Management Culture and Surveillance

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As the modern workplace increasingly adopts technology, that technology is being used to surveil workers in ways that can be highly invasive. Ostensibly, management uses surveillance to assess workers’ productivity, but it uses the same systems to, for example, map their interpersonal relationships, study their conversations, collect data on their health, track where they travel on and off the job, as well as monitor and manipulate their emotional responses. Many of these overreaches are justified in the name of enterprise control.

That justification should worry us. This Article aims to make us think about how surveillance is being used as a management tool. It raises broader questions about how management may use its tools if unchecked, especially given what we know about the origins and development of modern management from its roots in the slave plantations of the U.S. South and the West Indies.

Given this history, the Article argues for a new framework of analysis based on requiring better justifications for why managers need each piece of data that they collect on workers.

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“Everything is tracked, recorded and analyzed, via vertical reporting systems, double-entry record-keeping and precise quantification. Data seems to hold sway over every operation. It feels like a cutting-edge approach to management, but many of these techniques that we now take for granted were developed by and for large plantations” to control slaves.1

—Professor Matthew Desmond, describing the roots of modern management systems

INTRODUCTION

Today in China, elementary school children’s degree of concentration is monitored in real-time and sent back to a console at their teacher’s desk. Headbands across their foreheads light specific colors to show how hard they are thinking.2 A robot in their classroom scans their faces and reads their body language for health and engagement levels.3 Uniforms include chips that track their locations.4 Surveillance cameras report how often they use their phones or yawn during classes.5 As a student explains, “[w]hen we first wore the headband, it felt like it was controlling us.”6

This surveillance feeds pressure for students to perform at every moment.7 Parents additionally monitor the data during the day, and they punish students at home for low attention scores.8 Parents, teachers, and schools justify their actions as preparing the workforce for the future.9

In 2018, reports began to emerge of similar surveillance methods being used across China in factories and workplaces.10 If the above

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3. Id.
4. Id.
5. Id.
6. Id.
7. Id.
8. Id. There does not seem to be a popular backlash against this surveillance from either parents or schools. As one parent justifies, “[i]f it’s for our country’s research and development, I don’t think it’s a problem.” Id.
surveillance of children disturbs us, when we compromise the autonomy of children far more than we do adults, then we should find application of these surveillance technologies in the workplace even more upsetting. Yet here we are. Employers are “placing wireless sensors in employees’ caps or hats which,” when combined with “artificial intelligence algorithms . . . detect emotional spikes such as depression, anxiety or rage.” Managers are using this “emotional surveillance technology” to “tweak[] workflows, including employee placement and breaks,” in order to “increase productivity and profits.” Four years after the technology was introduced into a southeastern Chinese state electrical company, profits had jumped by U.S. $315 million.

In an article titled, ‘Forget the Facebook Leak’: China Is Mining Data Directly from Workers’ Brains on an Industrial Scale, the South China Morning Post reports that, while similar workplace brainwave-reading technology “is in widespread use around the world,” the difference in China is how pervasive its use has now become. Workers have become inured to wearing the devices. As one manager explained, in the beginning, the workers “thought we could read their minds. This caused some discomfort and resistance . . . . After a while they got used to the device. It looked and felt just like a safety helmet. They wore it all day at work.”

There is a tremendous power imbalance between management and workers that makes the adoption of this direct brain surveillance in China effectively involuntary. Management will always have business rationales
to increase surveillance of workers to maximize profits. As Professor Qiao Zhian explains, “[t]here is no law or regulation to limit the use of this kind of equipment in China. The employer may have a strong incentive to use the technology for higher profit, and the employees are usually in too weak a position to say no.” 18 As he concludes, “[t]he selling of Facebook data is bad enough. Brain surveillance can take privacy abuse to a whole new level.” 19

These examples come from China, but the same dynamic between management and workers, as well as the failure of privacy law to provide a remedy, is happening here in the United States. We too are inured to the massive spread of surveillance in our workplaces. As the New York Times noted as far back as 2014, “[c]ompanies . . . have few legal obligations other than informing employees.” 20 In their 2017 landmark article, Limitless Worker Surveillance, Professors Ajunwa, Crawford, and Schultz detail the ineffectiveness of U.S. privacy laws to prevent invasive workplace surveillance, and they note that “technologies, both digital and otherwise, have become the primary tools of employee monitoring.” 21 As they summarize workplace conditions in the U.S., “[t]he rapid erosion of technological and economic constraints on employee monitoring has magnified the invasiveness of surveillance activities.” 22 Accordingly, “with the advent of almost ubiquitous network records, browser history retention, phone apps, electronic sensors, wearable fitness trackers, thermal sensors, and facial recognition systems, there truly could be [legal] limitless worker surveillance.” 23

This Article picks up where Professors Ajunwa, Crawford, and Schultz leave off to discuss elements of limitless worker surveillance that have not been otherwise directly addressed in the law-review literature. New work in history and management studies is unearthing the roots of modern management techniques as developed in the slave plantations of the U.S. South and West Indies. Attempts to sanitize these techniques’ origins occurred within living memory of the Civil War when engineer Frederick Winslow Taylor claimed them as part of his system of scientific

18. Id.
19. Id.
22. Id. at 743.
23. Id. at 743. Before Professors Ajunwa, Crawford, and Schultz’s 2017 article, the state of technology might have provided slightly more restraint. See, e.g., Pauline T. Kim, Privacy Rights, Public Policy, and the Employment Relationship, 57 OHIO ST. L. REV. 671, 671–730 (1996); Ajunwa, Crawford, and Schultz, supra note 21 at 743 n.34.
management. Nonetheless, Congress at the time was not fooled. In questioning and in Taylor’s testimony before Congress in 1911–1912, we have the shape of the modern debate over the impact that these management techniques have on workers. What is different about today’s version of the debate is how much more invasive technological surveillance has become.

This Article sets up a longer discussion of the proper legal framework for evaluating limitless worker surveillance. The Article traces how surveillance has changed through Professor Adolf Berle’s life, effectively overlapping with the growth of Taylorism, and how surveillance qualities have continued to change to modern times. It then examines the history of management as control, and it argues that there is an underlying toxic combination in the synergy of management control with surveillance technology. The Article describes the recent work being done that pierces Taylor’s narrative of being the inventor of his management system, and it explains the techniques’ deeper roots in slavery.

The Article then importantly details the debate from the 1911–1912 Congressional hearing on Taylor’s practices that presciently highlights so many of the harms to workers with which we still live and that continue to accelerate as the tools of limitless worker surveillance evolve. Further connecting those concerns from that Congressional debate to modern day, the Article briefly describes some of the ways in which the harms it highlighted live close to the surface of our modern consciousness in the popular form of zombies (with their history in West Indian slavery) and the emotionally disconnected state of feeling like a human robot. The Article concludes with initial suggestions for better scrutinizing why management needs certain data from workers, and how harmful the collection of that data may be to the workers’ experience.

This Article’s conclusion sets the stage for a second article that will advocate for a new legal framework to evaluate limitless worker surveillance to be built, not on debates about privacy, but instead on protection of autonomy.

There are several themes in this work that shape its conclusions. First, the Article argues that there is an underlying toxic combination in the synergy of management culture with surveillance technology. Management is about control, and the roots of its modern form are in the slave plantations of the U.S. South and West Indies. It is particularly dangerous, given this history of management for limitless worker surveillance, to be based primarily on what is good for business productivity as opposed to what impact it may have on working conditions. Surveillance will be abused to push and control workers in the
name of increasing production. Recent historical research confirms that slavery effectively evolved the same way.

Second, limitless worker surveillance harms workers, producing negative psychological impacts that need to be addressed. This harm is an invasion and loss of control or personal agency, echoing damage done from other conditions of involuntary servitude. This Article does not directly correlate the harm of modern limitless surveillance with the vastly more debilitating combinations of harms suffered from historic slavery, but it argues that harm from limitless worker surveillance must be both acknowledged and mitigated.

Additionally, harm from a combination of oversurveillance and brutal work expectations lives particularly close to the surface of our modern fears. Revealingly, for example, the only modern monster of American culture not from European folklore or Gothic horror stories is the zombie: the creature created from 1915 U.S. re-imposition of slave-like conditions in the West Indies at the demand of American business interests long after the formal abolition of slavery. Similarly, we commonly talk about becoming “robots,” and other inhuman or emotionally distorted creatures, under the pressure of constant surveillance. Further work will discuss additional psychological research on these injuries.

Third, the Article sets the stage for law reform through limiting management surveillance of workers based on exactly how and why management requires each piece of data. As Professors Ajunwa, Crawford, Schultz, and others have previously explained, U.S. law “now evinces an ostensibly participatory character, wherein workers are expected to aid employer surveillance by using productivity applications and wellness programs that employers proffer as beneficial to the workers’ interests.” But, as Professor Julie Cohen notes, it becomes a dangerous artifice to impose on workers a duty to participate in “surveillance [when] championed as a requisite for innovation and progress.” Management and the courts’ rhetorical framing of the management-worker dynamic in

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24. See Elizabeth McAlister, *Slaves, Cannibals, and Infected Hyper-Whites: The Race and Religion of Zombies*, 85 ANTHROPOLOGICAL Q. 461 (2012); see also discussion infra Section II(E) and n.302.


27. *Id.* at 739 (citing Julie E. Cohen, *The Surveillance-Innovation Complex: The Irony of the Participatory Turn*, in *THE PARTICIPATORY CONDITION IN THE DIGITAL AGE* 207 (Darin Barney et al. eds., 2016)).
this way serves “to silence legal objections as to the extent and invasiveness of current employee surveillance tactics.”

Especially given modern management’s dark origins and history, this Article challenges management’s creeping rationale that every sacrifice workers make is justified for the sake of a business’s productivity. The history of modern management as rooted in slavery should give us pause in allowing management free rein to argue productivity at the price of harm to workers. The second article will propose a better legal framework to check the harm that limitless work surveillance creates.

Throughout this discussion, the broad term “surveillance” will be used for both “monitoring (viewed as more benign)” and “surveillance (viewed as less benign)” because they “involve the same actions.” Moreover, “whether those actions are benign or not is both a matter of interpretation and of effect.” In this era of complex employment law relationships, this Article will also more generally use the terms “management” or “managers” instead of “employers;” and “workers” instead of “employees;” “temporary employees;” or “independent contractors;” for the relationships between businesses and the workers that they use to create and distribute their goods or services. The second article by this author will describe at greater length how legal worker categorizations further permit management to conduct surveillance unchecked.

I. PROFESSOR BERLE WOULD NOT HAVE APPROVED: PRESSURES OF THE MODERN WORLD THAT MAKE SURVEILLANCE DIFFERENT

As this symposium is being published in honor of Professor Adolf Berle, it is worth noting how much more invasive workplace surveillance has become since Professor Berle’s time. He would not have approved.

A. Professor Berle Cautioned Against Management Abuse of Power

Professor Berle is most famous for advocating for shareholder power. But, “[f]rom the very first session[,] his students realized that no

28. Id. at 739.
29. See Nelson, supra note 25.
30. Ajunwa, Crawford & Schultz, supra note 21, at 738 n.8 (citing additional sources).
31. Id. at 738 n.8. (citing additional sources).
32. See Nelson, supra note 25.
classroom presentation was acceptable that did not deal with the ethical as well as the economic and legal aspects of corporate affairs.\footnote{William C. Warren, 
\textit{Adolf A. Berle}, 64 COLUM. L. REV. 1377, 1380 (1964).}

Berle’s opinions on appropriate business behavior also evolved over time. Although Berle originally believed that “corporate powers were powers in trust for shareholders,” he later conceded “that these powers were held in trust for the entire community.”\footnote{Joseph L. Weiner, \textit{The Berle-Dodd Dialogue on the Concept of the Corporation}, 64 COLUM. L. REV. 1458, 1464 (1964).} Moreover, “modern directors are not limited to running business enterprise for maximum profit, but are in fact recognized in law as administrators of a community system.”\footnote{Id. at 104.} Even in his classic 1933 text with Professor Gardiner Means, \textit{The Modern Corporation and Private Property}, Berle opined that management “should be made to . . . accept ‘a program comprising fair wages, security to employees, reasonable service to their public, and stabilization of business, all of which would divert a portion of the profits from the owners of passive property.’”\footnote{Charles R.T. O’Kelley, \textit{Berle and the Entrepreneur}, 33 SEATTLE U. L. REV. 1141, 1168 (2010) (interpreting and quoting ADOLF BERLE & GARDINER C. MEANS, \textit{THE MODERN CORPORATION AND PRIVATE PROPERTY} 356 (1933)).} Berle did not ultimately mince words in his opinion of managers who abuse their power: “All in all, I think the big businessman is regularly offered more power than is justified by his business position.”\footnote{Id. at 9.}

In addition, despite his reputation for strongly supporting managerial prerogative, Berle opened the door to regulation of managerial abuses of power. As he wrote in 1959, and as still has surprising resonance, “the illusion that a successful businessman is all-wise or all-powerful is so easily created, and is so cheerfully accepted by so much of the American public, that at any given moment big businessmen find themselves in positions disproportionate or irrelevant to their equipment.”\footnote{Adolf A. Berle Jr., \textit{Power Without Property: A New Development in American Political Economy} 9 (1959). No overt comparison to our 45th president will be made here.} Berle did not ultimately mince words in his opinion of managers who abuse their power: “All in all, I think the big businessman is regularly offered more power than is justified by his business position.”\footnote{Id. at 9.}

Berle saw “a clear and recognizable distinction between economic power used [by management] to carry out or reasonably extend a function, and economic power used for entirely other reasons.”\footnote{Id. at 104.} In his writings, he emphasized that management overreach may threaten the very legitimacy of enterprises. As Berle explains, when management’s actions exceed “[t]he power [that] is necessary to [carry out an enterprise’s corporate
industry] function[, . . .] the enterprise overpasses its function."40 The enterprise’s use of its power for these other purposes then “becomes illegitimate.”41

With echoes in the limitless worker surveillance context, Berle’s illustration of his argument for limits on managerial power has particular resonance: “A management dedicated to the business of providing communications would violate the reason for its being and the idea and conceptions of its whole organization if it endeavored to use its power and convert that organization into a wire-tapping service.”42

Abuse of management power may be additionally layered on deep political and economic imbalances between workers and management. As Berle summarized these realities even in 1959: “Economic power now becomes a crucial factor in our study. Exploration of its nature is inescapable.”43 Treating workers respectfully as individuals can be lost in that equation. Berle warns that “[t]he tendency to look to an abstraction and ignore human beings is a vice [in] which big business has frequently indulged.”44 In fact, Berle concludes, “[h]erein perhaps lies the greatest hazard of economic power. Its use to obtain an intended result may cause unforeseen effects, some of which may have sweeping impact.”45

B. How Modern Management Surveillance of Workers Has Changed Dramatically Since Professor Berle’s Time

Surveillance of workers is not new. There have always been economic reasons to monitor people performing work to ensure that the work is being done properly.46 But there is an incentive on the part of management to go beyond the degree and quality of the monitoring necessary to supervise tasks (a word choice consciously made, as discussed infra)47 to the person performing the task. Berle knew our country’s relationship with slavery when he was writing. There have been developments in the oversurveillance of workers since the formal end of

40. Id. at 102–03.
41. Id. at 103.
42. Id. at 100–01.
43. Id. at 77.
44. Id. at 12.
45. Id. at 85.
46. See generally, e.g., Michael C. Jensen & William H. Meckling, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, 3 J. FIN. ECON. 305 (1976) (conceptualizing a fundamental problem of management as the control of “agents” or workers); Ivan Manokha, New Means of Workplace Surveillance: From the Gaze of the Supervisor to the Digitalization of Employees, MONTHLY REV. (Feb. 1, 2019) ("[W]orkplace surveillance and the invasion of employee privacy have always been present under capitalism.").
47. See adoption of the task system from slavery infra Section II(B).
slavery, but such surveillance has recently taken on new qualities of pervasiveness and invasiveness.

As Ajunwa, Crawford, and Schultz describe, “[b]eginning with punch-card systems, advancing to closed-circuit video cameras and geolocating systems, workplace surveillance has become a fact of life for the American worker.” 48 As Oxford Political Economy Professor Ivan Manokha traces, however, modern workplace surveillance has moved from “the gaze of the supervisor” to “the digitalization of employees.” 49 Advances in workplace surveillance make it “now possible to track the movements of employees, record their conversations, register and analyze their performance in real time, and use biometric information for identity and access control, just to name a few examples.” 50

Furthermore, expectations of work have also been pushed by the technological ability to surveil and measure workers. In the days of guilds, “guild laborers set their own pace of work and took breaks whenever they saw fit.” 51 Eventually the “dissemination of . . . portable and precise mechanical clocks [enabled] . . . 'the full abstraction of work time into commodified hours [to] occur.” 52 Nonetheless, it took until the “end of the eighteenth century” for “the marriage between work, the hour, and pay [to] be[come] standard within the factory.” 53

When Berle began his academic career in the 1920s, 54 the state-of-art workplace was in Henry Ford’s factories. Henry Ford had borrowed elements he noted in Chicago’s meat-packing plants, in which workers stood still as carcasses came to them. As Ford allegedly declared, “[i]f they can kill pigs and cows that way, we can build cars that way.” 55 With his implementation of the assembly line in 1913, Henry Ford dramatically increased his factory’s productivity. But he had a very difficult time retaining workers under the new system: the company had to hire 963 workers for every one hundred that it wanted to keep because workers struggled so much to keep pace with the demands of the production line,

48. Ajunwa, Crawford & Schultz, supra note 21, at 738.
49. Manokha, supra note 46.
50. Id.
51. Id.
52. Id. (quoting BENJAMIN SNYDER, THE DISRUPTED WORKPLACE: TIME AND MORAL ORDER OF FLEXIBLE CAPITALISM 34, 38 (2016)).
53. Id. (quoting BENJAMIN SNYDER, THE DISRUPTED WORKPLACE: TIME AND MORAL ORDER OF FLEXIBLE CAPITALISM 36 (2016)).
54. According to his 1964 biography, Professor Berle’s first academic job was as a Lecturer on Finance at Harvard Business School from 1924–1927. See William C. Warren, Adolf A. Berle, 64 COLUM. L. REV. 1377, 1380 (1964).
and they usually left shortly after being hired.\textsuperscript{56} In 1914, Ford doubled wages to five dollars a day.\textsuperscript{57}

But this increase in wages came with new conditions. According to the 1915 company pamphlet suggestively entitled \textit{Helpful Hints and Advice to Employees: to Help Them Grasp the Opportunities Which Are Presented to Them by the Ford Profit-Sharing Plan}, the company worker had to be a “male employee over 22, who leads a clean, sober and industrious life.”\textsuperscript{58} If married, a man could “qualify as to sobriety, industry and cleanliness if he is living with his family.”\textsuperscript{59}

Henry Ford was serious about surveilling workers with the techniques available to him at the time for potential infractions of his strict health code and personal standards. He hired thirty inspectors into his company’s “Sociology Department” to regularly make unannounced visits to workers’ homes, to interview their neighbors, and otherwise “collect information and data from every one of the employees” on their behavior.\textsuperscript{60} In order to qualify for their wages of five dollars per day, his workers had to “live healthily and cleanly,” “make their homes clean,” and “use plenty of soap and water in the home, and upon their children, bathing frequently.”\textsuperscript{61} Workers were required to “go to the doctor’s office at once” if they experienced “a loss of weight, a persistent cough, or have excessive night sweats.”\textsuperscript{62} As Professor Antonio Gramsci notes, with new demands, Ford had to design an aggressive monitoring system of workers’ personal lives “to preserve, outside of work, a certain psycho-physical equilibrium which prevents the physiological collapse of the worker, exhausted by the new method of production.”\textsuperscript{63}

By the time Berle died in 1971,\textsuperscript{64} a major change was to arrive in considering the impact of surveillance itself. Published in 1975, Professor Michel Foucault’s landmark work \textit{Surveiller et Punir} (“Surveillance and Punishment”) is often not-quite-accurately translated into English as \textit{Discipline and Punish}.\textsuperscript{65} The Panopticon that Professor Foucault describes.

\begin{thebibliography}{99}
\item \textsuperscript{56} Keith Sward, \textit{The Legend of Henry Ford} 51 (1948).
\item \textsuperscript{57} Id.
\item \textsuperscript{58} The Ford Motor Company, \textit{Helpful Hints and Advice to Employees: to Help Them Grasp the Opportunities Which Are Presented to Them by the Ford Profit-Sharing Plan} 8 (1915).
\item \textsuperscript{59} Id.
\item \textsuperscript{60} Id. at 9; Manokha, \textit{supra} note 46.
\item \textsuperscript{61} The Ford Motor Company, \textit{supra} note 58, at 7, 13; Manokha, \textit{supra} note 46.
\item \textsuperscript{62} The Ford Motor Company, \textit{supra} note 58, at 17; Manokha, \textit{supra} note 46.
\item \textsuperscript{63} Antonio Gramsci, \textit{Selections from Prison Notebooks} 303 (1971).
\item \textsuperscript{64} See Albin Krebs, \textit{Adolf A. Berle Jr. Dies at Age of 76}, \textit{N.Y. Times}, Feb. 19, 1971, at 1.
\item \textsuperscript{65} Michel Foucault, \textit{Discipline and Punish} (1977) [hereinafter \textit{Foucault, Discipline and Punish}]; Michel Foucault, \textit{Surveille et Punir} (1975); Ivan Manokha, \textit{Surveillance},
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is a “system of control that . . . [allows] all subjects to be observed by a single watcher without being able to tell that they are being surveilled.”

Moreover, the “fact that the watched cannot know they are being observed means that they are motivated to act as though they are being surveilled at all times.”

As Professor Mark Poster has written, Professor Foucault’s Panopticon is “an imposition of a structure of domination,” developed as “a means of controlling masses of people.”

As Professor Manokha explains, “right from the start,” Professor Foucault referred to a wide variety of institutions as panoptic, including “the capitalist workplace . . . alongside asylums, clinics, hospitals, military barracks, and schools.”

Professor Foucault borrowed the image of the Panopticon that he applied to society from eighteenth-to-nineteenth century philosopher Jeremy Bentham. According to Professor Manokha, “Bentham’s Panopticon involve[d] three main assumptions: first, the omnipresence of the inspector, ensured by his total invisibility; second, universal visibility of objects of surveillance; and third, the assumption of constant observation by the watched.”

For Bentham, who was thinking about how to most efficiently exert power and control over people, “the Panopticon clearly involved two sides of power.” These sides were, “on one hand, the ‘power over,’ that is, the ability to spatially organise different categories of inmates, to observe them, to punish, and to discipline those whose behaviour violates the rules that must be followed.”

Then, “on the other hand, the power exercised over oneself, that is, inmates who know

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Note as well the interesting connection between surveillance and discipline: they are the same thing for the translator. The language highlights that the importance of surveillance in these conditions is the threat of discipline behind it.


69. Id. at 97.

70. Manokha, supra note 46, at 3.


72. Manokha, supra note 65, at 222.

73. Id.

74. Id.
that they are under constant surveillance end up exercising self-restraint and self-discipline, making any coercion totally unnecessary except in some rare cases of disobedience.” Bentham was interested both in overt control and in producing the paranoia that would result in workers’ self-conscious regulation for the presumed benefit of the watcher. As Professors Deborah Johnson and Priscilla Regan have written, it was part of Bentham’s plan that, “[s]eeing the guard tower or believing the guards were watching, inmates would adjust their behavior to conform to norms they expected the guards to enforce.”

A more hidden dimension of this history is that, in thinking of Jeremy Bentham as the father of utilitarianism—and modern businesses’ cost-benefit analysis—it is especially important to acknowledge what an influence then-contemporary slavery was on Bentham’s theory and his approach to worker surveillance. Recent work on Bentham shows that he thought of slavery as a condition underpinning many power relationships. Thus “Bentham used the notion of slavery in many contexts (e.g., in his discussion of colonies) ‘to define the human condition in terms of varying degrees of subjection’ . . . in an effort to better determine how to politically engage with slavery and its cognates.”

Bentham’s vision of the Panopticon as having a centralized observer who, through surveillance, controlled everyone else was inspired by his brother Samuel Bentham’s work on a factory for the Russian prince Potemkin. Samuel Bentham invented “the idea of a circular factory
building in a central position, from which the workers would be supervised” by management. 80 Those workers in Russia were serfs: effectively at the time, slaves. 81 By the 1970s, Professor Foucault notes that prisons had come to resemble factories, which in turn, were prisons for workers. 82

The net result is that Professor Foucault’s work begins to refocus attention in the 1970s after Berle’s death on the lineage of workplace surveillance from driving slaves in factories, to the oppressiveness of prisons, to the disturbing renewal and reinforcement of such techniques with technology into modern life. The pace of this change in surveillance has continued to increase. By the late second decade of the twenty-first century, the state of technological surveillance is such that “[m]ost Americans [should] realize that there are [at least] two groups of people who are monitored regularly as they move about the country. The first group is monitored involuntarily by a court order requiring that a tracking device be attached to their ankle. The second group includes everyone else . . . .” 83 As Professor Shoshana Zuboff notes, the continuous goal of the expanding surveillance “game” remains to create “access to the real-

81. Manokha, supra note 65, at 222; see also Oleg Yegorov, From Serfdom to Freedom: The Long and Winding Road, RUSSIA BEYOND (Apr. 17, 2017), https://www.rbth.com/arts/history/2017/04/17/from-serfdom-to-freedom-the-long-and-winding-road_744333 [https://perma.cc/35AT-7JTZ] (“In April 1797, . . . Emperor Paul I of Russia signed a decree limiting ‘barschina,’ the obligatory work Russian serfs were forced to perform for their landowners, to three days a week. This was the first small step towards the liberation of a class comprised of 23 million people whose living conditions were often compared to those of black slaves in the United States.” Historically, “serfdom both came and remained in Russia much later than in other European countries . . . . [Before] the late 16th and early 17th centuries . . . peasants who worked for noble landowners still held the right to work for others on certain days of the year . . . . In 1649, . . . the Tsardom of Russia published its first legal code forbidding peasants to leave their masters at any point . . . . [B]y the late 18th century, the percentage of serfs in Russia’s peasantry class . . . exceeded 50 percent of the country’s total population, which was 40 million people at that time . . . . Slavery remained a legally recognized institution in Russia until 1723, when Peter the Great converted the household slaves into house serfs . . . . Serfdom . . . was not abolished until 1861 . . . . [But] under [the 1861] decree[,] peasants were actually required to buy their plots from the owner . . . . [It was not until] 1906 [that] . . . . the government did finally cancel this requirement of payment for land from former serfs.”). Accord generally Rosen, supra note 71, at 48 (describing Russian serfs as enslaved people).
82. See FOUCAL, DISCIPLINE AND PUNISH, supra note 65, at 198.
time flow of your daily life—your reality—in order to directly influence and modify your behavior for profit.**84

Thus we have the outlines of the way many law professors,85 political scientists,86 philosophers,87 economists,88 and some business professors89 describe our arrival at the modern condition of limitless worker surveillance. To help summarize and bring us up to the current debate, in their 2016 taxonomy of how surveillance has been examined in the modern workplace, Professors Maša Galić, Tjerk Timan, and Bert-Jaap Koopsas describe what they see as its three major stages of philosophical surveillance analysis.

First, “Bentham . . . connected [function and theory] to the architectural design of a prison and other buildings[,] and Foucault’s subsequent analysis of discipline and the Panopticon . . . [created] a metaphor to talk about institutions and society.”90 Their work “laid the foundations of surveillance theory in the form of a conceptual framework that still resonates today.”91

Second, the philosophers describe “[p]ost-Panoptical theories of surveillance.”92 As they explain, “[t]he second phase moves away from the Panopticon to develop alternative theoretical frameworks for capturing surveillance.”93 The major theorists and works in this category include “Deleuze’s (and Guattari’s) control societies, linked to bureaucracy and the dawn of a computerised, networked society, followed by Haggerty and Ericson’s surveillant assemblage and Zuboff’s surveillance capitalism.”94

The second-phase writings have particular resonance in the workplace context because “surveillance capitalism involves real-time monitoring of contractual performance along with real-time, technology-enabled enforcement of the contract.”95 An additional problem these theories describe is that, when such “a system of contractual monitoring

84. Id.
85. See generally, e.g., supra notes 21–44.
86. See generally, e.g., supra notes 48, 62–69.
87. See generally, e.g., supra notes 70–76, infra notes 89–99.
88. See generally, e.g., supra note 45 et passim.
89. See also generally discussion of Henry Ford, supra notes 54–62, 83–84, and infra notes 100–105.
90. Maša Galić, Tjerk Timan & Bert-Jaap Koops, Bentham, Deleuze and Beyond: An Overview of Surveillance Theories from the Panopticon to Participation, 30 PHILOS. TECH. 9, 10 (2016).
91. Id.
92. Id. at 11.
93. Id.
94. Id.
95. Id. at 25 (citing Shoshana Zuboff, Big Other: Surveillance Capitalism and the Prospects of an Information Civilization, 30 J. INFO. TECH. 75, 75–89 (2015)).
and enforcement is the norm, ‘habits inside and outside the human body are saturated with data and produce radically distributed opportunities for observation, interpretation, communication, influence, prediction and ultimately modification of the totality of action,’” thereby “establishing a new architecture from which there is no escape, making the Panopticon seem prosaic.” Technologically invasive surveillance is even more powerful in the hands of management because it enables increasingly individualized nudges. Alarmingly, our system has enabled and enshrined management’s control of production to now encompass its control of all worker behavior. Indeed, “[w]here power was previously identified with ownership of means of production, it is now constituted by ownership of means of behavioural modification.”

Third, additional “scholarship refines, combines or extends the main conceptual frameworks developed earlier.” For example, “[s]urveillance theory branches out to conceptualise surveillance through concepts such as dataveillance, access control, social sorting, peer-to-peer surveillance and resistance.” Accordingly, “[w]ith the datafication of society, surveillance combines the physical with the digital, government with corporate surveillance and top-down with self-surveillance.”

Finally, to complete this background survey, in her 2019 book, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, Professor Zuboff focuses primarily on the relentlessly surveilled consumer. But she has some important observations about what is lost as every piece of our lives is digitized and manipulated.

With new technologies, the Panopticon’s eye and influence follow us without our permission everywhere, and at all times. Utilizing Professor Erving Goffman’s ideas about the “backstage” of life as the region into which a person needs to retreat, Professor Zuboff attributes the observation to Professor Goffman that “in work as in life, ‘control of the backstage’

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96. *Id.*
97. *Id.*
98. *Id.* at 9.
99. *Id.* at 9.
100. *Id.*
101. See SHOSHANA ZUBOFF, THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER, passim (2019); *id.* at 10 (“Surveillance capitalism’s products and services are not the objects of a value exchange. They do not establish constructive producer-consumer reciprocities. Instead, they are the ‘hooks’ that lure users into their extractive operations in which our personal experiences are scraped and packaged as the means to others’ ends. We are not surveillance capitalism’s ‘customers.’ Although the saying tells us ‘If it’s free, then you are the product,’ that is also incorrect. We are the sources of surveillance capitalism’s crucial surplus: material-extraction operation. Surveillance capitalism’s actual customers are the enterprises that trade in its markets for future behavior.”).
allows individuals ‘to buffer themselves from the deterministic demands that surround them.’”102 Because of limitless surveillance and its prodding, we lose any ability to be “backstage.” Without a “respite where a ‘real’ self can incubate and grow,” we experience what Jean-Paul Sartre describes as that “[h]ell [that] is other people” and their demands.103 In this “hell,” a “self-other balance can never be adequately struck as long as the ‘others’ are constantly ‘watching.’”104

With limitless worker surveillance, there can be no exit from hell.105 All these disciplines seem to agree that surveillance connected to the past, but gaining new strength in modern form, is changing the nature of our human experience. We are experiencing a new level of harm from such constant, intrusive, and limitless worker surveillance. The standard narrative has been that this modern surveillance may have started with Henry Ford,106 and that it was called to attention as a broad societal phenomenon by Professor Foucault and theorists who have followed him since.

Yet the next sections of this Article will introduce a new dimension to this now-established version of our history. It is a dark turn through slavery and the dubious legacy of Frederick Winslow Taylor, for whom “Taylorism” is named.

Furthermore, throughout all of these moments in which society has had to make decisions about which road it would take in the surveillance context, there seems to have been very few times in which we took the high road and prioritized the systemic protection of workers’ interests over businesses making more money.107 One of those few decisions seems to have been the abolition of slavery. Yet Taylorism still provides an avenue for many management techniques developed on the plantations to make their way back into fashion.

We are at the verge of taking another fork in the surveillance road. We need to rethink whether we want limitless worker surveillance and its harms to continue growing unchecked. As Professor Berle concluded about abuses of management power in 1959, we have a call to action that

102. Id. at 471 (quoting Professor Goffman).
103. Id. (quoting Jean-Paul Sartre’s play No Exit).
104. Id. (same).
105. See id. at 470–71.
106. As will be discussed, some business-school professors do trace these developments back to Frederick Winslow Taylor first. See generally infra Section II(B).
still needs to be answered: “The American economic system is getting away on a new base with a great many merits and some dangers. The time to study it and think about it and do whatever has to be done is in the next few years rather than later.”

II. A HISTORY OF MANAGEMENT & CULTURE

A. The Definition of Management as Control

Management is commonly defined, of course, as the “process of dealing with or controlling things or people.” How to control people is the core of agency theory as taught in business schools: to align people within an organization and bind them to pursue the organization’s purpose. Agency costs flow from people not doing what their superiors tell them to do in the way that the superiors want them to do it.

As the 2017 Oxford Handbook of Management explains, “management as an ethos, organizing principle, culture, and field of academic study has increased dramatically in the last half century, and spread throughout the world not least through the influence of university business schools.” Moreover, “to the extent that we live in a society of organizations, managerial ideas and practices have become prevalent not only in for-profit firms, but also non-profits, cooperatives, state agencies, and any aspect of society that requires organizing and organization.”

Because management is taught as the control of workers and processes, there has always been a basic power dynamic at play between

108. BERLE, supra note 37, at 10.
110. Merely to emphasize the point, “agency theory” as taught in business schools is not the same as “agency law” as taught in law schools.
112. Jensen, supra note 111; Jensen & Meckling, supra note 46; Shapiro, supra note 111. Agency theory and its associated study of how to reduce agency costs have “had a significant impact on the intellectual agenda of the academy, spawning a massive empirical literature in management and organizational behavior. Agency theory has become a cottage industry that explores every permutation and combination of agency experience in the corporate form.” Shapiro, supra note 111, at 269.
management and workers. This author does not deny that there are enlightened, progressive, and forward-thinking managers in many places who try to do the right things in the treatment of their workers. What is at issue may be a deeper structural blindness as to the effects of the techniques that managers are trained to use and from where those techniques came.115

In thinking about management as power, the Oxford Handbook notes that “structural relationships may create networks of dependencies between non-equivocal actors where obedience is sought, while recognizing that conflict and resistance may also occur.”116 In their 2007 book Contesting the Corporation: Struggle, Power and Resistance in Organizations, Professors Peter Fleming and André Spicer establish that even today’s corporations “are driven by political struggle, power plays and attempts to resist control.”117 Fleming and Spicer describe managerial power as possessing four dimensions: power as coercion, manipulation, domination, and subjectification.118 Moreover, they argue that ultimately “social justice claims underlie even the most innocuous forms of resistance in corporations,” making issues of power in the workplace key to understanding many other power dynamics in society.119

In the corporate world, pressure to make profit typically incentivizes behavior at all levels of business organizations.120 Managers often understand their jobs to be pushing employees toward the goal of making such profits.121 How managers push workers toward the business’s goal of making a profit is what has changed over time. Taylor is a larger part of this story in management’s own narrative. As the Oxford Handbook summarizes, management as recently taught in business schools traces a “genealogy of managing power and the infrastructures of power” from “Taylorists’s disciplinary infrastructure,” through “the Fordist moral

118. Id.
119. Id.
120. Jensen & Meckling, supra note 46, at 307.
121. Id. at 308.
infrastructure,” and procedural “human relations infrastructure,” through to the “corporate culturalism epitomized by Google.”  

Professor David Courpasson’s above list of methods of enforcing power ends now ominously with Google, the originator of surveillance capitalism. As Professor Zuboff writes about this transition: first, “Ford discovered and systematized mass production.” Then, with the help of Taylorism, companies such as “General Motors institutionalized mass production as a new phase of capitalist development with the discovery and perfection of large-scale administration and professional management.” Now, “[i]n our time, Google is to surveillance capitalism what Ford and General Motors were to mass-production and managerial capitalism a century ago: discoverer, inventor, pioneer, role model, lead practitioner, and diffusion hub.”  

Indeed, ironically, Google as the banner company of the new way forward in management-worker power dynamics now has its own public issues with power and internal control. For the company that helped perfect external surveillance capitalism to have overstepped its own bounds in surveilling and controlling its own workers must also be, in part, a story of how seductive are such tools.

One element of why managers are drawn to the technology of limitless worker surveillance is surveillance creep. As Professors Brett Frischmann and Evan Selinger describe, “[s]urveillance creep is an offshoot of what engineers call function creep, the idea that a tool designed for one purpose ends up being used for another one.” Frischmann and Selinger provide the example of a driver’s license, which originally

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123. Zuboff, supra note 83.

124. Although Google is “a notoriously secretive company,” a 2016 lawsuit began to shed light on an alleged “internal spying program in which employees are expected to identify coworkers who violated the firm’s confidentiality agreement: a broad prohibition against divulging anything about the company to anyone” Zuboff, supra note 101, at 64. Similarly, in 2019, Google employees grilled their CEO about changes that the company had internally embedded into its Chrome Internet browser “that employees worried was designed to monitor large gatherings.” Greg Bensinger, Google CEO. In Leaked Video, Says Company Is ‘Genuinely Struggling’ with Employee Trust, WASH. POST (Oct. 25, 2019), https://www.washingtonpost.com/technology/2019/10/25/google-ceo-leaked-video-says-company-is-genuinely-struggling-with-employee-trust/ [https://perma.cc/88NN-X35D]. Although the CEO attempted to assure employees that the company was not seeking to stifle speech and impose yet more rigid control over them through surveillance, “Luiz Barroso, a Google vice president of engineering, acknowledged that the software will eventually help [the company] monitor internal forums” by flagging their content. Id.

documented that an individual was authorized to drive a car, and has since been used as a general credential to prove one’s age and identity for access to alcohol and nightclubs. After passage of the Real ID Act in 2005, the same driver’s license has become linked to counterterrorism databases for boarding commercial airlines and access to federal buildings.

Regulators in many industries are part of the problem as well. They may overly require companies to prove that management knows what is happening inside their organizations, providing excuse and muscle for management to develop surveillance systems to protect themselves from liability. Especially within the financial industry, regulators have been insisting that companies collect and keep more and more data on employee behavior because they can. Regulators (and at times prosecutors who may effectively be regulating a company under a deferred or non-prosecution agreement) may justify encouraging abuses of employee personal privacy on the ground that the company is monitoring for insider trading and other illegal or unethical behavior. And when something goes wrong within the company, regulators may interpret a company’s decision not to have collected and monitored this information as a weak system of controls, which is damning in the government’s eyes. Lost in this discussion between regulators and the company is any conversation about the impact that such invasive and constant monitoring has on worker morale and conditions in the workplace.

Moreover, it is a particularly dangerous combination for workers that surveillance may both satisfy regulators and feed a psychological need for managers concerned about control. As Brian Beeghly, Founder and CEO of informed360 explains, “[b]usinesses need something tangible that they can latch onto and implement.” Indeed, as heard often in management settings, “[d]ata is the new oil”: valuable for all kinds of reasons and

126. Id. at 20.
127. Id.
128. This was a point nicely made recently by Rosemarie Paul, Partner at Ropes & Gray, LLP. Rosemarie Paul, Partner at Ropes & Gray, London, The Ethics of Workplace Surveillance & Monitoring Panel (Mar. 15, 2019), https://www.ethicalsyst ms.org/content/ethics-design-how-manage-organizations-era-anxiety-polarization-and-disruption#overlay-context=ethicsbydesign (last visited on Jan. 23, 2020).
130. See generally, e.g., Introduction, in PROSECUTORS IN THE BOARDROOM: USING CRIMINAL LAW TO REGULATE CORPORATE CONDUCT 1 (Anthony S. Barkow & Rachel E. Barkow eds., 2011).
helpful for running the world. Surveillance becomes another part of management, defined as the “process of dealing with or controlling things or people.” Surveillance, however, by managers who “want to control decisions, and . . . concentrate[] resources in their [own] hands” is “problematic because it is a self-perpetuating strategy” that increasingly concentrates control in managers’ hands at the expense of working conditions and workers’ ability to protest.

Meanwhile, a booming economic industry built around the monitoring and control of employees within organizations advertises itself for intertwined productivity and compliance purposes. As one website reviewing technology products details, “[t]he most comprehensive programs keep detailed logs of the websites your employees visit and the applications they use, along with emails, online chats, keystrokes, created and downloaded files, print jobs, inserted devices, and even their physical locations when they’re on company devices.” Additionally, the technology “should provide regular reports (at the intervals you choose) with easy-to-read statistics and visual breakdowns of employee habits.” Managers can detail and customize their notification options for all types of situations, including “alert[s] if an employee downloads a document online or tries to access a forbidden website.” Alerts and overview statistics can be used “in tandem” to provide an even more detailed picture of employee activities. A product called “HumanyzeTM asks employees to wear sociometric badges that use a combination of microphones, infrared sensors, accelerometers and Bluetooth to measure worker movements, [face-to-face] encounters, speech patterns, vocal intonations and posture to create data about how workers interact.”

133. The quote is commonly attributed to Clive Humby, a British mathematician and architect of Tesco grocery store’s Clubcard. Although attributed to Humby in 2006, the words have been re-quoted many times since. Michael Haupt, Who Should Get Credit for the Quote “Data Is the New Oil”?, Q UORA, https://www.quora.com/Who-should-get-credit-for-the-quote-data-is-the-new-oil [https://perma.cc/66L8-4ZEK].
137. Id.
138. Id.
139. Id.
140. V. John Ella, Employee Monitoring and Workplace Privacy Law, in AMERICAN BAR ASSOCIATION, 2016 NATIONAL SYMPOSIUM ON TECHNOLOGY IN LABOR AND EMPLOYMENT LAW 1, 2 (2016).
The problem with so much measurement and constant feedback from management to workers is that the accumulation of this surveillance and behavioral modification moves too easily from influence to coercion. Professor Cass Sunstein in The Ethics of Influence articulates a difference between mere influence and actual coercion.\textsuperscript{141} Influence is information that individuals are free to act upon or not.\textsuperscript{142} Coercion is darker.\textsuperscript{143} Coercion carries with it a threat of punishment or force.\textsuperscript{144} In coercion, the power differential between parties is much closer to the surface than with influence.

Point-blank, “[t]he employer-employee [or management-worker] relationship can create . . . [the] threat [of coercion].”\textsuperscript{145} At a minimum, it can certainly create “the perception of” coercion within the management-worker relationship.\textsuperscript{146} With so much to lose personally, “many workers wish to keep their jobs and not fall out of line with management.”\textsuperscript{147} As will be discussed more extensively in a separate article on flaws in our employment law framework,\textsuperscript{148} workers’ fear of management is “particularly [present] in the U.S., where the balance of power (and law) favors the company.”\textsuperscript{149}

Next, as we shall see, management’s drive for profits at the expense of conditions for the workers has taken some dark turns and can justify terrible behavior.

\textbf{B. Modern Management’s Roots in the Slave Plantations of the West Indies and U.S. South}

It is a historical fact that the management community is beginning to recognize and grapple with that the origins of modern management are in the slave plantations of the West Indies and U.S. South.\textsuperscript{150} The engineer Fredrick Winslow Taylor, one of the fathers of modern management whose work is taught today, borrowed and improved upon the techniques

\begin{itemize}
  \item \textsuperscript{141} Cass R. Sunstein, The Ethics of Influence: Government in the Age of Behavioral Science 1 (2016).
  \item \textsuperscript{142} Id.
  \item \textsuperscript{143} Id.
  \item \textsuperscript{144} Id.
  \item \textsuperscript{146} Id.
  \item \textsuperscript{147} Id.
  \item \textsuperscript{148} See Nelson, supra note 25.
  \item \textsuperscript{149} Filabi & Hurley, supra note 145.
  \item \textsuperscript{150} See Caitlin Rosenthal, Accounting for Slavery: Masters and Management (2018).
\end{itemize}
developed in those plantations to control slaves.\textsuperscript{151} Dividing up the work into specific “tasks”—a word deeply associated with slavery—was part of the plantation slave system’s distinction from earlier gang work, in which people worked under constant supervision for a set period of time. Instead, “taskmasters” of the plantation systems developed a set of goals and rewards for slaves who met targets, including monetary awards as bonuses.\textsuperscript{152}

In 2013, Professor Caitlin Rosenthal described her most important research findings to the \textit{Harvard Business Review}, a key management publication. As she explains, “[t]he mythology is that on plantations, management was crude and just amounted to driving enslaved people harder and harder.”\textsuperscript{153} But Rosenthal’s methodical work with documents from the plantations in the U.S. South and West Indies from 1750 to 1860 “show that plantations used highly sophisticated accounting practices more consistently than many contemporary northern factories. . . . In some ways[,] the conditions of slavery permitted a more scientific approach than the factories did.”\textsuperscript{154} In essence, “[i]n the factory books, you see lots of turnover. But slaves couldn’t quit.”\textsuperscript{155} Accordingly, “while factories were worrying about filling positions and just keeping things going, plantation owners were focused on optimization.”\textsuperscript{156} It is thus in the plantation records that there is a first “real quantitative analysis [of labor]” because “they were literally looking at humans as capital.”\textsuperscript{157}

Rosenthal acknowledges the way in which her findings make “people queasy” and “cringe[.]”\textsuperscript{158} Because the reader may now be having a similar reaction, it is worth confronting this issue head-on. As Rosenthal confirms, “[i]t should make you cringe.”\textsuperscript{159} It is a modern conceit and mythology that businesses have built up about themselves and their contributions to society that “[p]eople tend to think about the positive with regard to management and capitalism. With our modern lens, efficiency is good.”\textsuperscript{160} But in the history of modern management, “it was equal to the brutal extraction of labor from oppressed people.”\textsuperscript{161}

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\textsuperscript{151} See discussion \textit{infra} Section II(B) and nn.153–195. 
\textsuperscript{152} See id. 
\textsuperscript{154} Id. 
\textsuperscript{155} Id. 
\textsuperscript{156} Id. 
\textsuperscript{157} Id. 
\textsuperscript{158} Id. 
\textsuperscript{159} Id. 
\textsuperscript{160} Id. 
\textsuperscript{161} Id.
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for business people, and this author would add, for society in general, “to read unvarnished history, not just the happy stories.”

Rosenthal’s careful research describes how many specific innovations of modern management came from the slave plantations of the West Indies and American South. A good example is the development of the “task” system. It is still the former slave “task and bonus” system, which “pair[s] a flat task and a time wage with bonuses for overwork,” that is the basis for rewarding behavior in today’s gig economy.

As Rosenthal explained in 2018, “[u]nder the task system, an enslaved person would be assigned a set ‘task’—a word deeply associated with the slavery system and the “task masters” who ran it—“or quota that he or she was expected to complete by the end of the day.” The task system “was in contrast to the gang system, where enslaved people labored under constant supervision for a set period of time.” In fact, “slavers who used the task system . . . gave monetary bonuses [to slaves] for achievement above set targets.” Even more insidiously, slavery itself was justified as a “school” for the enslaved, and “descriptions of the interactions between planters and their slaves bear striking similarities to the ways” Taylor would later “describe[] the ideal interactions between managers and workers.”

Rosenthal makes another important point about the plantation owners of the 1750s to 1860s that should echo in our modern discussion of limitless worker surveillance. There is a psychological distancing from workers and their humanity that can occur for managers with the use of accounting terms and the production of detailed accounting books to enforce human misery through oppressive working conditions. The prison warden monitoring movements from the Panopticon experiences

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162. Id.
163. ROSENTHAL, supra note 150.
165. Id.
166. Id.
167. Id.
168. Id.
169. During slavery, plantation owners were often physically removed from where production was taking place. They might be “in London, getting reports in the mail about their plantations[,] and crunching the numbers over lunch, not so different from modern board members.” Rosenthal, supra note 153, at 30. The danger is that “[i]t’s so easy for someone at a long distance to forget about the humanity of the labor.” Id. This analogy now might be to a manager with a spreadsheet. “The spreadsheet can create that same separation.” Id. It is a struggle in such an antiseptic context to continue to remember “the humanity of the slaves.” Id. But their humanity “is absolutely necessary to remember. To never forget.” Id.
this distance. But even more so does the manager scanning banks of video monitoring screens, or—yet further removed from the humanity of the people being surveilled—statistical dashboards on data from workers in the production plant.

Another ugly truth about the history of slavery and management needs to be brought front-and-center in this time of economic justifications for limitless worker surveillance: slavery was “extremely” economically profitable for businesses and the top classes that owned enslaved workers. As Princeton professor Matthew Desmond bluntly describes, “[s]lavery was undeniably a font of phenomenal wealth.” As he elaborates, “[b]y the eve of the Civil War, the Mississippi Valley was home to more millionaires per capita than anywhere else in the United States.” It was “[c]otton grown and picked by enslaved workers [that] was the nation’s most valuable export.” In economic terms, “[t]he combined value of enslaved people exceeded that of all the railroads and factories in the nation.” The economic heart of the pre-Civil War south, New Orleans, “boasted a denser concentration of banking capital than New York City.”

It is part of our denial of slavery and its economic appeal for managers that, as Professor Rosenthal explains, “[t]oday people continue to cling to the idea that slavery wasn’t good business.” In fact, even before the Civil War, “both sides voiced this perspective,” potentially because, as this author suggests, it was uncomfortable to admit the economic rationale at the heart of the system’s existence. Instead, “[p]lantation owners tried to paint a picture of themselves as ‘benevolent’ paternalists who made the slaves’ lives better while earning limited profits.” Meanwhile, perhaps because it may have been so uncomfortable to discuss economic realities and take head-on the harm that abolishing slavery would have on profits, “[a]bolitionists argued that slavery was unprofitable in an effort to undermine it.” Even today, despite so much evidence of the falsity of perpetual assertions that slavery

171. Desmond, supra note 1.
172. Id.
173. Id.
174. Id.
175. Id.
177. Id.
178. Id.
179. Id.
was not profitable, “it’s still uncomfortable to explore the links between slavery and modern capitalism.”

Professor Desmond further explains how at its heart, economic motives drove the practice and experience of slavery, married only at times to inflicting physical punishment. This tie is why “punishments rose and fell [on plantations] with global market fluctuations.” As he writes,

There is some [modern] comfort, I think, in attributing the sheer brutality of slavery to dumb racism. We imagine pain being inflicted somewhat at random, doled out by the stereotypical white overseer, free but poor. But a good many overseers weren’t allowed to whip at will. Punishments were authorized by the higher-ups. It was not so much the rage of the poor white Southerner but the greed of the rich white planter that drove the lash.

Importantly,

The violence [of slavery] was neither arbitrary nor gratuitous. It was rational, capitalistic, all part of the plantation’s design. . . . Because overseers closely monitored enslaved workers’ picking abilities, they assigned each worker a unique quota. Falling short of that quota could get you beaten, but overshooting your target could bring misery the next day, because the master might respond by raising your picking rate.

Does this sound familiar from the factory floor?

Slavery was so profitable for owners, and so harmful to society as a whole, that it was only a fundamental change in social attitudes towards slavery that led to abolition. Such change may have come from religious convictions, from our sense of moral outrage and disquiet when we learned of slave conditions, and from other sources of human conscience that eventually took political form. As Professor Seymour Dresher describes:

180. Id. American ignorance about the way that slavery has shaped the country and its workplace practices is a combination of discomfort, denial, and misrepresentation. As part of the 1619 Project summarizes the findings of various reports about our educational system, we have been unwilling to face evidence about slavery’s continuing impact “[f]or generations.” Nikita Stewart, Why Can’t We Teach Slavery Right in American Schools?, N.Y. TIMES (Aug. 19, 2019), https://www.nytimes.com/interactive/2019/08/19/magazine/slavery-american-schools.html [https://perma.cc/9WM6-MWG4]. “Elementary-school teachers, worried about disturbing children, tell students about the ‘good’ people, like the abolitionists and the black people who escaped to freedom, but leave out the details of why they were protesting or what they were fleeing.” Id. Later, “[m]iddle-school and high-school teachers stick to lesson plans from outdated textbooks that promote long-held, errant views.” Id. Many textbooks’ outdated treatment convince Americans that slavery and its impacts on the workplace are long gone.

181. Id.

182. Id.

183. Id.
“The crucial change in attitudes towards the slave trade occurred neither because the West Indian slave system became economically redundant, nor because of the triumph of free market ideology.”\textsuperscript{184} Instead, “[i]t occurred when certain non-commercial judgments on the slave trade gained ground and prevailed.”\textsuperscript{185} The end of slavery was then “not so much an intellectual revolution as a revolution in public and parliamentary opinion.”\textsuperscript{186}

There were undeniable and enormous profits to be made from slavery by owners. The social price that was paid from slavery was the stratification of society into the haves and have-nots, as well as the scarring of the psyche and bodies of those subject to control, instead of any mark on those exercising that control. Society ultimately had to decide that endless business profits were not worth the sacrifices being made by the people subject to the working conditions required to produce at that rate.

In 2019, America marked the four-hundredth anniversary of the first slave ship to cross the Atlantic and land on its shores.\textsuperscript{187} As part of that coverage, historians are calling for a broader reckoning of the impact that slavery has had on the country’s development and economic system. Even in management sources, the complicity of the business community in denying the moral harm of slavery at the time is uncomfortable.\textsuperscript{188}

\begin{footnotes}
\item[184] Seymour Drescher, From Slavery To Freedom: Comparative Studies In The Rise And Fall Of Atlantic Slavery 15 (1999).
\item[185] Id.
\item[186] Id.
\item[187] The connections to today are striking. As Professor Desmond entitled his article for the New York Times’ 1619 Project, “In Order to Understand the Brutality of American Capitalism, You Have to Start on the Plantation.” Desmond, supra note 1. In a comment that pulls many threads together, he notes that “[c]otton was to the 19th century what oil was to the 20th: among the world’s most widely traded commodities.” Desmond, supra note 1. As already mentioned in today’s business world, the new “oil” of the twenty-first century is data. See “data is the new oil” discussion supra p. 643 and notes 132–135. That data come from the surveillance of people—humans such as those who once picked cotton. As Professor Desmond explains, it was not only the management techniques of slavery that were borrowed by the factory, but the slave production of cotton spurred the very creation of the factory as an element of the Industrial Revolution. Desmond, supra note 1. “[T]he large-scale cultivation of cotton hastened the invention of the factory, an institution that propelled the Industrial Revolution and changed the course of history.” Id. In this way, “[s]lavery . . . was the ‘nursing mother of the prosperity of the North.’” In fact, “[t]he cotton plantation was America’s first big business, and the nation’s first corporate Big Brother was the overseer.” Id.
\item[188] As Professor Sven Beckert described in 2019:
When you read the letters of businessmen of the 1840s and 1850s, you see numerous efforts to separate business and morality into distinct realms. Merchants and manufacturers in the past did know that slavery was a moral problem, but then they tried to say that such moral considerations were extraneous to the concerns of business. In retrospect we can all agree that these claims are preposterous. Such observations should make everyone today acutely conscious about making rationalizations that seek to insulate business from moral responsibility. History (and historians) don’t look kindly on this.
\end{footnotes}
The links between slavery’s approach to workers and the techniques of today are unmistakable. Today “[e]verything is tracked, recorded and analyzed, via vertical reporting systems, double-entry record-keeping and precise quantification.” In the modern world, “[d]ata seems to hold sway over every operation.” Our experience may “feel[] like a cutting-edge approach to management, but many of these techniques that we now take for granted were developed by and for large plantations.”

It is a convenient untruth that these techniques, as previous apologists have asserted, come from the later expansion of the railroads or some other potentially less-charged era of American history. As Professor Rosenthal explains in her 2018 book, Accounting for Slavery, “[v]ery few histories of business practices ever touch on slavery.” Instead, they choose to venerate as the source of management techniques relatively less-politically-charged subjects “across a familiar array of industries, inventors, and executives usually associated with innovation and the coming of capitalism—eighteenth-century merchants; nineteenth-century textile manufacturers, canal diggers, railroad tycoons, and financiers; and twentieth-century automobile manufacturers, high-tech founders, and consultants.” Embarrassingly, “[s]ome of these stories have taken on near mythical status for modern businesspeople.”

C. Taylorism as the More Acceptable Face of Slave Management Techniques

A good example of this attribution of management techniques that had been developed and commonly used throughout the U.S. South and West Indies during slavery to a more politically-palatable source is the legend of Frederick Winslow Taylor as the actual inventor, instead of as a mere popularizer, of such techniques. In 1911, Taylor published his classic of modern management, The Principles of Scientific Management. Briefly summarized, Taylor’s scientific management technique teaches “standardizing work” to establish the “one best way” of working, and then

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189. Desmond, supra note 1.
190. Id.
191. Id.
192. See id.
193. ROSENTHAL, supra note 150, at 4.
194. Id. at 4-5.
195. Id. at 5.
196. FREDERICK WINSLOW TAYLOR, THE PRINCIPLES OF SCIENTIFIC MANAGEMENT (1911).
“controlling so extensively and intensively as to provide for the maintenance of all these standards.” Nonetheless, as Professor Rosenthal has noted, even the language Taylor uses to describe his “new” techniques has specific echoes in the common maxims of slave plantation masters. For example, Taylor writes that “our endeavor [is] to learn what really constitute[s] a full day’s work for a first[-]class man; the best day’s work that a man [can] properly do year in and year out and still thrive under.” During slavery, a South Carolina planter had described the fundamental maxim of slave management as “[i]n nothing does a good manager so much excel a bad, as in being able to discern what a [good] field hand is capable of doing and in never attempting to make him do more.”

Taylor is an interesting figure. Born into a high-class Philadelphia family before the Civil War, he refused to be a lawyer like his father and instead cared deeply about creating his own legacy. Taylor certainly took fantastic steps to attempt to control what the public thought of him. Biographers have documented that he attempted to re-write the transcript of his testimony after it had already been delivered in front of Congress; he lobbied members of Congress behind the scenes for favorable

197. SUDHIR KAKAR, FREDRICK TAYLOR: A STUDY IN PERSONALITY AND INNOVATION 14 (2018) (briefly summarizing the elements of Taylorism).
198. TAYLOR, supra note 196, at 55.
199. Caitlin Rosenthal, Slavery’s Scientific Management: Masters and Managers, in SLAVERY’S CAPITALISM: A NEW HISTORY OF AMERICAN ECONOMIC DEVELOPMENT 62, 77–78 (Sven Beckert & Seth Rockman eds., 2016) (quoting South Carolina planter Plowden C.J. Weston); see also TAYLOR, supra note 196, at 117 (providing additional slave master quotes).
200. Taylor was born in 1856. See KAKAR, supra note 197, at 35.
201. Professor Sudhir Kakar’s 2018 psycho-historical analysis suggests that Taylor’s deep-seated need to control the world around him came in part from his very strict pre-Civil War upper-class childhood. As Professor Kakar describes the practices in Taylor’s environment and immediate family, “it was essential that the child submit to the will of the parents and thus any obstinacy was severely punished. A single lapse was seen as permanent setback.” Id. at 37. According to 1923 Taylor biographer Frank Barkley Copley, Taylor’s mother raised her children with “work, drill, and discipline,” in a system in which “child was remorselessly pitted against child.” FRANK BARKLEY COLEY, FREDERICK W. TAYLOR: FATHER OF SCIENTIFIC MANAGEMENT 65 (1923). Taylor himself later described his time at the boarding school Exeter as “perhaps the very best experience of my early life[,] namely the very severe Exeter discipline in which no excuse was taken for any delinquency whatever and in which every boy had to toe the mark in all respects.” KAKAR, supra note 197, at 53 (quoting letter to Morris Cooke from the Taylor collection).
202. Professor Kakar suggests that Taylor at times thought of his contributions in religious terms as a type of messiah. KAKAR, supra note 197, at 81 (“Thus [Taylor’s] followers were not entirely joking when they referred to their ‘cult’ as ‘the Almighty and his disciples.’ When a friend argued that scientific management was the extension of old religious truths of love and service, Taylor is reported to have solemnly nodded his agreement.”) (internal citations omitted).
203. KANIGEL, supra note 55, at 481.
he carefully taught himself how to swear to increase his credibility as a “working man”; and he came close to psychologically falling apart when challenged with reasonable questions. As 1997 Taylor biographer Professor Robert Kanigel concludes about Taylor’s efforts to manipulate his public image: “The man was shameless.”

As a manager himself, “Taylor’s attempts at controlling, or rather, over-controlling, . . . led to his fight with the workers in the machine shop almost immediately after his coming to [his first management job at] Midvale” Steel Works. As “gang boss” (note the echoes of that title from an earlier version of slavery), Professor Sudhir Kakar concludes “there can be little doubt” that “Taylor’s methods were arbitrary and authoritarian in the extreme.” In one case, Taylor began by “fining a man two dollars, and then as the machine parts continued to break[,]” regardless of whether the breakage was related to any action by the worker or not, Taylor

204. See id. at 458–59 (describing how, when Taylor learned he would appear before a Congressional committee, “[General]” Frederick Winslow Taylor began to marshal his forces. They needed ‘a plan of campaign[,]’ he wrote. ‘We should spare no effort to try to make the best possible impression upon the committee.’ [Taylor and his disciples] should bring the committee to Philadelphia before the formal hearing, closet them one on one—‘off the record, where you don’t have to worry about every word . . .’ [Taylor] peppered committee members with literature on scientific management and corresponded with them. He lined up favorable witnesses and coached them. He met personally with his judges. [He even offered to a Congressman at one point]: ‘It has occurred to me that you might not object to my joining you on your train from New York to Philadelphia.’”) (quoting Taylor).

205. COPLEY, supra note 201, at 90 (“As was true of all [Taylor’s] other activities, he steadily improved his swearing, made it less amateurish and more artistic; but the fact is that he never became able to do it quite like one” who had not been born into a high-class family.); see also KANIGEL, supra note 55, at 139 (quoting Taylor’s close friend Carl Barth as observing that Taylor actually “had a natural aversion to manual work, . . . only brain work being fully to his liking”).

206. KANIGEL, supra note 55, at 479 (arguing that Taylor was “simply unnerved by the rough-and-tumble of free and open debate”); Id. at 480 (noting that “[t]oward the end of his testimony, Taylor fell into pitched battle with two of the labor leaders. Insults and provocation threatened to escalate into blows. [The chairman of the committee] shouted a stop to it and struck everything said in anger from the record.”); Id. at 480 (“When Taylor was finally excused . . . and [he] had trouble getting [to and then into] the [train] station, Taylor lashed out. . . . The record is not clear. What is clear is that Taylor was a forlorn hulk of nerves, frustrated and defeated.”).

207. KANIGEL, supra note 55, at 482 (“Taylor sought to influence not just the course of the hearings but also how they were represented in the official record. For the next two weeks [after he received the preliminary transcript], he worked at [‘]correcting[’] his testimony, often staying up late each night. Here was his last chance to put it in the best light and perhaps make up for that terrible last day on the stand. ‘It takes me about four days to correct one day’s testimony[,]’ he wrote [to his friend]. . . . [Taylor] would ‘rather dictate the whole thing all the way over again from the start.’ . . . And, amazingly, that’s what he tried to do.”).

208. KAKAR, supra note 197, at 110.

209. See discussion supra Section II(B) and nn.163–168.

210. KAKAR, supra note 197, at 119.
“doubled the fine until he reached the sum of sixty-four dollars, which in those days represented more than two months’ wages to a worker.”

As Taylor described his own experience implementing his methods, “[w]e fought on the management’s side with all the usual methods, and the workmen fought on their side with all of their usual methods.” Taylor was determined to win this battle: “Finally, when they [the workers] found that these tactics did not produce the desired effect on the management, they got sick of being fined, their opposition broke down, and they promised to do a fair day’s work.”

Nonetheless, Taylor publicly insisted that his “scientific management” techniques were “completely free of value judgments[: …] they were simply the discovery of technological imperatives as they applied to men at work.” In his testimony before Congress in 1912, Taylor took great pains to paint his relationships with workers as “one of mutual friendliness[: …] any strains existed only inside the works and were forgotten by him, and presumably the workers, immediately outside working hours.” But, even in that carefully crafted testimony, his façade slipped when he continued: “[T]hose men were my personal friends, but when we went through the gate of [the factory,] we were enemies. [W]e were bitter enemies. I was trying to drive them[,] and they were not going to be driven.”

Although Professor Rosenthal may be correct about the source of Taylor’s management techniques, she is perhaps too harsh in her evaluation of his impact in popularizing them far beyond plantations. In 1908, the founding dean of Harvard Business School visited Taylor, and thereafter introduced “industrial organization” into the curriculum. Taylor, his friend Carl Barth, and other disciples of Taylorism “regularly lectured” at Harvard thereafter. When America entered the First World War in 1917, the government and other institutions embraced Taylorism with abandon. Taylor’s personal assistant and disciple Henry Gantt

211. Id. (citing 1 Frank Barkley Copley, Frederick W. Taylor: Father of Scientific Management 168 (1923)).
212. Id. at 113 (quoting Taylor).
213. Id. at 119 (same).
214. Id. at 15.
215. Id. at 120.
216. Id. at 121 (quoting 3 The Taylor and Other Systems of Shop Management: Hearing Before Special Committee of the House of Representatives, at 1434 (1912) (statement of Frederick Winslow Taylor)).
219. Id. at 489.
220. See id. at 486–90.
“helped speed ship production through the Emergency Fleet Corporation.”221 The 2018 Taylor biography notes that, by 1918, “Taylor’s system was taking on the trappings of an international movement . . . [and his] ideas have had an enormous influence on the industrial life of almost all countries.”222 Professor Robert Linhart describes Henry Ford’s techniques as “an application of the Taylor system to mass production;” Fordism was the special case, [whereas] Taylorism [was] the universal.”223 By 2012, “[w]hen [the] Harvard Business Review marked its ninetieth anniversary[,] . . .] Taylor made it into all three featured essays, offering an inspirational point of reference for the ability of managers to transform the broader economy.”224

Taylor’s success in popularizing the management techniques of slavery does not take away the menace of control that underpins them. Indeed, it makes the techniques’ widespread acceptance even more troubling. And it makes the sanitized narrative’s denial of the techniques’ origins in slavery that much more dangerous. Back in 2003, Professor William Cooke had noted that “planters had used many of the same practices we associate with the history of American business.”225 Indeed, Cooke had asserted then that “our failure to appreciate these associations resulted not from a lack of research, but from denial.”226 He “called it denial because his findings drew on easily accessible published research,” such as that of Professor Keith Aufhauser in 1973,227 Professor Mark Smith in 1996 and 1997,228 as well as others.229 The modern conversations must finally acknowledge the true roots of these techniques now.

In fact, the most direct way in which Taylor imported techniques from slavery into scientific management was through the above-mentioned Henry Gantt, whom Taylor hired as his assistant at Midvale Steel Works from July 1887 until 1893.230 As Professor Kanigel documents, Gantt “was won over to Taylor’s ideas and became a disciple,

221. Id. at 487.
222. KAKAR, supra note 197, at 11–12.
223. KANIGEL, supra note 55, at 498 (quoting Professor Linhart).
225. ROSENTHAL, supra note 150, at 203 (citing William Cooke’s “Denial of Slavery in Management Studies”).
226. Id.
229. ROSENTHAL, supra note 150, at 203 (citing Professors Aufhauser, Smith, and others).
230. See KANIGEL, supra note 55, at 237.
his life and career forever entwined with that of his mentor.”231 When Taylor left Simonds Rolling Machine Company in 1898, he announced that Henry Gantt would be “the new superintendent, who will take my place.”232 Taylor indeed wrote that letter from where he was staying in Gantt’s house.233

Gantt had been “born on the eve of the Civil War to a slaveholder in Maryland.”234 As Professor Rosenthal documents, “Gantt’s father, Virgil Gantt, owned more than sixty men, women, and children.”235 Gantt famously imported the “task” method, among other workplace innovations from the plantations, into Taylor’s scientific management system.236 And Gantt knew its roots. Gantt himself explained: “The term ‘task master’ is an old one in our language; it symbolizes the time, now happily passing away, when men were compelled to work, not for their own interests, but for those of someone else.”237

Gantt did not want to abolish the system of slavery into which he had been born a master, “but [rather] to adapt it to modern needs.”238 In his words, although “[t]he general policy of the past has been to drive, . . . the era of force must give way to that of knowledge, and the policy of the future will be to teach and to lead, to the advantage of all concerned.”239 Thus scientific management attempted to replicate “slavery’s extractive techniques while jettisoning the institution itself.”240 But scientific management’s roots in slavery were not even well-disguised at the time. In 1913, only two years after Taylor published his manifesto, “James Mapes Dodge, a Philadelphia manufacturer and early supporter of Taylor, explained . . . that ‘we cannot tell who first liberated the germ idea of Scientific Management, as it was born to the world in the first cry of anguish that escaped the lips of the lashed slave.’”241 Professor Rosenthal puts Dodge’s slave reference in context as “metaphorical, to a vague and distant past where slavery prevailed, not to the slave South. But he understood that ‘the present generation’ had inherited ‘from the past the

231. Id. at 237.
232. Id. at 306 (quoting Taylor).
233. Id. at 306.
234. Rosenthal, supra note 164.
235. Id.; accord KANIGEL, supra note 55, at 522.
236. See Rosenthal, supra note 164.
237. Id. (quoting Gantt).
238. Id.
239. Id. (quoting Gantt).
240. Id.
241. Id. (quoting Dodge).
relationship of master and slave’ and saw it as the job of scientific management to move beyond it.”

Taylor was also explicitly aware of the connection between scientific management and slavery. Taylor described the “task idea” as “the most prominent single element in modern scientific management.” He lamented the word “task”’s “unfortunate connection with ‘slave-driving’.” Gantt similarly “acknowledged that the word ‘task’ was ‘disliked by many men,’ regarding it as a ‘principal disadvantage’ of the method.”

Also within living memory of the Civil War, Congress was alarmed at the spread of Taylor’s “slave driving” system. The same year as Taylor published his manifesto *The Principles of Scientific Management*, there was a first organized labor strike against the implementation of a Taylor system. Workers pushed Congress to hold hearings, which it did starting in October 1911.

The testimony at those hearings is worth reviewing for the themes of how inhumane Taylorism could be and how poorly Taylor and his witnesses responded to concerns about harm to workers from oversurveillance and methods of control that have only continued to be perfected today. The testimony was full of references to slavery and pushing human beings beyond their humanity as though they were machines. The chairman of the committee asked an efficiency engineer, for example, whether he would “class a man in the same category that you would an ordinary machine?” Taylor’s witness Herbert Stimpson answered that he considered a man “as a little portable power plant . . . a mighty and delicate complicated machine.” Moreover, “like any machine, you could push a man right up to his limits, so long as you

242. Id. (same).
243. ROSENTHAL, supra note 150, at 201 (quoting Taylor).
244. Id. (same).
245. Id. (quoting Gantt).
246. Id. at 199 (citing ROBERT KANIGEL, THE ONE BEST WAY: FREDERICK WINSLOW TAYLOR AND THE ENigma OF EFFICIENCY 459 (1997), and HUGH G.J. AITKEN, TAYLORISM AT WATERTOWN ARSENAL: SCIENTIFIC MANAGEMENT IN ACTION 1908–1915 (1960)).
247. KANIGEL, supra note 55, at 457.
248. Id. at 458.
249. Investigation of Taylor System of Shop Management: Hearings on H.R. 90 Before the H. Comm. on Labor, 62nd Cong. 650 (1911) [hereinafter Hearings] (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord KANIGEL, supra note 55, at 460 (quoting Chairman Wilson).
250. Hearings, supra note 249, at 650 (testimony of Herbert Stimpson, Efficiency Engineer, Singer Building, New York); accord KANIGEL, supra note 55, at 460 (quoting Stimpson).
figured in a factor of safety."251 Chairman W. B. Wilson followed up to ask: “How would you arrive at the factor of safety in a man?”252 Stimpson replied, “[b]y a process analogous to that by which we arrive at the same factor in a machine.”253 When pressed, Stimpson fell back on a favorite answer: “Specialists. . . . We employ the specialist who knows what the machine can stand, and we should use the specialist who knows what the human frame can stand.”254

The 1911–1912 Congressional hearings also reveal that Taylor’s system seemed to have little empathy for workers who needed to move to relieve pain or otherwise modify their conditions. For example, noticing a mold in the factory, Chairman Wilson asked whether the “workman has to bend over the mold?”255 “Yes, sir,” came the answer.256 The Chairman then inquired whether “having to walk a distance to fetch nails or other supplies. . . [might] afford a chance to straighten up” which might be important to the worker.257 But the answer was that such a movement would be banned as “‘inefficient’ in a scientifically managed shop.”258

Even more fundamentally, a concern that came out in the hearing was whether workers would become, under the spread of Taylorism, “nothing more nor less than human machines to carry out . . . instructions” from management.259 This could lead to the “deskilling” of workers to profit management.260 Chairman Wilson asked whether a witness “believe[d] . . . that the workman’s skill profits him from having ‘all the details of his work mapped out for him by somebody else, giving him no

251. Hearings, supra note 249, at 652 (testimony of Herbert Stimpson, Efficiency Engineer, Singer Building, New York); accord KANIGEL, supra note 55, at 460.

252. Hearings, supra note 249, at 652 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord KANIGEL, supra note 55, at 460 (quoting Chairman Wilson).

253. Hearings, supra note 249, at 652 (testimony of Herbert Stimpson, Efficiency Engineer, Singer Building, New York); accord KANIGEL, supra note 55, at 460 (quoting Stimpson).

254. Hearings, supra note 249, at 652 (testimony of Herbert Stimpson, Efficiency Engineer, Singer Building, New York); accord KANIGEL, supra note 55, at 460.

255. Hearings, supra note 249, at 126 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord KANIGEL, supra note 55, at 461 (quoting Chairman Wilson).

256. Hearings, supra note 249, at 126 (statement of Maj. C. C. Williams, Ordnance Dept., U.S. Army); KANIGEL, supra note 55, at 461 (quoting the response to the congressional investigation).

257. Hearings, supra note 249, at 125–26; KANIGEL, supra note 55, at 461 (describing Chairman Wilson’s inquiry).

258. Hearings, supra note 249, at 125–26; KANIGEL, supra note 55, at 461 (describing Chairman Wilson’s inquiry).

259. Hearings, supra note 249, at 101 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord KANIGEL, supra note 55, at 462 (quoting Chairman Wilson).

260. See KANIGEL, supra note 55, at 462.
latitude to exercise his skill?” 261 The witness had to admit that he thought that “it would hurt a workman.” 262 After that point, the witness, a machinist and sometimes foreman who was trying to defend the management of the factory, lost the major part of his credibility as he had to admit that he could no longer perform the basic skills then expected in a shop such as to modernize it; that he could not redesign the lathes to which motors had been added; that he had never installed any electrical machinery; that he did not know the speeds of direct current motors; that he could not wind them; and that he could no longer work anywhere else selling himself as “a mechanic versed in the erection and installation of electrically driven machinery.” 263

In Taylorism’s overreliance on experts (including the judgment of managers over workers), Chairman Wilson “repeatedly pointed up the arbitrariness he saw in the Taylor system, question[ing] its objectivity, consistency, and fairness.” 264 For example, when a witness attempted to support Taylorism as “based on common sense,” the Chairman asked: “If [the system were] just common sense, wouldn’t it vary with ‘different standards of common sense’ around the country and thus, in a sense, be arbitrary?” 265 In fact, “[w]asn’t common sense really just ‘Mr. Taylor’s ideas and standards of common sense?’” 266

Taylor was also pressed on his obsession with soldiering, or what he perceived as the deliberate slowing down of work. As Wilson asked, “[w]ho . . . is to determine what constitutes soldiering?” 267 Taylor thought

261. Hearings, supra note 249, at 373 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord KANIGEL, supra note 55, at 463 (quoting Chairman Wilson).

262. Hearings, supra note 249, at 373 (testimony of Willard Barker); accord KANIGEL, supra note 55, at 463 (quoting Willard Barker).

263. Hearings, supra note 249, at 399 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord KANIGEL, supra note 55, at 463–64 (describing the remainder of the questioning and quoting Chairman Wilson).


266. Hearings, supra note 249, at 341 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord KANIGEL, supra note 55, at 475 (quoting Chairman Wilson).

267. Hearings, supra note 249, at 1441 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord KANIGEL, supra note 55, at 475 (quoting Chairman Wilson).
that the answer was simple: “a proper day’s work was a matter of ‘accurate, careful scientific investigation.’ Science would determine.”

But the questions kept coming: “[W]asn’t the employer an interested party to this scientific investigation? Wouldn’t that influence the results? How could the workman protect himself?” Taylor asserted that the worker could “refus[e] to work at the pace set,” and be granted a lower wage.

“Workers had but to bring any seeming injustice to the attention of management and an ‘impartial and careful investigation will be made.’” Yet “wasn’t a man selected [for] management likely picked precisely because he would protect the interests of management?” Moreover, “wasn’t it true ‘that the very essence of scientific management is that there must be one directing head[]’ who brooked no interference?”

Under questioning, Taylor resorted again and again to a rhetorical technique of distancing any negative application of a scientific management mechanism from “scientific management itself.” As Professor Kanigel notes, “[i]t was a disingenuous trick, as Taylor’s own correspondence shows.” As Taylor wrote to a potential witness a week later, “[b]y now [Chairman] Wilson ‘perfectly detests the statement that scientific management is mainly a state of mind, and that it ceases to exist when anyone on the management side gets into the wrong state of mind.’”

Taylor was willing to use any “weapons,” “methods,” “devices,” or “shields” he felt that he needed to against his enemies’ “lies,” “wiles,” and “traps.” Although Taylor’s “rhetoric pictured a benign system, a workplace at peace,” under questioning “down from the

268. Hearings, supra note 249, at 1441 (testimony of Frederick Winslow Taylor); accord Kanigel, supra note 55, at 475 (quoting Taylor) .

269. Hearings, supra note 249, at 1441 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord Kanigel, supra note 55, at 475 (quoting Chairman Wilson).

270. Hearings, supra note 249, at 1441 (testimony of Frederick Winslow Taylor); accord Kanigel, supra note 55, at 476 (quoting Taylor) .

271. Hearings, supra note 249, at 1442 (testimony of Frederick Winslow Taylor); accord Kanigel, supra note 55, at 476 (quoting Taylor).

272. Hearings, supra note 249, at 1442 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord Kanigel, supra note 55, at 476.

273. Hearings, supra note 249, at 1443 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord Kanigel, supra note 55, at 476 (quoting Chairman Wilson) .

274. Hearings, supra note 249, at 1442–44 (testimony of Frederick Winslow Taylor); accord Kanigel, supra note 55, at 477 (quoting Taylor) .


276. Id. (quoting Taylor).

277. Id. (same).
mountaintop, on reality’s fetid plains, Fred Taylor was, as usual, at war.  

Chairman Wilson also pressed Taylor on implications of the power imbalance between workers and management. “[W]here was the cooperation . . . if choosing not to cooperate placed the worker’s livelihood in danger?” What “[i]f refusal [of an order], while of no account to [the worker’s] employer, meant starvation to him?” Taylor reacted with denial and obfuscation: “I must say, Mr. Chairman, that I do not exactly catch your meaning; I do not think I understand you.” But, by then, “the chairman may have thought he was dealing with a child, or a naïf, or a cynic of Machiavellian proportion.” Wilson patiently explained, “I will give you an illustration,” and he described the “scenario in which a worker, ‘starvation staring him in the face,’ is forced to capitulate to any terms the employer may demand.”

Taylor’s method of dealing with this question was to explain “what could happen to men who were not, in [his] phrase, ‘first class men,’ and what constituted such a[n inferior] species.” But the Chairman wanted to know why less-than “first class men” should be punished for who they were and what they could do. “If, as was true by 1912, the American worker was already more productive than his counterparts abroad, or his counterparts two hundred years before, yet still often lived in misery, why,” Wilson wanted to know, “squeeze still more work out of him?” Moreover, “if higher production was supposed ‘to add to the comfort and well-being of mankind,’ hadn’t Taylor, in pressing the worker to his limit

278. Hearings, supra note 249, at 1452 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord KANIGEL, supra note 55, at 477.
279. Hearings, supra note 249, at 1452 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord KANIGEL, supra note 55, at 478.
280. Hearings, supra note 249, at 1452 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord KANIGEL, supra note 55, at 478.
281. Hearings, supra note 249, at 1452 (testimony of Frederick Winslow Taylor); accord KANIGEL, supra note 55, at 478.
282. KANIGEL, supra note 55, at 478.
283. Id.; Hearings, supra note 249, at 1452 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management).
284. KANIGEL, supra note 55, at 478; accord Hearings, supra note 249, at 1452 (testimony of Frederick Winslow Taylor).
285. KANIGEL, supra note 55, at 479; accord Hearings, supra note 249, at 1472 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management).
and exacerbating his discomfort, thereby destroyed the very purposes of your production?  

Taylor simply could not recognize that his system could produce discomfort in workers. Efficiency was sacred to him. “I do not look upon it as anything of a misfortune” that a man should ‘spend his working time in useful effort instead of in useless exertion.” But again, who was to decide what the standards would be and how hard workers would have to continue to produce like machines? Wilson wanted to know if Taylor thought that the “employer ‘should have the power to determine absolutely . . . what constitutes comfort’ for [the] employees?”

For Chairman Wilson, Taylorism had been unmasked as justification for the position that “the boss [would be] firmly in charge as usual.” He saw Taylorism as based on a fundamental conflict of interest. “Under our laws,” explained Wilson, “no judge would be permitted to sit in a case in which he had a personal interest.” Nonetheless, “with the power centered in the head of the establishment,” that was precisely the situation under the Taylor system.

Finally, the new technological quality of surveillance under Taylorism was enormously contentious. Part of what is fascinating about reviewing the concerns of 1911–1912 from over a hundred years later is how on-point they seem about the growth and power of technological surveillance today, while reminding us how far our tolerance for major changes in the nature of work have already crept. As Professor Robert Kanigel explains, at the congressional hearing:

The stopwatch itself, the very symbol of Taylorism, exposed the biggest breach between the workers and their masters. To the managers it was just a tool; to the workers it was hideous invasion of privacy, an oppressive all-seeing eye that peered into their work lives,

286. KANIGEL, supra note 55, at 479; Hearings, supra note 249, at 1472 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management).
287. KANIGEL, supra note 55, at 479; Hearings, supra note 249, at 1473 (testimony of Frederick Winslow Taylor).
288. KANIGEL, supra note 55, at 479; Hearings, supra note 249, at 1473 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management).
289. KANIGEL, supra note 55, at 479.
290. Hearings, supra note 249, at 1474 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord KANIGEL, supra note 55, at 479.
291. Hearings, supra note 249, at 1474 (statement of William B. Wilson, Chairman, Special Committee to Investigate the Taylor and Other Systems of Shop Management); accord KANIGEL, supra note 55, at 479.
ripping at their dignity . . . It was the difference in viewpoint between the watcher and the watched.292

Later the committee would agree that elements of scientific management acted “the same as a slave driver’s whip on the negro, as it keeps [the worker] in a constant state of agitation.”293

D. Expansion of Slave Management Techniques Through Taylorism and The Modern Economy

Management has been down this road before. We now have very sophisticated application of these systems to the modern workforce. The gig economy—in which up to one in five Americans works—is based on payments for specific tasks. In fact, one such service is even called TaskRabbit. As Professor Desmond writes, “[j]ust as in today’s gig economy, day laborers during slavery’s reign often lived under conditions of scarcity and uncertainty, and jobs meant to be worked for a few months were worked for lifetimes.”294 Moreover, “[l]abor power had little chance when the bosses could choose between buying people, renting them, contracting indentured servants, taking on apprentices or hiring children and prisoners.”295

Further, consider these specifically modern echoes of slavery as Professor Desmond connects them in discussing limitless worker surveillance. At least Taylor had to “run a [physical] spy ring” in his factories to drum out dissent.296 By contrast:

Today modern technology has facilitated unremitting workplace supervision, particularly in the service sector. Companies have developed software that records workers’ keystrokes and mouse clicks, along with randomly capturing screenshots multiple times a day. Modern-day workers are subjected to a wide variety of surveillance strategies, from drug tests and closed-circuit video monitoring to tracking apps and even devices that sense heat and motion. A 2006 survey found that more than a third of companies with work forces of 1,000 or more had staff members who read through employees’ outbound emails. The technology that accompanies this workplace supervision can make it feel futuristic. But it’s only the technology that’s new. The core impulse behind that

292. Kanigel, supra note 55, at 466.
293. 3 The Taylor and Other Systems of Shop Management: Hearing Before Special Committee of the House of Representatives, at 1869–70 (1912); accord Rosenthal, supra note 150, at 200 (quoting Committee findings).
294. Desmond, supra note 1.
295. Id.
296. Kanigel, supra note 55, at 482.
technology pervaded plantations, which sought innermost control over the bodies of their enslaved workforce.297

The systems of rewards and incentives is better designed than ever to manipulate behavior especially so that workers have a hard time understanding and evaluating their own interests. Before the Civil War, Henry David Thoreau famously compared Southern slavery and Northern wage slavery. A headline about scientific management in England during Taylor’s time ran under the headline “Another Step Towards Industrial Slavery.” 298 And Thoreau’s comments from as far back as 1854 echo menacingly in light of how the endlessly-prodded gig economy has grown today: “[i]t is hard to have a Southern overseer; it is worse to have a Northern one; but worst of all when you are the slave-driver of yourself.”299

E. The Zombie: When Loss of Autonomy Makes Workers Lose Their Souls

There is another connection between slavery and public consciousness since 1915 that neither the standard narrative, nor the researchers working on Taylor and slavery, have put together in their work. This part of the picture derives from work in Language, Religious, African-American, and Afro-Caribbean Studies. Additional monsters come to haunt us in modern America from the history of slavery and our own behavior after Taylorism in the West Indies.

It may be a surprising connection between loss of autonomy and zombies, but the reference has recently become so deep a fear in modern American culture that the historical connection is worth drawing out.300

297. Desmond, supra note 1.
298. KANIGEL, supra note 55, at 521 (quoting headline).
299. HENRY DAVID THOREAU, WALDEN 49 (Jeffrey S. Cramer ed., 2004).
The idea of being worked to the point of losing one’s own soul—one’s ability to make important decisions about one’s life and its direction—appears in popular culture in unexpected ways. There are, of course, huge components of race, class, ethnicity, and other issues that are tied up in the origins of modern management in the U.S. South and West Indies. This Article explicitly acknowledges those issues, and notes that they have dimensions far more complex than can be addressed in this discussion of management surveillance of workers from those times and since.301 Nonetheless, some of our fears about the worst abuses of management come from the use of slavery and post-slavery techniques in these areas. In fact, the history of zombies as a phenomenon in America is based in the experience of enslaved people in Haiti, part of the West Indies. Professor Elizabeth McAlister, from the Religion and African-American Studies departments at Wesleyan University, explains that it is the adoption of “the Haitian zonbi” that in the U.S. “interrogate[s] the boundary between life and death, elucidate[s] the complex relations between freedom and slavery, and highlight[s] the overlap between capitalism and cannibalism.”302 Work in Haiti under the taskmaster system literally sucked the life out of people: “[l]ife on the plantation was so brutal for the enslaved Africans that many didn’t live past their teenage years.

301. There is too much excellent literature on these issues to be noted here. But the fact that these issues have become so complex that references to them sometimes flip the expected racial narrative to describe interactions can be seen by, for example, descriptions of Irish and other white immigrants working under “slave wage” condition in the U.S. North, or the popular meme of an African-American U.S. president (Barack Obama) fleeing a white zombie (Senator John McCain). McAlister, supra note 24, at 459 (reproducing Figure 1 of “Cool Obama” and “Zombie McCain”); Elizabeth McAlister, Obama, Zombies, and Black Male Messiahs, IN MEDIA RES. (Oct 1, 2009), http://mediacommons.org/imr/2009/09/29/black-zombie-killers [https://perma.cc/85GS-DVJ2].

302. McAlister, supra note 24, at 458–59. Zombies are the one modern American “stock horror character that does not have a genealogy in European tradition or much presence in Gothic fiction.” Id. at 461. Zombies are instead born in “the colonial ‘space of death,’” and are “inextricable from the ‘culture of terror’ of the plantation.” Id. (citing MICHAEL TAUSIG, SHAMANISM, COLONIALISM, AND THE WILD MAN: A STUDY IN TERROR AND HEALING (1987)). The zombie specifically haunts us from the time of slavery and from post-slavery conditions as imposed by twentieth-century U.S. business interests. That the zombie terrifies us so much stems from how it is a “modern monster[,] . . . a complex and polyvalent Other that points us to art and thought produced out of the nightmarish aspects of modernity.” Id. As this historical origin is further explained by Professor Patrick Sylvain, “[z]ombies are associated with being in a death-like state, a body without a soul. It’s an idea that emerged in Haiti back when it was a French colony called Saint-Domingue and it was one of the most profitable colonies in the world.” Laine Kaplan-Levenson & Rund Abdefatah, A History of Zombies in America, NPR (Oct. 31, 2019), https://www.npr.org/2019/10/31/774985441/a-history-of-zombies-in-america [https://perma.cc/43C4-YQPR].
They were literally worked to death. And that backbreaking, endless labor hardly felt like living.\footnote{Kaplan-Levenson & Abdelfatah, supra note 302.}

There was a direct connection between work conditions under the taskmaster system on Haiti—becoming unthinking cogs in a machine—and zombies. As Language Studies Professor Patrick Sylvain explains, conditions in Haiti created “a place where the slaves were broken, . . . to be made docile and servile. This person becomes, in a sense, a machine of production. And, therefore, with the loss of the will, symbolically speaking, this person becomes a zombie. The slave is the perfect zombie.”\footnote{Id. (quoting Professor Sylvain); accord McAlister, supra note 300, at 465 (“Under slavery, Afro-Caribbeans were rendered nonhuman by being legally transposed into commodities.”).}

Even though enslaved people in Haiti had previously revolted against the French, once the U.S. invaded Haiti to protect its business interests in 1915, the U.S. “instituted a formal system of unpaid labor which forced Haitians to build new roads. This imposed yet another form of slavery and zombification.”\footnote{Kaplan-Levenson & Abdelfatah, supra note 302.} With the U.S. invasion of Haiti arrived a new vanguard of U.S. journalists and travel writers in Haiti who “had never encountered autonomous, independent black men who resisted white rule.”\footnote{Id. (quoting Professors McAlister and Sylvain).}

Widespread fear of this worker driven to revolt from overwork and senseless control was additionally propagated to the mainland through the 1929 sensationalist travel book \textit{The Magic Island} by New York Times reporter William Seabrook stationed in Haiti.\footnote{Kaplan-Levenson & Abdelfatah, supra note 302.}

Since then, zombie narratives commonly describe a battle between the survival of humanity as spontaneous and engaged versus its loss of autonomy by joining the soulless overworked.\footnote{See, e.g., \textit{The Walking Dead} franchise supra note 300. Additionally, zombie stories first grip the American popular imagination after 1929 just as the Great Depression settles upon the country and workers think of themselves as the walking dead.} Although we may now consider zombie stories to be light entertainment, it would be a blindness to our history “[t]o lose the genesis of the zombie within trans-Atlantic slavery.”\footnote{Kaplan-Levenson & Abdelfatah, supra note 302 (quoting Professor Sylvain).} These narratives and the fear they inspire are continuing testament to the inhumanity of working conditions both during and, 303. Kaplan-Levenson & Abdelfatah, supra note 302.
304. Id. (quoting Professor Sylvain); accord McAlister, supra note 300, at 465 (“Under slavery, Afro-Caribbeans were rendered nonhuman by being legally transposed into commodities.”).
306. Id. (quoting Professors McAlister and Sylvain). Out of the U.S. taskmasters’ fear of workers resisting came the myth of the zombie as dangerous to others. As academics who study West Indian history explain the reaction, “[H]ow do you then demonize these people who resisted? Call them cannibal. Then the black man, the black body, becomes a consumer of flesh.” Id. (quoting Professor Sylvain). Accordingly, it was not until after the U.S. occupation of Haiti to satisfy its business interests that zombies are reimagined as an aggressive walking monster. See id.
308. See, e.g., \textit{The Walking Dead} franchise supra note 300. Additionally, zombie stories first grip the American popular imagination after 1929 just as the Great Depression settles upon the country and workers think of themselves as the walking dead.
309. Kaplan-Levenson & Abdelfatah, supra note 302 (quoting Professor Sylvain).
importantly at the hands of U.S. business interests, after the formal end of slavery.

It is with this freight that workers at Amazon in 2016 called themselves “Amazombies.”310 The experience of working in a modern Amazon warehouse is “dehumanising.”311 As a worker describes, under constant surveillance, the job is “all about being bossed around by a scanner and having no thoughts beyond the next shelf number.”312 As another worker explains the repercussions: “You just leave your brains behind when you start working here. You’re just a zombie.”313

F. The Human Robot: When Loss of Autonomy Makes Workers Lose Their Humanity

A related fear expressed by workers within Amazon and other companies is that they have become “flesh robots,” who are pushed by the surveillance systems of the company at all times for their labor at the price of their humanity.314 Under constant monitoring, the message that workers receive is that “[i]f you’re a good Amazonian, you become an Amabot.”315 The term “Amabot” is similar to having been swallowed by the zombie masses in that a person has lost his or her humanity, and “you have become at one with the system.”316

It is the pervasive, technological, and inescapable quality of the surveillance at Amazon and other companies that provokes this reaction in workers. As an Amazon critic has noted, “[o]ne of the things that we hear consistently from workers is that they are treated like robots in effect because they’re monitored and supervised by . . . automated systems.”317

310. Lorraine Kelly, Amazombies, PRESS READER (Dec. 4, 2016), https://www.pressreader.com/ireland/the-irish-mail-on-sunday/20161204/282230895310580 (last visited on Nov. 18, 2019).
311. Id.
312. Id. (quoting worker in Amazon warehouse).
313. Id. (same).
316. Id.
In Amazon’s case, and many suspected others, the company literally fires workers on the basis of automated computer algorithmic results. 318

In an article entitled We Are All ‘Amabots’ Now: Jeff Bezos Just Perfected the ‘Burn and Churn’ Philosophy That’s Sucking American Workers Dry, journalist Annie Zaleski concludes that, “[f]or all its revolutionary rhetoric, Amazon is just an outsized example of what plagues our entire approach to work.” 319 According to Zaleski, stories about Amabots such as a 2015 investigative report in the New York Times strike a nerve in the modern American public because they “not only confirm[] the stereotype that corporate culture is cold and unforgiving—[they] sum[] up the experiences of workers in nearly every industry, not just tech.” 320 We are being pushed to become robots by

[p]ower-tripping bosses, incompetent management, lack of work-life balance, guilt for not being available for a job 24-7, and a fear of falling behind due to sickness or time off[ that are now] endemic in U.S. employment culture, where the 47-hour work week is now the norm, vacation time goes unused and paid maternity leave isn’t mandatory. 321

If all that some managers want is the physical labor of workers, that will leave many willing workers already at a disadvantage, 322 and it particularly discounts the contributions of those who bring creativity and innovation to a job. Workers in Amazon’s warehouses must walk up to fifteen miles a day attached to a clipboard that tracks their every movement and punishes them for being a second late. 323 Both the New York Times and Zaleski note “a ‘Lord of the Flies’-esque environment where the perceived weakest links are culled every year, stack-ranking makes yearly layoffs mandatory, and employees facing serious health problems were put on ‘performance improvement plans’ because these issues impacted their work.” 324

318. Id. (attaching documents from Amazon’s attorneys).
319. Annie Zaleski, We Are All “Amabots”: Now: Jeff Bezos Just Perfected the “Burn and Churn” Philosophy That’s Sucking American Workers Dry, SALON (Aug. 18, 2015), https://www.salon.com/2015/08/18/we_are_all_ambots_now_jeff_bezos_just_perfected_the_burn_and_churn_philosophy_thats_sucking_american_workers_dry/ [https://perma.cc/NT4U-985L].
320. Id.
321. Id.
324. Zaleski, supra note 319.
Additional reports confirm that the repetitive nature of the jobs at Amazon can be punishing even for young, able-bodied workers.\textsuperscript{325} The negative analogy to robots is constantly under the surface. As one employee who was fired for not meeting physical targets after she was injured on the job expressed about conditions at the company: “I’m so angry. Amazon doesn’t want humans, they want robots. I will have this [injury] forever because of them. They don’t care at all.”\textsuperscript{326}

Extrapolating from documents disclosed by Amazon during litigation in 2018, ten percent of its workers may be fired from warehouses by the automated system each year.\textsuperscript{327} According to documents, “the company fired ‘hundreds’ of employees at a single facility between August of 2017 and September 2018 for failing to meet productivity quotas” under the company’s automated system.\textsuperscript{328} “Amazon operates more than 75 fulfillment centers with more than 125,000 full-time employees,” suggesting that, even among full-time employees, some 12,500 people “lose their jobs with the company annually for failing to move packages quickly enough.”\textsuperscript{329}

In the white-collar workforce, surveillance and monitoring have a different tone than in the warehouse, but reducing human qualities to numerical ranking can be equally penalizing to workplace differences. Amazon’s white collar “uber-competitive policies are particularly unfriendly and alienating to women.”\textsuperscript{330} As the New York Times elaborates, “[s]everal former high-level female executives, and other women participating in a recent internal Amazon online discussion . . . said they believed that some of the leadership principles worked to their disadvantage.”\textsuperscript{331} Women “lose out in promotions because of intangible criteria like ‘earn trust’ (principle No. 10) or the emphasis on disagreeing with colleagues. Being too forceful, they said, can be particularly hazardous for women in the workplace.”\textsuperscript{332}

Finally, part of our fear of becoming robots is also losing the ability to express our appropriate human emotional responses at work. In 2018,
Professors Frischmann and Selinger’s book *Re-engineering Humanity* references Batman’s nemesis the Joker, who is terrifying to us because the emotion carved permanently into his face is at odds with the full range of human expression he must feel, but that is repressed—with disastrous consequences.333 Showing what resonance this dissonance has in current popular culture, a 2019 major film release about the Joker went to a particularly dark place of nightmares. According to film critics, 2019’s *Joker* story is different from previous films by providing the “verité gravitas” the public “badly” needed in its storytelling.334 The story is about “the kind of hate that emerges from crushed dreams,” and “a pathetic specimen of raw human damage.”335 The movie is “an exploration of empathy and the personal impact of a society devoid of it.”336 *Joker* culminates in a commentary on how “[t]his is what America has come to—a place where people feel like blowing their brains out.”337

How is an unconventional movie like this playing in modern society? In its opening weekend, the movie has made over U.S. $251 million.338 By the end of October 2019, only three weeks into its release and even before being shown in China, the movie had become “the top R-rated movie of all time by global box-office revenue.”339 Although industry insiders describe the movie as an unlikely hit, *Joker*’s dystopian vision of modern American conditions may indeed hit such a raw nerve that it becomes the “first $1 billion R-rated” picture.340 There are widespread frustrations in the population that stories such as this tap into.

333. FRISCHMANN & SELINGER, supra note 125, at 33.
335. Id.
337. Gleiberman, supra note 334.
340. Shaw & Horan, supra note 339.
CONCLUSION

When limitless worker surveillance can be justified by businesses without question on the basis of how it increases their profits—even if it inflicts harms on the workers who make up society—management will fight against putting that genie back in the bottle. As Professor Zuboff describes in the surveillance capitalism context, “it becomes clear that demanding privacy from surveillance capitalists or lobbying for an end to commercial surveillance on the Internet is like asking Henry Ford to make each Model T by hand.” 341 Businesses, as in dealing with slavery in the U.S. South and West Indies, 342 will argue that giving up or modifying the way in which they have produced profits at the expense of workers is “like asking a giraffe to shorten its neck or a cow to give up chewing. Such demands are existential threats that violate the basic mechanisms of the entity’s survival.” 343 Just as abolitionists’ demands were met with retrenchment on the part of slave owners, “[h]ow can we expect companies whose economic existence depends upon behavioral surplus to cease capturing behavioral data voluntarily?” 344 Businesses think of this request as being asked to commit “suicide.” 345

But slave owners were forced to give up their slaves and confront the harms inflicted by their methods of production. There must be boundaries in the endless pursuit of owners’ aggregation of profits. We cannot easily expect management to come to this conclusion itself, nor in a competitive economy, expect that it will have the support of boards and investors to walk such a different road alone. Instead, what we are witnessing is a race to the bottom. Consider how this Article opened with the future of what we may see in competition from China. This system is what U.S. businesses may feel that they have to implement to achieve a competitive edge, or even to avoid being perceived as falling behind. Within the United States in 2018, already roughly seventy percent of businesses admit to using “people analytics” and the use of artificial intelligence to “crunch monitoring data” on their workforces. 346

341. Zuboff, supra note 83.
342. See reaction of businessmen from the 1840s and 1850s, supra note 188. “[B]usinessmen of the 1840s and 1850s [attempted] . . . to separate business and morality into distinct realms. Merchants and manufacturers in the past did know that slavery was a moral problem, but then they tried to say that such moral considerations were extraneous to the concerns of business.” Id.
343. Zuboff, supra note 83.
344. Id.
345. Id.
But U.S. managers may still have room for the queasiness we now feel about slavery.347 As examiner of the Holocaust Hannah Arendt once observed, “indignation is the natural human response to that which degrades human dignity.”348 Even in 2019, less than a third of CEOs who admit that they collect extensive data on their workforces personally feel that their companies use the data responsibly.349 Even when businesses know that worker consent essentially waives management’s liability for surveillance,350 fifty-six percent of business leaders admit that their companies do not ask workers for their consent.351

If these last statistics may potentially be the signs of a guilty conscience, then the time to act to curb limitless worker surveillance is now. Business interests in surveillance and its accompanying behavioral modification techniques will only become stronger as businesses watch their competitors adopt the same technology. Accordingly, it is time to force management to ask itself some basic questions. The basic outline of these questions is as follows. A subsequent article on similar topics will also frame these questions for judicial review in the law.352

Future evaluation of surveillance methods should ask:

- **Who is impacted?** This is an inquiry into how extensive the surveillance is and who experiences it. For example, why do businesses need to install GPS monitoring on all their workers’ phones if only a few of them ever leave the workplace for business purposes during business hours?
- **Degree of impact?** This is an analysis of the impact the type of surveillance will have on the psyche of workers. Is it surveillance that they can meaningfully turn off when they are legitimately

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347. See supra Section II(B) and note 158.
348. ZUBOFF, supra note 101, at 522 (citing Hannah Arendt); see Hannah Arendt, A Reply to Eric Voegelin, in THE PORTABLE HANNAH ARENDT 159 (Peter R. Baehr ed., 2003) (“The natural human reaction to such conditions is one of anger and indignation because these conditions [of poverty] are against the dignity of man. If I describe these conditions without permitting my indignation to interfere, I have lifted this particular phenomenon out of its context in human society and have thereby robbed it of part of its nature, depriving it of one of its most inherent qualities.”).
350. See supra Introduction and notes 20–23.
352. See Nelson, supra note 25.
“backstage”? Will this surveillance yield information that is not the manager’s legitimate business or that may have discriminatory impact such as women’s fertility status and menstrual cycle?  

- **How monitoring is experienced?** This is a concern that certain types of monitoring are experienced as particularly oppressive, invasive, or demoralizing. Do the workers have to be implanted with a microchip that is not easily removed? Do the workers have to be strapped into an exoskeleton that transports them from place to place or wear a wrist band that guides their hands with haptic feedback to the location that the manager desires? 

- **Are the data needed?** This is a question about whether all the data are needed and how much additional information not necessary to managers may be swept up in its collection. If, for example, managers establish a specific need for GPS monitoring during certain times, do they need workers to wear trackers that also collect health information such as heartbeat, steps walked, sleep patterns, temperature, and so on? 

- **Is the effort counterproductive in the long-term?** This is a discussion about the long-term culture and impact that too much monitoring may have.
surveillance has on the workplace. Is it changing the workplace to destroy worker morale and ethical engagement? This set of concerns seeks to flip the lens through which both businesses and regulators have been thinking about workplace surveillance to consider its corrosive effects.359

As will be explored in a future article, the ultimate issue at stake for workers is a threat to their autonomy.360 But also to be explored is the benefit to managers in limiting worker surveillance to only what is necessary and enjoying the benefits of a happier, more engaged, and more creatively productive workforce. That type of workforce, not the children sitting in class wearing brainwave surveillance headbands,361 is the workforce that we should be trying to develop for our future.

359. See, e.g., Filabi & Hurley, supra note 145 (“Monitoring employees can have benefits, but it can also decimate employee morale and, paradoxically, weaken ethical behavior.”); J.S. Nelson, The Dark Side of Compliance, in CAMBRIDGE HANDBOOK ON COMPLIANCE (Benjamin van Rooij & Daniel D. Sokol eds., forthcoming) (on file with author).

360. See Nelson, supra note 25.