Hirst and Zeitlin 1991), but establishing a historical distinction is not necessary for the central aim of this study, which is to examine the limits to tech workers' power. A wealth of research on financialization (van der Zwan 2014) shows how managers in other sectors deploy financial discourse as well (Baud and Durand 2012; Faulconbridge and Muzio 2009; Holst 2016). The role of financial discourse in tech is particularly deep and broad because the centrality of venture capital in Silicon Valley resulted in tech firms developing closer relationships with finance than firms in other sectors (Kenney 2011), and management in tech was an early adopter of market-based compensation practices, such as equity pay (Ittner, Lambert, and Larcker 2003; Murphy 2003). Management in tech ensures that workers never lose sight of their connection to the firm's financial performance by, for instance, placing stockwatches on workers' screens (Ross 2003, 199). While some of these practices have become common in other sectors, tech remains extreme for the degree to which management frames every aspect of the employment relationship in financial discourse (Cushen 2013).

The extreme role of financial discourse in tech means that the tech workplace, given workers' precarity, provides a pathway case for constructing a theory to explain the association between digital transformation and precarity (Gerring 2007). Recognizing that tech is defined by the same financial discourse as other sectors may puncture the sense of novelty surrounding digital transformation. However, acknowledging this commonality allows building on, and contributing to, existing analyses of financialization and discourse in the workplace, and exploring how they apply to digital transformation. Financialization orients managers toward delivering value to shareholders above all else, which makes them more likely to downsize (Jung 2015; Shin 2017). Explaining manager behavior, however, does not explain precarity, because workers can always mobilize against the measures, even in the US, where they can creatively enforce tertiary institutions (Nielsen, Nelson, and Lancaster 2010). This paper builds on research on financialization by tracing how management's financial discourse contributes to tech workers' precarity by limiting their ability to mobilize.

Workers become precarious when management threatens them with downsizing. Workers can respond by either acquiescing or by mobilizing. Mobilization theory, particularly framing (Benford and Snow 2000), suggests that workers' decision to mobilize is based not only on perceptions of injustice but also on two cognitive factors: (a) whether workers *attribute* downsizing to factors within their control (Kelly 1998, 29), which in turn depends on (b) whether organizers present workers with an alternative account of downsizing that they find *credible* (Klandermans 1984, 113). These two necessary conditions for worker mobilization suggest why management's financial discourse dissuades workers from mobilizing, and why discourse is so important to workers' power resources (Lévesque and Murray 2013; Schmalz and Dörre 2014; Steinberg 1999). By framing the workplace as ineluctably shaped by market conditions, management leads workers to attribute downsizing to factors at the macro-level beyond their control. On such a view, workers see no reason to participate in collective action, because mobilization would do nothing to protect their jobs. While research on workers' discursive power resources focuses on how workers can use discourse to build power (Bellego, Doellgast, and Pannini 2019), this paper highlights how management uses discourse to *limit* worker power.

These observations inform three claims, which will be developed in the remainder of the paper. First, the tech sector is characterized by management's adoption of a financial discourse in the workplace. Second, tech workers acquiesce to downsizing because this financial discourse undermines two conditions necessary for collective action. Third, by complicating workers' ability to attribute downsizing to factors within their control, management's financial discourse upsets labor's established repertoires of contention (Tilly 1993). Applying mobilization tactics developed during previous eras of production will be ineffective, although tech workers may be able to mobilize when they develop novel repertoires for collective action. The following sections introduce two cases of downsizing in the tech sector and then address an alternative explanation before providing evidence for these three claims.

3 Case selection and methods

While focusing on two cases of downsizing in the US, where the institutional environment is particularly weak (L. Turner and Hurd 2001, 10), the account developed here can be applied to digital transformation in other countries, given the ineffectiveness of national institutions at regulating the tech sector. This is partly due to design, as policy entrepreneurs argued that liberalizing institutions for social protection was necessary for promoting the tech sector (Amable 2017, 29–30). Such advocacy, however, may not be necessary. At least in the European Union, stricter institutions regulating dismissals reduce the frequency of downsizing in manufacturing, but they make little difference in tech (Eurofound 2018). Germany, for instance, is renowned for its strict regulation of dismissals (Hall and Soskice 2001), but following the dot-com bust, unemployment in tech climbed to twice the national average, reaching 18 percent in 2001 (Bundesanstalt für Arbeit 2001, 134). Given unanimous commitment across the OECD to promoting economic growth by investing in digital technology (OECD 2017a, 11), the tech sector will play an increasingly central role in the global economy. The US's weak institutional environment may still be exceptional in some respects, but the workplace dynamics observed there are a harbinger for what to expect in other countries as the tech sector grows.

IBM offers a typical case for examining the role of discourse in explaining precarity in the digital transformation (Gerring 2007). Founded in 1911, IBM was already past its prime when the digital transformation began in earnest in the 1990s. Nonetheless, IBM is representative of broader trends because firms like Google, Apple, Facebook, and Amazon all follow in IBM's footsteps. Each employs high-skill labor, cultivates a reputation as a "great place to work" particularly through high pay, and each aims to secure a dominant share in their primary product markets (Dolata 2015). Examining changes at IBM over the past several decades holds important lessons for understanding the development of capitalism in the twenty-first century (Heckscher 1996; Lazonick 2009).

In 1993, IBM's board fired then-CEO, John Akers, and hired Lou Gerstner with a mandate to modernize the firm. Gerstner made dozens of changes, all of which reflected his intention to align IBM with Silicon Valley. The overall effect was to shift the framing of the employment relationship from norms of reciprocity to a financial discourse. Employee handbooks still acknowledged IBM's commitment to employment security, but they now warned that "true employment security, however, can only be achieved through a successful, profitable business and the individual's continuing contribution to that success."¹ In addition to linking employment security to economic conditions beyond management's control, Gerstner also restructured compensation so that market forces played a larger role. While management continued to set workers' pay according to some local metrics, including workers' contributions at the division level, salaries were primarily "driven by overall business performance," and in eight years, the number

1 IBM Corp. 2002. "About Your Job: Document Number USHR101."

Table 1 Workplace characteristics: IBM Burlington and IBM San Jose

	IBM Burlington	IBM San Jose
Main product	Semiconductors	Storage and memory
Employees ^a	8,300 (approx.) (2001)	7,000 (approx.) (2001)
Number dismissed (2001–2004)	2,950 [35.5% of site's workforce]	1,830 [26.1% of total workforce]
Participants in collective legal case	155 (43.4% of total plaintiffs)	24 (6.7% of total plaintiffs)
Union members	0	0
Year-on-year change in revenue by location (2001–2002) ^b	–8%	–6%

a The size of each site is difficult to measure, but reflects interviews with managers, which I triangulated with estimates by local journalists (e.g., Kuruwila 2005; Robinson 2001).

b Change in IBM's overall revenue during this period was –2%. Revenue of IBM Servers Division as an indicator for Burlington's performance because the Servers Division was Burlington's chief customer. Revenue of IBM Storage Division as an indicator for performance at San Jose because Storage was headquartered at San Jose (IBM Corp. 2002, 102, 104).

of non-executives receiving equity compensation increased from 500 to 60,000.² By the late 1990s, IBM appeared to have fully adopted the financial discourse of digital transformation, but comparing specific sites of production yields a different picture.

IBM's facilities in Burlington and San Jose represent the firm's presence on two different coasts and thus provide a useful contextualized comparison of how workers respond to downsizing (Locke and Thelen 1995). Burlington played a critical role in designing and producing the mass quantities of semiconductors that made IBM one of the most profitable firms of the twentieth century. San Jose, in the heart of Silicon Valley, designed and built disk drives, and the site hosted a large portion of IBM's software group. These differences aside, the two sites were roughly the same size and employed the same high-skill, anti-union workers. Despite decades of attempts to organize workers at IBM, the number of union members at each site prior to downsizing was the same: 0. But common demography between the two sites was not sufficient to dampen the effects of variation in management's discourse on workers' responses to downsizing, which allows approaching the sites through a most similar systems, dissimilar outcomes research design (Beach and Pedersen 2016, 238–39).

On November 28, 2001, IBM Burlington terminated 500 workers, followed by a second round on May 23, 2002, when 339 were dismissed, and a third on June 4, when 988 were cut.³ Downsizing continued over the next months, so that by August 2003, one third of the site's workers had been terminated. In the months following dismissals, workers in Burlington filed a collective legal case against IBM. 358 workers from IBM's locations across the US joined *Syverson v. IBM*, alleging that management selected workers for

2 Ibid.; IBM Corp 2001 "Lou Gerstner Hosts Live Employee Broadcast."

3 Declaration of Robert H. Topel 2009.

dismissal illegally, based on their age rather than a business reason. Workers associated with the *Alliance@IBM*, a group of IBM workers mostly from upstate New York who organized in the late 1990s to represent their interests against management, initiated the case, and 155 from Burlington eventually joined the collective legal action, forming the largest group of plaintiffs. IBM settled in 2009, paying workers an undisclosed sum and amending their dismissal policy to avoid future challenges.⁴

On May 22, 2002, IBM terminated 200 workers from its global software group in San Jose. The next day, 202 workers were terminated from the storage group, and in June, another 350 were cut. Like Burlington, downsizing continued, so that more than a quarter of the workers at San Jose lost their jobs by January 2004. Analyses presented during *Syverson* illustrate that workers at San Jose were subject to the same discriminatory treatment as workers at Burlington.⁵ Similar to Burlington, a handful of workers at San Jose organized with the *Alliance@IBM*. However, very few workers at IBM San Jose chose to participate in collective action, and only twenty-four joined the collective legal case, constituting less than 7 percent of the total plaintiffs.⁶

Workers at both Burlington and San Jose were subject to mass layoffs in the same time period, according to the Bureau of Labor Statistics' definition,⁷ but available data allows only rough estimates of the distribution of dismissals between the two sites.⁸ However, it is clear that workers at both sites viewed downsizing as a threat to their job security. The *Burlington Free Press* quoted one worker at Burlington: "I have been there 25 years and I know that I don't feel secure about my job" (Robinson 2001). Workers' Yahoo! chat group at San Jose reflected a similar sense of insecurity, where one worker observed that their colleagues "are only fooling themselves into a secure sense of job security. Next time, you will be cut, and your co-workers will be forced to work even harder!"⁹ One can imagine that different rates of downsizing between the sites, or indeed the sites' different sizes, might correspond to variation in worker behavior, but such a view would need to identify a causal mechanism to link the rate of downsizing

4 Former organizer and engineer, IBM Burlington, author interview, Burlington, October 15, 2015.

5 Declaration of Dr. Richard Drogin 2008.

6 Nager, Marshall, and Agenbroad (2009).

7 "50 or more initial claims for unemployment insurance benefits from an establishment beginning in a given month, regardless of duration" (US Bureau of Labor Statistics 2003, 38).

8 I analyzed documents included in *Syverson* to link individual plaintiffs to each site and a particular downsizing action, and therefore to link downsizing actions to each site. I then corroborated this analysis with press reports from each location and county-level data on job loss in the tech sector. However, plaintiffs do not represent a complete sample of downsizing actions and while these actions frequently involved multiple sites, there is no data on their exact distribution, so caution must be exercised when extrapolating from this data. During fieldwork, subjects never referred to the size of the site nor the magnitude of dismissals when discussing workers' reactions to downsizing, so this caution need not detract from the central argument here, which is that management's financial discourse in the tech sector limits workers' propensity to mobilize.

9 progresswhatprogress 2002.

to workers' responses. I propose that this linkage is, in part, discursive, because it must capture how workers perceive the threat of downsizing, and how they translate that perception into resistance or acquiescence.

Burlington housed a higher proportion of manufacturing workers than San Jose,¹⁰ so, given that blue-collar workers have historically been more militant than white-collar professionals (Mills 2002), mobilization at Burlington is not surprising. However, it is unclear where the threshold would be that qualifies a worker as blue-collar, let alone a site's entire workforce (Adcock and Collier 2001). It would be a stretch to call workers at Burlington blue-collar, given that they were high-skill technicians who produced microchips and earned much more than the average manufacturing wage in the area.¹¹ Moreover, empirical research shows that tech workers who identify as professionals do participate in collective action when it resembles a professional organization instead of a union (Benner 2002). Workers' occupational identities play a role in shaping their responses to downsizing, but identifying the causal relationship between occupational identity and collective action requires examining workers' experiences (Thompson 1964). As I show below, analyzing discourse in the workplace provides a promising avenue.

In order to explain why workers at IBM Burlington mobilized to resist downsizing, while workers at IBM San Jose acquiesced, I performed fieldwork at each site in 2014 and 2015, interviewing nearly forty workers, managers, labor organizers, and public officials.¹² I also collected 4,500 documents from the legal case, *Syverson v. IBM*, along with archived press coverage of the downsizing from national and local sources, and eighty-seven primary documents from interview subjects in Burlington and thirty-seven from subjects in San Jose. Triangulating between the different sources increases the confidence in inferences based on this data (Gallagher 2013, 194). I transcribed interviews verbatim and coded them, along with primary documents, in MAXQDA, according to a grounded theory approach that allowed constructing analytical concepts to make sense of the cases at hand (Clarke 2005). In order to capture the causal effects of management's and workers' discourse, I employed the critical approach outlined by Fairclough and Fairclough (2012), paying particularly close attention to tactics of persuasion. After addressing an alternative explanation in the next section, I present the results of this analysis in order to illustrate how management's financial discourse disposes workers to acquiesce to downsizing.

10 Former site executive, IBM, author interview, telephone, September 20, 2015.

11 "Channel 3 News." January 11, 2002.

12 See Appendix 1 for a list of interviews.

4 Labor market power: Weaker than expected

From the perspective of what is often taken as common sense, workers' acquiescence at San Jose is hardly surprising: tech workers do not mobilize. However, examining the dominant view in political economy that informs this common sense highlights why we need to update understandings of worker power in the twenty-first century. Existing approaches to political economy cannot explain variation in workers' responses to downsizing at IBM, and therefore cannot explain why tech workers face such a high degree of precarity.

Occupational approaches to political economy would explain the variation between workers' response to downsizing at Burlington and San Jose in terms of variation in the labor markets between the two locations. Based on asset theory (Iversen and Soskice 2001), these accounts would suggest that workers in Silicon Valley faced higher demand for their skills than those in Burlington, and therefore acquiesced to downsizing because finding another job was less costly than in Burlington. Labor market statistics in each location illustrate the shortcomings of this approach, and the necessity of investigating the workplace.

Despite its reputation for fluid labor markets (Saxenian 1994), in the early 2000s, tech workers in Silicon Valley were no better off than those in Burlington. California and Vermont sustained similar damage from the dot-com bust. In 2001, the number of jobs in California's high-tech sector fell by 8.5 percent, while in Vermont it fell by 5 percent. Job losses in the tech sector continued over the next two years, so that by 2003, California had lost 14 percent of its tech jobs, and Vermont 17 percent. In the same period, the number of tech jobs in the US as a whole decreased by 10.5 percent (US Census Bureau 2019). Job loss in Silicon Valley triggered long-term reductions in employment and wages. Up through 2008, tech employment in Silicon Valley remained at only 80 percent of where it stood in 2000, and wages in tech remained 14 percent lower (Mann and Luo 2010, 71). Unemployment in both Silicon Valley and Burlington was less than 4 percent in 2000. By 2002, it had climbed to 8.3 percent in Silicon Valley but stood at 3.6 percent in Burlington (Employment Development Department 2019a; Vermont Department of Labor 2019).

Therefore, it cannot be argued that workers at IBM San Jose acquiesced because they had greater labor market power than workers in Burlington. While workers in San Jose may have enjoyed some years of high demand for their skills, it is unlikely that this experience would have led them to overlook the dire prospects of reemployment in the early 2000s. Tech workers in Silicon Valley did not acquiesce to downsizing because they preferred flexibility over security.

Occupational approaches to political economy are no doubt correct that occupational profiles shape workers' preferences, but these preferences cannot be read directly from workers' positions in labor markets. This is partly due to the temporal variability of labor markets, as illustrated by the statistics above. Even more important, however, is

the fact that preferences are based in interpretation and are thus contingent on the discursive frameworks that workers deploy to perceive their position in a given labor market. Investigating discursive interactions in each workplace is therefore necessary for explaining variation in workers' responses to downsizing and resulting patterns of precarity. Explaining variation in IBM workers' responses to downsizing at Burlington and San Jose in terms of discourse is not to overlook the role of non-discursive factors in political economy. Labor market conditions were of course relevant to workers' decisions regarding mobilization and IBM's product markets also played a role, given that the firm faced significant challenges. Focusing on the role of discourse in the workplace, however, highlights the way in which each of these non-discursive features was enacted through interpretation and application, and thus became causally effective in shaping workers' job security.

5 The power of discourse

This section first presents worker mobilization at IBM Burlington in order to illustrate how management's normative discourse allowed workers to challenge downsizing by redeploying management's own norms. Then, turning to Silicon Valley, I show how management there adopted a financial discourse, which undermined the tactics that workers had used in Burlington. Together, the two cases illustrate how management's financial discourse limits worker power in the workplace and allows managers to dismiss workers without facing the threat of resistance.

Worker resistance at Burlington

Workers mobilized at IBM Burlington by engaging labor's established repertoire of collective action. Managers at Burlington framed the employment relationship in norms of reciprocity, with the understanding that they protected workers' jobs in exchange for workers' loyalty. While these norms largely succeeded in pacifying workers, they also provided the basis for collective action when workers redeployed them (Fantasia 1988). First, these norms allowed workers to charge management with acting unjustly. Second, and more importantly, these norms implied the underlying premise that management was capable of shaping employment conditions. On the basis of this belief, workers could reasonably hope that, if only they could apply enough pressure on management, they would be able to save their jobs. Management's reliance on normative discourse at Burlington was thus critical in motivating workers to mobilize.

After illustrating management's hegemonic normative discourse at IBM Burlington, the following section shows how workers redeployed management's framing. Organizers

mobilized workers by framing collective action in the discourse that resonated with them, and by extending the underlying premise that participating in collective action could be effective against downsizing.

Normative discourse in the workplace

Managers framed the employment relationship at IBM Burlington as embedded in a system of norms, which was based on the underlying premise that management had the power to shape working conditions. In interviews, managers emphasized that business decisions were made with the community's interests in mind. One manager underlined that, even during market slowdowns, IBM had chosen not to close the site due in part to their concerns for the community:

There's a human factor, a community factor. So with a fairly small incremental investment at the right time to stop [downsizing] from happening is a very reasonable thing to do [sic]. And even if it's not necessarily going to prove to make a lot of money for IBM, but to keep the facility running, keep the people employed. And it has a huge impact on the community, the impact of IBM on the community [sic]. All those things matter a lot to the senior executives at IBM.¹³

Of course, managers were first and foremost concerned with running IBM as a profitable business, but the fact that they were compelled to present themselves as caring for the community demonstrates the degree to which production was embedded in normative discourse.¹⁴

When John DiToro, a site executive, announced reductions to workers' pay in 2001, he assured workers that IBM still looked after their interests, implying that managers were indeed capable of doing so. In an email to Burlington's workers, DiToro underlined that the firm still cared for them and would tailor the plant-wide reductions in pay to meet individual needs through "temporary schedule accommodations, financial referrals, or an advance on future earnings if a severe financial hardship rose to the level of losing one's home."¹⁵ Just as management professed to making business decisions that took into account the concerns of the Burlington community, managers made clear that they took workers' interests into account.

Workers at Burlington were not oblivious to the challenges facing IBM, but, steeped in management's normative discourse, they believed that Burlington endured for non-economic reasons. According to one former worker, "IBM obviously did not want to be in the business that we do here. And that's been very true for many years. Maintenance on the buildings, maintenance anywhere – anything to do with money at all basically was trun-

13 Technical manager, IBM Burlington, author interview, Burlington, October 13, 2015.

14 Former manager, IBM Burlington, author interview, Burlington, October 13, 2015.

15 DiToro 2001.

cated. And everybody could see it.”¹⁶ Workers saw that IBM no longer invested in the site, although, until the dismissals in the early 2000s, management did attempt to keep workers employed. Workers made sense of IBM’s behavior by applying the norms of reciprocity that management established as hegemonic in the workplace: workers had contributed decades of their lives to making IBM successful, and now IBM was taking care of them by preserving their jobs. Workers’ acceptance of this normative framing implied their acceptance of the underlying premise that management was capable of protecting workers from market dislocation, which played a critical role in mobilizing against downsizing.

Mobilizing against downsizing

Once managers announced downsizing, their normative discourse helped workers make sense of the measures and mobilize to protect their jobs. Workers mobilized because organizers engaged this normative discourse to persuade workers that (a) managers were responsible for downsizing, and (b) participating in collective action could change management’s decisions. While the normative framing of downsizing enabled expressions of outrage, its underlying premise that management was capable of preventing dismissals was equally, if not more, important to workers’ mobilization.

Workers at Burlington believed that the employment relationship was constituted by mutual obligations between workers and their employer. Workers dedicated their lives to the firm, and, in return, managers were supposed to protect workers’ interests through high wages, regular promotions, and employment security. Dismissals did not fit the IBM that workers identified with: “I think the first layoff was 2002. And that was not IBM. You know, IBM was, you joined them and you are there for life.”¹⁷ This worker went on to emphasize that the IBM he knew was governed not according to business logic and competition, but by norms: “[When] I started with them, it was really like a family affair. Truly. You know, everybody cared about everybody.”¹⁸ Workers were expected to give maximal effort, and, in return, they expected that management would take care of them. Dismissals shattered this sense of reciprocity.

Organizers at IBM Burlington engaged this normative framing to persuade workers that downsizing was unjust and that workers were capable of protecting their jobs. Framing their critique of downsizing in the normative terms that management had established as hegemonic allowed organizers to illustrate the injustice of downsizing to workers in a discourse that resonated with them. Moreover, by framing the employment relationship in normative discourse, organizers reinforced workers’ belief that they were capable of saving their jobs by pressuring management.

16 Former production engineer, IBM Burlington, author interview, Burlington, October 16, 2015.

17 Former engineer, IBM Burlington, author interview, Burlington, October 11, 2015.

18 Former engineer, IBM Burlington, author interview, Burlington, October 11, 2015.

James Leas played a central role in mobilizing workers, and his normative framing of the employment relationship set the tone for the broader collective action. In a July 2002 letter protesting job cuts, Leas addressed site executives by their first names, implying that, as IBM employees, they shared a common set of values. While accusing the firm of acting illegally, Leas framed his concern by referring to these values: “I am writing this letter as an IBM employee who cares about the company and is concerned about a serious problem.”¹⁹ Despite the collegial tone, Leas nonetheless demanded “immediate action,” suggesting that “One approach would be to not layoff a disparate proportion of older employees by hiring back a number of older employees who were improperly laid off.” Leas had analyzed statistics concerning the downsizing, and, having found a significant relationship between age and dismissal, set about sharing this data as broadly as possible, urging workers to file a claim against IBM for wrongful termination.

Workers were receptive to Leas’s and other organizers’ appeals due to the normative discourse they used, but it was the statistical evidence of discrimination that persuaded them to mobilize. Had downsizing truly been out of management’s hands, they would not have been able to discriminate. Instead, organizers had proof that downsizing was the result of management discretion, rather than required by market forces. As long as managers were responsible for downsizing, mobilizing was a reasonable response because workers could pressure management to consider rehiring. Moreover, workers believed that evidence of discrimination meant that they stood a good chance of winning in court.²⁰

Following management’s announcement of dismissals, organizers polled workers at Burlington, asking them if they believed that downsizing was necessary. After sharing information about IBM’s financial performance, the poll asked, “Do you think IBM needs to Cut Jobs [sic] based on these results?” Two workers answered, “yes,” and 120, “no.”²¹ Workers’ belief in the potential effectiveness of collective action disposed them to mobilize against downsizing. Believing not just that management owed them job security, but also that rescinding dismissals was within management’s power, hundreds of workers at IBM Burlington mobilized to pressure their employer, rather than acquiescing to job cuts. In the leadup to filing *Syverson v. IBM*, workers participated in town halls and public demonstrations, distributed flyers in the workplace, reached out to the press to rally public support, and enlisted the help of public officials, including then-Congressman Bernie Sanders.²²

19 Leas 2002.

20 “Channel 3 News.” November 21, 2003.

21 Alliance@IBM 2002.

22 “Channel 3 News.” March 24, 2005; “Channel 3 News.” September 9, 2002; “Channel 3 News.” August 5, 2002; “Channel 3 News.” June 14, 2002; “Channel 3 News.” November 28, 2001; Former organizer and engineer, IBM Burlington, author interview, Burlington, October 15, 2015; Former organizer and production worker, IBM Burlington, author interview, Burlington, October 15, 2015.

Hundreds of workers followed organizers' advice and many of those who joined Syverson used a streamlined form that organizers prepared for them. They also added their own language to strengthen their claims against management,²³ implying broad acceptance of the underlying premise that management was capable of reversing course. Moreover, they explicitly referred to statistics on discrimination to emphasize management's discretion. One worker wrote that, "It is wrong that older workers who have devoted a substantial amount of their lives should be discarded at significantly higher rates than younger workers."²⁴ Workers' acceptance of normative discourse led them to be receptive to organizers' data. Allan Abrams described a conversation where his manager asked about his retirement plans: "I made it clear right up front that I was extremely intimidated by his question, since this coincided with the recent layoff we had just had ... With the November layoffs so recent, I as well as other employees did not dare bring up retirement at all. That discussion at a time of layoffs was taboo."²⁵ Abrams was certainly upset that he was dismissed, but he was also upset that his manager even suggested that he might not receive lifetime employment. In his eyes, it was unjust for a manager to discuss retirement plans with him because doing so constituted intimidation by signaling that his job was insecure. For workers at IBM, age discrimination was unjust not only because it was illegal but also because it violated the norm of reciprocity between managers and workers, which was based on the assumption that management had a choice in the matter and was not simply beholden to market forces.

As a result of organizers' framing of dismissals, workers at Burlington doubted management's argument that external market forces required downsizing. According to a former engineer, "oh, they [managers] had to say what they were doing: 'Yeah, we are doing it [downsizing] because we are losing business and we are ... Everybody will lose if some don't lose.' You know, unfortunately, I don't understand that logic. Because IBM did not do layoffs until that first one."²⁶ Organizers engaged the normative logic that workers understood, and they provided data that attributed downsizing to management discretion rather than market forces beyond their control. Management's normative framing, in contrast to the financial framing of executives like Gerstner, provided organizers discursive resources to highlight management's agency over the employment relationship, and thus, workers' ability to protect their jobs. After years of struggle, IBM settled with workers in 2009. The firm amended their downsizing policy and awarded plaintiffs in *Syverson* an undisclosed sum.

23 Abramovich 2002; Deshler 2002.

24 Rivera 2003.

25 Abrams 2002.

26 Former engineer, IBM Burlington, author interview, Burlington, October 11, 2015.

Worker acquiescence at San Jose

Workers at IBM San Jose acquiesced to downsizing because they were embedded in the financial discourse of Silicon Valley. In contrast to the normative discourse observed at IBM Burlington, managers in San Jose framed the employment relationship in financial terms, which led workers to accept the underlying premise that market forces external to the firm limit management's discretion over working conditions. Paradoxically, it was precisely this belief that enabled management to exercise discretion, for it led workers to perceive collective action as ineffective against the threat of downsizing. Workers were thereby disposed to acquiesce, believing that even if they pressured management, mobilization would do nothing against the market forces that demanded job cuts.

This section shows how workers accepted management's financial framing of the employment relationship. In contrast to Burlington, organizers failed to frame collective action in a discourse that resonated with workers, thereby providing workers no reason to believe that collective action could be effective in protecting their jobs. Without credible evidence of potential effectiveness, workers at IBM San Jose chose, quite reasonably, to acquiesce to downsizing.

The financial discourse of digital transformation

Just as at IBM Burlington, management's discourse at San Jose shaped workers' propensity to mobilize. However, at San Jose, this discourse framed the employment relationship in terms of market forces external to the firm, with managers at San Jose more likely than their counterparts in Burlington to justify personnel decisions in a financial register. Workers adopted this financial frame, and were thus less prone than workers at Burlington to express moral outrage over downsizing. More importantly, workers' acceptance of this financial frame disposed them to accept the underlying premise that management was powerless against market forces, leading workers to view acquiescence as a more reasonable response to downsizing than collective action.

Everyday discourse in the workplace at San Jose revolved around financial valuation, rather than the norms of reciprocity observed at Burlington. Managers explicitly based teams' budgets on the previous year's profits, which led workers to keep a close eye on the firm's financial performance.²⁷ Like Burlington, workers identified closely with IBM, but they understood their membership in financial terms, proud that their division "made more than all the rest of the company. OK. We were the darlins' of the company."²⁸ Workers understood their role in the firm primarily in terms of their contribution to

27 Former manager, IBM San Jose, author interview, San Jose, March 22, 2015; Former site manager, IBM San Jose, author interview, San Francisco, March 7, 2015.

28 Former site manager, IBM San Jose, author interview, San Francisco, March 7, 2015.

IBM's competitive performance, rather than, for instance, scientific discoveries.²⁹ Pervasive in the everyday interactions constituting the employment relationship, this financial discourse was particularly significant during downsizing.

While managers at Burlington presented downsizing as regrettable, managers at San Jose treated downsizing as a strictly economic interaction. One former manager described conversations he had with his staff about downsizing:

“Do you think we’re going to have another layoff?” I’d say, “yeah.” “Do you think our area will be affected?” “Yeah.” And then I would say, “Now let’s look at the performance of our products. Based on the performance and based on how poor these products are, why do you think we should keep that group over there, why do you think that product should continue?”³⁰

At San Jose, the employment relationship was understood as governed solely by market forces, which left no space for normative commitments or notions of reciprocity. Furthermore, this financial framing implied that market forces external to the firm significantly limited managers’ agency over working conditions.

Workers’ acceptance of managers’ financial discourse can be observed in how they understood their identity as professionals. Rather than referring to their skills or pay, workers instead referred to their relationship to the market. One software engineer identified as a professional by noting the distinct role of the market in shaping his employment conditions: “My employment is an agreement between me and my employer, and if I don’t like it, I can ask him for a raise, and if I don’t get it, I can go someplace else. And I can test the job market.”³¹ In this way, workers’ identification as professionals helps explain their propensity to acquiesce to downsizing because they attributed employment conditions to market forces beyond the firm, rather than to managers’ agency.

Some workers at San Jose were so steeped in management’s discourse that they welcomed downsizing. One former worker described reactions to dismissals: “Actually, we all thought that was great. Because we were like, ‘finally.’ If IBM had what we refer to as ‘deadwood,’ there’s a lot of deadwood we can get rid of.”³² While the normative discourse surrounding production at IBM Burlington led workers there to view downsizing as a violation of an implicit contract with management, at IBM San Jose, financial discourse led workers to view downsizing as potentially advantageous and, at any rate, unavoidable. Even though San Jose had led IBM’s outsourcing efforts in the late 1980s and 1990s, the site had, like Burlington, largely avoided downsizing.³³

29 Former programmer, IBM San Jose, author interview, Walnut Creek, CA, March 3, 2015.

30 Former engineering manager, IBM San Jose, author interview, San Jose, March 19, 2015.

31 Software engineer, IBM San Jose, author interview, San Jose, April 9, 2015.

32 Software engineer, IBM San Jose, author interview, San Jose, April 9, 2015.

33 One could argue that the prior occurrence of outsourcing at San Jose represents a different pattern of management practices than at Burlington, so that variation in management practices explains variation in worker responses. The discursive approach developed here does not challenge this potential explanation. Indeed, explaining how management practices affected worker

Of course, most workers at IBM San Jose were not happy about downsizing, and court documents filed during the *Syverson* proceedings show that some workers there deployed the same normative discourse used in Burlington.³⁴ However, the dominant sentiment remained one oriented to market forces. One former worker explained his orientation to the employment relationship: “It’s not an emotional deal. It’s a business deal. Just the bottom line.”³⁵ Workers’ framing of downsizing in financial terms deprived them of a sense of moral outrage, but it also implied their acceptance of the underlying premise that dismissals were the unavoidable consequence of market forces beyond their control. As a result, in contrast to Burlington, workers at San Jose acquiesced.

Acquiescing to downsizing

While some workers at IBM San Jose opposed downsizing in a normative discourse, they represented only a small minority that paid attention to organizers’ strategies. The union, Communication Workers of America (CWA), activated its national network in an attempt to support workers at IBM as part of a broader revitalization strategy (Katz, Batt, and Keefe 2003). While the CWA was also present at Burlington, they were overshadowed by workers who organized themselves. The lack of bottom-up organizing at San Jose put the CWA at the center of mobilization efforts, but because they deployed exactly the same discourse in San Jose as in Burlington, their efforts fell flat.

While in Burlington the CWA followed workers’ lead by lending material and logistical support, and left the framing of collective action to the workers, organizing attempts in San Jose took the opposite route and pursued a more top-down strategy. This resulted in organizers engaging the same discursive tactics from Burlington instead of reaching out to workers and engaging a discourse that resonated with them, a step that has been shown to be necessary for organizing workers in any environment (Hickey, Kuruvilla, and Lakhani 2010). In this case, variation in the sites’ discursive contexts ensured that organizers’ distance from workers at San Jose led them to formulate a discourse that did not resonate with workers. Without a credible alternative to management’s financial framing of downsizing, workers at San Jose perceived job cuts as unavoidable and they chose to acquiesce.

Rather than adapting their tactics to the discursive context of Silicon Valley, organizers at IBM San Jose simply recycled the materials and advice they received from organizers at East Coast sites like Burlington. According to one organizer, the *Alliance@IBM* and

behavior requires tracing how workers’ perceptions of management practices informed their understandings of collective action. Given that this process necessarily involves interpretive frameworks, I submit that the dominant discourse in the workplace informs the causal mechanisms that link management practices to workers’ understandings of collective action.

34 Payne 2002.

35 Former engineer, IBM San Jose, author interview, San Jose, March 9, 2015.

CWA produced a newsletter that was “a professionally-printed, like glossy kind of thing. So they were nice pieces.”³⁶ While glossy, these newsletters “were like national news, but they didn’t say anything about San Jose or the Local. So we would stuff a little thing in there, especially if we were going to try and have a meeting.”³⁷ Inserting a site-specific announcement in advance of a meeting was no doubt necessary for generating attendance, but it was hardly sufficient to build support for mobilization. Workers receiving a newsletter were more likely to pay attention to the glossy pages than to a single black and white insert, and the majority of those glossy pages reflected a normative discourse that clashed with the financial discourse of Silicon Valley.

In November 2001, workers at multiple sites, including San Jose, received a press release from the *Alliance@IBM* that deployed a normative discourse critiquing management’s downsizing plans. The president of the *Alliance@IBM*, Linda Guyer, drew attention to the firm’s stock repurchase of that year, in which IBM spent 7.8 billion dollars to buy back its own shares. With such actions, IBM could not justify dismissals for business reasons because “money isn’t the issue.” Instead, “respect and loyalty to long-term employees is in short supply.”³⁸ Guyer concluded the press release with another explicitly normative statement regarding the dismissals: “The workers who built IBM deserve much better treatment than they’ve received this week.” While workers at San Jose may have also criticized executives’ strategy to buy back the firm’s own shares, they were unlikely to be persuaded by Guyer’s framing of downsizing in this normative discourse. Workers at San Jose were focused on broader business issues facing IBM, such as growing competition and declining prices among their core products.³⁹ Guyer did not mention these.

Organizers at San Jose failed to adapt their strategies to the discursive context of Silicon Valley because they did not learn enough about the workers there. While CWA had organized skilled workers in the technology sector, the majority of their efforts had been focused on telecommunications, at firms like AT&T. Organizers believed they did not need to update their strategies when approaching different types of workers: “I don’t think that [different types of workers] makes a big difference [to organizing] ... Especially at an early stage of a campaign, when you’re out there just like trying to get people involved. You pretty much just pass out leaflets and then try to follow up with folks who have an interest.”⁴⁰ While this may have been true in previous organizing campaigns, organizers never learned enough about the workers at San Jose to ensure that it applied here as well:

I knew very little about the company [IBM]. I did not have a lot of information. I didn’t, like, know what the hell they were really doing in there, in Cottle Road. Making hard disks. Okay. But what types of workers there were? I did not have a good understanding of that. I mean,

36 Former CWA organizer, author interview, Oakland, March 2, 2015.

37 Former CWA organizer, author interview, Oakland, March 2, 2015.

38 Alliance@IBM, Communications Workers of America 2001.

39 Software engineer, IBM San Jose, author interview, San Jose, author interview, Oakland, April 9, 2015.

40 Former CWA organizer, author interview, Oakland, March 2, 2015.

were these people like hands-on assembling stuff? Clean rooms? Or were they mostly engineers, software people designing stuff? I didn't even know that, really.⁴¹

This distance from the workplace prevented organizers from appreciating, or even perceiving, the discourse that management had established as hegemonic at IBM San Jose. Organizers thus had little sense of what discourses workers found credible, and were unaware of how workers made sense of downsizing or the employment relationship in general. Lacking familiarity with the discursive context at San Jose, organizers stood little chance of framing downsizing in a discourse that resonated with workers, which prevented them from demonstrating that mobilization could be effective.

Workers at San Jose had access to the same data on downsizing as workers at Burlington, and organizers tried to show them evidence of age discrimination, but workers did not find it credible. In an online forum, some workers posted their analyses: "It came as no surprise to me that fully 73 percent of the 312 people laid off in June were over the age of 40. No age bias, eh? Bullshit. BTW [by the way], those numbers are based upon IBM information."⁴² CWA publicized these statistics, by posting flyers near the IBM site and contacting local Congressional representatives.⁴³ Despite being aware of age discrimination, workers largely ignored organizers' efforts because organizers framed this hard data in terms of norms, claiming, for instance, that "IBM's lawyers have tried very hard to intimidate you."⁴⁴

Acceptance of management's financial discourse made it easier for workers to let go of their jobs because they were less likely than their colleagues in Burlington to feel that they had been mistreated. According to one worker: "I think that people generally had the view that management tried hard to be fair about what they had to do. And it had to be done. The business couldn't support the population that it had. People had to go."⁴⁵ Applying management's financial discourse led workers to accept downsizing as a fact of life, rather than a violation of norms foundational to their identity. Instead of investing emotional energy in IBM, either via loyalty in good times or outrage in bad, workers at San Jose invested time and money in contingency plans. Believing that their job security depended on factors beyond their control and the control of their managers, some workers seemed to expect that they would be dismissed:

Guess what, I have a pharmacy license ... Because I have a Plan B. If they lay me off ... They [other firms] don't want me. I'm too old, you know. I'm not young and innovative, but I'm too young for Social Security, so here I've got my pharmacy license and I'll go down and start applying to any local drugstore, Safeway, you name it.⁴⁶

41 Former CWA organizer, author interview, Oakland, March 2, 2015.

42 doobiespal2002 2002.

43 Alliance@IBM, Communications Workers of America; Olvera and Sperry 2003; Sperry 2003.

44 Alliance@IBM, Communications Workers of America.

45 Former engineering manager, IBM San Jose, author interview, Mountain View, CA, March 26, 2015.

46 Software manager, IBM San Jose, author interview, telephone, October 8, 2014.

This worker, a senior computer programmer, articulates the mindset that anchors “flexible” labor markets, but not in the way predicted by occupational approaches to political economy. While this worker was unlikely to find herself long-term unemployed, one can hardly view her reemployment strategy as voluntary. The labor market in the tech sector may indeed be “flexible,” but this does not imply that workers there are any more powerful against management discretion than workers in other sectors.

San Jose workers’ discussion of downsizing in online forums also reflected their disposition to attribute downsizing to market forces beyond their control. One worker from San Jose posted in the Yahoo! group “IBM Union” that IBM had no choice but to downsize and move jobs offshore: “If one’s competitors go overseas, to survive a co. [company] has to go there too.”⁴⁷ Even those workers at San Jose who supported the idea of a union did not believe that it would have any power against downsizing: “a union cannot, by itself, prevent layoffs. It does, however, improve conditions for the ‘next guy.’”⁴⁸ Workers at IBM San Jose accepted management’s financial framing of the workplace, which disposed them to view mobilization as ineffective against downsizing, making acquiescence the most reasonable choice.

In contrast to IBM Burlington, workers at IBM San Jose did not believe that collective action would be effective in protecting their jobs. Instead, viewing the employment relationship through a financial discourse, workers at San Jose believed that downsizing was required by market forces beyond management’s control. Even if they were to mobilize enough power to pressure management to rescind dismissals, IBM would still be subject to the market forces that demanded cost reductions. On this view, participating in collective action made no sense, as it stood no chance of affecting the workplace.

Management’s discourse at IBM San Jose disposed workers to acquiesce to downsizing by leading workers to perceive the workplace as ineluctably shaped by market forces beyond the firm. Interpreting the employment relationship via this financial discourse exposed workers at IBM San Jose to a higher degree of precarity than workers at IBM Burlington. In the discursive context of digital transformation, normative repertoires of contention developed during previous eras of production do not resonate with workers. Mobilizing workers in twenty-first century capitalism requires organizers to adapt their strategies to this new discursive context (McAlevey 2015). Doing so requires learning from workers how they understand the employment relationship and what informs their underlying assumptions about the potential effectiveness of collective action.

47 stan_hoo 2001.

48 dividedwefall_ibm 1999.

Conclusion

This paper foregrounded discourse in the workplace in order to explain why tech workers are so precarious. Existing approaches to the political economy of digital transformation are right to focus on occupational change as a crucial part of the causal mechanisms linking technological transformation to social consequences. However, these approaches rely on assumptions that are called into doubt by tech workers' vulnerability to downsizing. The case studies presented above illustrate how labor market power does not automatically entail worker power. Demand for workers' skills improves their bargaining position vis-à-vis management, but it fluctuates considerably over time. Particularly during economic downturns, when workers are most in need of power resources, demand for their skills shrinks and, with it, their labor market power. At the same time, labor's established repertoires of collective action for limiting management's discretion have become less effective in the twenty-first century. Employers can undermine these repertoires by establishing a financial discourse as hegemonic in the workplace, which reinforces tech workers' distaste for collective action. Tech workers are thus exposed to management discretion and vulnerable to mass dismissals.

While foregrounding the workplace, the analytical framework developed here holds important implications for understanding how national institutions shape the path of digital transformation. Some institutions provide workers greater power resources, such as those in Germany that limit employer discretion over hiring and firing (Hall and Soskice 2001). Still, German workers face the same challenge as workers everywhere, which is that enforcing these institutions requires them to mobilize. Therefore, to appreciate the way in which national institutions affect worker power, we must follow them into the workplace. Institutions for codetermination, for instance, offer workers resources for collective action, including access to management's financial data, a platform for labor representatives to reach workers, and mechanisms that increase representatives' credibility with workers (Rothstein 2018). Informal institutions, such as normative commitments (Bremer 2019; Schulze-Cleven and Weishaupt 2015), may also play an important role in shaping power relations between workers and managers by establishing a master frame for discourse in the workplace. Future research can extend the workplace-centered framework articulated here by integrating it with existing research at the national level.

Future research can also build on this study by addressing its limitations. First, discourse is one of many factors that explain why workers resist the threat of downsizing in some cases and acquiesce in others. The most similar systems design of the case studies presented here controls for many of these factors, and allows observing the modifying effects of others, but this paper does not suggest that discourse is the only, or even the most important, factor that shapes worker power in digital transformation. Future research can identify these other factors and how discourse interacts with them.

Second, this paper highlights the limitations to tech worker power, and therefore focuses only on the conditions necessary for its exercise while overlooking those conditions

that are sufficient. Mobilization is thus treated as binary, which may be unsatisfying, given that, at Burlington, only a small portion of affected workers participated in collective action. Moreover, while filing a legal case represented a credible threat to management's interests, it took years to reach a settlement, and although IBM changed its downsizing policy, it is difficult to identify whether mobilization directly protected any workers from dismissal. However, treating mobilization as binary corresponds to the paper's theoretical aims of identifying the limits to worker power in the digital transformation (Adcock and Collier 2001). Moreover, recent events illustrate the substantive value of taking small acts of mobilization seriously. Now that IBM has pursued another wave of downsizing (Gosselin and Tobin 2018), workers have again mobilized and filed another collective legal case against the firm (Estle, et al. v. International Business Machines Corporation 2019). Their tactics directly echo those from *Syverson*, suggesting that workers at IBM learned from this earlier mobilization. Future research can investigate worker mobilization over a longer time period in order to establish not just how small acts of resistance can contribute to a "culture of solidarity" (Fantasia 1988), but also how workers learn over time and may improve their tactics and strategies for building more sustainable power resources.

Third, it must be conceded that, despite considerable efforts to promote growth in the tech sector, tech workers constitute a small proportion of most countries' workforces. In 2016, tech workers represented about 10 percent of the US workforce, and 5.5 percent across the OECD (OECD 2017b, 43; Roberts and Wolf 2018, 5). These small numbers may limit the generalizability of the conceptual claims developed here, particularly regarding approaches to political economy that explain the effects of policy preferences in the context of mass politics (Beramendi et al. 2015), because the inability to explain a small portion of the electorate may not pose such a challenge as has been suggested above. However, while tech constitutes a small portion of the workforce, it represents an especially pivotal constituency, given its position at the core of digital transformation. Researchers have begun examining how the experience of precarity affects policy preferences (Emmenegger, Marx, and Schraff 2015; Häusermann, Kurer, and Schwander 2015; Margalit 2019), and future research could extend this work to examine the effects of downsizing, particularly among high-wage, high-skill workers.

Lastly, the case studies presented above are from the early 2000s, and digital transformation may have evolved since then. However, while the platform economy now receives the lion's share of scholars' attention (e.g., Rahman and Thelen 2019), generous estimates suggest that only 1.6 percent of the US population earned income from platform work in 2018 (Farrell, Greig, and Hamoudi 2018), relatively similar to rates in other European countries (Ilsoe and Madsen 2018). At the same time, employment continues to grow among multinational tech firms (OECD 2010, 132; 2019, 43), and these workers remain precarious. Mass dismissals at tech firms have been among the ten largest in California every year from 2011 to 2018 (Employment Development Department 2019b). In Europe between 2002 and 2018, the only sector with a higher frequency of downsizing than tech is manufacturing (Eurofound 2018). While the tech sector may

have adopted some new discursive frames, such as “solutionism,” finance remains central to management’s discourse (Nachtwey and Seidl 2017). Moreover, tech is not the only sector where management frames the workplace in a financial discourse, so the analytical framework developed here can be applied to a wider universe of cases. Furthermore, the excitement about tech has led to widespread adoption of its management practices: the proportion of firms that compensate workers with equity, for instance, has grown steadily over the past several decades (Murphy 2003). Future research can investigate the spread of management’s practices and discourse from tech to other sectors and whether they have the same effects on workers’ precarity.

This paper highlighted the limits to tech workers’ power, but the analysis offered here can also help explain what leads tech workers to mobilize successfully. If discourse in the workplace plays the role suggested above, we would expect tech workers to mobilize when they develop counterhegemonic tactics that redeploy management’s discourse. Future research can take a closer look at recent cases of mobilization in tech, from the Google walkout to the efforts of the Tech Workers Coalition (Tech Workers Coalition 2017; Tiku 2018). Given that tech workers remain precarious, and capitalism remains prone to crisis, there will no doubt be waves of downsizing in the future. Perhaps tech workers, like the generations of workers that preceded them, will develop sustainable tactics to defend their jobs.

Appendix

Interviews Performed: IBM Burlington and IBM San Jose

Number	Date	Subject	Location
1.	March 6, 2014	Former IBM employee, and organizer, Alliance@IBM	Telephone
2.	August 27, 2014	Labor representative	Telephone
3.	September 11, 2014	Public official	San Jose, CA
4.	September 16, 2014	Union official, CWA	San Jose, CA
5.	September 19, 2014	Former site executive, IBM	Telephone
6.	September 19, 2014	Journalist – Bay Area press	Telephone
7.	September 22, 2014	Former researcher, IBM San Jose	Telephone
8.	October 8, 2014	Software engineer, IBM San Jose	Telephone
9.	March 2, 2015	Former CWA organizer	Oakland, CA
10.	March 3, 2015	Former programmer, IBM San Jose	Walnut Creek, CA
11.	March 7, 2015	Former site manager, IBM San Jose	San Francisco, CA
12.	March 9, 2015	Former engineer, IBM San Jose	San Jose, CA
13.	March 19, 2015	Former engineering manager, IBM San Jose	San Jose, CA
14.	March 22, 2015	Former manager, IBM San Jose	San Jose, CA
15.	March 24, 2015	Former organizing director, CWA	Telephone
16.	March 26, 2015	Former engineering manager, IBM San Jose	Mountain View, CA
17.	March 27, 2015	Former manager, IBM San Jose	San Jose, CA
18.	April 5, 2015	Union official, CWA	Telephone
19.	April 6, 2015	Union official, CWA	Telephone
20.	April 9, 2015	Former IBM employee, and organizer, Alliance@IBM	Telephone
21.	April 9, 2015	Software engineer, IBM San Jose	San Jose, CA
22.	April 13, 2015	Former software engineer, IBM San Jose	Telephone
23.	September 20, 2015	Former consultant, IBM Burlington	Telephone
24.	September 20, 2015	Former site executive, IBM	Telephone
25.	October 11, 2015	Former engineer, IBM Burlington	Burlington, VT
26.	October 13, 2015	Technical manager, IBM Burlington	Burlington, VT
27.	October 13, 2015	Former manager, IBM Burlington	Burlington, VT
28.	October 13, 2015	Former production worker, IBM Burlington	Burlington, VT
29.	October 14, 2015	Former engineering manager, IBM Burlington	Burlington, VT
30.	October 14, 2015	Former organizer and engineer, IBM Burlington	Burlington VT
31.	October 14, 2015	Technical manager, IBM Burlington	Burlington, VT
32.	October 15, 2015	Former organizer and production worker, IBM Burlington	Burlington, VT
33.	October 15, 2015	Former organizer and engineer, IBM Burlington	Burlington, VT
34.	October 15, 2015	Engineering manager, IBM Burlington	Burlington, VT
35.	October 16, 2015	Engineering manager, IBM Burlington	Burlington, VT
36.	October 16, 2015	Former production engineer, IBM Burlington	Burlington, VT

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