Extraordinary Times, Extraordinary Measures: Protecting the Right to Organize in the Age of Algorithmic Management

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In the modern workplace, employers commonly subject their workers to electronic monitoring and algorithmic management practices. Under the National Labor Relations Act (NLRA), this surveillance does not comprise an unfair labor practice because it is not "out of the ordinary." But this interpretation is mistaken: Algorithmic management's chilling effect on organizing is the same or worse than that of a manager monitoring emails for hints of a union campaign—a long-established unfair labor practice. The National Labor Relations Board's (NLRB) former General Counsel has proposed a framework that would make this kind of surveillance presumptively unlawful and require businesses to give notice of the surveillance to employees. This Note argues that the NLRB should go further to address the threat that algorithmic management poses to workers' right to organize. The Board should find algorithmic management practices unlawful and issue a narrow bargaining order to remedy electronic surveillance's infringement on workers' rights under Section 7 of the NLRA. Part I of this Note charts the evolution of algorithmic management and its treatment under existing legal regimes. It illustrates how these practices chill organizing efforts and thus violate Section 8(a)(1) of the Act. Part II proposes remedying this unfair labor practice with a narrow bargaining order. Part III addresses impediments to adopting this framework.

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INTRODUCTION

At grocery chain Whole Foods, employees fulfilling online orders are assigned a "units per hour" score—that is, how many

items they can pick off the shelves in 60 minutes.[1] Managers monitor the path they take through the store, too, and inefficiency may be grounds for discipline.[2] That's not all the supermarket, which Amazon acquired in 2017 for $13.7 billion,[3] tracks. Whole Foods has used heat maps to calculate stores at greatest "risk" of unionization using over two dozen metrics, including "employee loyalty, turnover, and racial diversity; tipline calls to human resources; proximity to a union office; and violations recorded by the Occupational Safety and Health Administration [(OSHA)]."[4] Workers say that the widespread surveillance "is so intense that they can't breathe."[5] But despite relatively high union density in retail grocery,[6] just one Whole Foods location has voted in favor of unionization.[7]

Employers increasingly use real-time employee data for everything from tracking productivity or monitoring health and safety risks to informing automated disciplinary decisions.[8] This

1. *See* Madeline Stone & Alex Bitter, *Whole Foods Workers Describe Tracking Systems in Stores, with Amazon Watching How Fast They Scan Items and Whether They Immediately Respond to Job Alerts*, BUS. INSIDER (Feb. 10, 2022, 12:24 PM) (on file with the *Columbia Journal of Law & Social Problems*), https://www.businessinsider.com/whole-foods-workers-say-tracking-and-metric-system-is-like-amazons-2022-2.

2. *See* More Perfect Union, *The Hidden Horror of Whole Foods*, YOUTUBE (Dec. 4, 2024), https://www.youtube.com/watch?v=e0gUJYhi6jY&t=569s [https://perma.cc/5T2Z-LL82].

3. *See* Sarah Whitten, *Whole Foods Stock Rockets 28% on $13.7 Billion Amazon Takeover Deal*, CNBC (June 16, 2017, 3:44 PM), https://www.cnbc.com/2017/06/16/amazon-is-buying-whole-foods-in-a-deal-valued-at-13-point-7-billion.html [https://perma.cc/43LH-5N65].

4. Hayley Peterson, *Amazon-owned Whole Foods Is Quietly Tracking Its Employees with a Heat Map Tool That Ranks Which Stores Are Most at Risk of Unionizing*, BUS. INSIDER (Apr. 20, 2020, 10:52 AM) (on file with the *Columbia Journal of Law & Social Problems*), https://www.businessinsider.com/whole-foods-tracks-unionization-risk-with-heat-map-2020-1.

5. More Perfect Union, *supra* note 2.

6. *See* RUTH MILKMAN, NEW YORK CITY'S RETAIL GROCERY INDUSTRY: ECONOMIC RESTRUCTURING AND ITS IMPACT ON ORGANIZED LABOR 4 (2021), https://slu.cuny.edu/wp-content/uploads/2021/04/CUNY-SLU-Grocery-Report_C2411.pdf [https://perma.cc/Y9MF-PPNX] (discussing how nationally, supermarket workers' rate of unionization is quadruple that of retail workers generally, and more than double that of private sector workers).

7. *See* Spencer Soper, *Whole Foods Union Faces Tough Task to Secure Contract with Amazon*, BLOOMBERG (Jan. 29, 2025, 12:05 PM) (on file with the *Columbia Journal of Law & Social Problems*), https://www.bloomberg.com/news/newsletters/2025-01-29/union-win-by-whole-foods-workers-doesn-t-guarantee-contract-with-amazon.

8. *See generally* Alex Hertel-Fernandez, *Estimating the Prevalence of Automated Management and Surveillance Technologies at Work and Their Impact on Workers' Well-Being*, WASH. CTR. FOR EQUITABLE GROWTH (Oct. 1, 2024), https://equitablegrowth.org/research-paper/estimating-the-prevalence-of-automated-management-and-surveillance-technologies-at-work-and-their-impact-on-workers-well-being/ [https://perma.cc/55DF-M8PS].

practice is known as algorithmic management.[9] Corporations use algorithms to raise or lower worker pay based on consumer demand, catalog worker performance by tracking how quickly they hit quotas, automatically discipline or terminate workers based on performance, and more.[10]

Critically, these practices curtail workers' ability to organize their workplaces and exercise other rights the National Labor Relations Act (the NLRA or the Act) guarantees.[11] These "Section 7" rights include "the right to self-organization, to form, join, or assist labor organizations, to bargain collectively through representatives of their own choosing, and to engage in other concerted activities for the purpose of collective bargaining or other mutual aid or protection."[12] Retaliation for union organizing is unlawful under the Act,[13] and surveillance is presumptively unlawful when it infringes on workers' Section 7

9. *See* ANNETTE BERNHARDT ET AL., DATA AND ALGORITHMS AT WORK: THE CASE FOR WORKER TECHNOLOGY RIGHTS, UC BERKELEY LAB. CTR. 6–14 (2021), https://laborcenter.berkeley.edu/wp-content/uploads/2021/11/Data-and-Algorithms-at-Work.pdf [https://perma.cc/WTN6-ZRD7] (discussing algorithmic management and worker data collection practices in industries such as warehouses, retail, home care, the public sector, and others).

10. *See* Veena Dubal, *On Algorithmic Wage Discrimination*, 123 COLUM. L. REV. 1929 (2023) (dynamic wage setting); Letter from Crystal S. Carey, Associate, Morgan, Lewis & Bockius LLP, to Barbara Elizabeth Duvall, Esq., Field Attorney, NLRB Region 5 (Sept. 4, 2018) [hereinafter Morgan Lewis Letter] ("Amazon's system tracks the rates of each individual associate's productivity and automatically generates any warnings or terminations regarding quality or productivity without input from supervisors."); Colin Lecher, *How Amazon Automatically Tracks and Fires Warehouse Workers for 'Productivity*,*'* VERGE (Apr. 25, 2019, 12:06 PM), https://www.theverge.com/2019/4/25/18516004/amazon-warehouse-fulfillment-centers-productivity-firing-terminations [https://perma.cc/8KUP-RLDX] (performance); Julia Lang Gordon, Note, *Under Pressure: Addressing Warehouse Productivity Quotas and the Rise in Workplace Injuries*, 49 FORDHAM URB. L.J. 150, 150 (2021) (automated discipline); *see also generally* ALEXANDRA MATEESCU & AIHA NGUYEN, EXPLAINER: ALGORITHMIC MANAGEMENT IN THE WORKPLACE, DATA & SOC'Y (2019), https://datasociety.net/wp-content/uploads/2019/02/DS_Algorithmic_Management_Explainer.pdf [https://perma.cc/X2K3-E3T8] (describing use cases for algorithmic management and these practices' relationship to worker dignity and autonomy). For a more thorough discussion of how these technologies operate, see Jeffrey M. Hirsch, *Future Work*, 2020 U. ILL. L. REV. 889, 894–900, 906–915 (2020).

11. *See* Wilneida Negrón & Aiha Nguyen, *The Long Shadow of Workplace Surveillance*, STAN. SOC. INNOVATION REV. (Sept. 6, 2023) (workplace surveillance's impact on workers' ability to unionize is "particularly worrisome").

12. 29 U.S.C. § 157. The Taft-Hartley Act (1947) amended this section to include the right to refrain from organizing activities "except to the extent that such right may be affected by an agreement requiring membership in a labor organization as a condition of employment." Labor Management Relations (Taft-Hartley) Act § 101, 29 U.S.C. § 157.

13. *See* 29 U.S.C. § 158(a)(3) ("It shall be an unfair labor practice for an employer . . . by discrimination in regard to hire or tenure of employment or any term or condition of employment to encourage or discourage membership in any labor organization.").

rights.[14] For example, a supervisor installing cameras in the break room because they heard rumors of an organizing drive would clearly violate Section 8(a)(1) of the Act, which makes it unlawful for employers to "interfere with, restrain, or coerce employees" in their exercise of Section 7 rights.[15] But employers also use algorithmic management to evade accountability, such as by using an automated scheduling system to randomly shuffle workers' assigned shifts and separate the leader of an organizing drive from their comrades.[16] Since algorithmic management applies to *all* employees, regardless of their involvement in organizing, employers have not clearly violated the Act. But where bosses monitor and catalog employees' every move in the workplace, employees feel constrained from acting collectively against the boss' interests, even when the law nominally protects them.[17] The nature of the algorithmically managed workplace itself deters organizing.

In October 2022, Jennifer Abruzzo, then the National Labor Relations Board (NLRB) General Counsel, issued a memo addressing electronic surveillance's chilling effect on labor organizing. She proposed a new framework for determining whether algorithmic management constitutes unlawful surveillance.[18] Under her approach, an employer has "presumptively" committed an unfair labor practice "where the employer's surveillance and management practices, viewed as a whole, would tend to interfere with or prevent a reasonable employee from engaging in activity protected by the Act."[19] An employer could overcome this presumption by establishing that its practices "are narrowly tailored to address a legitimate business

14. *See infra* Part III.B.

15. *See* 29 U.S.C. § 158(a)(1) ("It shall be an unfair labor practice for an employer to interfere with, restrain, or coerce employees in the exercise of the rights guaranteed in section 157 of this title . . . ."); *id.* § 158(a)(3) (it is an unfair labor practice to discriminate "in regard to hire or tenure of employment or any term or condition of employment to encourage or discourage membership in any labor organization"); *see also* Nat'l Captioning Inst., 368 N.L.R.B. No. 105, slip op. at 7 (2019) (regarding surveillance) ("It is well settled that an employer commits unlawful surveillance if it acts in a way that is out of the ordinary in order to observe union activity.").

16. *See infra* Part I.A.

17. *See infra* notes 74–76 and text accompanying.

18. Memorandum from Jennifer A. Abruzzo, General Counsel, to All Regional Directors, Officers-in-Charge, and Resident Officers (Oct. 31, 2022) [hereinafter Electronic Surveillance Memo], https://www.nlrb.gov/news-outreach/news-story/nlrb-general-counsel-issues-memo-on-unlawful-electronic-surveillance-and [https://perma.cc/M376-KZ36].

19. *Id.* at 8.

need."[20] When the employer's business need outweighs employees' Section 7 rights, the employer must disclose "the technologies [the employer] uses to monitor and manage [employees], its reasons for doing so, and how it is using the information it obtains" as a remedy.[21]

This framework is a critical step towards recognizing the dangers that algorithmic management poses to workers' associational freedoms. It adapts the NLRB's existing jurisprudence on surveillance to a new, more technologically sophisticated era. The proposed remedy, however, is insufficient to prevent employers from using algorithmic management to infringe on workers' ability to organize. First, the "legitimate business need" requirement could be easily surmounted. Amazon, for instance, could claim a "legitimate business need" by presenting data demonstrating that traditional human-mediated discipline would congest the tight supply chain management necessary to fulfill the company's delivery objectives.[22] Second, the remedial notice and disclosure requirements would not remove the obstacles to organizing that algorithmic management creates. Employees so closely monitored that they "can't breathe" are less likely to be able to initiate organizing at all, let alone marshal majority support for a union.[23] Beyond protecting the right to organize, a new framework would also protect employees' dignitary interests more broadly. First, because algorithmic management disproportionately affects low-wage workers and workers of color,[24]

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20. *Id.*

21. *Id.*

22. *See* Morgan Lewis Letter, *supra* note 10 at 1 ("In order to ensure that associates are processing orders as efficiently as possible, Amazon developed a proprietary productivity metric for measuring and weighting productivity of each associate.").

23. To become the exclusive representative of a group of workers, triggering the employer's duty to bargain under the Act, a union must win a representation election by a majority vote. *See* 29 U.S.C. 159(a). A union may petition for a representation election by presenting a "showing of interest" that 30% or more of a proposed bargaining unit wish to be represented by the union. *See* 76 Fed. Reg. 80138, 801358 (2011) (codified at 29 C.F.R. §§ 101, 102) (30% threshold is an administrative determination that is nonlitigable). It is typical practice for unions to demonstrate this showing of interest by having employees sign authorization cards. *See Your Right to Form a Union*, NAT'L LAB. RELS. BD., https://www.nlrb.gov/about-nlrb/rights-we-protect/the-law/employees/your-right-to-form-a-union [https://perma.cc/MKJ8-RVQP]. As this Note posits, *see infra* Part II, minority unionism—which recognizes the power of any group of workers acting collectively for their mutual aid without need for an exclusive-representation election—is a permissible interpretation of the Act.

24. *See* BERNHARDT ET AL., *supra* note 9 at 19 ("[N]otions of consent to new technologies or the ability to find better conditions elsewhere are not meaningful or available to low-wage workers, women, and workers of color, who face a labor market that is often dominated

continued acceptance of the practice risks limiting the pool of workers who are able to organize along economic and racial lines. Second, recognition of a "legitimate business need" for algorithmic discipline would entrench management's use of these technologies, increasing negative outcomes for workers as these technologies are refined to maximize employer gains at the expense of employee rights.

This Note argues that beyond adopting this proposed framework, the Board should find the unilateral use of algorithmic management unlawful *a fortiori* as an inherent restraint on employees' Section 7 rights. To remedy this unfair labor practice, the Board should order companies to bargain with their workers over the issue of algorithmic management, building on the framework of *Gissel* bargaining orders.[25] Once workers have been able to negotiate algorithmic management's effects on their terms and conditions of employment, the Board may sanction its use in that workplace. Part I will illustrate how algorithmic management chills low-wage worker organizing and why the NLRB should interpret it as an unfair labor practice. Part II will show how existing law enables the NLRB to remedy algorithmic management's infringement on workers' rights with a bargaining order. Part III will address roadblocks for implementing this legal framework, particularly the NLRA's prohibition on remedies for workers fired for cause. While algorithmic management affects workers across the socioeconomic spectrum,[26] this Note focuses on

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by employers competing on the basis of cutting labor costs."); Hertel-Fernandez, *supra* note 8, at 11–12; *see also* Frank Pasquale, *Licensure as Data Governance*, KNIGHT FIRST AMEND. INST. (Sept. 28, 2021), https:// knightcolumbia.org/content/licensure-as-data-governance [https://perma.cc/R3EE-7NM8] (critiquing consent-based models of data governance given the information asymmetries between data collectors and consumers).

25. *See* NLRB v. Gissel Packing Co., 395 U.S. 575, 579 (1969) (validating the *Gissel* bargaining order as a constitutional remedy). *Gissel* bargaining orders remedy situations where an employer's union-busting practices have made it impossible for a union to win a representation election. *See id.*; *see also* NLRB v. J. Weingarten, Inc., 420 U.S. 251, 266 (1975) (finding that the Board has a responsibility to "adapt the Act to the changing patterns of industrial life."); *infra* Part II.A.

26. The COVID-19 pandemic increased awareness of algorithmic management for computer workers. *See* BRISHEN ROGERS, DATA AND DEMOCRACY AT WORK: ADVANCED INFORMATION TECHNOLOGIES, LABOR LAW, AND THE NEW WORKING CLASS 77 (2023) [hereinafter ROGERS, DATA AND DEMOCRACY]. But this trend is not likely to dissipate post-COVID: In a January 2023 report, 98% of human-resources professionals surveyed said they would rely on software and algorithms to reduce labor costs in a recession; 47% said they would feel "completely comfortable" relying entirely on their technology's recommendations of which workers to lay off. Brian Westfall, *Algorithms Will Make Critical Talent Decisions in the Next Recession—Here's How to Ensure They're the Right Ones*, CAPTERRA (Jan. 9, 2023), https://www.capterra.com/resources/recession-planning-for-businesses/

nonunion workers in low-wage workplaces where algorithmic management is both more prevalent and more harmful.[27]

This Note recognizes that this proposal would constitute a departure from the NLRB's extant balance of worker and management rights.[28] This balance is highly likely to tip further in favor of management under the second Trump administration,[29] especially after his summary removal of General Counsel Abruzzo and Board Member Gwynne Wilcox,[30] which will hobble the

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[https://perma.cc/T25S-UA5U]. A 2024 study found that while automated management and surveillance were present across all wage levels and industries, it was more prevalent in larger corporations. *See* Hertel-Fernandez, *supra* note 8, at 13. Further, workers who reported more frequent monitoring were "more likely to report working faster than would be healthy or safe," workplace anxiety, and workplace-related injuries. *Id.* at 14–18.

27. *See* WILNEIDA NEGRÓN, LITTLE TECH IS COMING FOR WORKERS 58–59 (2021), https://home.coworker.org/wp-content/uploads/2021/11/Little-Tech-Is-Coming-for-Workers.pdf [https://perma.cc/42RV-G6NC] (discussing emerging technologies that enable algorithmic management in low-wage sectors). This Note's framework is inapplicable to unionized workers who have been able to win a representation election because they already enjoy the right to bargain over algorithmic management. *See infra* Part I.B.2.

28. This Note's proposal would be a significant shift even considering the worker-friendly developments during General Counsel Abruzzo's tenure. *See generally* LYNN RHINEHART, CELINE MCNICHOLAS, & MARGARET POYDOCK, THE BIDEN BOARD: HOW PRESIDENT BIDEN'S NLRB APPOINTEES ARE RESTORING AND SUPPORTING WORKERS' RIGHTS, ECON. POL'Y INST. (May 1, 2024), https://www.epi.org/publication/bidens-nlrb-restoring-rights/ [https://perma.cc/4QCN-FLGJ] (contrasting Biden precedent to Trump precedent).

29. Trump appointees have expressed support for expanding the use of artificial intelligence (AI) through a deregulatory approach, which would enable employers to scale the use of algorithmic management to increase control over workers. *See* Justine Calma, *Donald Trump's EPA Pick Wants to 'Make America the AI Capital of the World'*, VERGE (Nov. 12, 2024, 11:56 AM), https://www.theverge.com/2024/11/12/24294483/donald-trump-ai-data-center-epa-lee-zeldin [https://perma.cc/WXT5-XA49]; *see also* John Villasenor & Joshua Turner, *AI Policy Directions in the New Trump Administration*, BROOKINGS INST. (Nov. 14, 2024), https://www.brookings.edu/articles/ai-policy-directions-in-the-new-trump-administration/ [https://perma.cc/S9VC-FC99] (summarizing reporting on the Trump II administration's proposed deregulatory approach to AI). What is more, the prior Trump administration effected massive changes in labor law in employers' favor. *See generally* Celine McNicholas, Margaret Poydock, & Lynn Rhinehart, UNPRECEDENTED: THE TRUMP NLRB'S ATTACK ON WORKERS' RIGHTS, ECON. POL'Y INST. (Oct. 16, 2019), https://www.epi.org/publication/unprecedented-the-trump-nlrbs-attack-on-workers-rights/ [https://perma.cc/5ZC9-6R5H] (reviewing Trump Board precedent). For further discussion of the politicization of the NLRB, see *infra*, note 112 and accompanying text.

30. *See* Josh Eidelson, *Trump Ousts Top Labor Board Leaders Who Backed Broader Worker Rights*, BLOOMBERG, (Jan. 28, 2025, 10:11 PM) (on file with the *Columbia Journal of Law & Social Problems*), https://www.bloomberg.com/news/articles/2025-01-28/trump-fires-nlrb-general-counsel-jennifer-abruzzo; *see also* Andrea Hsu, *Trump Fires EEOC and Labor Board Officials, Setting up Legal Fight*, NPR (Jan. 28, 2025, 6:07 PM), https://www.npr.org/2025/01/28/nx-s1-5277103/nlrb-trump-wilcox-abruzzo-democrats-labor [https://perma.cc/T4RW-HXR5] (describing how the move is likely to tee up a legal challenge to Humphrey's Executor v. United States, 295 U.S. 602 (1935), where the Court held that Congress may protect members of independent agencies from unilateral removal by the president).

Board's operations.[31] Nonetheless, this Note envisions an approach to labor law that can stand up to novel technologies that, without check, threaten workers' exercise of their inherent power to organize.

I. THE DEFAULT RULES OF WORKER SURVEILLANCE

This Part illustrates how employers have made surveillance a background condition of employment. This surveillance impeded workers' access to organizing prior to the advent of algorithmic management, but the unregulated development of new technologies further threatens to incapacitate workers' ability to form a majority union entirely. Given these impediments, and the fact that other legal regimes have not adequately caught up to these technologies, labor law holds the most promise for worker-protective approaches to regulating algorithmic management.

A. THE RISE OF "DIGITAL TAYLORISM"

Wherever production has bifurcated into classes of labor and management, in the ancient world as in recent history, supervisors have used surveillance and data collection to track, measure, and discipline workers.[32] The Industrial Revolution centralized production, creating the conditions for both worker organizing and worker surveillance at scale.[33] In the United States, the story of surveillance-aided union-busting begins with the Pinkerton

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31. *See* New Process Steel v. NLRB, 560 U.S. 674, 676 (2010) (NLRB may not exercise authority without quorum of three out of five members). Only two members currently sit on the Board. *See The Board*, NLRB, https://www.nlrb.gov/about-nlrb/who-we-are/the-board [https://perma.cc/5HF2-KSQM] (Members Prouty and Kaplan). Indeed, Whole Foods has challenged the successful election at its sole unionized location by arguing that the Board's regional director cannot certify the vote tally while the Board lacks quorum. *See* Objections to Conduct Affecting the Results of the Election, Whole Foods Market Group, Inc., N.L.R.B. Reg'l Dir., Case 04-RC-355267 (Feb. 3, 2025).

32. *See* IFEOMA AJUNWA, THE QUANTIFIED WORKER: LAW AND TECHNOLOGY IN THE MODERN WORKPLACE 16, 18–19 (2023) [hereinafter AJUNWA, QUANTIFIED WORKER] (describing the role of workplace surveillance in the Roman Empire and during the transatlantic slave trade).

33. *See id.* at 18–19 (citing Kevin Hjortshøj O'Rourke, *Luddites, the Industrial Revolution, and the Demographic Transition*, 18 J. ECON. GROWTH 373, 374, 376 (2013)). Ajunwa notes that the Industrial Revolution's "skill-saving" technologies both supplanted skilled workers and controlled their bargaining power. AJUNWA, QUANTIFIED WORKER, *supra* note 32, at 18–19; *see also* ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 25–26 ("Homogenization strategies were central to the transformation from craft-based to industrial production and to the emergence of Taylorist/Fordist modes of production.").

National Detective Agency's founding in 1855.[34] The Pinkertons quickly became known for their skill at "monitoring workers deemed a threat" to employers' interests.[35] Pinkerton spies embedded themselves within the worksite, making friends and attending union meetings, then delivered detailed daily reports of their activities at the plant to their supervisors, who would suggest names of "Dangerous Union Agitators" for management to fire.[36] Employers also called upon Pinkertons to break strikes—and didn't much care if things turned violent, as they did in the Homestead Strike of 1892.[37] In response, in 1893, Congress passed the Anti-Pinkerton Act, which prevented the federal or D.C. government from employing the "mercenaries."[38]

The use of Pinkerton spies fell into disfavor, but the 1911 publication of Frederick Winslow Taylor's *The Principles of Scientific Management* offered employers the ability to bake surveillance—and union avoidance—into the production process.[39] "Taylorism" maximized workplace efficiency by collecting data on worker performance, optimizing tasks based on that data, and incentivizing individual performance.[40] According to Professor Ifeoma Ajunwa, Taylorism was premised on the idealistic notion that "employers and employees can overcome their historical antagonism in the pursuit of increased productivity, which would lead to shared prosperity" where "unionization would not be necessary."[41] In reality, the opposite was true: Taylorist

34. *See* AJUNWA, QUANTIFIED WORKER, *supra* note 32, at 43 (quoting J. A. Zumoff, *Politics and the 1920s Writings of Dashiell Hammett*, 52 AM. STUD. 77, 79 (2012)).

35. AJUNWA, QUANTIFIED WORKER, *supra* note 32, at 43 (citing FRANK MORN, THE EYE THAT NEVER SLEEPS: A HISTORY OF THE PINKERTON NATIONAL DETECTIVE AGENCY (1982)).

36. MORRIS FRIEDMAN, THE PINKERTON'S LABOR SPY 16–18 (1907).

37. *See* AJUNWA, QUANTIFIED WORKER, *supra* note 32, at 43–44 (citing MORN, *supra* note 35)).

38. 5 U.S.C. § 3108 (1893); AJUNWA, QUANTIFIED WORKER, *supra* note 32, at 43, 45.

39. *See generally* FREDERICK WINSLOW TAYLOR, THE PRINCIPLES OF SCIENTIFIC MANAGEMENT (1911).

40. *See* AJUNWA, QUANTIFIED WORKER, *supra* note 32, at 21–22. Though Taylor originated both terms, Ajunwa distinguishes "Taylorism" from "scientific management" in that the latter relies on "the most general efficiency principles Taylor provided" and ignores Taylor's "ostensible distributive justice goals," i.e., that workers would benefit from the profits obtained by increased productivity. *Id.* at 24–25.

41. AJUNWA, QUANTIFIED WORKER, *supra* note 32, at 20, 60; s*ee also* Mark Barenberg, *Democracy and Domination in the Law of Workplace Cooperation: From Bureaucratic to Flexible Production*, 94 COLUM. L. REV. 753, 777–79 (1994) [hereinafter Barenberg, *Democracy and Domination*] (discussing structural coercion in the nonunion workplace); *cf.* Mark Barenberg, *The Political Economy of the Wagner Act*, 106 HARV. L. REV. 1379, 1418–22 (1993) (discussing Senator Robert Wagner's belief that "workers' genuine consent

production models led to "impossible work standards," lowered wages, increased turnover, and decreased trust among workers.[42] These work standards left no room for the organizing necessary for strikes or work stoppages.[43] In a 1911 congressional hearing, Samuel Gompers, president of the American Federation of Labor (AFL), testified that Taylorism made worker organizing "practically impossible," arguing that "the spirit of independence or self-assertion [necessary for organizing] is wholly eliminated by the system itself."[44]

Gompers' assessment was not hyperbole. In 1913, the Ford Motor Company expanded on the "Taylor system" by implementing its moving assembly line, a deskilled model of production known as Fordism.[45] The company also offered its workers a $5 daily pay rate in exchange for following certain rules, including maintaining clean and tidy homes; maintaining personal hygiene; having a healthy diet and abstaining from alcohol; not taking in boarders or sending money to relatives abroad; and being "assimilated to American cultural norms."[46] To ensure that its primarily immigrant workforce followed these rules, Ford also created a "Sociological Department," which monitored workers on-site and in unannounced home visits.[47] Workers who would not or could

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provided the necessary legal and social foundation for both workplace and political cooperationism" under the Fordist model of production).

42. AJUNWA, QUANTIFIED WORKER, *supra* note 32, at 52–53.

43. *See* ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 26; *see also* Craig Littler, *Understanding Taylorism*, 29 BRIT. J. SOCIO. 185, 194–96 (1978); AJUNWA, QUANTIFIED WORKER, *supra* note 32, at 59 (Taylor "devised his system to take control back from workers who were halting production with threats of strikes or slowdowns.").

44. *Investigation of the Taylor System of Shop Management: Hearing on H.R. 90 Before the H. Comm. on Lab., 61st* Cong. 22 (1911) (statement of Samuel Gompers, President, American Federation of Labor); s*ee also* AJUNWA, QUANTIFIED WORKER, *supra* note 32, at 57.

45. ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 81. Though often referenced together, Taylorism is distinct from Fordism in that Fordism's innovations derive from improvements in the mechanized production, whereas Taylorism focused on increasing labor performance efficiency. *See* David A. Hounshell, *The Same Old Principles in the New Manufacturing*, HARV. BUS. REV., Nov. 1988 (reviewing ROBERT H. HAYES ET AL., DYNAMIC MANUFACTURING: CREATING THE LEARNING ORGANIZATION (1998) and C. JACKSON GRAYSON, JR., AND CARLA O'DELL, AMERICAN BUSINESS: A TWO-MINUTE WARNING (1988)), https://hbr.org/1988/11/the-same-old-principles-in-the-new-manufacturing [https://perma.cc/Q26G-DXF8] (contrasting Taylorism and Fordism).

46. Elizabeth Anderson, Arthur F. Thurnau Professor and John Dewey Distinguished University Professor of Philosophy and Women's Studies at the University of Michigan, Lecture II: Private Government, The Tanner Lectures in Human Values, delivered at Princeton University (Mar. 4–5, 2015).

47. *See* ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 81 (citing Georgios Paris Loizides, Deconstructing Fordism: Legacies of the Ford Sociological Department (June

not follow the Department's edicts saw their pay cut by over half.[48] One organizer in 1925 reported that Ford workers were "not disposed to unionize" because of the Sociological Department's efforts.[49] By way of example: Even though 150,000 workers joined the United Auto Workers (UAW) between its 1935 founding and 1937, when General Motors workers (who were not subject to such far-reaching surveillance) won union recognition through their famous sit-down strike, Ford workers did not unionize until 1941.[50]

The Taylorist/Fordist models of production endured throughout the 20th century, even as the United States shifted from a manufacturing to a service and knowledge economy and from purely analog to digital surveillance.[51] Today, the tools of digital Taylorism—inter alia, surveillance, algorithmic management, and artificial intelligence—are used to "assign tasks, to schedule and to oversee workers, and to discipline them."[52] They allow firms "to plug workers into and out of jobs fairly easily, reducing companies' training costs and their incentives to invest in their workforce and making it still more difficult for workers to organize."[53] Digital Taylorism might take the form of software that monitors an employee's keystrokes or website visits to check if they are actively working, redistributes worker shifts based on anticipated consumer demand, or catalogs employee movement around a

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2004) (Ph.D. dissertation, Western Michigan University) (on file with the Western Michigan University Library system)).

48. *See* Daniel M.G. Raff & Lawrence H. Summers, *Did Henry Ford Pay Efficiency Wages?*, 5 J. LAB. ECON. S57, S69–72 (1987) (noting that the base minimum wage rate at Ford was $2.34).

49. ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 82. In addition to the Sociological Department, Ford operated under an explicit "open-shop" ideology, which sought to safeguard "the absolute authority of employers over their workforce and against labor unions." Loizides, *supra* note 47, at 70.

50. *See* Cameron Molyneux, *United Auto Workers (UAW) Locals 1937–1949*, MAPPING AMERICAN SOCIAL MOVEMENTS PROJECT, https://depts.washington.edu/moves/CIO_UAW_locals.shtml [https://perma.cc/372F-FG39].

51. *See, e.g.*, ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 22 ("Companies across the service economy have adopted business models that depend on suppressing workers' associational power."); *see also* Ifeoma Ajunwa et al., *Limitless Worker Surveillance*, 105 CAL. L. REV. 101, 106–07 (2017) [hereinafter Ajunwa et al., *Limitless*] (describing the findings of a 1987 Office of Technology Assessment report about workplace electronic surveillance).

52. ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 59. Scholars have used the term "digital Taylorism" since as early as 2001. *See, e.g.*, Christian Parenti, *Big Brother's Corporate Cousin*, THE NATION (July 27, 2001), https://www.thenation.com/article/archive/big-brothers-corporate-cousin/ [https://perma.cc/ZHP8-MXEA] (describing the rise of electronic surveillance in white collar and service workplaces).

53. ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 78.

warehouse or grocery store to track their workplace efficiency.[54] Algorithms allow human managers to obtain insights from this collected data at scale. In some workplaces, the algorithms might act on those insights on their own: flagging irregularities for human review or disciplining or terminating the worker *automatically*.[55] Because employers are likely to keep the operations that power these algorithms secret, these systems multiply employers' capacity to control their workers by factors known only to those who design the algorithm,[56] which may be a third party to the employer.[57]

Employers may have legitimate needs for this technology under a Fordist model of production. With labor increasingly divided and deskilled in the interest of extracting maximum value from labor,[58] managerial oversight ensures that workers meet quality and safety standards, as well as complete their tasks on time.[59] But these data-collection practices have enabled more rigorous production quotas and standards, to the effect that these jobs are unsustainable for many workers: turnover in Amazon warehouses

54. *See* Charlotte Garden, *Labor Organizing in the Age of Surveillance*, 63 ST. LOUIS UNIV. L.J. 55, 56–58 (2018) (cataloging examples of workplace surveillance tools); Annette Bernhardt et al., *The Data-Driven Workplace and the Case for Worker Technology Rights*, 76 ILR REV. 3, 7 (2022) ("Probably the best-known example of algorithmic management is scheduling optimization systems."); NEGRÓN, *supra* note 27, at 21; *see also* More Perfect Union, *supra* note 2 and accompanying text.

55. *See* Brishen Rogers, *The Law & Political Economy of Workplace Technological Change*, 55 HARV. C.R.-C.L. L. REV. 532, 562 (2020) [hereinafter Rogers, *Law & Political Economy*].

56. *See* AIHA NGUYEN, THE CONSTANT BOSS: WORK UNDER DIGITAL SURVEILLANCE, DATA & SOC'Y 15 (2023) (discussing worker concerns over how employers will use collected data); NEGRÓN, *supra* note 27, at 58 (defining "black-box" technologies).

57. *See generally* Negrón & Nguyen, *supra* note 11 (surveying third-party vendors of workplace monitoring technology).

58. *See* ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 25–26 (discussing how "power-augmenting technology" can "homogenize" or "deskill" labor "enabling it to be performed by individuals without the need for extensive training," allowing management to retain a greater share of profits in lieu of expending it on training (citing Samuel Bowles, *Social Institutions and Technical Change*, *in* TECHNOLOGICAL AND SOCIAL FACTORS IN LONG TERM FLUCTUATIONS 78 (Massimo Di Matteo, Richard M. Goodwin, and Alessandro Vercelli, eds., 1986))).

59. *See* Ajunwa et al., *Limitless*, *supra* note 51, at 136 (citing ÉMILE DURKHEIM, THE DIVISION OF LABOUR IN SOCIETY (1893)); *see also* Richard A. Bales & Katherine V.W. Stone, *The Invisible Web at Work: AI & Electronic Surveillance in the Workplace*, 41 BERKELEY J. EMP. & LAB. L. 1, 49–50 (2020) (discussing other legitimate reasons employers have for monitoring the workplace, e.g., preventing loitering or shrinkage, maintaining safety protocols, tracking performance, rewarding high performers, etc.).

can be as high as 150% year over year.[60] Senator Robert Wagner could have hardly imagined technologies that could enable exploitation to this degree when he began drafting the NLRA in 1934.[61]

Today, the U.S. economy is fast approaching a technological tipping point.[62] The boom in artificial intelligence (AI) technology has sparked fears that algorithmic management practices may become more widespread, more entrenched, the technological "black box" more obscured.[63] This development is especially pernicious for vulnerable workers. Researchers Annette Bernhardt, Lisa Kresge, and Reem Suleiman note that, because it is well established that algorithms replicate human biases, the adverse impacts of algorithmic management are more likely to impact workers of color, women, and multiply marginalized workers.[64] For example, one program used in call centers "provides real-time behavioral guidance to workers on a computer dashboard, coaching them to express more empathy, pace the call more efficiently, or exude more confidence and professionalism."[65] Given the pervasive gender and racial stereotypes associated with "confidence and professionalism,"[66] it is likely that workers of color

60. *See* Maria Cramer, *Investigating Amazon, the Employer*, N.Y. TIMES (July 4, 2021) (on file with the *Columbia Journal of Law & Social Problems*), https://www.nytimes.com/2021/07/04/insider/amazon-workers-investigation.html.

61. *See* Theodore J. St. Antoine, *How the Wagner Act Came to Be: A Prospectus*, 96 MICH. L. REV. 2201, 2210 (1998).

62. *See* Hirsch, *supra* note 10, at 891.

63. *See* BERNHARDT ET AL., *supra* note 9, at 4 ("[T]he lack of regulatory oversight has turned workplaces into sites of experimentation with these systems, many of which are hidden from workers, policymakers, and researchers."); *accord* Bales & Stone, *supra* note 59, at 59 ("Given the blinding pace at which companies currently are collecting data on workers, a legal response may quickly become a moot point. Once sufficient data are collected, it likely will be difficult to put the genie back in the bottle.").

64. *See* BERNHARDT ET AL., *supra* note 9, at 2*; see generally* Mary Madden et al., *Privacy, Poverty, and Big Data: A Matrix of Vulnerabilities for Poor Americans*, 95 WASH. U.L. REV. 53 (2017). For more discussion about systemic racism in algorithms and AI specifically, see Solon Barocas & Andrew D. Selbst, *Big Data's Disparate Impact*, 104 CALIF. L. REV. 671 (2014) and Hirsch, *supra* note 10, at 938–944 (discussing benefits and risks to using AI to eliminate workplace bias).

65. *See* BERNHARDT ET AL., *supra* note 9, at 7.

66. *See, e.g.*, Courtney McCluney et al., *To Be or Not to Be . . . Black: The Effects of Racial Code-Switching on Perceived Professionalism in the Workplace*, 97 J. EXPERIMENTAL SOC. PSYCH. (2021) (finding that Black employees who codeswitch—"mirroring the norms, behaviors, and attributes of the dominant group (i.e., White people)"—are regarded as more professional than white employees); Dina Gerdeman, *How Gender Stereotypes Kill a Woman's Self-Confidence*, HARV. BUS. SCH. WORKING KNOWLEDGE (Feb. 25, 2019), https://www.library.hbs.edu/working-knowledge/how-gender-stereotypes-less-than-br-greater-than-kill-a-woman-s-less-than-br-greater-than-self-confidence [https://perma.cc/

and female workers receive far more "real-time behavioral guidance" than white, male workers. Receiving constant correction can be anxiety-inducing, as one worker told Bernhardt, Kresge, and Suleiman: "[I]t becomes increasingly stressful because of fear of loss of your job."[67] These workers are also more likely to hold jobs in industries like warehousing and distribution, retail, home care, call centers, and other fields where algorithmic management and artificial intelligence are becoming increasingly common.[68] Consistent with that research, Professor Alex Hertel-Fernandez has found that Black, Hispanic, and other non-white employees are more likely to report both electronic monitoring and automated management at work than white employees.[69] Because algorithmic management and artificial intelligence disproportionately impact workers of color and female workers, those demographics are most at risk of having their access to organizing cut off at the source.

The best example of how electronic surveillance curbs organizing can be found—like everything else—at Amazon. One 2023 report catalogued 12 examples of interconnected forms of surveillance and algorithmic management used in Amazon warehouses, from scanners that track how quickly and accurately employees move merchandise around the warehouse, to key fobs that monitor workers' location within the warehouse and when they start, end, or pause their shifts.[70] The online retail giant maintains a "proprietary productivity metric for measuring and weighting productivity" based on "quality performance data."[71] A system measures "associates," as the retailer calls its warehouse workers, against this metric by "track[ing] the rates of each individual associate's productivity and automatically generat[ing] any warnings or termination regarding quality or productivity

U7FC-9ZAF] (summarizing research showing gender stereotypes negatively reinforce women's confidence).

67. BERNHARDT ET AL., *supra* note 9, at 7; *see also* Hertel-Fernandez, *supra* note 8, at 3, 5, 27 (workers who reported being subject to electronic monitoring were more likely to experience anxiety at work).

68. *See* BERNHARDT ET AL., *supra* note 9, at 6–14.

69. *See* Hertel-Fernandez, *supra* note 8, at 11–12 (35% of white employees versus 63% of Black employees and 52% of Hispanic employees reported having work schedules or tasks automatically assigned; 65% of white employees versus 82% of Black employees and 73% of Hispanic employees reported "some form" of electronic monitoring at work).

70. *See* OUR DATA BODIES, TRACKED AND TARGETED: NAVIGATING WORKER SURVEILLANCE AT AMAZON 22–28 (2023), https://www.odbproject.org/wp-content/uploads/2024/01/Tracked-and-Targeted.pdf [https://perma.cc/TV4V-R66H].

71. Morgan Lewis Letter, *supra* note 10 at 2.

without input from supervisors."[72] While supervisors can manually override these notices, associates have little recourse if their supervisor declines to find their explanations satisfactory.[73] Workers at a Missouri Amazon warehouse reported the constant surveillance makes them "feel like [they're] in prison."[74] Those same workers filed a charge against Amazon in May 2024, alleging that the company's "intrusive workplace controls . . . interfere with Section 7 rights of employees to engage in protected concerted activity."[75] Or, in other words, to unionize. And despite a concerted push to organize the retail giant that began during the COVID-19 pandemic, just one Amazon warehouse has successfully unionized to date.[76]

Algorithmic management is not the only obstacle to organizing at Amazon. The company utilizes myriad traditional, often lawful union-busting techniques at its warehouses, including analog surveillance, captive audience meetings, threats of lowered wages or promises of benefit, and others.[77] But algorithmic management in particular reduces the psychological motivations required for organizing,[78] just as Samuel Gompers predicted over a century ago. A 2024 analysis of five studies found that the presence of algorithmic management decreases employees' prosocial

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72. *Id.* (emphasis added).

73. *See id.* at 3.

74. Michael Sainato, *'You Feel Like You're in Prison': Workers Claim Amazon's Surveillance Violates Labor Law*, GUARDIAN (May 21, 2024, 6:00 AM), https://www.theguardian.com/us-news/article/2024/may/21/amazon-surveillance-lawsuit-union [https://perma.cc/ET5R-2NZU].

75. *Id.*

76. *See* Michael Sainato, *'Fighting Goliath': Amazon Workers to Hold Union Election at North Carolina Warehouse*, GUARDIAN (Jan. 23, 2025, 7:00 AM), https://www.theguardian.com/us-news/2025/jan/23/amazon-union-election-north-carolina-warehouse [https://perma.cc/8EE2-532N].

77. *See, e.g.*, Noam Scheiber, *Judge Finds Amazon Broke Labor Law in Anti-Union Effort*, N.Y. TIMES (Jan. 31, 2023), https://www.nytimes.com/2023/01/31/business/economy/amazon-union-staten-island-nlrb.html [https://perma.cc/2LBR-HTHC] (cataloguing anti-union practices in use during the JFK8 drive). In November 2024, in a case involving Starbucks' anti-union campaign, the Board overturned 70-year-old precedent to hold that captive audience meetings are unlawful. *See generally* Siren Retail Corp., 373 N.L.R.B. No. 135 (Nov. 8, 2024); *accord* Amazon.com Services, 373 N.L.R.B. No. 136 (Nov. 13, 2024) (same). It is unlikely that these decisions will survive the Trump II Board. *See supra* note 29 and accompanying text.

78. *See* Jack Fiorito et al., *Prosocial & Self-Interest Motivations for Unionism & Implications for Institutions*, *in* 24 ADVANCES IN INDUSTRIAL & LABOR RELATIONS 2017: SHIFTS IN WORKPLACE VOICE, JUSTICE, NEGOTIATION & CONFLICT RESOLUTION IN CONTEMPORARY WORKPLACES 185, 194–96 (David Lewin & Paul J. Gollan eds., 2018) (discussing the role of prosocial motivation in individuals' personal relationship to union membership).

motivation—"the desire to protect and promote the well-being of others"—because it objectifies workers.[79] When workers "feel like robots,"[80] they are less likely to seek out relationships with their coworkers or develop trust with them,[81] both of which are essential to the union-organizing process. These findings hold true even when human managers merely consult algorithms as part of their decision-making process.[82]

Some might see the rise of digital Taylorism as a natural evolution of workplace surveillance, as inevitable an industrial development as Ford's invention of the assembly line. And if workers wish to exercise collective voice, they should learn to adapt to new workplace technologies. Indeed, resistance to algorithmic management might *catalyze* organizing drives in some cases.[83] Starbucks' automated scheduling practice, for example, was one motivation for the campaign to unionize the coffee retailer.[84] But a single Starbucks location may only have 20 or 30 workers[85] who are not subject to automated, algorithmic performance evaluation in the way that, say, Amazon workers are. They are thus better able to organize through traditional processes.

The above examples and data illustrate that as algorithmic management grows in scope and effectiveness, it will allow bosses to further diminish workers' ability to build the solidaristic networks necessary for organizing. They may allow management

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79. Armin Granulo et al., *Deployment of Algorithms in Management Tasks Reduces Prosocial Motivation*, 152 COMPUTS. HUM. BEHAV. 1, 2 (2024).

80. *See* More Perfect Union, *supra* note 2.

81. *Compare* Granulo et al., *supra* note 79, at 6 ("[D]eploying algorithms in management tasks reduces prosocial motivation because it increases the objectification of co-workers") *with* Fiorito et al., *supra* note 78, at 196–99 (summarizing literature finding that social relationships promote union participation).

82. *See* Granulo et al., *supra* note 79, at 6.

83. *Cf. generally* Peng Hu et al., *Too Much Light Blinds: The Transparency-Resistance Paradox in Algorithmic Management*, 161 COMPUTS. HUM. BEHAV. 108403 (2024) (finding correlation between worker awareness of algorithmic management and worker resistance to algorithmic management).

84. *See Our Fight*, STARBUCKS WORKERS UNITED, https://sbworkersunited.org/proposal-update [https://perma.cc/8KE6-JXV8] (enumerating "Guaranteed and Consistent Schedules" among union demands); Jodi Kantor, *Working Anything But 9 to 5*, N.Y. TIMES (Aug. 13, 2014), https://www.nytimes.com/interactive/2014/08/13/us/starbucks-workers-scheduling-hours.html [https://perma.cc/6BXY-PC8X] (describing scheduling technology in use at Starbucks).

85. *See, e.g.*, *Inside Starbucks: A Look at How Partners Across U.S., Canada, are Connecting over Coffee, Embracing New Mission*, STARBUCKS (May 4, 2023), https://stories.starbucks.com/stories/2023/inside-starbucks-a-look-at-how-partners-across-u-s-canada-are-connecting-over-coffee-embracing-new-mission/ [https://perma.cc/UEB4-KFBN] ("250,000 partners at 10,000 stores").

to create insurmountable hurdles to unionizing and skirt labor law.[86] While courts have interpreted existing law to give employers "near-plenary powers to monitor and surveil workers,"[87] another, better world is possible. Just as the law has enabled these background conditions, the law has the power to curtail them—to privilege workers' interests over those of employers.

B. THE CURRENT LEGAL FRAMEWORKS REGULATING SURVEILLANCE

Surveying the existing legal regimes governing workplace electronic surveillance demonstrates why labor law, which governs the collective bargaining process, is best suited to protect workers from algorithmic management's harmful effects. Generally, employment law, which regulates treatment of individual workers, tends to construe electronic surveillance as a function of management's right to control the workplace. Some state laws, however, acknowledge limits on that right as it implicates employee privacy interests or health and safety. NLRA-covered workers[88] have access to stronger protections in the collective bargaining context. Still, the current interpretation of the NLRA falls short of fully protecting workers' Section 7 rights in

86. *See infra* Part I.B.2; ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 60 (discussing how digital Taylorism "puts pressure on workers' statutory rights").

87. Brishen Rogers, *Workplace Data and Workplace Democracy*, 6 GEO. L. & TECH. REV. 454, 457 (2022).

88. *See* 29 U.S.C. § 153 (excluding independent contractors, domestic and agricultural workers, and others from NLRA coverage). Employers classify many of the workers most affected by algorithmic management, like rideshare drivers or delivery workers, as independent contractors excluded from NLRA coverage. *Cf. generally* ASIAN AMERICANS ADVANCING JUSTICE & RIDESHARE DRIVERS UNITED, FIRED BY AN APP: THE TOLL OF SECRET ALGORITHMS AND UNCHECKED DISCRIMINATION ON CALIFORNIA RIDESHARE DRIVERS (Feb. 2023), https://www.asianlawcaucus.org/news-resources/guides-reports/fired-by-an-app-report [https://perma.cc/735T-9S3R] (describing impact of algorithmic management in rideshare driver context). A recent Board ruling, adjusting the standard for when a worker is an employee or independent contractor, suggests that algorithmic management could be an indicium of control cutting in favor of a traditional employment relationship and NLRA coverage. *See* Atlanta Opera, Inc., 372 N.L.R.B. No. 95, slip op. at 10–11, 17–18 (2023); NAT'L EMP. L. PROJECT, BREAKING DOWN THE NLRB DECISION IN *ATLANTA OPERA* AND ITS POTENTIAL IMPACT ON APP-BASED RIDEHAIL AND DELIVERY WORKERS 3 (2023), https://www.nelp.org/app/uploads/2023/10/Atlanta-Opera-Factsheet_final.pdf [https://perma.cc/544Q-ELVA] (positing that under *Atlanta Opera*, the Board will consider "data-driven assignments" in its assessment of whether rideshare workers are employees or independent contractors). This Note takes the position that employers misclassify most gig-economy workers, and that those workers should enjoy NLRA coverage.

algorithmically managed workplaces. Though former General Counsel Abruzzo's memo charts a path for bringing algorithmic management within the umbrella of remediable unfair labor practices, the Board's remedies must be stronger to fulfill its mandate to protect workers' interests against the "changing patterns of industrial life."[89]

1. *Federal and State Employment Law Regimes*

No existing federal employment laws expressly regulate worker surveillance.[90] Some scholars advocate for a Title VII approach to combating algorithm-enabled discrimination, particularly in the context of algorithmic hiring or workplace wellness programs.[91] However, employees rarely bring lawsuits alleging this kind of algorithmic discrimination, likely because (1) the algorithms that

89. NLRB v. J. Weingarten, Inc., 420 U.S. 251, 266 (1975).

90. In 2023, recognizing this gap, President Biden issued an executive order on artificial intelligence, declaring that it is the policy of the United States to encourage responsible AI use and development, particularly as it affects American workers. *See* Exec. Order 14110 of October 30, 2023: Safe, Secure and Trustworthy Development and Use of Artificial Intelligence, 88 Fed. Reg. 75191 (Oct. 30, 2023). The executive order stated, in part, that "AI should not be deployed in ways that undermine [workplace] rights, worsen job quality, encourage undue worker surveillance, lessen market competition, introduce new health and safety risks, or cause harmful labor-force disruptions," and required stakeholders like the Secretary of Labor to prepare reports about AI's impact on the workplace and issue principles and best practices for governing emerging technology. *Id.* at 75210–11. In October 2024, the Department of Labor (DOL) released a set of best practices for developers and employers in response to Biden's executive order. *See* ARTIFICIAL INTELLIGENCE AND WORKER WELL-BEING PRINCIPLES AND BEST PRACTICES FOR DEVELOPERS AND EMPLOYERS, U.S. DEP'T OF LAB. (2024), https://www.dol.gov/sites/dolgov/files/general/ai/AI-Principles-Best-Practices.pdf [https://perma.cc/7ZBB-RABV]. However, the DOL's guidance is expressly non-binding and does not compel compliance, and President Trump, in rescinding the earlier executive order in January 2025, directed all agency heads to rescind or propose rescinding all actions taken pursuant to the 2023 executive order, nullifying any impact it would have had on national AI regulation. *See* Exec. Order 14179 of January 23, 2025: Removing Barriers to American Leadership in Artificial Intelligence, 90 Fed. Reg. 8741 (Jan. 23, 2025).

Separately, while it bears mentioning that the European Union and other nations have a far stronger data privacy regulatory regime than the United States, a comparative law analysis is outside the scope of this Note. For discussion of European data privacy frameworks' impact on worker voice, see generally Adrián Todolí-Signes, *Algorithms, Artificial Intelligence and Automated Decisions Concerning Workers and the Risks of Discrimination: The Necessary Collective Governance of Data Protection*, 25 TRANSFER: EUR. REV. LAB. & RSCH. 465 (2019) (reviewing GDPR regime and calling for stronger collective action by trade unions and worker organizations); Phillippa Collins & Joe Atkinson, *Worker Voice and Algorithmic Management in Post-Brexit Britain*, 29 TRANSFER: EUR. REV. LAB. & RSCH. 32 (2023) (assessing regulatory proposals that would enhance worker voice in the context of bargaining over use of algorithmic management in UK labor market context).

91. *See* Ajunwa et al., *Limitless*, *supra* note 51, at 114–22 (surveying how existing anti-discrimination law would apply to electronic surveillance).

drive these decisions are largely inscrutable to the general public and (2) it is much harder to prove discrimination without direct evidence of intent to discriminate,[92] though this may be changing as awareness of algorithmic discrimination grows.[93] Moreover, a Title VII approach would likely not capture the impact of algorithmic discrimination on union organizing. If lower diversity positively correlates with a higher "risk" of unionization, as Whole Foods' heat map assumes,[94] an employer that sought to decrease the likelihood of union organizing could program its hiring algorithm to *increase* diversity. However, because race is a protected category under Title VII,[95] while union affiliation is not, such a program would likely be lawful because it "further[s] Title VII's purpose of eliminating the effects of discrimination in the workplace."[96]

By contrast, individual employees (or a group of employees in a class action) can seek redress for employer surveillance through

92. *See* ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 125 ("[P]latforms' control over data and technology gives them some capacities to avoid regulations. If regulators can neither access companies' data [due to trade secrets and constitutional protections] nor understand those companies' algorithms [due to their complexity], it may be nearly impossible to ensure that the companies are abiding by the law."); *see also* Madden et al., *Privacy, Poverty, and Big Data*, *supra* note 64, at 89–95 (describing obstacles to applying employment discrimination law to data collection practices).

93. *See* Mobley v. Workday, Inc., No. 23-CV-00770-RFL, 2024 WL 3409146, at *2 (N.D. Cal. July 12, 2024) (motion to dismiss granted in part and denied in part) (employee brought, inter alia, Title VII claims that defendant, which provided AI-enabled applicant screening services, discriminated against him on the basis of age, race, and disability); *cf.* Huskey v. State Farm Fire & Cas. Co., No. 22 C 7014, 2023 WL 5848164, at *9 (N.D. Ill. Sept. 11, 2023) ("Plaintiffs plausibly allege a connection between State Farm's policy and the statistical racial disparities. From Plaintiffs' allegations describing how machine-learning algorithms—especially antifraud algorithms—are prone to bias, the inference that State Farm's use of algorithmic decision-making tools has resulted in longer wait times and greater scrutiny for Black policyholders is plausible.").

94. *See* Peterson, *supra* note 4 (per internal metrics, "[s]tores at higher risk of unionizing have lower diversity"); *cf.* John-Paul Ferguson, *Racial Diversity and Union Organizing in the United States, 1999–2008*, 16 ILR REV. 53, 55, 72–75 (2016). The Ferguson analysis found that union drives at more diverse workplaces were less likely to be successful, but posited that this link was because employers of more diverse workplaces were more likely to commit unfair labor practices that deter organizing. *See id.* Therefore, racial diversity is not a per se indicator of a union's likelihood of success.

95. *Compare* 42 U.S.C. § 2000e-3(a) (2018) (prohibited discrimination under Title VII) *with* 29 U.S.C. § 158(a)(3) (prohibited discrimination under NLRA); *cf.* ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 98 (noting that an algorithm that screens out applicants on the basis of likelihood to organize would likely be per se unlawful under the NLRA, but that employers are generally permitted to discriminate on the basis of political affiliation or social activities, which may be useful proxies for union sympathies).

96. Johnson v. Transp. Agency, 480 U.S. 616, 630 (1987) (quoting United Steelworkers v. Weber, 433 U.S. 193, 204 (1979)).

state law tort claims.[97] The employee might seek injunctive relief in addition to damages in order to prevent algorithmic management from continued use in the workplace, but to do so, the plaintiff must show (1) continuing harm,[98] which would likely require the plaintiff employee to continue to be subject to algorithmic management (that is, they cannot quit or be terminated), and (2) that the harm caused by algorithmic management is irreparable.[99] Further, courts will generally find that employer surveillance is an invasion of privacy only when it is "highly offensive to a reasonable person"[100] and have not found that met for "ordinary" use of digital monitoring technologies.[101]

While many states adhere to the above approach, grounded in individual employee rights, some state laws have taken a broader approach to regulation of employer surveillance. Connecticut and Delaware require employers who use electronic surveillance to inform their employees that they may be monitored at work.[102] Delaware's law is limited to employer monitoring of telephone or email communications, but Connecticut's law, broadly construed, could encompass the surveillance underlying algorithmic management.[103] Connecticut's statute defines "electronic management" as "the collection of information on an employer's premises concerning employees' activities or communications by any means other than direct observation, including the use of a computer, telephone, wire, radio, camera, electromagnetic,

97. *See* RESTATEMENT (THIRD) OF EMP. L. §§ 401, 7.02–7.06 (AM. L. INST. 2015).

98. *See* Lujan v. Defs. of Wildlife, 504 U.S. 555, 564 (1992) (quoting City of Los Angeles v. Lyons, 461 U.S. 95, 102 (1983)); O'Shea v. Littleton, 414 U.S. 488, 495–96 (1974) ("Past exposure to illegal conduct does not in itself show a present case or controversy regarding injunctive relief . . . if unaccompanied by any continuing, present adverse effects.").

99. *See Lyons*, 461 U.S. at 111 (quoting *O'Shea*, 414 U.S. at 502).

100. RESTATEMENT (THIRD) OF EMP. L. §§ 7.02–7.06 (AM. L. INST. 2015). Determining whether an act is "highly offensive" requires balancing the employer's business needs and interests with how a reasonable person would perceive pursuit of those interests. The Restatement offers the example of requiring job applicants to share their religious beliefs or sexual history as an act that would be highly offensive. *See id.* at § 7.06 cmt. a; *id.* at § 7.06 cmt. b.

101. *See, e.g.*, City of Ontario v. Quon, 560 U.S. 746, 756 (2010) (employer city review of employee police officer text message was reasonable and therefore did not violate Fourth Amendment prohibition on unreasonable search and seizure); *cf.* Caesars Ent. Corp., 368 N.L.R.B. No. 143, slip op. at 6–10 (2019) (employers may lawfully prohibit employees from using work emails to send non-business information, including union-related information).

102. *See* Conn. Gen. Stat. Ann. § 31-48d (West 2024); Del. Code Ann. tit. 19, § 705 (West 2024).

103. *See* DEL. CODE ANN. tit. 19, § 705 (West 2024); CONN. GEN. STAT. ANN. § 31-48d (West 2024).

photoelectronic or photo-optical systems."[104] Still, the employer is only required to inform employees that such surveillance is happening, and the consequence for not doing so is a maximum $3,000 fine for a third offense.[105] Further, there is no private right of action under the law.[106] This approach does not adequately address the risk algorithmic management poses to organizing because it is grounded in a mere notice requirement,[107] while appropriately responsive legislation would eliminate the material restrictions on organizing algorithmic management poses.

Other state laws address the health-and-safety impacts of algorithmic management practices under notice-and-consent models, which do not sufficiently protect workers' ability to unionize. In New York, the Warehouse Worker Protection Act requires employers to provide workers access to their personal work speed data, prohibits discipline based on failure to meet undisclosed production quotas, and bans retaliation for workers who claim their quota interferes with their ability to take breaks.[108] Likewise, in California, the Warehouse Quota Law limits quotas that interfere with meal or rest periods and requires employers to disclose them.[109] A similar Washington law went into effect in July 2024,[110] and Senator Ed Markey, D-Ma., introduced a federal version of this legislation in the 2023–2024 legislative session.[111] These laws protect workers against unreasonably restrictive production quotas. But while beneficial, they do not attempt to address the impact of these quotas on worker free association.

Employment law may hold some promise for protecting individual workers from discrete aspects of algorithmic management, but the structure of labor law holds more promise for regulating electronic surveillance as it impacts workers' rights.

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104. CONN. GEN. STAT. ANN. § 31–48d(b)(3) (West 2024). *But see* Gerardi v. City of Bridgeport, No. CV084023011S, 2007 WL 4755007, at *8 (Conn. Super. Ct. Dec. 31, 2007), *aff'd*, 985 A.2d 328 (Conn. 2010) (collection of GPS data used to discipline employee was not unlawful, even though employee did not have notice of GPS data collection, because the data was collected off-site).

105. *See* CONN. GEN. STAT. ANN. § 31–48d(c) (West 2024).

106. *See id.*

107. *Cf.* Pasquale, *supra* note 24 and accompanying text (critiquing consent-based models of data governance).

108. *See* N.Y. LAB. LAW §§ 780–88 (McKinney 2024).

109. *See* CAL. LAB. LAW §§ 2100–05 (West 2024).

110. *See* WASH. REV. CODE ANN. § 49.84.020 (West 2024).

111. *See* S. 4260, 118th Cong. (2023–2024).

This is because labor law is more responsive to worker needs and better able to impact broad swaths of workers as opposed to individuals.

2. *The Collective Bargaining Context*

Federal labor law has the potential to offer workers the strongest protections against workplace surveillance, despite critical limitations.[112] The general rule is that workplace surveillance that chills workers' exercise of their Section 7 rights is an unfair labor practice, but if an employer can show that a legitimate business purpose motivated their surveillance, the Board will find it lawful.[113] For example, in *The Broadway*, the Board adopted the findings of the ALJ, who held that a "good-night" policy where senior managers supervised employees as they left the store was not unlawful surveillance because its purpose was to deter theft.[114] By contrast, a boss taking affirmative, out-of-the-ordinary steps to surveil organizing employees (or give the impression that they are)[115] is unlawful. In *National Captioning Institute*, the Board found that a manager asking an employee to spy on a private Facebook group for organizing workers was an unfair labor practice, as was reviewing employee communications on an internal messaging service.[116] As the law currently stands,

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112. One serious limitation that is beyond the scope of this Note is labor law's vulnerability to political shifts. Though NLRB rulings tend to be more responsive to workplace trends compared to federal legislation, whether labor law tends to protect worker or employer interests depends largely on which political party controls the Executive Branch, since the president appoints incoming Board members and the General Counsel. *See* Bales & Stone, *supra* note 59, at 54 (noting in 2020 that the first Trump Board's decisions in *Caesars Ent. Corp.* and *Boeing Corp.* suggest that the NLRB at that time would have been likely to approve of employer surveillance even where it infringed on Section 7 rights). In addition, conservative legal activists have recently targeted not only the constitutionality of the NLRB, but the entire administrative state. *See* Noam Scheiber, *Amazon Argues Labor Board Is Unconstitutional*, N.Y. TIMES (Feb. 15, 2024) (on file with the *Columbia Journal of Law & Social Problems*), https://www.nytimes.com/2024/02/15/business/economy/amazon-labor-nlrb.html (summarizing recent challenges to the NLRB from Amazon, SpaceX, and Trader Joe's); Kate Andrias, *Constitutional Clash: Labor, Capital, and Democracy*, 118 NW. U.L. REV. 985, pt. III.D (2024); *accord* Loper Bright Enters. v. Raimondo, 603 U.S. 369, 412 (2024) (overturning *Chevron* deference). For more discussion on this point, see *infra* note 207.

113. The Broadway, 267 N.L.R.B. 385, 399–400 (1983).

114. *See id.*

115. *See Interference with Protected Rights*, *in* THE DEVELOPING LABOR LAW 6.II.B.2.D (Bryan T. Arnault et al. eds., 8th ed., 2024) (collecting cases). Surveillance is unlawful whether or not the employees are aware of it. *See id.*

116. *See* Nat'l Captioning Inst., 368 N.L.R.B. No. 105, slip op. at 6 (2019).

the Board is likely to consider algorithmic management practices closer to the lawful surveillance in *The Broadway* than the unlawful surveillance in *National Captioning*: employers implement algorithmic management as an ordinary business practice, with legitimate business purposes in mind, and without explicit intent to curtail organizing.[117]

In circumstances where the Board viewed algorithmic management as unlawful surveillance, employers could continue to use it to curb organizing by relying on the protections of the *Wright Line* rule.[118] The *Wright Line* rule governs situations where an employer has "dual motive" for disciplining or firing a worker.[119] Dual-motive adverse actions occur when the employer action is motivated by both lawful "business necessity" reasons and an unlawful desire to curb organizing.[120] *Wright Line* establishes a burden-shifting framework for these cases. First, the NLRB's General Counsel must demonstrate that anti-union animus was a motive for the discipline.[121] Then, the burden shifts to the employer to show that it would have made the same decision absent an anti-union motive.[122] *Even if* an anti-union motive is an animating factor in the firing, the same-decision defense can rebut the presumption of illegality.

Under *Wright Line*, the Board acknowledges that management often exercises discretion in disciplining employees. The presence of algorithmic management may help or hinder management's attempt to overcome the presumption of an unlawful firing. In *Cayuga Medical Center at Ithaca, Inc.,* the Board affirmed the administrative law judge's finding that despite the employer's claims, the company's disciplinary algorithm "would not allow for the discharges" of two union supporters.[123] This suggests that

117. For more discussion on surveillance jurisprudence under the NLRA, see Garden, *supra* note 54, at 68 (advocating for a version of the notice-and-consent model ultimately adopted by General Counsel Abruzzo).

118. *See* Wright Line, 251 N.L.R.B. 1083 (1980); NLRB v. Transp. Mgmt. Corp., 462 U.S. 393, 400–04 (1983) (approving the *Wright Line* framework).

119. *Id.* at 1089.

120. *See* 29 U.S.C. § 158(a)(1) (making it an unfair labor practice to "interfere with, restrain, or coerce" employees' exercise of their Section 7 rights); 29 U.S.C. § 158(a)(3) (making it an unfair labor practice to discriminate against employees to "discourage membership in any labor organization").

121. *See Wright Line*, 251 N.L.R.B. at 1083–84.

122. *See id.* at 1089.

123. Cayuga Med. Ctr. at Ithaca, Inc. 367 N.L.R.B. No. 21 (2018); *see also* Paulsen v. CSC Holdings, No. CV 15-7054, 2016 WL 951535, at *12 (E.D.N.Y. Mar. 8, 2016) (district

employers may not point to the mere existence of an algorithm to prove its burden under *Wright Line*; like other indicia supporting a same-decision defense, the algorithm must consistently discipline or terminate workers using nondiscriminatory rationales. But as companies grow to rely on algorithms to make more of their hiring and firing decisions, they may be able to "launder personnel decisions through new algorithms that obscure their intent," as Professor Brishen Rogers posits.[124] An algorithm or AI model might infer a worker's proclivity for collective action from seemingly unrelated data points—things like whether a worker is involved with employee resource groups (ERGs), or whether they tend to socialize with coworkers on breaks instead of leaving the worksite, which would allow them to forge trust bonds needed for organizing—then recommend discipline or termination for those employees on arguably nondiscriminatory grounds.[125] Any legal framework that finds electronic surveillance and algorithmic management unlawful must account for how employers may evade accountability under the *Wright Line* test.

These limitations aside, the collective bargaining context offers the most impactful approach to regulating algorithmic management, especially as compared to privacy, health-and-safety, or anti-discrimination regimes. Under the NLRA, employers are obligated to bargain with recognized unions over wages, hours, and terms and conditions of employment.[126] In *Colgate-Palmolive Company,* where the union challenged the employer's installation of security cameras, the Board held that "terms and conditions" included surveillance because it could affect workers' "continued employment."[127] Since that decision, unions

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court declined to enforce Board order reinstating organizing employee, emphasizing that poor scores on performance metrics motivated her discharge).

124. Rogers, *Law & Political Economy*, *supra* note 55, at 460; *see also* Westfall, *supra* note 26 (noting that HR professionals are increasingly willing to rely on AI to make personnel decisions).

125. *See* ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 98. Rogers acknowledges that the Board would likely find unlawful an algorithm intentionally designed to screen out, say, a worker who has previously filed an NLRB charge, but notes that in many states, it is lawful to discriminate against employees based on nonwork political and social activities—factors that would allow employers to infer whether a worker is likely to organize. *See id.*

126. *See* 29 U.S.C. § 158(a)(5).

127. Colgate-Palmolive Co., 323 N.L.R.B. 515, 515, 519 (1997); *see also* Brewers & Maltsters, Loc. Union No. 6 v. NLRB, 414 F.3d 36, 42–48 (D.C. Cir. 2005) (installation of surveillance cameras was mandatory subject of bargaining, but the Board could not remedy worker discipline based on misconduct discovered by unlawfully installed cameras under 29 U.S.C. § 160(c)). The Electronic Surveillance Memo cites *Brewers & Maltsters* for the

have bargained over and won notice requirements, collaborative decision-making clauses, and limits on data use.[128] In 2023, unionized workers at the media company Future ratified a new collective bargaining agreement (CBA) that prohibits the use of AI in layoffs[129] and UPS drivers successfully bargained for a ban on "any discipline based solely on technology."[130] These are powerful work rules that give workers increased control over electronic surveillance and algorithmic management in their workplaces.[131] Moreover, negotiating these rules can improve the workers' relationship with surveillance: employees in unionized workplaces are more likely to report that their employers use monitoring for health and safety purposes, and are less likely to report "feeling pressured to work faster than would be healthy or safe."[132] Still, under the current regime, these changes are only accessible to workers who already have a majority vote in favor of exclusive union representation.

But the rise in algorithmic management practices undercuts workers' ability to win a union election in the first place.[133] Indeed, these contractual wins may give employers even more incentive to fight against a nascent unionization campaign to avoid

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proposition that "employers violate Section 8(a)(5) if they fail to provide information about, and bargain over, the implementation of tracking technologies and their use of the data they accumulate." Electronic Surveillance Memo, *supra* note 18, at 5 n.20.

128. *See* Lisa Kresge, Union Collective Bargaining Agreement Strategies in Response to Technology (Nov. 2020) (working paper, UC Berkeley Labor Center) (on file with the *Columbia Journal of Law & Social Problems*) (surveying CBAs regulating employer use of electronic monitoring).

129. *See* Press Release, Writers Guild of Am., E., WGA East Members at Future PLC Ratify Second Union Contract (Dec. 13, 2023), https://www.wgaeast.org/wga-east-members-at-future-plc-ratify-second-union-contract/ [https://perma.cc/C3V7-5XDN].

130. *UPS National Master Tentative Agreement 2023-2028 Summary Changes and Improvements*, UPS TEAMSTERS (Aug. 2023) [hereinafter UPS CBA], https://teamster.org/wp-content/uploads/2023/08/UPS-Master-Highlights-single-pgs-1.pdf [https://perma.cc/W4YG-WYH3]. If employees believe the employer has impermissibly attempted to circumvent the contract by, for example, having a human-resources official communicate discipline that was, in fact, based solely on technology, the union can pursue the grievance and arbitration procedures outlined in the CBA to seek an appropriate remedy.

131. Some worker advocates have proposed implementing sectoral bargaining—industry-wide negotiations over workplace standards—in order to scale the gains won by unionized workers in AI regulation. *See* Patrick Oakford et al, *Federal AI Legislation: An Evaluation of Existing Proposals and a Road Map Forward*, ECON. POL'Y INST. (Sept. 25, 2024), https://www.epi.org/publication/federal-ai-legislation/ [https://perma.cc/7264-GDGS] (citing HARV. L. SCH. CTR. FOR LAB. & A JUST ECON., CLEAN SLATE FOR WORKER POWER, PRINCIPLES OF SECTORAL BARGAINING: A REFERENCE GUIDE FOR DESIGNING FEDERAL, STATE, AND LOCAL LAWS IN THE U.S. (May 2021)).

132. Hertel-Fernandez, *supra* note 8, at 14, 27.

133. *See supra* Part I.

reconfiguring their algorithmic management practices. Data shows that the use of surveillance during union election campaigns increased from 14% to 32% from 1999 to 2021, and to 36% when the employer mounted an anti-union campaign.[134] Without greater regulation of these practices, the information asymmetry between workers and bosses is only likely to grow.

3. *Adapting Labor Law to New Technologies*

For the foregoing reasons, labor law must recognize algorithmic management as an unfair labor practice. It must design a remedy that adequately supports workers. Doing so will prevent employers from using algorithmic management to evade labor law and protect workers' ability to exercise their rights.

As former General Counsel Abruzzo has argued, the Board should construe algorithmic management as an infringement on workers' Section 7 rights within the NLRB's existing surveillance doctrine.[135] Her Electronic Surveillance memo cites precedent that makes it unlawful, for example, to photograph employees engaging in protected concerted activity; institute new surveillance measures in response to protected activity or create the impression thereof; discipline employees who protest workplace surveillance or algorithm-generated production quotas; or use artificial intelligence to hire or terminate workers if the underlying algorithm makes decisions based on the exercise of Section 7 rights.[136] The former General Counsel's proposed framework would expand on this precedent to "protect employees . . . from intrusive or abusive forms of electronic monitoring and automated management that interfere with Section 7 activities," balancing the impact on Section 7 rights with employers' business needs.[137]

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134. *See In Solidarity: Removing Barriers to Organizing: Hearing Before the H. Comm. on Educ. & Lab.*, 177th Cong. 11–12 (2022) (testimony of Kate Bronfenbrenner). This data underscores one of the biggest flaws in the NLRB enforcement regime, which is that employers do not really care whether surveillance is unlawful. A rational employer would rather absorb the penalty for an unfair labor practice—at most, backpay for a discharged worker, plus foreseeable collateral expenses; at least, a notice mandate—over the expense of a unionized workforce. *See* Paul Weiler, *Promises to Keep: Securing Workers' Rights to Self-Organization under the NLRA*, 96 HARV. L. REV. 1769, 1790–91 (1983) (describing the inadequacy of traditional NLRB remedies).

135. *See* Electronic Surveillance Memo, *supra* note 9, at 3–5.

136. *See id.* at 3–5.

137. *Id.* at 1; *see also* NLRB v. Great Dane Trailers, Inc., 388 U.S. 26, 34 (1967) (when "the resulting harm to employee rights is . . . comparatively slight, and a substantial and

Under this framework, an employer who fires two or more employees who staged a walkout over algorithmic management practices would likely be found to have violated the Act. The available remedy would likely be reinstatement and backpay for the fired workers.

The proposal mirrors the framework former General Counsel Abruzzo advocated for in *Stericycle*, a 2023 Biden Board decision regarding facially neutral work rules—for example, prohibiting sharing salary information—that prevent workers from exercising their rights under the Act.[138] Under *Stericycle*, the General Counsel has the burden of establishing that a challenged work rule "has a reasonable tendency to chill employees from exercising their Section 7 rights."[139] If they succeed, the rule is presumed unlawful.[140] The employer may rebut that presumption by "proving that the rule advances a legitimate and substantial business interest, and that the employer is unable to advance the interest with a more narrowly tailored rule."[141] The Board justified its decision by emphasizing its responsibility to balance furthering the "dominant purpose of the Act"—protecting employees' right to organize—with the "equally undisputed . . . right of employers to maintain discipline in their establishments."[142] The remedy for an unlawful work rule would be recission of the rule, alongside reinstatement and backpay for any workers unlawfully disciplined or terminated under it.[143]

The Trump Board is likely to revert to its pre-*Stericycle* precedent,[144] but this framework also offers a pathway to construing algorithmic management as an unlawful work rule. Consider *Boeing Co.*, a case that centered on a work rule prohibiting camera use at the worksite except in limited circumstances.[145] The Board established a categorical approach to

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legitimate business end is served, the employers' conduct is prima facie lawful" (internal citations omitted)).

138. *See* Stericycle, Inc., 372 N.L.R.B. No. 113, slip op. at 13 (2023).

139. *Id.* at 2.

140. *See id.*

141. *Id.*

142. *Id.* at 8 (quoting Republic Aviation Corp. v. NLRB, 324 U.S. 793, 798 (1945)).

143. *See id.* at 13 ("[T]he remedy will be an order to rescind the rule, leaving the employer free to replace the rule with a more narrowly tailored substitute.").

144. *See supra* note 29 (likely changes to labor law under the second Trump administration); *supra* note 112 (politicization of the NLRB); *see also* Boeing Co., 365 N.L.R.B. 1494, 1495 (2017).

145. *See Boeing Co.*, 365 N.L.R.B. at 1494–95.

facially neutral work rules, evaluating rules according to "(i) the nature and extent of the potential impact on NLRA rights, and (ii) legitimate justifications associated with the rule."[146] Relying in part on the defense-contractor employer's national security concerns, the Board held that its no-camera rule was lawful.[147] It highlighted that workers had not alleged that the rule interfered with their Section 7 rights, and that the rule "would not prevent employees from engaging in [a] group protest, thereby exercising their Section 7 right to do so, notwithstanding their inability to photograph the event."[148] By contrast, workers in algorithmically managed workplaces could point to facts supporting the conclusion that algorithmic management and workplace surveillance *had* interfered with the exercise of their Section 7 rights, militating recission of those rules.[149]

The remedies under either of these frameworks—recission, reinstatement, and backpay—would certainly help manage turnover, which would in turn support organizing. These are not the only remedies that could mitigate algorithmic management's impact on workers' ability to unionize. Union access—ordering the employer to open its doors to labor organizers, who can connect with and mobilize workers—would give unions a direct line to affected workers to explain the benefits of unionization. Even with this remedy, however, employers can prohibit discussing the union "in non-work areas during non-working time" if they have a legitimate, nondiscriminatory reason for doing so,[150] and algorithmic management hampers workers' access to these spaces ex ante: If a worker hardly has time to use the bathroom on their breaks for fear of an automated writeup,[151] it is unlikely that they will use that precious time to talk with a union organizer.

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146. *See id.* at 1496.
147. *See id.* at 1512.
148. *Id.*
149. *See id.* at 1509 ("[W]hen a rule, reasonably interpreted, *would* prohibit or interfere with the exercise of NLRA rights, the mere existence of some plausible business justification will not automatically render the rule lawful.").
150. Beth Israel Hosp. v. NLRB, 437 U.S. 483, 488–89 (1978) (holding that hospital work rules banning solicitation and distribution, including of union-related material, were invalid as to cafeteria and break areas, but valid as to patient care areas) (citing NLRB v. Beth Israel Hosp., 554 F.2d 477, 480 (1977)); *see id.* at 492–93, nn.10, 11 (collecting cases where the Board has found that the rule is "necessary to maintain production or discipline," including in "retail marketing establishments [where] solicitation and distribution may be prohibited on the selling floor at all times").
151. *See* BETH GUTELIUS & SANJAY PINTO, CTR. FOR URB. ECON. DEV., PAIN POINTS: DATA ON WORK INTENSITY, MONITORING, AND HEALTH AT AMAZON WAREHOUSES 19 (Oct.

Some scholars advocate for "preemptive abolition," or rescission, of algorithmic management, particularly where it makes employment decisions "without the involvement of a human supervisor."[152] Rescission, however, may not be possible when algorithmic management practices are embedded in the fabric of a business; unlike the New Deal–era factory, an Amazon warehouse cannot provide its hallmark services (such as two-day shipping) without algorithmic management. Total rescission, moreover, denies workers the ability to bargain over the potential benefits of workplace surveillance, particularly for health and safety protections.[153] Abolishing algorithmic management could also incentivize capital flight,[154] as the cost of eliminating its use is likely more onerous than simply moving elsewhere.

Over and above these proposed remedies, the Board can meet the challenge algorithmic management poses by instituting innovative remedies that would (1) cure algorithmic management's infringement on workers' rights and (2) promote organizing in the face of technological change. In Part II, this Note argues that the Board should breathe new life into the bargaining order remedy as part of its mandate to "adapt the Act to the changing patterns in industrial life."[155]

2023), https://indigo.uic.edu/articles/report/Pain_Points_Data_on_Work_Intensity_Monitoring_and_Health_at_Amazon_Warehouses/24435124?file=44065940 [https://perma.cc/EAA4-7ZKW] (reporting that 44% of Amazon employees surveyed cannot "take breaks when they need to," 23% say their "production standard or rate makes it hard for [them] to take time to use the bathroom 'always/most of the time,'" and 31% say the same is true "sometimes").

152. ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 141–42 (citing BERNHARDT ET AL., *supra* note 9, at 22).

153. *See* Hertel-Fernandez, *supra* note 8, at 27 (unionized workers are more likely to express confidence that workplace surveillance is used to promote health and safety).

154. Capital flight (also called capital mobility or capital migration) refers to employers' ability to move operations to geographic locations less sympathetic to organizing and thereby prevent unionization. *See generally* Kate Bronfenbrenner, *Uneasy Terrain: The Impact of Capital Mobility on Workers, Wages, and Union Organizing*, CORNELL UNIV. (Sept. 6, 2000), https://ecommons.cornell.edu/server/api/core/bitstreams/e433b22a-cab8-438b-a779-761d5892acdd/content [https://perma.cc/2VJQ-NBWY] (global context); Tami J. Friedman, *Exploiting the North-South Differential: Corporate Power, Southern Politics, and the Decline of Organized Labor after World War II*, 95 J. AM. HIST. 323 (2008) (domestic).

155. NLRB v. J. Weingarten, Inc., 420 U.S. 251, 266 (1975).

II. TOWARDS A MORE HUMAN WORKPLACE: REMEDYING ALGORITHMIC MANAGEMENT VIA BARGAINING ORDERS

The existing frameworks that would govern algorithmic management as an unfair labor practice fall short of their full potential to protect workers. The Electronic Surveillance Memo, *Stericycle*, and *Boeing* approaches would afford non-union workers notice or recission of the technologies governing their work life but not the opportunity to bargain over them, while the application of *Wright Line* would allow employers to design these algorithms to prevent worker organizing. The Board should take a firmer stance against algorithmic management's infringement on workers' Section 7 rights. Once the issue of algorithmic management comes before the Board, it should issue a narrow, nonmajority[156] bargaining order on the grounds that algorithmic management is a pervasive unfair labor practice that interferes with the "laboratory conditions" under which union representation elections must occur.[157] Any agreement resulting from such an order would effectuate workers' informed consent to algorithmic management, allowing them to retain any benefits they see to the practice.

The notion of bargaining with employees without an exclusive, elected representative is anathema to employers. Indeed, it runs counter to many assumptions about labor law. The following Parts will demonstrate why a narrow bargaining order is not only permissible, but preferable to traditional remedies from both a legal and a policy perspective.

A. THE NLRA AND CASE LAW PERMIT NONMAJORITY AND MINORITY BARGAINING ORDER REMEDIES

The Board derives its authority to issue remedies from Section 10(c) of the NLRA.[158] If the Board finds an employer or a union has engaged in an unfair labor practice, it shall "take such affirmative action including reinstatement of employees with or

156. This Note uses the term "nonmajority," as distinct from "minority," to distinguish bargaining orders issued in absence of a recognition of exclusive representation by a labor union that would apply to the entire workplace (nonmajority) or merely to the minority association of employees.

157. NLRB v. Gissel Packing Co., 395 U.S. 575, 612 (1969).

158. *See* 29 U.S.C. § 160(c).

without back pay, as will effectuate the policies of this subchapter."[159] Those policies include "protecting the exercise by workers of *full freedom of association*, self-organization, and designation of representatives of their own choosing."[160] While the Board may only issue make-whole remedies, not punitive damages, it has broad discretion to fashion remedies that promote the policy of the Act.[161] The most robust remedy in the Board's arsenal is a *Gissel* bargaining order, requiring employers to negotiate with the union without the union first winning a representation election.[162] The *Gissel* order is most appropriate when an employer has committed such pervasive unfair labor practices that the "laboratory conditions necessary for a fair election" have been "destroy[ed]."[163] Assuming algorithmic management is found to be a Section 8(a)(1) violation under the frameworks outlined in Part I.C, the Board will need to find that the pattern of unfair labor practices was so "pervasive" that "their coercive effects cannot be eliminated by the application of traditional remedies, with the result that a fair and reliable election cannot be had"[164] to issue a bargaining order as a remedy. The Board should find that this pervasiveness standard is met where algorithmic management is woven into the fabric of a modern business such that not even organizing, let alone a fair election, is possible.[165]

1. *The Vitality of a Nonmajority Bargaining Order Remedy*

Because *Gissel* is the Board's most potent remedy, it is the best match for the employer's own most powerful weapon—that is, algorithmic management. *Gissel* holds that workers need not win a majority representation election before the employer incurs a statutory duty to bargain with the union.[166] In *Gissel*, the

159. *Id.*
160. 29 U.S.C. § 151 (emphasis added).
161. *See* Fibreboard Paper Prods. Corp. v. NLRB, 379 U.S. 203, 216 (1964) (quoting NLRB v. Seven-Up Bottling Co., 344 U.S. 344, 346 (1953)).
162. *See Gissel Packing Co.*, 395 U.S. at 612 (affirming Board's use of bargaining order remedy where employer's pervasive unfair labor practices made it impossible for workers to win union election by majority vote).
163. NLRB v. Gissel Packing Co., 395 U.S. 575, 612 (1969).
164. *Id.* at 613–14 (internal citations omitted).
165. *See* Barenberg, *Democracy and Domination*, *supra* note 41, at 941 (describing how anti-union sentiment forms the "warp and woof" of an enterprise's culture).
166. *See* NLRB v. Gissel Packing Co., 395 U.S. 575, 613–15 (1969).

employers waged extreme anti-union campaigns against their workers, a majority of whom had signed authorization cards.[167] When the unions lost their elections, they filed unfair labor practices.[168] The Board ordered the employer to bargain, but the Fourth Circuit ordered a rerun election.[169] On appeal, the Supreme Court upheld the Board's order, finding that if:

> [T]he possibility of erasing the effects of past practices and of ensuring a fair election (or a fair rerun) by the use of traditional remedies, though present, is slight and that employee sentiment once expressed through cards would, on balance, be better protected by a bargaining order, then such an order should issue.[170]

The Court in *Gissel* approved remedial bargaining orders in two types of cases: one, where the unfair labor practices are so coercive that "a fair and reliable election" would not be possible through traditional remedies alone; and two, "less extraordinary cases" where the employer's practices undermined the majority.[171] Such an "extraordinary" remedy was necessary to deter future employer misconduct.[172] Even if the Board's remedies include a cease-and-desist, a notice remedy,[173] or granting the union access to the worksite, the employer will have already succeeded in eroding the union's majority support and will have no need for further union-busting.[174] As Justice Warren opined, "Perhaps the only fair way to effectuate employee rights is to re-establish the conditions as

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167. *See id.* at 580. Authorization cards indicate that workers seek to be represented by the union; they typically contain language that the worker authorizes the union to negotiate on their behalf. *See Your Right to Form a Union*, NAT'L LAB. RELS. BD., *supra* note 23.

168. *See Gissel Packing Co.*, 395 U.S. at 580–82.

169. This remedy allows unions that have lost a majority representation election because of employer misconduct to try again to obtain a majority of votes in favor of unionization. *See* Jeld-Wen of Everett, Inc., 285 N.L.R.B. 118, 120 (1987) ("[A] rerun election is a repeat election, standing in the place of another election which has been tarnished because the conditions denied voters a free choice and thus set aside.").

170. NLRB v. Gissel Packing Co., 395 U.S. 575, 614 (1969).

171. *Id.* at 614. These are known as "*Gissel* Category I" and "*Gissel* Category II" cases, respectively.

172. *Id.*

173. The Board may order informational remedies that require the company to post or read aloud a notice informing employees of their rights under the Act. *See, e.g.*, Noah's Ark Processors, LLC, 372 N.L.R.B. No. 80 (2023) (ordering employer to, inter alia, hold a meeting during work hours where the CEO will read a notice of employees' rights under the Act in English and Spanish).

174. *See Gissel Packing Co.*, 395 U.S. at 612.

they existed before the employer's unlawful campaign," or the "laboratory conditions" under which a union election should take place.[175]

In current practice, the Board will issue a *Gissel* bargaining order when a union cannot win an election—despite a majority of its bargaining unit having signed cards—because of an employer's union-busting practices.[176] But the *Gissel* Court noted, in dicta, that the Board could issue a bargaining order without prior evidence of majority support: though the lower court had declined to impose a bargaining order, it "nevertheless left open the possibility of imposing a bargaining order, *without need of inquiry into majority status on the basis of cards or otherwise*, in 'exceptional' cases marked by 'outrageous' and 'pervasive' unfair labor practices."[177] In noting that the "only effect" of its holding was to approve the issuance of bargaining orders in cases with less pervasive unfair labor practices, the Court implicitly affirmed the Board's authority to issue bargaining orders absent evidence of a majority when that remedy was the only "available, effective remedy for substantial unfair labor practices."[178]

At least one court saw the potential of *Gissel*'s nonmajority bargaining order dicta. In *United Dairy Farmers Cooperative Association*, the union lost its election, 14–12, after numerous employer unfair labor practices.[179] The Board declined to issue a bargaining order, divided on the question of whether it had the authority to do so and if it did, whether the facts of the case were egregious enough to warrant it.[180] On appeal, the Third Circuit held that the Board had the authority to issue a bargaining order

175. *Id.*

176. *See generally, e.g.*, Starbucks Corp. & Workers United, 374 N.L.R.B. No. 10 (Dec. 16, 2024) (adopting ALJ's recommendation to issue *Gissel* bargaining order given the "overwhelming number and relative severity of unfair labor practices" the employer committed across its Buffalo, New York-area stores); Spike Enter., Inc., 373 N.L.R.B. No. 41 (Apr. 10, 2024) (adopting ALJ's finding that employer's unlawful termination of union supporters and threats to bargaining unit employees comprised a *Gissel* category II case).

177. NLRB v. Gissel Packing Co., 395 U.S. 575, 613 (1969) (emphasis added).

178. *Gissel Packing Co.*, 395 U.S. at 614; *see also* Gil A. Abramson, *The Uncertain Fate of* Gissel *Bargaining Orders in the Circuit Courts*, 18 LAB. LAW. 121, 123 (2002) (describing the Court's dictum as authorizing a bargaining order "based solely on employer conduct").

179. *See* 242 N.L.R.B. 1026 (1979).

180. *See id.*; *see also Jay R. Bloom*, United Dairy Farmers Cooperative Association*: NLRB Bargaining Orders in the Absence of a Clear Showing of a Pro-Union Majority*, 80 COLUM. L. REV. 840, 843–51 (1980) (analyzing the plurality Board opinion).

absent evidence of majority support.[181] It noted that failure to recognize this authority would undermine the Act's goal of "further[ing] the majority preference of all employees" and likely incentivize even worse employer misconduct.[182]

Three years later, however, a three-judge panel of the D.C. Circuit ruled in *Conair Corp. v. NLRB* that the board did *not* have the authority to issue bargaining orders absent a clear majority.[183] Then-Judge Ginsburg, joined by then-Judge Scalia, emphasized the potential infringement on employees' choice of representative. "Nothing now in the text of the governing statute, or in its legislative history," she wrote, "suggests that Congress contemplated general authority in the Board to select or designate a union for employees, a majority of whom never signaled assent to the arrangement."[184] Judge Wald, in a blistering dissent, wrote that on the facts of *Conair*, where the employer had waged a vicious campaign against striking workers, "a remedial bargaining order is the only way to restore to employees their statutory right to make a free and uncoerced determination whether they wish to be represented in collective bargaining by a labor organization."[185] But the Supreme Court denied certiorari, and that same year, the Reagan Board signaled its intent to follow the D.C. Circuit in *Gourmet Foods*.[186]

The *Conair* ruling notwithstanding, the Supreme Court has never repudiated the *Gissel* dicta, and the Board could lean on its longstanding policy of nonacquiescence to revive the Third Circuit's approach.[187] Against the backdrop of extraordinary

181. *See* United Dairy Farmers Coop. Ass'n v. NLRB, *enforced*, 633 F.2d 1054, 1068 (3d Cir. 1980).

182. *Id.*

183. *See* 721 F.2d 1355, 1383–84 (D.C. Cir. 1983).

184. *Id.* at 1379.

185. *Id.* at 1387 (Wald, J., dissenting).

186. *See* Gourmet Foods, Inc., 270 N.L.R.B. 578, 583 (1983); *see also* Abramson, *supra* note 178, at 123–24.

187. *See* Samuel Estreicher & Richard L. Revesz, *Nonacquiescence by Federal Administrative Agencies*, 98 YALE L.J. 679, 705–13 (1989). When a party petitions for judicial enforcement or review of a Board decision, the NLRB may decline to follow circuit precedent in favor of its own view of a "nationally uniform" labor policy. *Id.* at 708 (citing Ins. Agents (AFL-CIO) (Prudential Ins. Co. of Am.), 119 N.L.R.B. 768, 773 (1957)). This is so because under 29 U.S.C. § 160(f), parties may seek review of Board decisions in the circuit where the unfair labor practice was committed, where the litigants reside or transact business, or in the D.C. Circuit, meaning the Board may not know exactly which circuit's law should apply when it issues its ruling. The doctrine is criticized for, among other things, defying settled circuit law. *See* Heartland Plymouth Ct. MI, LLC v. NLRB, 838 F.3d 16, 26 (D.C. Cir. 2016) (awarding attorneys' fees to employer appellant because NLRB arguments

coercion in the form of algorithmic management, the Board should resurrect the nonmajority *Gissel* bargaining order, approved of in the Third Circuit, to restore workplaces to the "laboratory conditions" necessary for free and fair elections. "Laboratory conditions" are those which are "nearly as ideal as possible"[188] to effectuate employee free choice, or at least those "conditions as they existed before the employer's unlawful campaign."[189] If the Board finds that omnipresent electronic surveillance violates Section 8(a)(1), it should seek to recreate the conditions of organizing prior to the adoption of algorithmic management.

2. *Policy Arguments for Minority Union Bargaining Orders*

One risk of imposing a bargaining order without clear evidence of majority support, as then-Judge Ginsburg suggested in *Conair*, is infringing on the workers' right to choose their own representatives under Section 7.[190] The Board and the Court have held that this right is foundational to the Act. In International Ladies' Garment Workers' Union (ILGWU) v. NLRB (*Bernhard-Altmann*), the employer unlawfully recognized the union without a secret ballot election, based on its good-faith but incorrect belief that the union had majority support.[191] The employer's pre-majority recognition, Justice Clark wrote, conferred on the union "a deceptive cloak of authority with which to persuasively elicit additional employee support."[192] At the same time, however, both the majority opinion and Justice Douglas' dissent distinguished *exclusive* representation by a minority union (unlawful) from an employer *bargaining* with a minority union (lawful).[193] *Bernhard-*

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in favor of nonacquiescence amounted to bad faith); *see also* Estreicher & Revesz, *supra*, at 710–13 (surveying circuit decisions criticizing nonacquiescence). However, arguments in favor of nonacquiescence recognize its importance to the exercise of the Board's congressionally delegated authority to set national labor policy. *See id.* at 708–09.

188. *See* Gen. Shoe Corp., 77 N.L.R.B. 124, 127 (1948). *But see* Amalgamated Clothing & Textile Workers Union v. NLRB, 736 F.2d 1559, 1562 (D.C. Cir. 1984) (collecting cases) (because "nearly as ideal as possible" conditions are extremely difficult to achieve to the point of being "unrealistic," courts must apply "laboratory conditions" standard "flexibly").

189. NLRB v. Gissel Packing Co., 395 U.S. 575, 612 (1969).

190. *See* 29 U.S.C. §§ 157, 158(a)(1).

191. *See* 366 U.S. 731, 733–36 (1961).

192. *Id.* at 736.

193. *See id.* at 736–37 (majority opinion) ("[E]xclusive representation is the vice in the agreement."); *id.* at 741 (Douglas, J., concurring) ("We have indicated over and again that . . . a minority union has standing to bargain for its members."); *see also* CHARLES MORRIS, THE BLUE EAGLE AT WORK: RECLAIMING DEMOCRATIC RIGHTS IN THE AMERICAN

Altmann's proscription of employer support for an exclusive representative, therefore, is copacetic with *Gissel*'s bargaining order absent evidence of majority support in Category I cases.

Still, the Board might decide that the risk of violating employees' right to choose their own representatives through a *Gissel* bargaining order is too high. In that case, the Board could impose a bargaining order for a minority union at a workplace governed by algorithmic management.[194] A minority or members-only union is one that represents only those workers who opt in; that is, it is non-exclusive representation within the meaning of Section 9.[195] Labor law scholars have long argued that a minority or members-only bargaining order is a permissible reading of the Act. For instance, Professor Charles Morris asserts that minority unions were common and "uncontroversial" prior to the passage of the Wagner Act, and the bill's drafters expressly contemplated bargaining rights for members-only unions.[196] Examining drafts of what would become the Wagner Act, Morris suggests that Senator Wagner and his key legislative aide, Leon Keyserling, "were conscious of the role played by minority-union bargaining in the organizational process, for it was common knowledge that such bargaining often preceded the establishment of a union's majority."[197] Indeed, Wagner and his aides rejected a draft of what was then Section 8(5) that would have excluded minority-bargaining obligation from employers' duty to bargain.[198]

WORKPLACE 95 (2004) (discussing *Bernhard-Altmann*'s approval of minority-union bargaining).

194. *See, e.g.*, Brandon Magner, *Minority Unionism and the NLRB*, LAB. L. LITE (Jan. 4, 2021), https://brandonmagner.substack.com/p/minority-unionism-and-the-nlrb [https://perma.cc/RK6Z-W63P]. Magner, discussing the Alphabet Workers Union, a minority union of Google employees, posits that "[t]here is a strong rationale for organizing [as a minority union] at a corporate giant." *Id.*

195. *See* 29 U.S.C. § 159(a) (exclusive representation is only permissible with majority support).

196. *See* MORRIS, *supra* note 193 at 10 (minority bargaining was "not deemed controversial" because it was common practice prior to the New Deal); *id.* at chs. 1–2 (describing the evolution of the Wagner Act). In Morris' telling, Senator Wagner believed that majority exclusivity was "the ideal bargaining format for mature collective bargaining," but "his primary concern was to establish an effective means to settle representation disputes so that collective bargaining—whatever its format—could proceed expeditiously and successfully." *Id.* at 42–43.

197. *Id.* at 43; *compare id.* at 5 (describing minority bargaining as a "preliminary stage"), *with Bernhard-Altmann*, 366 U.S. 731, 736 (1961) (describing employer pre-majority support of union as conferring impermissible veneer of authority interfering with employee free choice).

198. *See* MORRIS, *supra* note 193, at 63; *see also* Children's Hosp. & Rsch. Ctr. of Oakland, 364 N.L.R.B. 1677, 1682–83 (2016) (Member Hirozawa, concurring) (noting that

Expanding on Morris' thesis, Professors Catherine Fisk and Xenia Tashlitsky advocate for NLRB rulemaking endorsing minority bargaining order remedies.[199] They note that "nothing in the language of Section 7 explicitly limits the right to self-organize to those workplaces where a majority of employees choose one union or grants the right to bargain collectively only when a majority choose the same union," and that Section 8(a)(1) prohibits violations of that right in union or non-union workplaces alike.[200] Fisk and Tashlitsky also point out that Section 9 of the Act, which governs representation and elections, "applies only to *exclusivity*, not (explicitly) to the duty to bargain at all."[201] Fisk, Tashlitsky, and Morris make a strong case that a minority bargaining order is permissible under the Act. Recognizing the barriers to traditional majority unionism in workplaces governed by algorithmic management, the Board could still adopt a bargaining order remedy for a minority union of employees subject to the practice.

3. *The Board's Discretion to Craft Novel Remedies*

Courts have long affirmed the Board's authority to order remedies that adequately respond to new workplace practices that, without check, threaten workers' exercise of their rights. Therefore, in either exclusive representation or minority union context, finding algorithmic management a "pervasive" unfair labor practice remediable by bargaining order would fulfill the Board's "responsibility to adapt the Act to changing patterns of industrial life."[202] In *NLRB v. J. Weingarten, Inc.*, the Court sketched the bounds of judicial deference to the Board's remedial decision-making power, finding that reviewing courts should approve Board decisions that are "at least permissible" under the Act.[203] Even before *Weingarten*, lower courts affirmed time and again that the Board's power to craft remedies is "a broad

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Section 9(a) "does not mean that for an employer to have a duty to bargain with a union on behalf of its employees, the union must be a Section 9(a) exclusive representative").

199. *See* Catherine Fisk & Xenia Tashlitsky, *Imagine a World Where Employers Are Required to Bargain with Minority Unions*, 27 A.B.A. J. LAB. EMP. L. 1, 5–10 (2011) (summarizing and critiquing Morris' analysis of legal support for minority bargaining orders).

200. *Id.* at 5.

201. *Id.* at 6 (emphasis in original).

202. NLRB v. J. Weingarten, Inc., 420 U.S. 251, 266 (1975).

203. *Id.* at 266–67.

discretionary one, subject to limited judicial review."[204] Lower courts should not undo Board remedies unless they comprise "a patent attempt to achieve ends other than those which can fairly be said to effectuate the policies of the Act."[205] Likewise, because remedying algorithmic management with a narrow bargaining order would effectuate the Act's policy of "protecting the exercise by workers of full freedom of association," appellate courts should not disturb the Board's decision to issue this remedy.[206] When an employer inevitably challenges such a remedy, reviewing courts should defer to the Board's expertise in fashioning remedies.[207]

Though nonmajority or minority bargaining orders are legally feasible remedies, they would depart from current NLRB practice.[208] In 2006, in response to a minority-union campaign at Dicks' Sporting Goods, the Bush-appointed NLRB General

204. Fibreboard Paper Prods. Corp. v. NLRB, 379 U.S. 203, 216 (1964) (quoting NLRB v. Seven-Up Bottling Co., 344 U.S. 344, 346 (1953)).

205. *Id.* (quoting Va. Elec. & Power Co. v. NLRB, 319 U.S. 533, 540 (1943)); *see also* NLRB v. Noah's Ark Processors, 31 F.4th 1097, 1108 (8th Cir. 2022) (finding that ordering an employer to reimburse a union for bargaining expenses was valid exercise of Board power).

206. 29 U.S.C. § 151.

207. Full exploration of the potential impact of Loper Bright Enters. v. Raimondo, 603 U.S. 369, 412 (2024) (overturning doctrine of *Chevron* deference), is outside the scope of this Note, as is the proposed remedy's interaction with the Major Questions Doctrine, *see* West Virginia v. EPA, 597 U.S. 697, 721 (2022) (agencies must point to clear congressional authorization for its decisions on questions of major political or economic significance). The *Loper Bright* question bears mentioning, however: because the framework for courts' deference to NLRB statutory interpretation predates *Chevron* and is based on distinct rationale, it arguably survives *Loper Bright*. *See* Darin Dalmat, *Judicial Review of NLRB Orders in a Post-*Chevron *World—Part II*, ONLABOR (Dec. 8, 2023), https://onlabor.org/judicial-review-of-nlrb-orders-in-a-post-chevron-world-part-ii/ [https://perma.cc/RC7G-Z9RC] (collecting cases). But *Loper Bright* may embolden courts to apply traditional tools of statutory interpretation to invalidate Board holdings, despite prior precedent suggesting this approach is inapposite. *See* Andrew Storm, *Here's How Loper Bright is Stripping Away Workers' Rights*, ONLABOR (Oct. 4, 2024), https://onlabor.org/heres-how-loper-bright-is-stripping-away-workers-rights/ [https://perma.cc/28HB-7A5S] (arguing that *Loper Bright* encourages judges to declare "open season" on agencies who depart from the judge's preferred outcome, other standards of deference notwithstanding).

The Fifth Circuit recently did just this in Hudson Inst. of Process Rsch. v. NLRB, 117 F.4th 692 (5th Cir. 2024), a case that hinged on the use of an automated project management software (PMS) and key performance indicator (KPI) tracker. In *Hudson Institute*, the employer claimed that certain employees were supervisors who should have been excluded from the bargaining unit because they were authorized use independent judgment to assign work to junior staff, even though the PMS actually delegated assignments, as well as override the KPI tracker's automated determinations rewarding junior staff's performance. *Id.* at 702–05. The Board found that actual *exercise* of authority (or lack thereof) was controlling, but the Fifth Circuit disagreed, finding that the Board's determination that these employees were not supervisors was not supported by substantial evidence, *id.* at 701, and the authority itself was sufficient to render these employees supervisors, *id.* at 703–05.

208. *See* Fisk & Tashlitsky, *supra* note 199, at 2.

Counsel issued a memo stating that the rule against members-only bargaining "is well-settled and not an open issue."[209] Indeed, some scholars have posited that because minority unionism has been a non-starter for so long, it would require legislative action or administrative rulemaking to "reaffirm the true meaning of the law."[210] The Biden Board, too, demonstrated openness to expanding bargaining orders through its landmark *Cemex Construction Materials Pacific* ruling.[211] In *Cemex*, the Board effectively lowered the threshold for *Gissel* Type Two cases.[212] It held that an employer may either recognize a majority union or timely file for an election, but if the employer commits any unfair labor practice in the run-up to the election that would require setting aside the results, the Board will issue a bargaining order anyway.[213] That said, the conservative Project 2025 proposes banning voluntary card-check recognition and instead mandating secret-ballot majority elections before any union may be certified, suggesting that *Cemex*'s days are numbered.[214]

This Note acknowledges that the likelihood of any even moderate proposals to expand workers' rights through Board law is slim through at least 2028.[215] The foregoing analysis, nonetheless, suggests a pathway by which labor law could extend the bargaining order remedy to situations where an employer's unlawful surveillance has impeded workers' ability to organize *ab initio*.

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209. Memorandum from Barry J. Kearney, Associate General Counsel, to Gerald Kobell, Regional Director, Region 6 (June 22, 2006), https://onlabor.org/wp-content/uploads/2016/09/dicks-sporting-goods-advice-memo-1.pdf [https://perma.cc/4VBE-Z3KQ].

210. MORRIS, *supra* note 193, at 2 (first citing Alan Hyde, *After Smyrna: Rights and Powers of Unions that Represent Less than a Majority*, 45 RUTGERS L. REV. 637, 639 n.8 (1993); then citing Matthew W. Finkin, *The Road Not Taken: Some Thoughts on Nonmajority Employee Representation*, 69 CHI.-KENT L. REV. 195, 198, n.18 (1993)).

211. *See* Cemex Constr. Materials Pac., LLC, 372 N.L.R.B. No. 130, slip op. at 24–28 (Aug. 25, 2023).

212. *See id.*; *see also* Tascha Shahriari-Parsa, *Cemex Is a Big Change, but It's Not Joy Silk*, ONLABOR (Aug. 26, 2023), https://onlabor.org/cemex-is-a-big-change-but-its-not-joy-silk/ [https://perma.cc/9FK2-KBUY].

213. *See Cemex*, 372 N.L.R.B. No. 130, slip op. at 25.

214. *See* Jonathan Berry, *Department of Labor and Related Agencies*, in MANDATE FOR LEADERSHIP 2025: THE CONSERVATIVE PROMISE 602–03 (Paul Dans & Steven Groves eds., 2023).

215. *But cf.* Benjamin Sachs, *Hawley Calls for a "Pro-Worker Framework"*, ONLABOR (Jan. 10, 2025), https://onlabor.org/hawley-calls-for-a-pro-worker-framework/ [https://perma.cc/AKP6-V2NW] (reporting that arch-conservative Missouri Senator Josh Hawley proposed a pro-worker agenda for the 119th Congress, including a prohibition on "unsafe work speed quotas or other corporate policies that lead to higher worker injury rates").

B. A BARGAINING ORDER PROMOTING WORKER ORGANIZATION BEST EFFECTUATES THE ACT'S POLICY.

As a remedy for the algorithmic management unfair labor practice, a bargaining order would better effectuate the policies of the Act than a notice-and-consent requirement, union access remedy, or rescission of algorithmic management. The stated purpose of the Act is to "mitigate and eliminate . . . certain substantial obstructions to the free flow of commerce" by:

> encouraging the practice and procedure of collective bargaining and by protecting the exercise by workers of full freedom of association, self-organization, and designation of representatives of their own choosing, for the purpose of negotiating the terms and conditions of their employment or other mutual aid or protection.[216]

Notably, these "substantial obstructions" include not only strikes, work stoppages, and other labor disputes, but also unequal bargaining power between "employees who do not possess full freedom of association" and employers "organized in the corporate or other forms of ownership association."[217] Remedies that seek to rebalance bargaining power between labor and management will thus effectuate the Act's purpose.

When it comes to algorithmic management, equalizing this imbalance will require removing the information asymmetry between bosses and workers. But even if true notice is achievable—and there are strong arguments that it is not, given the black-box nature of many surveillance technologies[218]—notice alone will not necessarily eliminate this asymmetry because of the ways employers can use algorithmic management to tamp out worker organizing.[219] Further, mere notice does not encourage workers to make full use of their right to collective action; indeed, it may contribute to an impression that the boss' power over the workplace is insurmountable.

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216. 29 U.S.C. § 151.
217. *Id.*
218. *See* ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 84.
219. *See supra* Part I.A; BERNHARDT ET AL., *supra* note 9, at 19 (discussing how under existing employment law, notice alone cannot correct asymmetries between low-wage workers and their employers).

By contrast, a minority bargaining order would "encourage the practice and procedure of collective bargaining" while protecting workers' exercise "of full freedom of association, self-organization, and designation of representatives of their own choosing."[220] It would remedy the information asymmetry between workers and employers more thoroughly than a mere notice requirement because workers will be able to directly request information about the surveillance technologies used in the workplace that is most relevant to them. The opportunity to negotiate data-collection safeguards could protect against the possibility of algorithms that "randomly" terminate workers to increase turnover, reducing the likelihood of the union obtaining majority support.[221] Critically, the bargaining process would allow workers who see advantages to algorithmic management—for example, in promoting efficiency or ergonomics—to retain those benefits.[222] Employers may also emerge successful: Professor Rogers suggests that giving workers the ability to bargain over new technologies "should incentivize employers to adopt productivity-enhancing rather than power-augmenting technologies."[223]

The Board should design this novel bargaining process in a way that maximally promotes worker self-determination. In lieu of an elected bargaining committee, as is traditional in an organizing drive,[224] negotiation sessions should be open to all workers, ensuring transparency into the proposals and the employer's responses. The negotiations themselves should effectuate a clear mutual understanding of (1) what workplace data employers collected; (2) how they use that data (e.g., to set and enforce

220. 29 U.S.C. § 151.

221. *See* Pranshu Verma, *AI Is Starting to Pick Who Gets Laid Off*, WASH. POST (Feb. 20, 2023, 7:00 AM) (on file with the *Columbia Journal of Law & Social Problems*), https://www.washingtonpost.com/technology/2023/02/20/layoff-algorithms/ (quoting Google employee wondering whether the tech giant had relied on a "mindless algorithm carefully designed not to violate any laws" in laying off 12,000 workers); Greg Rosalsky, *You May Have Heard of the 'Union Boom.' The Numbers Tell a Different Story*, NPR: PLANET MONEY (Feb. 28, 2023, 6:31 AM), https://www.npr.org/sections/money/2023/02/28/1159663461/you-may-have-heard-of-the-union-boom-the-numbers-tell-a-different-story [https://perma.cc/VES5-UN7Z] (high turnover "may weaken worker solidarity and reduce the incentive" to organize since workers are not invested in the long-term sustainability of a workplace).

222. *See* ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 143; c*f. generally* AARON BASTANI, FULLY AUTOMATED LUXURY COMMUNISM: A MANIFESTO (2019) (arguing that technological advancements will liberate future society from exploitative labor).

223. ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 143.

224. *See* Megan McRobert, *What Is an Organizing Committee? Why Should I Form One?*, UNIT (Oct. 27, 2021), https://guide.unitworkers.com/whats-an-organizing-committee/ [https://perma.cc/9S8W-BVGL].

productivity quotas); (3) under what conditions the data could lead to adverse employment outcomes; and (4) what appeal processes are available to workers disciplined or terminated based on the collected data. To protect employees' Section 7 right to refrain from organizing, neither a recognition agreement nor a CBA would result from these negotiations, but rather a memorandum of understanding as to the employer and employees' rights and responsibilities regarding algorithmic management.

This firsthand experience with negotiating could propel a broader, traditional organizing drive with the ultimate goal of a traditional majority union[225] or counsel its rejection; either outcome is consistent with employees' right to a free choice of representative. But because the Board could order this remedy whether or not a group of employees are affiliated with a formal, established labor organization, it has the potential to demonstrate opportunities for promoting worker autonomy outside of the traditional union context.[226] At the same time, the Board should ensure that unrepresented workers are not unfairly disadvantaged as they negotiate with the employer, who will almost certainly be represented by counsel. The Board could appoint a mediator to supervise the proceedings, or it could connect workers with formal labor organizations that have traditionally operated in the workers' industry or geographic location for advice or guidance. This intervention is a necessary recognition of the political economy of minority unionism: that is, without majority support, a group of employees is unlikely to be able to leverage enough power to force the employer to bargain with them. Because algorithmic management creates conditions where it is extremely difficult to obtain majority support in the first place,[227] connecting groups of employees with unions—repeat players with institutional knowledge about negotiation strategy, Board law, and more—would help level the playing field between unions and management.

According to Fisk and Tashlitsky, resurrecting the minority bargaining order would "dramatically alter the landscape of

225. *See* MORRIS, *supra* note 193, at 43 (noting that during the drafting of the Wagner Act, it was "common knowledge" that minority bargaining often preceded the establishment of a majority union).

226. *Cf.* Kate Andrias, *The New Labor Law*, 126 YALE L.J. 2, 69, 93–99 (2016) (arguing that worker organizing may enjoy greater success where it takes on a "wider range of forms, not all of which would entail exclusive union representation").

227. *See* NLRB v. Gissel Packing Co., 395 U.S. 575, 612 (1969).

organizing."[228] Namely, it would lower the barriers to organizing, reduce employer incentives to fight the union, and allow employers and workers direct pathways to negotiate over critical issues. But because so much of labor law is set up to support traditional unionism, and because algorithmic management presents a novel problem in the context of near-century old labor laws, minority bargaining orders would also encounter serious obstacles to effective implementation.

III. OBSTACLES TO IMPLEMENTATION

Because a nonmajority bargaining order would depart from past practice, this Note addresses the primary obstacles to implementing this remedy, which include (1) whether the Board can order reinstatement for algorithmically disciplined workers, given that Section 10(c) prohibits remedies for workers fired "for cause;" (2) whether a nonmajority bargaining order would impermissibly interfere with employers' rights to direct and control the workplace; and (3) whether a minority group of unorganized workers can build enough power to make the remedy effective. Case law has demonstrated that these issues are significant, but not insurmountable.

A. REINSTATEMENT FOR ALGORITHMICALLY DISCIPLINED WORKERS

For the Board to enable organizing among workers subject to algorithmic management, it must be able to protect those workers against discriminatory or pretextual firings, or firings laundered through *Wright Line*.[229] The NLRB's traditional remedies include reinstatement and backpay for workers who experience discrimination for their union activity.[230] But the NLRA specifically prohibits remedial reinstatement or backpay for workers "suspended or discharged for cause."[231] This is a problem

228. Fisk & Tashlitsky, *supra* note 199, at 11.

229. *See supra* Part I.B.2.

230. *See* Thryv, Inc., 372 N.L.R.B. No. 22, slip op. at 22 (Dec. 13, 2022) (ordering reinstatement, backpay, and "any other direct or foreseeable pecuniary harms suffered as a result of [the workers'] unlawful layoff").

231. 29 U.S.C. § 160(c). "Cause" generally comprises the obvious: misconduct, poor performance, etc. *See* Loc. One, Amalgamated Lithographers of Am. v. NLRB, 729 F.2d 172, 176 (2d Cir. 1984) (employees lawfully discharged for smoking cannabis at work); Paulsen

for employees subject to algorithm-determined termination for minor infractions that a human manager would never catch or write up. For instance, digital monitoring technologies may automatically mete out discipline for failure to meet productivity quotas by a slim margin; making minor, harmless errors on the production line; or returning from a break seconds late.[232] Compounding these concerns, employees have limited ability to appeal an algorithm's termination decision.[233] As a result, the threshold for what constitutes "cause" is far lower in the algorithmically managed workplace than in a traditional one. While proponents of algorithmic management would argue that digital monitoring is simply a more efficient way of catching and correcting legitimate infractions, opponents would contend that such heavy policing of employee performance not only threatens workers' exercise of their rights, but has a measurably harmful effect on worker health, safety, and morale with few, if any, productivity benefits.

From the labor law perspective, it difficult to make out a case that this kind of discipline rises to the level of unlawful discrimination: even if a discharged employee claimed that their dismissal was pretextual, the General Counsel would also need to meet their *Wright Line* burden of showing that a protected activity was a "substantial or motivating factor" in the discipline.[234] And even assuming the General Counsel could make out a claim, the employer could avoid liability by demonstrating that they make the same decision when it comes to employees who have not engaged in protected activity.[235]

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v. CSC Holdings, 2016 WL 951535, at *12 (E.D.N.Y. Mar. 8, 2016) (district court declined to enforce Board order reinstating organizing employee discharged for poor scores on performance metrics). The Act does not define "cause." 29 U.S.C. § 152.

232. *See* Morgan Lewis Letter, *supra* note 10.

233. *See id.* at 3 (explaining that managers can override incorrectly applied performance warnings).

234. NLRB v. Transp. Mgmt. Corp., 462 U.S. 393, 401 (1983).

235. *Compare* Morgan Lewis Letter, *supra* note 10, at 1 ("[Redacted] termination was based on [redacted] repeated failures to meet and maintain, with any consistency, [redacted] production rates. Notably, the production rates are set from outside the facility and apply to the entire facility, not just a single employee . . . . Further, the criteria for receiving a production related notice is entirely objective—the production system generates all production related warning and termination notices automatically with no input from supervisors."), *with* Summit Logistics, 337 N.L.R.B. 145 (2002) (employer met its *Wright Line* burden by demonstrating discharged employee's low performance metrics). *Contra* Cayuga Med. Ctr. at Ithaca, Inc., 367 N.L.R.B. No. 21 (Nov. 2, 2018) (holding that employer violated Section 8(a)(3) because the company's "Just Culture Algorithm" discipline model would not have terminated employees as claimed).

Because the NLRA does not define "cause,"[236] however, the Board could construe "for cause" to exclude technology-mediated disciplinary decisions, echoing the contract language the UPS Teamsters recently won.[237] Longstanding board precedent supports cause-tolling—suspending traditional norms around what constitutes "cause" for the purpose of adverse employment actions—in the organizing context. In *Lion Elastomers*, the Biden Board re-established the long-accepted setting-specific standards for when misconduct arising out of protected activity, like yelling at a supervisor at the bargaining table, is itself protected.[238] Without cause-tolling, Section 7 protections "would be meaningless" because the Board would not be able to "take into account the realities of industrial life and the fact that disputes over wages, hours, and working conditions are among the disputes most likely to engender ill feelings and strong responses."[239] This policy rationale maps onto "the realities of industrial life" in the electronically monitored workplace: the protections of Section 7 are meaningless if algorithmic management prevents workers from exercising those rights.

The test the Board returned to in *Lion Elastomers* analyzes outbursts or similar misconduct; it does not apply to job performance. But the Board could adopt a parallel test to protect employee conduct that, but for the dragnet of surveillance, would not have merited discipline or discharge. The factors in the longstanding test—place of discussion, subject matter, nature of outburst, and whether an employer's unfair labor practice provoked the outburst—must be balanced against "whether the conduct is so egregious as to take it outside the protection of the Act, or of such character as to render the employee unfit for service."[240] A parallel test could incorporate elements of the fourth factor—whether the discharge/discipline was "provoked" or

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236. *See* 29 U.S.C. § 152 (definitions used in NLRA).

237. *See* UPS CBA, *supra* note 130. In *Weingarten*, the Supreme Court approved of the Board's policy of incorporating language from collective bargaining agreements as evidence of "actual industrial practice." NLRB v. J. Weingarten, Inc., 420 U.S. 251, 268 (1975).

238. *See* Lion Elastomers LLC II, 372 N.L.R.B. No. 83, slip op. at 4 (May 1, 2023). The Board overturned *General Motors, LLC*, a Trump Board decision, which had held that the *Wright Line* standard applied in cases of misconduct arising out of protected activity. 369 N.L.R.B. No. 127 (July 21, 2020). Again, it is likely that the second Trump Board would seek to restore its prior precedent. *See supra* note 29 and accompanying text.

239. Lion Elastomers LLC II, 372 N.L.R.B. No. 83, slip op. at 2 (May 1, 2023) (quoting Consumers Power Co., 282 N.L.R.B. 130, 132 (1986)).

240. *Id.*; *see* Atlantic Steel Co., 245 N.L.R.B. 814, 816–17 (1979) (four factors).

generated by the employer's unfair labor practice, here algorithmic management—and weigh it against whether the conduct was "so egregious" that it should not be protected, or made the employee "unfit for service." Only the most draconian manager would argue that leaving a shift one minute early[241] is "so egregious" that it should not be protected by the Act or renders the employee "unfit for service." The effect of this kind of cause-tolling would be to allow the Board to reinstate employees who, under present conditions, would not be eligible for that remedy under Section 10(c)'s for-cause prohibition. This would protect employees whose de minimis infractions are caught by the algorithm's ever-watchful eye while preserving management's right to maintain discipline and control over the workplace.[242]

B. ALGORITHMIC MANAGEMENT AS A MANDATORY SUBJECT OF BARGAINING

Consistent with Section 10(c)'s prohibition on remedies for workers discharged "for cause," the background rule of labor law is that workers' "undisputed right of self-organization" must be balanced against employers' "equally undisputed right . . . to maintain discipline in their establishments."[243] This principle undergirds the General Counsel's proposed remedy in the Electronic Surveillance memo.[244] Companies that use algorithmic management will argue that these management tools are narrowly

241. *See* StitchyWitches, Post to r/FASCAmazon, REDDIT (Feb. 28, 2021, 10:58 AM), https://www.reddit.com/r/FASCAmazon/comments/luj9ay/will_i_be_fired_for_one_minute/?rdt=42415 [https://perma.cc/NE8X-9458] (anonymous user posted on forum for Amazon employees wondering whether clocking out one minute early would be a fireable offense).

242. *See* Republic Aviation Corp. v. NLRB, 324 U.S. 793, 798 (1945) (holding that the Board must balance the rights of employees under the Act against employers' right to maintain discipline at the worksite).

243. *Id.* (formulating the background rule); *see also* First Nat'l Maint. v. NLRB, 452 U.S. 666, 679 (1981) ("[I]n view of an employer's need for unencumbered decisionmaking, bargaining over management decisions that have a substantial impact on the continued availability of employment should be required only if the benefit, for labor-management relations and the collective-bargaining process, outweighs the burden placed on the conduct of the business."); *cf.* NLRB v. Babcock & Wilcox Co., 351 U.S. 105, 112 (1956) (accommodation between workers' right to organize and employers' property rights "must be obtained with as little destruction of one as is consistent with the maintenance of the other").

244. Electronic Surveillance Memo, *supra* note 18, at 8 ("If the employer establishes that the practices at issue are narrowly tailored to address a legitimate business need—i.e., that its need cannot be met through means less damaging to employee rights—I will urge the Board to balance the respective interests of the employer and the employees to determine whether the Act permits the employer's practices.").

tailored to address their legitimate business needs: specifically, to encourage workplace efficiency.[245] They will argue that even if their legitimate business need argument is unavailing, their use of algorithmic management, distinct from electronic surveillance, is a "managerial decision . . . at the core of entrepreneurial control" and not subject to the duty to bargain.[246]

The Board has repeatedly held, however, that electronic surveillance falls within the scope of "terms and conditions of employment" and is therefore plainly a mandatory subject of bargaining.[247] This is the case regardless of whether the employer implements the surveillance to catch misconduct or to supervise the worksite. In *Colgate-Palmolive Company*, the Board held that the installation of security cameras is a mandatory subject because, like physical examinations or drug testing requirements, it "is not entrepreneurial in character, is not fundamental to the basic direction of the enterprise, and impinges directly on employment security."[248] The Seventh Circuit adopted this approach in *National Steel*, adding that a bargaining order preserved the company's managerial interest.[249] The order "only requires National Steel to negotiate with the unions [and] does not dictate how the legitimate interests of the parties are to be accommodated in the process."[250] The D.C. Circuit affirmed the principle again in *Brewers and Maltsters*, noting that "the well-established test for determining whether a subject is a term or condition of employment is not whether it affects employees' privacy interests, but whether it is 'plainly germane to the working

245. *See* ROGERS, DATA AND DEMOCRACY, *supra* note 26, at 73 (explaining how algorithmic management has become established among large companies in the low-wage labor market); *cf.* Bales & Stone, *supra* note 59, at 49 (describing "many legitimate reasons" for which employers may want to monitor their workers, e.g. to prevent stealing time, stealing trade secrets, safety, or tracking individual improvement).

246. Fibreboard Paper Prods. Corp. v. NLRB, 379 U.S. 203, 223 (1964) (Stewart, J., concurring). Justice Stewart's concurrence contemplated the decision of an enterprise to "invest in labor-saving machinery" as one that would be excluded from the scope of mandatory bargaining, even though it would impact "wages, hours, and terms and conditions of employment." The Court later adopted Justice Stewart's framework for when managerial decisions that "have a direct impact on employment" but focus primarily on "economic profitability" are permissive subjects of bargaining in *First National Maintenance.* 452 U.S. at 677.

247. *See supra* Part I.B.2.

248. Colgate-Palmolive Co., 323 N.L.R.B. 515, 515 (1997).

249. *See* Nat'l Steel Corp. v. NLRB, 324 F.3d 928, 933 (7th Cir. 2003).

250. *Id.*

environment' and 'not among those managerial decisions, which lie at the core of entrepreneurial control.'"[251]

The Board should find that algorithmic management—particularly practices that automate discipline—meets the standard for term or condition of employment. It is plainly germane to the working environment because it dictates the pace and tenor of work, including when employees may be subject to discipline. It is not a managerial decision at the core of entrepreneurial control because nearly all enterprises throughout post-industrial history have been able to expand without the use of algorithmic management as it exists today. Therefore, algorithmic management's primary function is to control employees' terms and conditions of employment in the sense contemplated by the Act.[252] But businesses can achieve the entrepreneurial benefits of algorithmic management—like maximizing logistical efficiency—without automatically disciplining or terminating employees. The Board should also look at the myriad clauses governing surveillance in modern CBAs to demonstrate that bargaining over those terms is a common industrial practice.[253] The Board should thus analogize from *Colgate-Palmolive*, *First National Steel*, and *Brewers & Maltsters* to find that omnipresent surveillance "is not entrepreneurial in character, is not fundamental to the basic direction of the enterprise, and impinges directly on employment security."[254]

C. THE POLITICAL ECONOMY QUESTION

The most compelling argument against a minority bargaining order is not necessarily one of law, but of political and economic realities. The power of a union lies in the capacity of workers to leverage collective action to force concessions from their employer. Professor Paul Weiler writes:

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251. Brewers & Maltsters, Loc. Union No. 6 v. NLRB 414 F.3d 36, 43 (D.C. Cir. 2005) (quoting Ford Motor Co. v. NLRB, 441 U.S. 488, 498 (1979)) (cleaned up).

252. *See* 29 U.S.C. § 158(d) (employers and unions have a duty to bargain in good faith over "wages, hours, and other terms and conditions of employment"). In general, a corporate policy that affects an employee's day-to-day experience of work is a term or condition of employment. *See Ford Motor Co.*, 441 U.S. at 494–98 (price of food in-plant was term or condition of employment and subject to mandatory duty to bargain).

253. *See supra* note 237 and accompanying text.

254. *Brewers & Maltsters*, 414 F.3d at 43 (quoting Colgate-Palmolive Co., 323 N.L.R.B. 515, 515 (1997)).

> To achieve any degree of real authority in the bargaining unit and to win a decent contract that will give collective action a reasonable prospect of survival, the union must obtain a strike mandate from the employees . . . . Only such a mandate will make the employer realize that its employees are . . . willing to put their jobs on the line to secure a collective influence on their employment conditions.[255]

Even if the employer is ordered to bargain over its use of algorithmic management, because federal labor law cannot unilaterally impose a contract, the employer must only bargain to impasse before it can lawfully implement its desired terms.[256] The employer has no reason to agree to the workers' demands unless the workers are willing to leverage the economic tools at their disposal: the threat of withholding their labor. And realistically, a group of five, ten, or even 100 workers organized enough to strike at a workplace of 1,000 simply cannot wield the requisite pressure to make the employer agree to terms it does not want to agree to. The law is meant to aid in this process by protecting workers from unjust firings,[257] but the law cannot organize the unorganized by itself.

If the Board adopts the framework advanced by this Note, a *Gissel* bargaining order would only be a first step. Workers should use the order as a mobilizing tool to recruit leaders and supporters who can move their coworkers to take collective action. Unions should seek new organizing opportunities at algorithmically managed workplaces and develop existing leaders' organizing capacity. As Jane McAlevey famously wrote, there are "no

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255. Weiler, *supra* note 134, at 1811.

256. *See supra* Part III.B.; NLRB v. Am. Nat. Ins. Co., 343 U.S. 395, 402 (1952) ("The Act does not compel any agreement whatsoever between employees and employers.").

257. Even so, because the Board's remedies are compensatory, not punitive, many employers will decide that the potential, eventual cost of reinstatement and backpay for discriminating against a worker is cheaper than the cost of accepting a union over time. *See* Cynthia L. Estlund, *Economic Rationality and Union Avoidance: Misunderstanding the National Labor Relations Act*, 71 TEX. L. REV. 921, 933–40 (1993) (analyzing Board and case law to show when employers may lawfully claim that union avoidance is a legitimate economic motive). Whether the math supports a finding that such a decision is actually economically rational, taking into consideration counsel and union-avoidance consultants as well as compensatory awards, is debatable. *See* Celine McNicholas et al., *Employers Spend More than $400 Million Per Year on 'Union-Avoidance' Consultants to Bolster Their Union-Busting Efforts*, ECON. POL'Y INST. (Mar. 29, 2024), https://www.epi.org/publication/union-avoidance/ [https://perma.cc/UA9Y-Q63Y] (reporting that Amazon alone spent over $400 million on union-avoidance consultants in 2021).

shortcuts" to organizing,[258] and favorable law is no exception. But if the Board can recreate the pre-algorithmic management conditions under which Congress passed the Wagner Act, spurring workers to build the solidaristic networks on which existing law is premised, labor law has a hope of adapting to the future of work.

CONCLUSION

Organizing has always been difficult—a David-versus-Goliath battle where the law is on Goliath's side. But algorithmic management threatens to cut off organizing at the root for low wage workers most in need of the National Labor Relations Act's protection. If not adequately addressed through innovative legal frameworks, these technologies will proliferate, frustrating the ability of the Act to protect the rights of all American workers. Given these concerns, the Board should find algorithmic management to be an unfair labor practice regardless of the employer's legitimate business reason for implementing it. To remedy the imbalance of power between employers who use surveillance and workers subject to it, the Board should issue a narrow bargaining order, empowering workers to negotiate for greater protections against algorithmic management. Of course, there are obstacles to issuing such a remedy and to that remedy's effectiveness. But the Board should follow its mandate to adapt the Act to the new realities of industrial life, ensuring employers cannot use electronic monitoring and algorithmic management to lawfully obstruct their workers' right to organize.

258. JANE MCALEVEY, NO SHORTCUTS: ORGANIZING FOR POWER IN THE NEW GILDED AGE (2016).