

Notes

Introduction

1. Clarissa A. Leon and Mike Elk, “The Bureau of Labor Statistics Counted Only Eight Strikes in 2020, Payday Report Counted 1,200,” *Institute for New Economic Thinking, Perspectives Blog*, July 13, 2021, <https://www.ineteconomics.org/perspectives/blog/the-bureau-of-labor-statistics-counted-only-eight-strikes-in-2020-payday-report-counted-1-200>.

2. *The Daily*, “Stories from the Great American Labor Shortage,” *New York Times*, podcast, August 3, 2021, <https://www.nytimes.com/2021/08/03/podcasts/the-daily/coronavirus-hiring-job-vacancies-hospitality-industry.html>. While some suggested at the time that we were experiencing a “Great Resignation” in which workers dropped out of the labor market *en masse*, labor market data in early 2022 did not support that interpretation. Paul Krugman, for example, has suggested that the tight labor market was a result of workers moving into higher-paid jobs, increased incidence of self-employment, and reduced immigration during the Trump years. Paul Krugman, “What Ever Happened to the Great Resignation,” *New York Times*, Paul Krugman newsletter, April 5, 2022, <https://www.nytimes.com/2022/04/05/opinion/great-resignation-employment.html>. On recent unionization efforts, see, e.g., Noam Scheiber, “Starbucks Unionization Campaign Pushes on, with at Least 16 Stores Now Organized,” *New York Times*, April 8, 2022; Noam Scheiber, “Amazon Workers on Staten Island Vote to Unionize in Landmark Win for Labor,” *New York Times*, April 1, 2022.

3. This book borrows from and joins a growing body of scholarship that elucidates the role of data-driven technologies and associated legal regimes in our contemporary political and social order. See generally Julie E. Cohen, *Between Truth and Power: The Legal Constructions of Informational Capitalism* (Oxford: Oxford University Press, 2019); Amy Kapczynski, “The Law of Informational Capitalism,” *Yale Law Journal* 129, no. 5 (2020): 1460–1515; Salomé Viljoen, “A Relational Theory for Data Governance,” *Yale Law Journal* 131, no. 2 (2022): 573–654; Yochai Benkler, “Power and Productivity: Institutions, Ideology, and Technology in Political Economy,” in *A Political Economy of Justice*, ed. Danielle Allen, Yochai Benkler, Leah Downey, Rebecca Henderson, and Josh Simons (Chicago: University of Chicago Press, 2021), 27–60.

4. In the United States, the law of work is divided into three major subfields: “labor law,” which covers union organizing and collective bargaining; “employment discrimination,” which applies civil rights protections to employment; and “employment law,” which includes common law and statutory governance of the individual employment relationship. Michael Fischl, “Rethinking the Tripartite Division of American Work Law,” *Berkeley Journal of Employment & Labor Law* 28, no. 1 (2007): 163–216. For ease of exposition I use “labor law” to refer to all three bodies of law.

5. See Erik Olin Wright, “Working-Class Power, Capitalist-Class Interests, and Class Compromise,” *American Journal of Sociology* 105, no. 4 (January 2000): 958, 962 (discussing workers’ “associational power,” as contrasted with their “structural power,” or the power that workers may have, individually or collectively, by virtue of their skills or location in a tight labor market).

6. See Neil M. Richards and Jonathan King, “Big Data Ethics,” *Wake Forest Law Review* 49, no. 2 (2014): 396 (arguing that privacy should be understood as “encompassing information rules that manage the appropriate flows of information in ethical ways”). See also Julie E. Cohen, “What Privacy Is For,” *Harvard Law Review* 126, no. 7 (May 2013): 1906 (arguing that “privacy is shorthand for breathing room to engage in the processes of boundary management that enable and constitute self-development”).

7. See the discussion in chapters 1 and 4.

8. While this book focuses on legal changes in the United States, similar but less momentous shifts in workplace governance have occurred in many other nations. See generally Lucio Baccaro and Chris Howell, *Trajectories of Neoliberal Transformation: European Industrial Relations Since the 1970s* (Cambridge: Cambridge University Press, 2017).

9. See the discussion in chapter 2.

10. See Gary Marx, *Windows Into the Soul: Surveillance and Society in an Age of High Technology* (Chicago: University of Chicago Press, 2016), 50–51, table 2.1 (providing a schematic overview of the differences between contemporary and historical forms of surveillance).

11. Marx, *Windows Into the Soul*, 50–51.

12. See the discussion in chapter 3.

13. See the discussion in chapter 3.

14. See the discussion in chapter 5.

15. See the discussion in chapter 4.

16. See the discussions in chapter 3 (on inductive learning generally) and chapter 4 (on the use of inductive learning to hide statutory violations).

17. Lorenzo Franceschi-Bicchierai, “Amazon Is Hiring an Intelligence Analyst to Track ‘Labor Organizing Threats,’” *Vice*, September 1, 2020, <https://www.vice.com/en/article/qj4aqw/amazon-hiring-intelligence-analyst-to-track-labor-organizing-threats>.

18. See Gabriel Winant, *The Next Shift: The Fall of Industry and the Rise of Health Care in Rust Belt America* (Cambridge, MA, Harvard University Press, 2021), 23–24, 262–264 (discussing the latent political and associational power of care workers, a subset of service workers).

19. See the discussion in chapter 6.

20. Morris R. Cohen, “Property and Sovereignty,” *Cornell Law Review* 13, no. 8 (December 1927): 8–30; Robert L. Hale, “Coercion and Distribution in a Supposedly Non-Coercive State,” *Political Science Quarterly* 38, no. 3 (September 1923): 470–494.

21. Karl E. Klare, “Labor Law as Ideology: Toward a New Historiography of Collective Bargaining Law,” *Industrial Relations Law Journal* 4, no. 3 (1980–1981): 450–482; Katherine Van Wezel Stone, “The Post-War Paradigm in American Labor Law,” *Yale Law Journal* 90, no. 7 (1981): 1509–1580.

22. Michael Fischl, “Self, Others, and Section 7: Mutualism and Protected Protest Activities under the National Labor Relations Act,” *Columbia Law Review* 89, no. 4 (1989): 789–865; Mark Barenberg, “Democracy and Domination in the Law of Workplace Cooperation: From Bureaucratic to Flexible Production,” *Columbia Law Review* 94, no. 3 (1994): 753–983; Brishen Rogers, “Passion and Reason in Labor Law,” *Harvard Civil Rights–Civil Liberties Law Review* 47, no. 2 (2012): 313–369.

23. All of these bodies of literature are vast. On the tensions between traditional organizing and collective bargaining strategies and movements for racial and gender justice, see, e.g., Marion Crain and Ken Matheny, “Labor’s Identity Crisis,” *California Law Review* 89, no. 6 (December 2001): 1767–1846; Ahmed A. White, “My Co-Worker, My Enemy: Solidarity, Workplace Control, and the Class Politics of Title VII,” *Buffalo Law Review* 63, no.5 (2015): 1061–1140. On the relationship between union organizing and immigrant rights, see, e.g., Jennifer Gordon, *Suburban Sweatshops: The Fight for Immigrant Rights* (Cambridge, MA: Harvard University Press, 2007).

24. Overviews of the emerging literature on law and political economy include Angela Harris and James Varellas, “Law and Political Economy in a Time of Accelerating Crises,” *Journal of Law and Political Economy* 1, no. 1 (2020): 1–27 (the introduction to the first issue of the new *Journal of Law and Political Economy*); and Jedediah Britton-Purdy, David Singh Grewal, Amy Kapczynski, and K. Sabeel Rahman, “Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis,” *Yale Law Journal* 129, no. 6 (2020): 1784–1835.

25. See Harris and Varellas, “Law and Political Economy”: 10 (stating that LPE holds that “law is central to the creation and maintenance of structural inequalities in the

state and the market”); Britton-Purdy et al., “Law-and-Political-Economy Framework,” 1792–1793, 1818–1823 (discussing the continued relevance of legal realism today).

26. Angela Harris, “Foreword: Racial Capitalism and Law,” in *Histories of Racial Capitalism*, eds. Destin Jenkins and Justin Leroy (New York: Columbia University Press, 2021), vii–xx; David Singh Grewal, “The Legal Constitution of Capitalism,” in *After Piketty: The Agenda for Economics and Inequality*, eds. Heather Boushey, J. Bradford DeLong, and Marshall Steinbaum (Cambridge, MA: Harvard University Press, 2017), 471–490; David Singh Grewal, “Book Review: The Laws of Capitalism,” *Harvard Law Review* 128, no. 2 (2014): 626–668; Cohen, *Between Truth and Power*; and Benkler, “Power and Productivity.”

27. Pauline T. Kim and Matthew T. Bodie, “Artificial Intelligence and the Challenges of Workplace Discrimination and Privacy,” *ABA Journal of Labor & Employment Law* 35, no. 2 (2021): 289–315; Ifeoma Ajunwa, “Age Discrimination by Platforms,” *Berkeley Journal of Employment and Labor Law* 40, no. 1 (2019): 1–27; Solon Barocas and Andrew D. Selbst, “Big Data’s Disparate Impact,” *California Law Review* 104, no. 3 (June 2016): 671–732; Pauline T. Kim, “Data-Driven Discrimination at Work,” *William and Mary Law Review* 58, no. 3 (February 2017): 857–936. See also Simone Browne, “Race and Surveillance,” in *Routledge Handbook of Surveillance Studies*, eds. Kirstie Ball, Kevin D. Haggerty, and David Lyon (London: Routledge, 2012), 72–80 (discussing the relationship between contemporary surveillance practices and social processes of racial differentiation).

28. Important exceptions within labor law include Jeffrey M. Hirsch, “Future Work,” *University of Illinois Law Review* 2020, no. 3 (2020): 889–958; Valerio De Stefano, “‘Negotiating the Algorithm’: Automation, Artificial Intelligence and Labour Protection,” *Comparative Labor Law and Policy Journal* 41, no. 1 (2019): 15–46; Jeremias Adams-Prassl, “What If Your Boss Was an Algorithm: Economic Incentives, Legal Challenges, and the Rise of Artificial Intelligence at Work,” *Comparative Labor Law and Policy Journal* 41, no.1 (2019): 123–146; and Cynthia Estlund, “What Should We Do After Work? Automation and Employment Law,” *Yale Law Journal* 128, no. 2 (2018): 254–326. For an influential treatment of how an earlier generation of information technologies affected work, see Katherine Van Wezel Stone, *From Widgets to Digits: Employment Regulation for the Changing Workplace* (Cambridge: Cambridge University Press, 2004).

29. Langdon Winner, “Do Artifacts Have Politics?” *Daedalus* 109, no. 1 (Winter 1980): 121–136; and Sheila Jasanoff, *Designs on Nature: Science and Democracy in Europe and the United States* (Princeton, NJ: Princeton University Press, 2005).

30. Cohen, *Between Truth and Power*; Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom* (New Haven, CT: Yale University Press, 2006).

31. Benkler, “Power and Productivity”; Cohen, *Between Truth and Power*; Lawrence Lessig, *Code: And Other Laws of Cyberspace* (New York: Basic Books, 1999).

32. Cohen, *Between Truth and Power*; Frank Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information* (Cambridge, MA: Harvard University Press, 2016); Danielle Citron and Frank Pasquale, "The Scored Society: Due Process for Automated Predictions," *Washington Law Review* 89, no. 1 (2014): 1–33. See also Daniel Schiller, *Digital Capitalism: Networking the Global Market System* (Cambridge, MA: MIT Press, 1999) (discussing political economy of information in an earlier period).

33. Adam Smith, *The Wealth of Nations* (London: W. Strahan and T. Cadell, 1776; Chicago: University of Chicago Press, 1976), book 1, chapters I–II (on the modern division of labor and technological innovation; first published in 1776); Karl Marx, *Capital, Volume 1: A Critique of Political Economy* (Hamburg: Verlag von Otto Meisner, 1867; New York: Penguin Books, 1990), chapter 15 (on the use of technology to discipline workers); Joseph Schumpeter, *Capitalism, Socialism, and Democracy* (New York: Harper & Brothers, 1942), chapter 7 (discussing "creative destruction"); Immanuel Wallerstein, *World-Systems Analysis: An Introduction* (Durham, NC: Duke University Press, 2004), 24–30 (summarizing the relationship among technological innovation, monopoly rents, and core/periphery divisions in world capitalism).

34. Kathleen Thelen, *Varieties of Liberalization and the New Politics of Social Solidarity* (Cambridge: Cambridge University Press, 2014); Peter A. Hall and David Soskice, "An Introduction to Varieties of Capitalism," in *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, eds. Peter A. Hall and David Soskice (Oxford: Oxford University Press, 2001), 1–68; Gøsta Esping-Andersen, *The Three Worlds of Welfare Capitalism* (Princeton, NJ: Princeton University Press, 1990). For a critical account of the "varieties of capitalism" literature exemplified by Hall and Soskice, see Lucio Baccaro and Jonas Pontusson, "Rethinking Comparative Political Economy: The Growth Model Perspective," *Politics & Society* 44, no. 2 (2016): 175–207.

35. Samuel Bowles and Herbert Gintis, "Contested Exchange: New Microfoundations for the Political Economy of Capitalism," *Politics and Society* 18, no. 2 (1990): 165–222 (heterodox economics); Harry Braverman, *Labor and Monopoly Capital* (New York: Monthly Review Press, 1974) (sociology); Katherine Stone, "The Origins of Job Structures in the Steel Industry," *Review of Radical Political Economics* 6, no. 2 (1974): 113–173 (heterodox economics and sociology); David Montgomery, *Workers' Control in America* (New York: Cambridge University Press, 1980) (labor history). Industrial relations scholars have addressed issues of technology and labor relations as well. See, for example, John T. Dunlop, *Industrial Relations Systems* (New York: Henry Holt & Co., 1958).

36. Winner, "Do Artifacts Have Politics?" 124–25. This issue is discussed in more detail in section 1.2 of this book.

37. Alex Rosenblat, *Uberland: How Algorithms Are Rewriting the Rules of Work* (Berkeley: University of California Press, 2018); Mary L. Gray and Siddharth Suri, *Ghost Work: How to Stop Silicon Valley from Building a New Global Underclass* (New York: Houghton

Mifflin, 2019); Virginia Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor* (New York: St. Martin's Press, 2018).

38. The term has been used by others in the past, including *Schumpeter* (blog), "Digital Taylorism," *The Economist* (September 10, 2015).

Chapter 1

1. Total manufacturing employment declined from a peak of around 19.5 million in 1979 to just under 13 million in 2019. Federal Reserve Bank of St. Louis, "All Employees, Manufacturing," accessed December 12, 2021, <https://fred.stlouisfed.org/series/MANEMP> (data since 1939). Total service employment increased from around 50 million in 1979 to nearly 110 million in 2019. See Federal Reserve Bank of St. Louis, "All Employees, Private Service-Providing," accessed December 12, 2021, <https://fred.stlouisfed.org/series/CES0800000001> (data since 1939). On wages among service workers, see section 1.5.

2. See, e.g., Kathleen Thelen, "The American Precariat: U.S. Capitalism in Comparative Perspective," *Perspectives on Politics* 17, no. 1 (2019): 14–15 (noting the high incidence of low-wage work and precarious work in the US compared with other countries). On the recent growth of economic inequality across wealthy economies, see generally Thomas Piketty, *Capital in the Twenty-First Century*, trans. Arthur Goldhammer (Cambridge, MA: Harvard University Press, 2017).

3. See Wolfgang Streeck, "Taking Capitalism Seriously: Toward an Institutional Approach to Contemporary Political Economy," *Socio-Economic Review* 9 (2011): 153 (utilizing a similar definition).

4. Yochai Benkler, "Power and Productivity: Institutions, Ideology, and Technology in Political Economy," in *A Political Economy of Justice*, ed. Danielle Allen, Yochai Benkler, Leah Downey, Rebecca Henderson, and Josh Simons (Chicago: University of Chicago Press, forthcoming, 2022), 37.

5. See Julie E. Cohen, "Turning Privacy Inside Out," *Theoretical Inquiries in Law* 20, no. 1 (2019): 17–23 (discussing the notion of technological "affordances" in relationship to legal theories of privacy); Sheila Jasanoff, *States of Knowledge: The Co-Production of Science and Social Order* (New York: Routledge, 2004), 17 ("science and society are co-produced, each underwriting the other's existence").

6. Benkler, "Power and Productivity," 37.

7. Michael L. Wachter, "Neoclassical Labor Economics: Its Implications for Labor and Employment Law," in *Research Handbook on the Economics of Labor and Employment Law*, ed. Cynthia L. Estlund and Michael L. Wachter (Northampton, MA: Edward Elgar Publishing, 2012), 21. See also Aage B. Sørensen, "Foundations of a Rent-Based Class Analysis," in *Approaches to Class Analysis*, ed. Erik Olin Wright

(Cambridge: Cambridge University Press, 2005), 123 (noting the impossibility of class power in the neoclassical model).

8. See David H. Autor and David Dorn, “The Growth of Low-Skill Service Jobs and the Polarization of the US Labor Market,” *American Economic Review* 103, no. 5 (August 2013): 1553 (“Technology in the canonical model [of skill-biased technological change] is assumed to take a factor-augmenting form, meaning that it complements either high- or low-skill workers”).

9. See generally Autor and Dorn, “Growth of Low-Skill Service Jobs.” On a related note, the Autor and Dorn analysis assumes that wages are set by supply and demand for particular skills. Autor and Dorn, “Growth of Low-Skill Service Jobs,” 1554, 1557. That assumption disregards the fact that many vulnerable workers are not covered by minimum wage and collective bargaining laws, or are denied rights under those laws through “fissuring” strategies such as subcontracting and franchising, all of which tend to drive down wages. See the discussion in chapters 2 and 5.

10. Benkler, “Power and Productivity,” 45. See also Joshua Cohen, “Research Brief: Good Jobs,” MIT Task Force on Work of the Future, October 29, 2020, <https://workofthefuture.mit.edu/research-post/good-jobs/>, 3 (observing that nearly all commentators on the so-called future of work in the 2010s believed that “the path of technology and its implications for human work are more or less fixed” so that “the only genuinely open question is the public policy response.”)

11. Daron Acemoglu, “Technical Change, Inequality, and the Labor Market,” *Journal of Economic Literature* 40, no. 2 (March 2002): 13, 49–52.

12. See Wachter, “Neoclassical Labor Economics,” 24 (arguing that in a neoclassical model, if markets are competitive, then “there is no need for government policy (or for unions) to ensure that wages rise over time with worker productivity . . . Instead, if unions raise wages above competitive levels, the economy will be less productive.”).

13. See generally Claudia Golden and Lawrence F. Katz, *The Race between Education and Technology* (Cambridge, MA: Harvard University Press, 2010).

14. See Wachter, “Neoclassical Labor Economics,” 24 (suggesting that a tax-and-transfer system rather than labor market regulations should be used to ensure fair distribution and that “industrial policy should be confined to making markets as competitive as possible”). See generally Louis Kaplow and Steven Shavell, “Fairness Versus Welfare: Notes on the Pareto Principle, Preferences, and Distributive Justice,” *Journal of Legal Studies* 32, no. 1 (2003): 331–362. See also Yochai Benkler, *A Political Economy of Oligarchy: Winner-Take-All Ideology, Superstar Norms, and the Rise of the 1%* (unpublished manuscript, September 2017): 13–14 (noting how neoclassical approaches to public policy have influenced legal scholarship).

15. Kathleen Thelen, *Varieties of Liberalization and the New Politics of Social Solidarity* (Cambridge: Cambridge University Press, 2014), 11–18. See also Gøsta Esping-Andersen,

The Three Worlds of Welfare Capitalism (Princeton, NJ: Princeton University Press, 1990), 26–29 (outlining differences among welfare states and their effects on distributive outcomes).

16. Peter A. Hall and David Soskice, “An Introduction to Varieties of Capitalism,” in *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, ed. Peter A. Hall and David Soskice (Oxford: Oxford University Press, 2001), 38–39. Comparative evidence to this effect is presented in this book at various points, including section 1.5.

17. See Thelen, “The American Precariat,” 16 (stating that “one of the most robust findings in the literature on comparative political economy is that the strength of the organized labor movement is associated with lower inequality (especially low-end inequality) and more generous social protections”) (citing Evelyne Huber and John D. Stephens, *Development and Crisis of the Welfare State: Parties and Politics in Global Markets* [Chicago: University of Chicago Press, 2001]); Jake Rosenfeld, *What Unions No Longer Do* (Cambridge, MA: Harvard University Press, 2014) (showing that the decline of unions in the US has aggravated income inequality and racial inequality).

18. See David Singh Grewal, “Book Review: The Laws of Capitalism,” *Harvard Law Review* 128, no. 2 (2014): 665 (criticizing arguments that distribution should be addressed only through the tax-and-transfer system by noting that “it may be naïve to assume that after letting the inequality-producing market run its course there will be any agent left at the end of the process capable of demanding redistribution.”).

19. See Robert L. Hale, “Coercion and Distribution in a Supposedly Non-Coercive State,” *Political Science Quarterly* 38, no. 3 (September 1923): 471 (explaining, in a classic article, how the law helps to constitute economic relations and to perpetuate economic inequality); Duncan Kennedy, “The Stakes of Law, or Hale and Foucault!” *Legal Studies Forum* 15, no. 4 (1991): 328–341 (drawing on Hale’s work to illustrate how legal entitlements affect labor/capital power relations); Simon Deakin, David Gindis, Geoffrey M. Hodgson, Kainan Huang, and Katharina Pistor, “Legal Institutionalism: Capitalism and the Constitutive Role of Law,” *Journal of Comparative Economics* 45 (2017): 189, 194–198 (describing the legal constitution of markets, criticizing classical and modern theories of the firm for disregarding the importance of legal incorporation in facilitating production); Julie E. Cohen, *Between Truth and Power: The Legal Constructions of Informational Capitalism* (Oxford: Oxford University Press, 2019), 4 (discussing the contemporary relationship among legal institutions, the development of networked information technologies, and changes in the political economy).

20. Hale, “Coercion and Distribution,” 474.

21. The discussions in this section and in section 1.5 draw on Brishen Rogers, “Capitalist Development, Labor Law, and the New Working Class,” *Yale Law Journal* 131, no. 6 (2022): 1842–1879.

22. Yochai Benkler has developed a theory of the political economy of work and technology that has influenced my own. Benkler's is more ambitious—though also more complex—as it aims to explain many fields of social action beyond the workplace. See generally Benkler, “Power and Productivity.”

23. Walter Korpi, “Power Resources Approach vs. Action and Conflict: On Causal and Intentional Explanations in the Study of Power,” *Sociological Theory* 3, no. 2 (1985): 33. See also Walter Korpi, “The Power Resources Model,” in *The Welfare State Reader*, 2nd ed., ed. Christopher Pierson and Francis G. Castles (Cambridge, UK: Polity Press, 2006), 76–88 (describing the application of the power resources model to welfare-state development, viewing the structure and generosity of welfare states largely as an effect of working-class political power). While this book borrows the term “power resources,” its analysis does not entirely track the analyses of power-resources theorists in the welfare states literature. This book's analysis is also indebted to Kathleen Thelen's argument that cross-class alliances are important to institutional change over time. See Thelen, *Varieties of Liberalization*, 18–24 (discussing the limits of power resources and neo-corporatist theories of political-economic evolution, proposing an alternative theory that takes account of producer group alliances).

24. Chiara Benassi, Lisa Dorigatti, and Elisa Pannini, “Explaining Divergent Bargaining Outcomes for Agency Workers: The Role of Labor Divides and Labour Market Reforms,” *European Journal of Industrial Relations* 25, no. 2 (2018): 165 (distinguishing “three broad categories” of worker-side power resources: “structural, associational, and institutional” or legal/regulatory). On the notion of and importance of workers' “associational power,” see Erik Olin Wright, “Working-Class Power, Capitalist-Class Interests, and Class Compromise,” *American Journal of Sociology* 105, no. 4 (January 2000): 958.

25. See Guy Mundlak, *Organizing Matters: Two Logics of Trade Representation* (Cheltenham, UK: Edward Elgar Publishing), 23 (noting that industrial relations systems in many wealthy nations are based on a recognition that labor's interests and capital's interests diverge, and therefore that policymaking processes should “give voice to the representatives of the class cleavage”).

26. Claus Offe and Helmut Wiesenthal, “Two Logics of Collective Action: Theoretical Notes on Social Class and Organizational Form,” *Political Power & Social Theory* 1 (1980): 74; Deakin et al., “Legal Institutionalism,” 197. See also *Vegelahn v. Guntner*, 167 Mass. 92, 108 (1896) (Holmes, J., dissenting) (noting that modern enterprises enable combinations of capital).

27. Offe and Wiesenthal, “Two Logics,” 74–75.

28. Bruce E. Kaufman, “Economic Analysis of Labor Markets and Labor Law: An Institutional/Industrial Relations Perspective,” in *Research Handbook on the Economics of Labor and Employment Law*, ed. Cynthia L. Estlund and Michael L. Wachter (Northampton, MA: Edward Elgar Publishing, 2012), 83.

29. See Wolfgang Streeck, *Buying Time: The Delayed Crisis of Democratic Capitalism* (London: Verso, 2014), 80–84 (arguing that modern states must serve both national citizens and global markets). See also Marc Galanter, “Why the ‘Haves’ Come Out Ahead: Speculations on the Limits of Legal Change,” *Law & Society Review* 9, no. 1 (Autumn 1974): 95–160 (arguing that the U.S. legal system systematically favors wealthy interests because they have the capacity to fight for rules as well as outcomes in litigation).

30. Both Joseph Schumpeter and Karl Marx emphasized this point. Joseph Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper & Brothers, 1942), chapter 7 (discussing the process of “creative destruction” that fuels growth in capitalist economies). Karl Marx, *Capital, Volume 1: A Critique of Political Economy* (Hamburg: Verlag von Otto Meisner, 1867; New York: Penguin Books, 1990), esp. chapter 12, “The Concept of Relative Surplus Value.” See also Immanuel Wallerstein, *World-Systems Analysis: An Introduction* (Durham, NC: Duke University Press, 2004), 25–27 (2004) (arguing that the incessant competition that characterizes capitalism makes profitability very difficult, and therefore leads companies to seek monopoly positions); Streeck, “Taking Capitalism Seriously,” 139, 151–152, 154–158 (discussing the constant evolution of capitalist economies due to such pressures).

31. See Immanuel Wallerstein, “Braudel on Capitalism, or Everything Upside Down,” *Journal of Modern History* 63, no. 2 (1991), 355 (calling these “high-voltage” profits). See also Wallerstein, *World-Systems Analysis*, 25–29 (discussing the importance of IP protections in creating monopoly rents and dividing the world economy into “core” or profitable processes, which typically enjoy IP protection, and “peripheral” or unprofitable processes, which typically do not).

32. Streeck, “Taking Capitalism Seriously,” 154–158. In one view, the use of markets to discipline workers and the poor is foundational to capitalism. See John Clegg, “A Theory of Capitalist Slavery,” *Journal of Historical Sociology* 33 (2020): 80 (while markets and a division of labor have existed throughout history, capitalist societies “uniquely deny the vast majority of people any direct (non-market-mediated) access to their means of subsistence”).

33. Wolfgang Streeck, “Varieties of Varieties: ‘VoC’ and the Growth Models,” *Politics & Society* 44, no. 2 (2016): 246.

34. See generally Alex Rosenblat, *Uberland: How Algorithms Are Rewriting the Rules of Work* (Berkeley: University of California Press, 2018).

35. As argued in section 1.3, efforts like Uber’s—which generate product market rents while eliminating job rents—are an important axis of class conflict today. See also Herman M. Schwartz, “Intellectual Property, Technorents, and the Labour Share of Production,” *Competition and Change* (October 28, 2020), <https://doi.org/10.1177/1024529420968221> (discussing such dynamics).

36. See Richard B. Freeman and James L. Medoff, *What Do Unions Do?* (New York: Basic Books, 1984), 3–25 (discussing the cartel-like characteristics of unions). See also

David Singh Grewal and Jedediah Purdy, "Introduction: Law and Neoliberalism," *Law & Contemporary Problems* 77, no. 4 (2014): 8 (arguing that political contests under neoliberalism involve the question of who will be subject to market discipline).

37. See generally Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Boston: Beacon Press, 2001).

38. Streeck, "Taking Capitalism Seriously," 162. As discussed in the next section, to say that norms are "solidaristic" does not imply that they are politically progressive. Those norms can be radically democratic in orientation, for example, or they can be racist and misogynistic.

39. Streeck, "Taking Capitalism Seriously," 164. See also Grewal and Purdy, "Law and Neoliberalism," 3–4 (discussing the tension between "democratic demands and market imperatives").

40. See Robert Gordon, "Critical Legal Histories," *Stanford Law Review* 36, no. 1 (1984): 120–121 (observing parallels between classical legal thought and classical political economy, and between legal realism and old institutionalist economics).

41. See Christopher Tomlins, "The Presence and Absence of Legal Mind: A Comment on Duncan Kennedy's 'Three Globalizations,'" *Law and Contemporary Problems* 78, no. 1–2 (2015): 10–14 (suggesting that neoliberalism provides the integrating concepts of contemporary legal consciousness); Jedediah Britton-Purdy, David Singh Grewal, Amy Kapczynski, and K. Sabeel Rahman, "Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis," *Yale Law Journal* 129, no. 6 (2020): 1789 (suggesting that legal theory since the 1980s has been heavily influenced by neoliberalism).

42. See Peter Swenson, *Capitalists against Markets: The Making of Labor Markets and Welfare States in the United States and Sweden* (Oxford: Oxford University Press, 2002) (arguing that companies and workers have often joined together to pass social legislation); Thelen, *Varieties of Liberalization*, 22–25 (discussing the role of cross-class alliances in the recent evolution of welfare states).

43. Wright, "Working-Class Power," 957.

44. Ellen Meiksins Wood, *Democracy Against Capitalism: Renewing Historical Materialism* (London: Verso, 1995), 76 (emphasis in original).

45. See generally Erik Olin Wright, "Foundations of a Neo-Marxist Class Analysis," in *Approaches to Class Analysis*, ed. Erik Olin Wright (Cambridge: Cambridge University Press, 2005), 4–30.

46. See, for example, Adam Przeworski, "Proletariat into a Class: The Process of Class Formation from Karl Kautsky's 'The Class Struggle' to Recent Controversies," *Politics & Society* 7, no. 4 (December 1977): 358–359 (discussing constant changes in class relations under capitalism).

47. Daniel Bell, *The Coming of Post-Industrial Society* (New York: Basic Books, 1973), 134 (arguing that the US “has become a white collar society” due to technological development), 145–147 (arguing that the major axes of labor market conflict going forward will involve race and gender divisions and social conflicts over the quality of services rather than class per se), 148–154 (arguing that the production workforce has become so skilled and educated that it is no longer a working class).

48. Manuel Castells, “Materials for an Exploratory Theory of the Network Society,” *British Journal of Sociology* 51, no. 1 (March 2000): 18. See also Nicholas Garnham, “Information Society Theory as Ideology: A Critique,” *Society and Leisure* 21, no. 1 (1998): 102–103 (noting Castells’s debt to Bell).

49. Manuel Castells, *The Information Age, Vol. 1: Rise of the Network Society* (Cambridge, MA: Blackwell), 255–302 (discussing changes in work relations in so-called network society).

50. Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: PublicAffairs, 2019). For lucid criticisms of Zuboff’s book, see Amy Kapczynski, “The Law of Informational Capitalism,” *Yale Law Journal* 129, no. 5 (2020): 1474 (arguing that Zuboff’s account disregards “important problems of private power,” including how “digital technology has impacted labor”); Julie E. Cohen, “Review of Zuboff’s *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*,” *Surveillance & Society* 17, nos. 1–2 (2019): 240–245 (arguing that Zuboff largely disregards the role of law in structuring the practices of surveillance capitalism).

51. See generally E. P. Thompson, *The Making of the English Working Class* (New York: Penguin Books, 1963). For a different account of the role of culture in class formation see generally Pierre Bourdieu, *Distinction: A Social Critique of the Judgement of Taste*, trans. Richard Nice (London: Routledge Classics, 1984).

52. Benjamin I. Sachs, “Enabling Employee Choice: A Structural Approach to the Rules of Union Organizing,” *Harvard Law Review* 123 (2010): 684–685.

53. See Kate Bronfenbrenner and Dorian Warren, “The Empirical Case for Streamlining the NLRB Certification Process: The Role of Date of Unfair Labor Practice Occurrence,” Institute for Social and Economic Research and Policy Working Paper Series (June 2011), <https://digitalcommons.ilr.cornell.edu/workingpapers/159> (reviewing anti-union campaign tactics and their efficacy).

54. Offe and Wieselth, “Two Logics,” 78–79 (emphasis in original). This form of organizing requires fairly “strong ties” in Mark Granovetter’s schema as measured by the degree of trust and emotional intimacy among workers. Mark S. Granovetter, “The Strength of Weak Ties,” *American Journal of Sociology* 78, no. 6 (1973): 1360–1380.

55. Offe and Wieselth, “Two Logics,” 78–79; Rick Fantasia, *Cultures of Solidarity: Consciousness, Action, and Contemporary American Workers* (Berkeley: University of

California Press, 1989). See also Mundlak, *Organizing Matters*, 31 (arguing that enterprise bargaining helps constitute workers' identities).

56. See generally Sørensen, "Rent-Based Class Analysis."

57. Sørensen, "Rent-Based Class Analysis," 125–127.

58. Sørensen, "Rent-Based Class Analysis," 151.

59. On skills and occupational licensing, see Sørensen, "Rent-Based Class Analysis," 133.

60. See the discussions in chapters 3–5.

61. See generally C. L. R. James, *The Black Jacobins: Toussaint L'Ouverture and the San Domingo Revolution*, 2nd rev. ed. (New York: Vintage Books, 1989); Cedric J. Robinson, *Black Marxism: The Making of the Black Radical Tradition* (London: Zed Press, 1983; Chapel Hill: University of North Carolina Press, 2000).

62. Within legal scholarship, canonical works include Frances E. Olsen, "The Family and the Market: A Study of Ideology and Legal Reform," *Harvard Law Review* 96, no. 7 (1983): 1497–1578 (arguing that dominant understandings of the market and the family as separate spheres devalue women's economic contributions and reinforce the subordination of women); and Katharine Silbaugh, "Turning Labor into Love: Housework and the Law," *Northwestern Law Review* 91, no. 1 (1996): 1–86 (arguing that the dominant understanding of household labor as an act of love obscures its central importance to our economy). On the intersection of race and gender in employment discrimination doctrine, see generally Kimberlé Crenshaw, "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics," *University of Chicago Legal Forum* 1989 (1989): 139–167.

63. Dorothy Sue Cobble, *The Other Women's Movement: Workplace Justice and Social Rights in Modern America* (Princeton, NJ: Princeton University Press, 2003); Eileen Boris and Jennifer Klein, *Caring for America: Home Health Workers in the Shadow of the Welfare State* (Oxford: Oxford University Press, 2012).

64. 29 U.S.C. 152(3) (2018).

65. Title VII of that act, which prohibits employment discrimination, has been amended several times since 1964. The current text begins at 29 U.S.C. 2000e (2018).

66. See generally Gabriel Winant, *The Next Shift: The Fall of Industry and the Rise of Health Care in Rust Belt America* (Cambridge, MA: Harvard University Press, 2021).

67. Destin Jenkins and Justin Leroy, "Introduction: The Old History of Capitalism," in *Histories of Racial Capitalism*, ed. Destin Jenkins and Justin Leroy (New York: Columbia University Press, 2021), 3.

68. On the history of foreclosure, see K-Sue Park, “Race, Innovation, and Financial Growth: The Example of Foreclosure,” in *Histories of Racial Capitalism*, ed. Destin Jenkins and Justin Leroy (New York: Columbia University Press, 2021), 27–47.

69. Jenkins and Leroy, “The Old History of Capitalism,” 3.

70. Winant, *The Next Shift*, 157.

71. See Ruth Milkman, “Immigrant Organizing and the New Labor Movement in Los Angeles,” *Critical Sociology* 26, no. 1–2 (2000): 66 (discussing the role of “shared experience of migration” in recent immigrant worker organizing); James Green and Chris Tilly, “Service Unionism: Directions for Organizing,” *Labor Law Journal* 38, no. 8 (1987): 492 (discussing the relationship between “Black pride” and civil rights consciousness and worker organizing among health-care workers, as well as similar efforts among farm workers).

72. See David H. Autor, “Polanyi’s Paradox and the Shape of Employment Growth,” in *Re-Evaluating Labor Market Dynamics* (Kansas City, MO: Federal Reserve Bank of Kansas City, 2015), 163–164 (discussing complementarities between technology and human capital in midskilled health-care jobs).

73. Germany is the canonical case. See Hall and Soskice, “Introduction to Varieties of Capitalism,” 24–27 (discussing various elements of the German industrial relations model, including high investments in skills).

74. My distinction between power-enhancing and productivity-augmenting technologies draws upon Benkler, “Power and Productivity”; Samuel Bowles, “Social Institutions and Technical Change,” in *Technological and Social Factors in Long Term Fluctuations*, ed. Massimo Di Matteo, Richard M. Goodwin, and Alessandro Vercelli (New York: Springer-Verlag 1986), 67–88; and Peter Skott and Frederick Guy, “A Model of Power-Biased Technological Change,” *Economics Letters* 95, no. 1 (2007): 124–131.

75. See Bowles, “Social Institutions and Technical Change,” 78 (using the term “homogenize” rather than “deskill”), 70 (arguing that employers may favor inefficient technologies when doing so helps them contain workers’ power and capture a higher share of profits).

76. Bowles, “Social Institutions and Technical Change,” 78. Bowles’s focus on problems of labor discipline overlaps with some mainstream analyses, including Armen A. Alchian and Harold Demsetz, “Production, Information Costs, and Economic Organization,” *American Economic Review* 62, no. 5 (December 1972): 777–795.

77. Samuel Bowles, “The Production Process in a Competitive Economy: Walrasian, Neo-Hobbesian, and Marxian Models,” *American Economic Review* 75, no. 1 (March 1985): 31–32.

78. Langdon Winner, “Do Artifacts Have Politics?” *Daedalus* 109 (Winter 1980): 125. See also Benkler, “Power and Productivity,” 38 (discussing this history).

79. See Stephen A. Marglin, “What Do Bosses Do? The Origins and Functions of Hierarchy in Capitalist Production,” *Review of Radical Political Economics* 6, no. 2 (1974): 70–72, 86. See also E. P. Thompson, “Time, Work-Discipline, and Industrial Capitalism,” *Past and Present* 38, no. 1 (1967): 56–97 (contrasting peasants’ understanding of time prior to industrialization with the regimentation of time in schools and factories following industrialization).

80. Frederick Winslow Taylor, *The Principles of Scientific Management* (New York: Harper Bros., 1913). See also Harry Braverman, *Labor and Monopoly Capital* (New York: Monthly Review Press, 1974), 76–83 (arguing that Taylor sought to reorganize machine tool production for the purpose of disempowering workers). The sociologist Craig R. Littler has argued that the importance of Taylorism lay less in the erosion of craft skills and more in industrialists’ elimination of the internal contracting system that dominated at the time, so that Taylorism led to direct employment relationships between company and workers and centralized managerial control of the labor process. Craig Littler, “Understanding Taylorism,” *British Journal of Sociology* 29, no. 2 (1978): 185–202.

81. Taylor, *Scientific Management*, 63.

82. Karen Levy, “The Contexts of Control: Information, Power, and Truck-Driving Work,” *The Information Society* 31, no. 2 (2015): 161.

83. See David Montgomery, *Workers’ Control in America* (New York: Cambridge University Press, 1980), 13 (discussing the ethical code of nineteenth-century craft workers, which led them to refuse to work while being watched), 115 (discussing workers’ refusal to work while being monitored by industrial engineers in the early twentieth century).

84. James R. Beniger, *The Control Revolution: Technological and Economic Origins of the Information Society* (Cambridge, MA: Harvard University Press, 1989).

85. See Gary Marx, *Windows into the Soul: Surveillance and Society in an Age of High Technology* (Chicago: University of Chicago Press, 2016), 50–51, table 2.1 (summarizing contemporary surveillance efforts and how they differ from historical forms of surveillance); Marion Fourcade and Jeffrey Gordon, “Learning Like a State: Statecraft in the Digital Age,” *Journal of Law and Political Economy* 1, no. 1 (2020): 79 (describing new forms of governance and power today as universal, comprehensive, indefinite in temporality, and circular or mimetic).

86. This is a variant on the argument that the law tends to lag technology. See Gary E. Marchant, “The Growing Gap Between Emerging Technologies and the Law,” in *The Growing Gap Between Emerging Technologies and Legal-Ethical Oversight: The Pacing Problem*, ed. Gary E. Marchant, Braden R. Allenby, and Joseph R. Herkert (New York: Springer, 2011), 23 (arguing that the law lags technology both because legal regulations “are based on static rather than a dynamic view of society and technology” and because legal institutions take time to revise).

87. Mireille Hildebrandt, *Smart Technologies and the End(s) of Law: Novel Entanglements of Law and Technology* (Cheltenham, UK: Edward Elgar Publishing, 2016), 12 (discussed in Kapczynski, “The Law of Informational Capitalism,” 1471).

88. See Cohen, *Between Truth and Power*, 76 (discussing this “emergent limbic media system”), 77 (arguing that “the result is an emergent form of collective consciousness that is primed for precognitive activation and manipulation at scale”).

89. See generally Paul Pierson, *Politics in Time* (Princeton, NJ: Princeton University Press 2004) (discussing the long-term evolution of political-economic institutions).

90. The analysis in this section is indebted to Gabriel Winant’s recent work, which emphasizes that neoliberalism’s politics and institutions evolved from the postwar order, carrying forward many of the tensions and social divisions of the postwar period. Winant, *The Next Shift*, 18. See also Gabriel Winant, “Anomalies and Continuities: Positivism and Historicism on Inequality,” *Journal of the Gilded Age and Progressive Era* 19, no. 2 (2020): 286 (suggesting that the politics of neoliberalism can be understood only in “the historical time of capitalism, from primitive accumulation to industrial maturity to overcapacity”)

91. Industrial pluralism and its relationship to law are discussed in detail in chapter 2.

92. On the New Deal order, see generally Steve Fraser and Gary Gerstle, eds., *The Rise and Fall of the New Deal Order, 1930–1980* (Princeton, NJ: Princeton University Press, 1989); Gary Gerstle, Nelson Lichtenstein, and Alice O’Connor, eds., *Beyond the New Deal Order: U.S. Politics from the Great Depression to the Great Recession* (Philadelphia: University of Pennsylvania Press, 2019).

93. 29 U.S.C. § 151 (2018).

94. See Erik Olin Wright, *Envisioning Real Utopias* (London: Verso, 2010), 337 (arguing that “advances in bottom-up social empowerment within a capitalist society will be most stable and defensible when such social empowerment also helps solve certain real problems faced by capitalists and other elites”).

95. Michael Wachter, “The Striking Success of the National Labor Relations Act,” in *Research Handbook on the Economics of Labor and Employment Law*, ed. Cynthia L. Estlund and Michael Wachter (Northampton, MA: Edward Elgar Publishing, 2012), 427–462.

96. This is the essence of the Rehn-Meidner model, which informed Swedish economic policy for decades. Lennart Erixon, “Progressive Supply-Side Economics: An Explanation and Update of the Rehn-Meidner Model,” *Cambridge Journal of Economics* 42 (May 2018): 653–697.

97. Freeman and Medoff, *What Do Unions Do?*, 7–9.

98. Wallerstein, *World-Systems Analysis*, 55–59.

99. Grewal, “The Laws of Capitalism,” 631. See also David Singh Grewal, “The Legal Constitution of Capitalism,” in *After Piketty: The Agenda for Economics and Inequality*, ed. Heather Boushey, J. Bradford DeLong, and Marshall Steinbaum (Cambridge, MA: Harvard University Press, 2017), 489–490 (noting that the postwar era was a time of relative labor scarcity, which bolstered workers’ capacity to demand higher wages).

100. See Nelson Lichtenstein, *State of the Union: A Century of American Labor* (Princeton, NJ: Princeton University Press, 2002): 98 (arguing that “the very idea of . . . a harmonious accord is a suspect reinterpretation of the postwar industrial era.”). See also the discussion in chapter 2.

101. See Joel Rogers, “Divide and Conquer: Further ‘Reflections on the Distinctive Character of American Labor Laws,’” *Wisconsin Law Review* 1990 (1990): 103–107 (summarizing data showing that worker organization after 1947 was largely limited to the geographic areas and industrial sectors that had organized before that time).

102. Sean Farhang and Ira Katznelson, “The Southern Imposition: Congress and Labor in the New Deal and Fair Deal,” *Studies in American Political Development* 19, no. 1 (Spring 2005): 7.

103. The causes of stagflation and subsequent deindustrialization are still debated. For an overview of the 1970s as a period of crisis that led companies and investors to pursue various institutional reforms, see generally Streeck, *Buying Time*, 20–34.

104. On the transnational business counteroffensive against the postwar regime during this time, see generally Streeck, *Buying Time*, 24–31.

105. See Financial Services Modernization Act of 1999, 113 Stat. 1338 (1999) (repealing Glass-Steagall Act, which forbade investment and commercial banking within the same enterprise). See also Greta Krippner, “The Financialization of the American Economy,” *Socio-Economic Review* 3, no. 2 (2005): 173–208 (financialization explains why “profit-making occurs increasingly through financial channels rather than through trade and commodity production”).

106. Christoph Lakner and Branko Milanovic, “Global Income Distribution: From the Fall of the Berlin Wall to the Great Recession,” *World Bank Economic Review* 30, no. 2 (2016): 203–232.

107. See Autor, “Polanyi’s Paradox,” 131–133 (discussing technological change and anxieties over automation in 1960s); Rick Wartzman, “The First Time America Freaked Out Over Automation,” *Politico* (May 30, 2017) (discussing automation fears in 1950s and 1960s, caused by incorporation of new technologies into factories and other workplaces).

108. Federal Reserve Bank of St. Louis, “All Employees, Manufacturing/All Employees, Nonfarm,” accessed December 12, 2021, <https://fred.stlouisfed.org/graph/?g=cAYh> (data since 1940).

109. Federal Reserve Bank of St. Louis, “All Employees, Private Service-Providing.”
110. See Bell, *Post-Industrial Society*, 129–142 (collecting and analyzing data on growth of services in the 1950s and 1960s).
111. See Federal Reserve Bank of St. Louis, “Labor Force Participation Rate—Women,” accessed December 12, 2021, <https://fred.stlouisfed.org/series/LNS11300002> (showing an increase from around 32 percent in 1948 to more than 51 percent in 1980, then peaking around 60 percent in 2001).
112. See Federal Reserve Bank of St. Louis, “All Employees, Manufacturing/All Employees, Nonfarm” (showing a drop in manufacturing jobs from 22.7 percent of total employment in 1979 to 18.4 percent in 1983, followed by a continued decline to around 10 percent by 2010).
113. See Autor, “Polanyi’s Paradox,” 140 (discussing the adoption of industrial robotics in the 1980s).
114. National Academies of Sciences, Engineering, and Medicine, *Information Technology and the U.S. Workforce: Where Are We and Where Do We Go from Here?* (Washington, DC: National Academies Press, 2017), 66; Laura Tyson and Michael Spence, “Exploring the Effects of Technology on Income and Wealth Inequality,” in *After Piketty: The Agenda for Economics and Inequality*, ed. Heather Boushey, J. Bradford DeLong, and Marshall Steinbaum (Cambridge, MA: Harvard University Press, 2017), 187.
115. Winant, *The Next Shift*, 3.
116. Gøsta Esping-Andersen, *Social Foundations of Postindustrial Economies* (Oxford: Oxford University Press 1999), 24–26; Torben Iversen, “The Dynamics of Welfare State Expansion: Trade Openness, De-Industrialization, and Partisan Politics,” in *The New Politics of the Welfare State*, ed. Paul Pierson (Oxford: Oxford University Press, 1995), 47; Paul Pierson, “Post-industrial Pressures on the Mature Welfare States,” in *The New Politics of the Welfare State*, ed. Paul Pierson (Oxford: Oxford University Press, 2001), 83–87.
117. William J. Baumol, “Macroeconomics of Unbalanced Growth: The Anatomy of Urban Crisis,” *American Economic Review* 57, no. 3 (1967): 415–426. The phrase “cost disease” does not appear in Baumol’s 1967 article but came into wide usage later. E.g., William J. Baumol, with contributions by Monte Malach, Ariel Palbos-Méndez, and Lilian Gomory Wu, *The Cost Disease: Why Computers Get Cheaper and Health Care Doesn’t* (New Haven, CT: Yale University Press, 2012). See also Torben Iversen and Anne Wren, “Equality, Employment and Budgetary Restraint: The Trilemma of the Service Economy,” *World Politics* 50 (July 1998): 507–546 (arguing that service economies are subject to a “trilemma,” in which they can achieve no more than two of three goals: wage equality, low unemployment, and modest public spending); Anne Wren, Máté Fodor, and Sotiria Theodoropoulou, “The Trilemma Revisited: Institutions, Inequality, and Employment Creation in an Era of ICT-Intensive Service Expansion,” in *The Political Economy of the Service Transition*, ed. Anne Wren (Oxford: Oxford University Press, 2013), 108–146 (arguing that states

may be able to mitigate the trilemma by encouraging growth in high-value, tradable services like finance, insurance, advertising, and law, and then using the large profits in those sectors to fund social programs).

118. Thelen, *Varieties of Liberalization*, 14.

119. 29 U.S.C. 2101–2109 (2018).

120. Thelen, *Varieties of Liberalization*, 14–15 (on “embedded flexibilization” in Denmark).

121. See Hall and Soskice, “Introduction to Varieties of Capitalism,” 24–27 (discussing such elements of the German model and their complementarities with systems of worker interest representation).

122. Thelen, *Varieties of Liberalization*, 30–31 (discussing the emergence of dualism in Germany, where precarious work is common outside the industrial core). See also Tobias Schulze-Cleven, “German Labor Relations in International Perspective: A Model Reconsidered,” *German Politics and Society* 35, no. 4 (2017): 46–76 (discussing the German model in greater detail).

123. For overviews of the “new working class” and its particular challenges in the US, see generally Winant, *The Next Shift*; Sarah Jaffe, “The New Working Class,” *The New Republic* (February 22, 2018); and Tamara Draut, *Sleeping Giant: How the New Working Class Will Transform America* (New York: Penguin, 2016). In the UK context, see Mike Savage et al., “A New Model of Social Class? Findings from the BBC’s Great British Class Survey Experiment,” *Sociology* 47, no. 2 (2013): 219–250 (finding that around 19 percent of workers are in the “emergent service sector,” and 15 percent are in the “precariat”).

124. Occupation-level data given in this paragraph come from the US Department of Labor. Bureau of Labor Statistics, Occupational Employment Statistics, accessed November 25, 2021, https://www.bls.gov/oes/2019/may/oes_nat.htm#35-0000 (data from May 2019).

125. Winant, *The Next Shift*, 5–8.

126. Irene Tung, Yannet Lathrop, and Paul Sonn, *The Growing Movement for \$15* (New York: National Employment Law Project, November 2015): 1. Those racial wage gaps also reflect the decline of unions. Jake Rosenfeld and Meredith Kleykamp, “Organized Labor and Racial Wage Inequality in the United States,” *American Journal of Sociology* 117, no. 5 (2012): 1460–1502.

Chapter 2

1. The introductory text to this chapter draws from Brishen Rogers, “Capitalist Development, Labor Law, and the New Working Class,” *Yale Law Journal* 131, no. 6 (2022): 1842–1879.

2. See generally Felix Frankfurter and Nathan Greene, *The Labor Injunction* (New York: Macmillan, 1930).
3. *Lochner v. New York*, 198 U.S. 45 (1905).
4. *West Coast Hotel Co. v. Parrish*, 300 U.S. 379 (1937) (rejecting a constitutional challenge to state minimum wage law); *NLRB v. Jones & Laughlin Steel Corp.*, 301 U.S. 1 (1937) (rejecting a constitutional challenge to NLRA).
5. *Jones & Laughlin*, 301 U.S. at 45. See also *H.K. Porter & Co., Inc. v. NLRB*, 397 U.S. 99, 108 (1970) (observing that “one of the[] fundamental policies” of the NLRA “is freedom of contract.”); Karl E. Klare, “Judicial Deradicalization of the Wagner Act and the Origins of Modern Legal Consciousness, 1937–1941,” *Minnesota Law Review* 62, no. 3 (1978): 299–300 (criticizing *Jones & Laughlin* for importing contractualism into the NLRA).
6. Karl E. Klare, “Labor Law as Ideology: Toward a New Historiography of Collective Bargaining Law,” *Industrial Relations Law Journal* 4 (1980–1981): 454. See also Christopher Tomlins, *Law, Labor and Ideology in the Early American Republic* (Cambridge: Cambridge University Press, 1993), 32 (identifying a similar conflict between democratically inflected constitutionalism and the common law in the early days of the US).
7. See generally Klare, “Judicial Deradicalization”; Katherine Van Wezel Stone, “The Post-War Paradigm in American Labor Law,” *Yale Law Journal* 90, no. 7 (1981): 1509–1580; Karl E. Klare, “The Public/Private Distinction in Labor Law,” *University of Pennsylvania Law Review* 130, no. 6 (1982): 1358–1422.
8. Stone, “Post-War Paradigm,” 1511.
9. Stone, “Post-War Paradigm,” 1515. The canonical cases are the so-called Steelworkers Trilogy of 1960: *United Steelworkers v. American Mfg. Co.*, 363 U.S. 564 (1960); *United Steelworkers v. Warrior & Gulf Navigation Co.*, 363 U.S. 574 (1960); and *United Steelworkers v. Enterprise Wheel & Car Corp.*, 363 U.S. 593 (1960).
10. See Archibald Cox, “Labor Law Preemption Revisited,” *Harvard Law Review* 85, no. 7 (1972): 1352 (asserting that “two fundamental ideas lie at the core of the national labor policy: (1) freedom of employee self-organization; and (2) the voluntary private adjustment of conflicts of interest over wages, hours, and other conditions of employment through the negotiation and administration of collective bargaining agreements”).
11. Alan Hyde and Mona Ressaissi, “Unions without Borders: Recent Developments in the Theory, Practice and Law of Transnational Unionism,” *Canadian Labour and Employment Law Journal* 14, no. 1 (2008): 91–92.
12. Stone, “Post-War Paradigm,” 1511.
13. Ruth Dukes, “Constitutionalizing Employment Relations: Sinzheimer, Kahn-Freund, and the Role of Labour Law,” *Journal of Law & Society* 35, No. 3 (September 2008): 342–344.

14. Stone, "Post-War Paradigm," 1566–1573.
15. Stone, "Post-War Paradigm," 1571–1572.
16. *American Mfg. Co.*, 363 U.S., at 568.
17. See Eric Tucker, "Labor's Many Constitutions (and Capital's Too)," *Comparative Labor Law & Policy Journal* 33, no. 3 (2012): 358 (contrasting "thin" and "thick" forms of industrial democracy).
18. Such issues came up frequently in postwar labor cases, with courts often ratifying employers' anti-union efforts. See, e.g., *NLRB v. Adkins Transfer Co.*, 226 F.2d 324 (6th Cir. 1955) (no violation of NLRA for employer to close a division to avoid paying union-scale wages); *Textile Workers Union v. Darlington Mfg. Co.*, 380 U.S. 263 (1965) (no violation of NLRA where employer shut down entire business due to anti-union animus). In other cases, courts limited companies' rights to resist unionization. See, e.g., *Fibreboard Paper Products Corp. v. NLRB*, 379 U.S. 203 (1964) (employer must bargain with union over decision to subcontract work within a unionized bargaining unit); *NLRB v. Gissel Packing Co.*, 395 U.S. 575 (1969) (unfair labor practice for employer to threaten to close plant if workers unionize). The facts of *Gissel* nevertheless show that some employers fought bitterly against unionization well after the New Deal. *Gissel*, 395 U.S. at 579–586 (summarizing several employers' unlawful responses to several union campaigns, which included interrogation and termination of union supporters and racist appeals).
19. Stone, "Post-War Paradigm," 1511.
20. The discussion in this chapter uses "neoliberalism" to signify an approach to political-economic governance. See Joshua Cohen and Joel Rogers, "Secondary Associations and Democratic Governance," in *Associations and Democracy*, ed. Erik Olin Wright (New York: Verso, 1995), 12–14, 12n10 (outlining the neoliberal view of the state as evidenced in, for example, Friedrich A. Hayek, *The Constitution of Liberty* (Chicago: University of Chicago Press, 1960)). A related literature uses "neoliberalism" to signify a political rationality or moral theory that encourages individuals to understand themselves as entrepreneurs. On the latter, see Wendy Brown, *Undoing the Demos: Neoliberalism's Stealth Revolution* (Princeton, NJ: Princeton University Press, 2015) (outlining this conception of neoliberalism). Michel Foucault's influential history of neoliberalism has influenced both of these literatures. See Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France, 1978–79*, ed. Michel Senellart, trans. Graham Burchell (London: Palgrave Macmillan, 2008), 101–129 (discussing German ordo-liberalism), 185–214 (discussing American neoliberalism).
21. Wolfgang Streeck, *Buying Time: The Delayed Crisis of Democratic Capitalism* (New York: Verso, 2014), 26–31 (outlining the transition to neoliberalism in advanced market economies in the 1970s).
22. Cass Sunstein, "Lochner's Legacy," *Columbia Law Review* 87 (1987): 874.

23. David Singh Grewal and Jedediah Purdy, "Introduction: Law and Neoliberalism," *Law & Contemporary Problems* 77, no. 4 (2014): 5. See also Jedediah Britton-Purdy, David Singh Grewal, Amy Kapczynski, and K. Sabeel Rahman, "Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis," *Yale Law Journal* 129, no. 6 (2020): 1794–1818 (summarizing high-level developments in legal theory during the late twentieth century that were indebted to neoliberalism); Christopher Tomlins, "The Presence and Absence of Legal Mind: A Comment on Duncan Kennedy's 'Three Globalizations,'" *Law and Contemporary Problems* 78, no. 1–2 (2015): 9–17 (suggesting that neoliberalism provides the integrating concepts of contemporary legal consciousness).
24. Grewal and Purdy, "Introduction: Law and Neoliberalism," 5–6; Britton-Purdy et al., "Law-and-Political-Economy Framework," 1810; Foucault, *Birth of Biopolitics*, 131 (suggesting that neoliberalism involves "dissociating the market economy from the political principle of laissez-faire.").
25. Britton-Purdy et al., "Law-and-Political-Economy Framework," 1790.
26. See Quinn Slobodian, *Globalists: The End of Empire and the Birth of Neoliberalism* (Cambridge, MA: Harvard University Press, 2018), 13 (using the term "encasement" to describe the common neoliberal strategy of protecting property rights against democratic infringement).
27. Lina M. Khan, "Amazon's Antitrust Paradox," *Yale Law Journal* 126, no. 3 (2017): 720–721.
28. Henry Hansmann and Reinier Kraakman, "The End of History for Corporate Law," *Georgetown Law Journal* 89, no. 2 (2001): 439–468. See also Michael C. Jensen and William H. Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," *Journal of Financial Economics*, 3, no. 4 (1976): 305–360 (providing economic rationale for shareholder primacy).
29. See the discussion in section 2.3.
30. Grewal and Purdy, "Law and Neoliberalism," 13.
31. Britton-Purdy et al., "Law-and-Political-Economy Framework," 1806–1809.
32. *San Antonio Indep. Sch. Dist. v. Rodriguez*, 411 U.S. 1 (1973) (holding that poverty is not a suspect class in education context); *Lindsey v. Normet*, 405 U.S. 56 (1972) (rejecting the claim for a constitutional right to decent housing). See also *Washington v. Davis*, 426 U.S. 229 (1976) (holding that statutes that have a disparate impact on the basis of race are not invalid under the Fourteenth Amendment unless they were adopted with the intent to discriminate); Britton-Purdy et al., "Law-and-Political-Economy Framework," 1808–1809 (discussing these developments).
33. Noah D. Zatz, "Welfare to What?" *Hastings Law Journal* 57, no. 6 (2006): 1131–1188.

34. Regarding minimum wages, see Daniel Shaviro, “The Minimum Wage, the Earned Income Tax Credit, and Optimal Subsidy Policy,” *University of Chicago Law Review* 64, no. 2 (1997): 405–481. Regarding collective bargaining, see Richard Epstein, “A Common Law for Labor Relations: A Critique of the New Deal Labor Legislation,” *Yale Law Journal* 92, no. 8 (1983): 1357–1408; Richard A. Posner, “Some Economics of Labor Law,” *University of Chicago Law Review* 51, no. 4 (1984): 988–1011.

35. Brishen Rogers, “Justice at Work: Minimum Wage Laws and Social Equality,” *Texas Law Review* 92, no. 6 (2014): 1554–1559; Yochai Benkler, *A Political Economy of Oligarchy: Winner-Take-All Ideology, Superstar Norms, and the Rise of the 1%* (unpublished manuscript, September 2017): 10–14, PDF.

36. See Brishen Rogers, “Three Concepts of Workplace Freedom of Association,” *Berkeley Journal of Employment & Labor Law* 37, no. 2 (2016): 199–205 (tracing influence of neoliberalism on doctrine surrounding union/member relationships).

37. A major turning point was *Wards Cove Packing Co. v. Atonio*, 490 U.S. 642 (1989). While that case was overturned in substantial part by Congress by passing the 1991 Civil Rights Act, disparate impact doctrine has become far less important as a device for ensuring labor market equality. See Michael Selmi, “Was the Disparate Impact Theory a Mistake?” *UCLA Law Review* 53, no. 3 (2006): 734–749 (summarizing evidence that disparate impact cases are rarely brought anymore).

38. This basic logic was clear in the 1970s. See Alan David Freeman, “Legitimizing Racial Discrimination through Antidiscrimination Law: A Critical Review of Supreme Court Doctrine,” *Minnesota Law Review* 62, no. 6 (1978): 1049–1119 (discussing the “perpetrator perspective” that dominates anti-discrimination doctrine).

39. Ahmed A. White, “My Co-Worker, My Enemy: Solidarity, Workplace Control, and the Class Politics of Title VII,” *Buffalo Law Review* 63, no.5 (2015): 1111–1118.

40. See Kriston McIntosh, Emily Moss, Ryan Nunn, and Jay Shambaugh, “Examining the Black-White Wealth Gap,” Washington, DC: Brookings Institution, February 27, 2020, <https://www.brookings.edu/blog/up-front/2020/02/27/examining-the-black-white-wealth-gap/> (collating data regarding the Black-White wealth gap).

41. Katherine Van Wezel Stone, “The Legacy of Industrial Pluralism: The Tension between Individual Employment Rights and the New Deal Collective Bargaining System,” *University of Chicago Law Review* 59, no. 2 (Spring 1992): 575–644; Reuel E. Schiller, “From Group Rights to Individual Liberties: Post-War Labor Law, Liberalism, and the Waning of Union Strength,” *Berkeley Journal of Employment & Labor Law* 20, no.1 (1999): 1–73. The two regimes are not hermetically sealed off from one another, and workers have often used individual legal entitlements to advance their collective interests. Michael Fischl, “Rethinking the Tripartite Division of American Work Law,” *Berkeley Journal of Employment & Labor Law* 28, no. 1 (2007): 163–216; Benjamin I. Sachs, “Employment Law as Labor Law,” *Cardozo Law Review* 29, no. 6 (2008): 2685–2748.

42. This discussion draws on Rogers, “Capitalist Development.”
43. For a detailed treatment of the causes and consequences of deunionization in the US, see Thomas A. Kochan, Harry C. Katz, and Robert B. McKersie, *The Transformation of American Industrial Relations*, 2nd ed. (Ithaca, NY: Cornell University Press, 1993).
44. *Elk Lumber Co.*, 91 NLRB 333 (1950) (slow-down strikes); *NLRB v. Fansteel Metallurgical Corp.*, 306 U.S. 240 (1939) (sit-down strikes); and *United Auto Workers v. Wisconsin Board*, 336 U.S. 245 (1949) (upholding state law banning intermittent strikes). See also Craig Becker, “Better than a Strike: Protecting New Forms of Collective Work Stoppages under the National Labor Relations Act,” *University of Chicago Law Review* 61, no. 2 (1994): 351–421 (providing overview and critique of this body of doctrine). Mass picketing, which was a crucial tactic in New Deal-era organizing efforts, is also illegal in most cases. See generally Ahmed A. White, “Workers Unarmed: The Campaign against Mass Picketing and the Dilemma of Liberal Labor Rights,” *Harvard Civil Rights-Civil Liberties Law Review* 49, no. 1 (2014): 59–123.
45. *NLRB v. Mackay Radio & Telegraph Co.*, 304 U.S. 333 (1938).
46. John B. Logan, “Labor’s ‘Last Stand’ in National Politics? The Campaign for Striker Replacement Legislation, 1990–1994,” *Advances in Industrial and Labor Relations* 13 (2004): 192–193 (noting increased use of permanent replacements in 1980s).
47. 29 U.S.C. 158(b)(4) (2018). Kate Andrias and Brishen Rogers, *Rebuilding Worker Voice in Today’s Economy* (New York: Roosevelt Institute, 2018), 12 (discussing Taft-Hartley revisions). Workers have broader rights to engage in secondary activity when they appeal to consumers rather than workers. See *NLRB v. Fruit & Vegetable Packers, Loc. 760*, 377 U.S. 58 (1964) (peaceful secondary picketing urging consumers not to purchase struck produce at grocery store is not prohibited by NLRA); *Edward J. DeBartolo Corp. v. Florida Gulf Coast Building & Constr. Trades Council*, 485 U.S. 568 (1988) (peaceful leafletting urging consumer boycott of secondary target is not prohibited by NLRA).
48. See Kate Andrias, “The New Labor Law,” *Yale Law Journal* 126, no. 2 (2016): 30–32 (summarizing franchising strategies and their effects on workers’ rights to organize). See also David Weil, *The Fissured Workplace: Why Work Became So Bad for So Many and What Can Be Done to Improve It* (Cambridge, MA: Harvard University Press, 2014) (noting how large corporations have increasingly shed their role as direct employers by outsourcing work to smaller companies).
49. 29 U.S.C. 158(c) (2018) (protecting employers’ rights to express their views on unionization). See generally *Gissel*, 395 U.S., at 575, 618–620 (1969) (discussing how employers can exploit such speech rights to threaten and coerce workers).
50. 29 U.S.C. 159(b) (2018). See also Robert A. Gorman and Matthew W. Finkin, *Basic Text on Labor Law: Unionization and Collective Bargaining*, 2nd ed. (St. Paul, MN:

Thomson West 2004), 76–84, 103–104 (discussing emphasis on single-employer, localized bargaining in the US). While multiemployer bargaining has been common at certain times in our history, it “is and always has been consensual in nature,” in the sense that both union and employer have the right to refuse to engage in multi-employer bargaining. *Kroger Co.*, 148 NLRB 569, 575 (1964) (with members Leedom and Jenkins dissenting). For comparative evidence on multiemployer bargaining in the US system and various European systems, see Harry C. Katz, “The Decentralization of Collective Bargaining: A Literature Review and Comparative Analysis,” *Industrial & Labor Relations Review* 47, no. 1 (October 1993): 3–22. Chapter 6 discusses recent reform proposals to encourage multiemployer and sectoral bargaining.

51. See 29 U.S.C. § 158(a)(5) (2018) (unfair labor practice for an employer to refuse to bargain collectively with a certified union); 29 U.S.C. § 159(a) (2018) (union “designated or selected” by the majority of workers in an appropriate bargaining unit becomes their exclusive representative); *Int’l Ladies’ Garment Workers’ Union v. NLRB*, 366 U.S. 731 (1961) (holding that voluntary recognition is lawful, but only if a majority of employees in fact support the union).

52. Unions and companies can, however, negotiate clauses in collective bargaining agreements establishing preferential ground rules for organizing new worksites. *Kroger Co.*, 219 NLRB 388 (1975).

53. Andrias and Rogers, *Rebuilding Worker Voice*, 26–29; David Madland, *The Future of Worker Voice and Power* (Washington, DC: Center for American Progress, 2016).

54. German workers, for example, have a guaranteed voice at the enterprise level through works councils with consultative rights around various issues. Matthew Dimick, “Productive Unionism,” *University of California Irvine Law Review* 4, no. 2 (2014): 688n49. See generally Joel Rogers and Wolfgang Streeck, eds., *Works Councils: Consultation, Representation, and Cooperation in Industrial Relations* (Chicago: University of Chicago Press, 1995). Workers in Europe also have more of a guaranteed voice in policymaking through “social dialogue” processes. Lucio Baccaro and Marco Simoni, “Policy Concentration in Europe: Understanding Government Choice,” *Comparative Political Studies* 41, no. 10 (2007): 1323–1348.

55. See Jelle Visser and Daniele Checchi, “Inequality and the Labor Market: Unions,” in *Oxford Handbook of Economic Inequality*, eds. Wiemer Salverda, Brian Nolan, and Timothy M. Smeeding (New York: Oxford University Press, 2011), 230–256 (arguing that unions’ power, coverage, and level of bargaining coordination in particular nations correlates with economic equality in those nations); Kathleen Thelen, “The American Precariat: U.S. Capitalism in Comparative Perspective,” *Perspectives on Politics* 17, no. 1 (2019): 14–15 (discussing the close relationship between workers’ associational power and welfare state generosity).

56. See Andrias, “The New Labor Law,” 19–20, 46–47 (discussing this and other models and the difficulty of replicating them today); Nelson Lichtenstein, *The Most*

Dangerous Man in Detroit: Walter Reuther and the Fate of American Labor (New York: Basic Books, 1995): 271–298 (describing pattern bargaining).

57. Civil Rights Act of 1964, Title VII, Pub. L. No. 88-352 (1964), codified as amended at 42 U.S.C. § 2000e *et seq.* (2018); Occupational Safety and Health Act of 1970, Pub. L. 91–596 (1970), codified at 29 U.S.C. § 651 *et seq.* (2018); Employee Retirement Income Security Act of 1974, Pub. L. No. 93-406 (1974) codified as amended at 29 U.S.C. § 1001 *et seq.* (2018).

58. See the discussion in section 2.3.

59. Americans with Disabilities Act of 1990, Pub. L. 101–336 (1990), codified at 42 U.S.C. § 12101 *et seq.* (2018).

60. See Economic Policy Institute, “Minimum Wage Tracker” (last checked December 28, 2021) <https://www.epi.org/minimum-wage-tracker/> (showing that twenty-eight states and the District of Columbia have changed their minimum wage laws since 2014).

61. Annette Bernhardt, James DeFilippis, and Siobhan McGrath, *Unregulated Work in the Global City: Employment and Labor Law Violations in New York City* (Washington, DC: Brennan Center for Justice, 2007).

62. *Payne v. Western & Atlantic R.R. Co.*, 81 Tenn. 507, 519 (1884). See also Clyde W. Summers, “Employment at Will in the United States: The Divine Right of Employers,” *University of Pennsylvania Journal of Labor and Employment Law* 3, no. 1 (2000): 65 (arguing that the doctrine “has been, and still is, a basic premise undergirding American labor law,” and that it “gives American labor law much of its distinctive character”).

63. Michael L. Wachter, “Neoclassical Labor Economics: Its Implications for Labor and Employment Law,” in *Research Handbook on the Economics of Labor and Employment Law*, eds. Cynthia Estlund and Michael L. Wachter (Northampton, MA: Edward Elgar Publishing, 2012), 43.

64. Jay M. Feinman, “The Development of the Employment at Will Rule,” *American Journal of Legal History* 20, no. 2 (1976): 125–129. Feinman also explains that the rule appears to have been first articulated in its modern form in Horace Gray Wood, *A Treatise on the Law of Master and Servant: Covering the Relation, Duties and Liabilities of Employers and Employees* (Albany, NY: John D. Parsons, Jr., 1877): 271. Feinman, “Employment at Will Rule,” 126.

65. *Adair v. United States*, 208 U.S. 161, 174–175 (1908).

66. See, e.g., *Woolley v. Hoffmann-La Roche, Inc.*, 491 A.2d 1257, 1266–1268 (N.J. 1985).

67. For a lucid review of those exceptions and their importance, see Cynthia Estlund, “Rethinking Autocracy at Work,” *Harvard Law Review* 131, no. 3 (2018): 803–805

(reviewing Elizabeth Anderson, *Private Government: How Employers Rule Our Lives (and Why We Don't Talk about It)* (Princeton, NJ: Princeton University Press, 2017).

68. Kate Andrias and Alexander Hertel-Fernandez, *Ending At-Will Employment: A Guide for Just Cause Reform* (New York: Roosevelt Institute, 2021), 4.

69. *Woolley*, 491 A.2d at 1266–1268.

70. *Asmus v. Pacific Bell*, 999 P.2d 71, 76 (Cal. 2000).

71. *Epic Sys. Corp. v. Lewis*, 138 S. Ct. 1612, 1619 (2018).

72. Compare *Epic Sys. Corp. v. Lewis*, 138 S. Ct. at 1633 (Ginsburg, J., dissenting) (writing, in summary of the facts, that to “block” class action claims, the plaintiffs’ “employers required them to sign, as a condition of employment, arbitration agreements banning collective judicial and arbitral proceedings of any kind”). See also Samuel R. Bagenstos, “Consent, Coercion, and Employment Law,” *Harvard Civil Rights-Civil Liberties Law Review* 55 (2020): 410 (arguing that *Epic Systems* and other Roberts Court labor cases “rest on a principle of employee consent that ignores many of the forces that actually impose limits on an employee’s choice”).

73. *Soto-Fonalledas v. Ritz-Carlton San Juan Hotel Spa & Casino*, 640 F.3d 471, 475 (1st Cir. 2011).

74. Rogers, “Passion and Reason,” 315.

75. *Lechmere, Inc., v. NLRB*, 502 U.S. 527, 540–541 (1992). See also Nathan Newman, “Reengineering Workplace Bargaining: How Big Data Drives Lower Wages and How Reframing Labor Law Can Restore Information Equality in the Workplace,” *University of Cincinnati Law Review* 85, no. 3 (2017): 727–728 (noting this aspect of *Lechmere*).

76. *Janus v. AFSCME Council 31*, 138 S. Ct. 2448, 2459–60 (2018).

77. Bagenstos, “Consent, Coercion,” 435–438.

78. Bagenstos, “Consent, Coercion,” 438. See also Rogers, “Three Concepts,” 199–205 (discussing, in similar terms, how neoliberalism has influenced jurisprudence around union agency fees).

79. See generally Weil, *Fissured Workplace*.

80. See generally Bruce Goldstein, Marc Linder, Laurence E. Norton II, and Catherine K. Ruckelshaus, “Enforcing Fair Labor Standards in the Modern American Sweatshop: Rediscovering the Statutory Definition of Employment,” *UCLA Law Review* 46, no. 4 (1999): 983–1163.

81. *NLRB v. Hearst Publ'ns*, 322 U.S. 111 (1944) (NLRA); *Rutherford Food Corp. v. McComb*, 331 U.S. 722 (1947) (FLSA); *United States v. Silk*, 331 U.S. 704 (1947) (SSA).

82. 29 U.S.C. 152(3) (2018). See also *NLRB v. United Ins. Co. of Am.*, 390 U.S. 254, 256 (1968) (observing that congressional reaction to *Hearst* “was adverse and

Congress passed an amendment . . . [t]he obvious purpose of [which] was to have the . . . courts apply general agency principles in distinguishing between employees and independent contractors under the [NLRA]”).

83. *Nationwide Mut. Ins. Co. v. Darden*, 503 U.S. 318, 324–29 (1992) (common law agency test applies under NLRA, SSA, and the Employment Retirement Income Social Security Act of 1974); 326 (FLSA applies a broader test derived from child labor statutes). See also Restatement (Second) of Agency § 220(2) (Am. Law Inst. 1958) (listing factors that should be used to determine whether a principal legally employs an agent).

84. Noah D. Zatz, “Beyond Misclassification: Tackling the Independent Contractor Problem without Redefining Employment,” *ABA Journal of Labor & Employment Law* 26, no. 2 (Winter 2011): 282–283. See also *Sec’y of Labor v. Lauritzen*, 835 F.2d 1529, 1544 (7th Cir. 1987) (Easterbrook, J., concurring) (“The reasons for blocking vicarious liability at a particular point have nothing to do with the functions of the FLSA”).

85. See *Lancaster Symphony Orchestra*, 357 NLRB 1761, 1763 (2011) (listing ten factors that the NLRB uses to determine whether an employment relationship exists, but noting that “the same set of factors that was decisive in one case may be unpersuasive when balanced against a different set of opposing factors in another case”).

86. Weil, *Fissured Workplace*, 7 (drawing this metaphor).

87. 29 U.S.C. 158(b)(4) (2018).

88. Zatz, “Beyond Misclassification,” 288–290. Companies must bargain with unionized workers over decisions to contract out, even though they face no such restrictions in nonunion settings. *Fibreboard*, 379 U.S. at 210. See also *Healthcare Emps. Union, Local 399 v. NLRB*, 463 F.3d 909 (9th Cir. 2006) (unfair labor practice to subcontract work in order to prevent workers from voting in upcoming union election).

89. See Zatz, “Beyond Misclassification,” 288–290.

90. Lichtenstein, *Most Dangerous Man in Detroit*, 220–247.

91. Lichtenstein, *Most Dangerous Man in Detroit*, 280–281, quoting Daniel Bell, “The Treaty of Detroit,” *Fortune* (July 1950): 53.

92. *Fibreboard*, 379 U.S. at 223 (Stewart, J., concurring).

93. *First Nat’l Maint. Corp. v. NLRB*, 452 U.S. 666, 679 (1981); see also *First Nat’l Maint. Corp. v. NLRB*, 686n22 (holding that whether employers must bargain over decisions to automate work must be decided on a case-by-case basis).

94. See Robert A. Gorman and Matthew W. Finkin, *Labor Law: Analysis and Advocacy* (Huntington, NY: Juris Publishing, 2013): 806 (noting that there are few court or NLRB opinions addressing the duty to bargain over automation decisions).

95. See *First Nat'l Maintenance*, 452 U.S., at 681.

96. See 29 U.S.C. § 158(d) (2018) (specifying that the duty to bargain requires employers and unions to “meet at reasonable times and confer in good faith,” but “does not compel either party to agree to a proposal or require the making of a concession”).

97. See Melvin Dubovsky, “Legal Theory and Workers’ Rights: A Historian’s Critique,” *Industrial Relations Law Journal* 4, no. 3 (June 1981): 500 (observing that “[m]anagement prerogatives remain a constant area of struggle” since unions have not conceded that management has unilateral authority in that sphere).

98. See *Colgate-Palmolive Co.*, 323 NLRB 515, 515 (1997) (employer must bargain with its employees’ union prior to installing hidden surveillance cameras, whose recordings could be used to spot infractions of workplace rules).

99. See *NLRB v. Washington Aluminum Co.*, 370 U.S. 9, 14 (1962) (holding that § 7 of NLRA, 29 U.S.C. § 157 protects workers’ rights to engage in collective protest around working conditions, even if those workers had no intention of unionizing).

100. *Legacy Charter*, 2018 WL 3955527 (NLRB. Div. of Judges), 2018 NLRB LEXIS 338 (August 16, 2018).

101. For example, Daniel Solove proposes a taxonomy of privacy law that sorts cases into four categories—information collection, information processing, information dissemination, and invasion into protected spaces—with sixteen subcategories. Daniel Solove, “A Taxonomy of Privacy,” *University of Pennsylvania Law Review* 154, no. 3 (2006): 489.

102. See Neil M. Richards and Jonathan King, “Big Data Ethics,” *Wake Forest Law Review* (2014): 396 (describing privacy not as centrally concerned with secrecy, but rather as “encompassing information rules that manage the appropriate flows of information in ethical ways”); Julie E. Cohen, “What Privacy Is For,” *Harvard Law Review* (May 2013): 1906 (“Privacy is shorthand for breathing room to engage in the processes of boundary management that enable and constitute self-development”).

103. See Pauline T. Kim, “Data Mining and the Challenges of Protecting Employee Privacy under U.S. Law,” *Comparative Labor Law & Policy Review* 40, no. 3 (2019): 411–416 (gathering cases discussing ways in which modern forms of data analytics enable employers to gather extensive information about workers without risking tort liability).

104. *Restatement (Second) of Torts* § 652B (Am. Law Inst. 1977). See also *Restatement of Employment Law* §§ 7.02–7.06 (Am. Law Inst. 2015) (clarifying that employees have protected privacy interests in their person, physical and electronic locations, and information of a personal nature, and that employers are liable for violations of those interests that would be “highly offensive to a reasonable person”).

105. *Koepfel v. Speirs*, 808 N.W.2d 177 (Iowa 2011) (changing room); *Wal-Mart Stores, Inc. v. Lee*, 74 S.W.3d 634 (Ark. 2002) (home); *Sowards v. Norbar, Inc.*, 605 N.E.2d 468 (Ohio Ct. App. 1992) (hotel room).

106. See *O'Bryan v. KTIV Television*, 868 F. Supp. 1146, 1158 (N.D. Iowa 1994) (finding that an employer can search an employee's desk area for work-related documents without violating the employee's reasonable expectations of privacy, and therefore rejecting the employee's claim of intrusion upon seclusion).

107. *Restatement (Second) of Torts* § 652B.

108. Kim, "Data Mining," 415, citing William L. Prosser, "Privacy," *California Law Review* 48, no. 3 (1960): 384. See also Matthew W. Finkin, "Employee Privacy, American Values, and the Law: The Kenneth M. Piper Lecture," *Chicago-Kent Law Review* 72, no. 1 (1996): 256 (observing that once a majority of employers adopt a practice that invades employee privacy, "consent" to the practice "cannot be said to be free").

109. *Vega-Rodriguez v. Puerto Rico Tel. Co.*, 110 F.3d 174, 180 (1st Cir. 1997). See also *Restatement of Employment Law* § 7.06, comment e, illustration 6 (endorsing rule from *Vega-Rodriguez*).

110. *Restatement of Employment Law* § 7.08(c) (protecting employee autonomy interests but permitting employers to take action that infringes on those interests where they have a "reasonable and good-faith belief" that the employee's conduct may harm the business).

111. For notable exceptions, see *Conn. Gen. Stat.* §§31–51q (2005) (creating action for damages where an employer disciplines or discharges an employee for any action that is protected by the First Amendment of the US Constitution); Cal Lab. Code. §§ 1101, 1102 (2005) (protecting employees' rights to participate in political activities).

112. See *Edmundson v. Shearer Lumber Prods.*, 75 P.3d 733 (2003) (rejecting an at-will employee's claim for wrongful termination in violation of public policy where the employer's stated reason for termination was the employee's opposition to one of its political projects). Compare *Novosel v. Nationwide Ins. Co.*, 721 F.2d 894 (3d Cir. 1983) (finding on similar facts that an employee could state a claim for wrongful discharge in violation of public policy given the preeminent importance of political speech under the First Amendment). In subsequent cases, courts have usually declined to follow *Novosel*. Samuel R. Bagenstos, "Employment Law and Social Equality," *Michigan Law Review* 112, no. 2 (2013): 257. See also Matthew W. Finkin, "Menschenbild: The Conception of the Employee as a Person in Western Law," *Comparative Labor Law & Policy Journal* 23, no. 2 (2002): 582–584 (comparing US and German law on point, collecting and discussing cases), 578 (noting that under French law, an employer cannot forbid employees from discussing nonwork matters while on the job).

113. Alexander Hertel-Fernandez, *Politics at Work: How Companies Turn Their Workers into Lobbyists* (Oxford: Oxford University Press, 2018).

114. See Matthew W. Finkin, *Privacy in Employment Law*, 5th ed. (Bloomberg Law, 2018): xxxiv, xxxv (observing that in the US, privacy “legislation has been enacted piecemeal” and “most often, issues of privacy remain unspoken to by the law”); Joel R. Reidenberg, “Setting Standards for Fair Information Practice in the U.S. Private Sector,” *Iowa Law Review* 80, no. 3 (1995): 506 (noting this “sectoral” development of privacy laws in the US).

115. *HIPAA Privacy Rule*, 45 C.F.R. § 160 (2018); US Equal Employment Opportunity Commission, *Enforcement Guidance on Disability-Related Inquiries and Medical Examinations of Employees under the Americans with Disabilities Act* (July 26, 2000). The Fair Credit Reporting Act also limits employers’ rights to gather data about employees and potential employees. 15 U.S.C. § 1681(b) (2018).

116. Biometric Information Privacy Act, 740 Ill. Comp. Stat. 14 (2008); Texas Business and Commercial Code § 503 (2017).

117. For example, a recent wave of laws has forbidden employers to request employees’ social media passwords. Marko Mrkonich, Allan King, Rod Fliegel, et al., *The Big Move toward Big Data in Employment* (Littler Mendelson, P.C., August 2015): 14 (showing that twenty-two states passed such laws by 2015).

118. Cal. Consumer Privacy Act of 2018, Cal. A.B. 25 (Cal. 2019) (enacted).

119. Anupam Chander, Margot E. Kaminski, and William McGeeveran, “Catalyzing Privacy Law,” *Minnesota Law Review* 105, no. 4 (2021): 1755–1756.

120. *GDPR & CCPA: Opt-ins, Consumer Control, and the Impact on Competition and Innovation, Hearing before the U.S. Senate Committee on the Judiciary*, 116th Congress (March 12, 2019) (statement of Michelle Richardson, Director of Privacy and Data for the Center for Democracy and Technology: 5); European GDPR Art. 5(1) (enumerating principles), 6(1)(b–f) (listing lawful reasons for data processing). On the differences between the CCPA and GDPR, see generally Chander et al., “Catalyzing Privacy Law.”

121. 18 U.S.C. § 2701 (2018).

122. 18 U.S.C. § 2701(c)(1) (2018).

123. Finkin, *Privacy in Employment*, Ch. 5.III.D.1–2 (discussing state statutes regulating the interception of telephone and electronic communications).

124. Julie E. Cohen, *Between Truth and Power: The Legal Constructions of Informational Capitalism* (New York: Oxford University Press, 2019), 15.

125. William W. Fisher III, *The Growth of Intellectual Property: A History of the Ownership of Ideas in the United States* (self-pub., 1999) (English version), 2, <https://cyber.harvard.edu/people/tfisher/iphistory.pdf>; James Boyle, “The Second Enclosure Movement and the Construction of the Public Domain,” *Law and Contemporary Problems* 66, no. 1–2 (2003): 37.

126. See Cohen, *Between Truth and Power*, 20–24 (tracing developments across a number of IP doctrines). See also Amy Kapczynski, “The Law of Informational Capitalism,” *Yale Law Journal* 129, no. 5 (2020): 1512 (discussing “encasement” of IP rights and rights around data flows under international and transnational trade regimes).

127. Catherine Fisk, *Working Knowledge: Employee Innovation and the Rise of Corporate Intellectual Property, 1800–1930* (Chapel Hill: University of North Carolina Press, 2009).

128. Cohen, *Between Truth and Power*, 18.

129. Cohen, *Between Truth and Power*, 91.

130. Lothar Determann, “No One Owns Data,” *Hastings Law Journal* 70, no. 1 (2018): 5; Mark A. Lemley, “Private Property,” *Stanford Law Review* 52, no. 5 (2000): 1547.

131. *Feist Pub’s, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1991).

132. *Bilski v. Kappos*, 561 U.S. 593, 611–612 (2010). See also Kapczynski, “Law of Informational Capitalism,” 1501 (discussing challenges of protecting algorithms and machine learning processes under existing IP doctrines).

133. Cohen, *Between Truth and Power*, 58.

134. See Kapczynski, “Law of Informational Capitalism,” 1508–1510 (discussing the expansion of protections in trade secrets since *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986 (1984) (holding that trade secrets entail property rights under the Taking Clause of the Fifth Amendment), including cases such as *Philip Morris, Inc. v. Reilly*, 312 F.3d 24 (1st. Cir. 2002) (striking down Massachusetts law requiring disclosure of cigarette ingredients to state regulators)).

135. See Jamillah Bowman Williams, “Diversity as a Trade Secret,” *Georgetown Law Journal* 107, no. 6 (2019): 1702, 1707 (noting and discussing recent claims by companies that hiring algorithms are protected trade secrets).

136. Amy Kapczynski, “The Public History of Trade Secrets,” *U.C. Davis L. Rev.* 55, no. 3 (2022): 1367–1443.

137. Julie E. Cohen, “The Biopolitical Public Domain: The Legal Construction of the Surveillance Economy,” *Philosophy & Technology* 31, no. 2 (2018): 213.

138. Kapczynski, “Law of Informational Capitalism,” 1498. See also Jathan Sadowski, “When Data Is Capital: Datafication, Accumulation, and Extraction,” *Big Data & Society* 6, no. 1 (2019): 2 (data is not naturally occurring, but rather “a recorded abstraction of the world created and valorised by people using technology”).

139. Such agreements are typically unenforceable against line-level workers. Charles A. Sullivan, “The Puzzling Persistence of Unenforceable Contract Terms,” *Ohio State*

Law Journal 70, no. 5 (2009): 1149. Nevertheless, major low-wage employers have increasingly required line-level workers to sign them in recent years. Steven Greenhouse, “Noncompete Clauses Increasingly Pop up in Array of Jobs,” *New York Times*, June 8, 2014; Spencer Woodman, “Amazon Makes Even Temporary Warehouse Workers Sign 18-Month Non-Competes,” *The Verge*, March 26, 2015, <https://www.theverge.com/2015/3/26/8280309/amazon-warehouse-jobs-exclusive-noncompete-contracts>.

140. See *Restatement (Second) of Contracts* § 188 (Am. Law. Inst. 1981) (providing a test for enforceability of a covenant not to compete). See also *Hopper v. All Pet Animal Clinic*, 861 P.2d 531, 539–540 (Wyo. 1993) (discussing modern approach to covenants that considers their reasonableness under the circumstances).

141. See *Lucht’s Concrete Pumping v. Horner*, 255 P.3d 1058, 1059–60 (Colo. 2011) (holding that continued employment can constitute consideration that binds an employee to a covenant not to compete promulgated by the employer).

142. Orly Lobel, “The New Cognitive Property: Human Capital Law and the Reach of Intellectual Property,” *Texas Law Review* 93, no. 4 (2015): 827–833.

143. Lobel, “New Cognitive Property.”

144. In important work not finalized as this book went to press, Julia Tomassetti argues that in cases where gig economy workers challenge their misclassification, gig economy companies often argue that they have managerial prerogatives rooted in property rights to surveil and discipline workers who are not their employees. Julia Tomassetti, “Managerial Prerogative, Property Rights, and Labor Control in Employment Status Disputes,” *Theoretical Inquiries in Law* 24, no. 1 (forthcoming, 2023).

Chapter 3

1. Nick Statt, “Amazon Says Fully Automated Shipping Warehouses Are at Least a Decade Away,” *The Verge*, May 1, 2019, <https://www.theverge.com/2019/5/1/18526092/amazon-warehouse-robotics-automation-ai-10-years-away>; Amazon warehouse managers, interviews by Frank Levy, May 13, 2019, on file with author.

2. Author tour of Amazon warehouse with Washington Center for Equitable Growth (January 2020); Will Knight, “Inside Amazon’s Warehouse, Human-Robot Symbiosis,” *MIT Technology Review*, July 7, 2015; Nick Wingfield, “As Amazon Pushes Forward with Robotics, Workers Find New Roles,” *New York Times*, September 10, 2017; Brian Callaci, “Digital Scab, Digital Snitch,” *Phenomenal World*, May 28, 2020, <https://phenomenalworld.org/analysis/digital-scab-digital-snitch>.

3. See generally Beth Gutelius and Nik Theodore, *The Future of Warehouse Work: Technological Change in the U.S. Logistics Industry* (Berkeley, CA: UC Berkeley Center

for Labor Research and Education and Working Partnerships USA, October 2019), <https://laborcenter.berkeley.edu/pdf/2019/Future-of-Warehouse-Work.pdf>.

4. Author tour of Amazon warehouse (January 2020); Evan Ackerman, “Brad Porter, VP of Robotics at Amazon, on Warehouse Automation, Machine Learning, and His First Robot,” *IEEE Spectrum*, September 27, 2018, <https://spectrum.ieee.org/automaton/robotics/industrial-robots/interview-brad-porter-vp-of-robotics-at-amazon> (on use of video cameras).

5. Alana Semuels, “I Delivered Packages for Amazon and It Was a Nightmare,” *The Atlantic*, June 28, 2018; Josh Eidelson and Matt Day, “Amazon Work Rules Govern Tweets, Body Odor of Contract Drivers,” *Bloomberg*, May 5, 2021, <https://www.bloomberg.com/news/articles/2021-05-05/amazon-work-rules-govern-tweets-body-odor-of-contract-drivers>.

6. Jeffrey Dastin, “Amazon Hikes Average U.S. Starting Pay to \$18, Hires for 125,000 Jobs,” *Reuters*, September 14, 2021, <https://www.reuters.com/business/exclusive-amazon-hikes-starting-pay-18-an-hour-it-hires-125000-more-logistics-2021-09-14>.

7. Noam Scheiber, “Inside an Amazon Warehouse, Robots’ Ways Rub off on Humans,” *New York Times*, July 3, 2019.

8. Amazon worker, interview by author at Washington Center for Equitable Growth conference on warehouse work, January 2020, Baltimore.

9. A 2021 California statute requires warehouse employers to provide written notice of production quotas to workers. Under the law, workers cannot be required to meet quotas that have not been disclosed or that lead them to miss “meal or rest periods, use of bathroom facilities,” or not to comply with workplace safety laws. California Assembly Bill 701 (signed into law September 22, 2021).

10. This term has been used by others in the past, including *The Economist*. *Schumpeter* (blog), “Digital Taylorism,” *The Economist* (September 10, 2015).

11. Karen Levy, “The Contexts of Control: Information, Power, and Truck-Driving Work,” *The Information Society* 31, no. 2 (2015): 161.

12. The term “algorithmic management” is not my own. It seems to have become popular due to a working paper by several Carnegie Mellon researchers. Min Kyung Lee, Daniel Kusbit, Evan Metsky, and Laura Dabbish, “Working with Machines: The Impact of Algorithmic and Data-Driven Management on Human Workers,” in *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (April 2015): 1603–1612, <https://wtf.tw/ref/lee.pdf>.

13. Helpful overviews of these phenomena that have informed this chapter’s analysis include Elizabeth Tippet, Charlotte S. Alexander, and Zev J. Eigen, “When Timekeeping Software Undermines Compliance,” *Yale Journal of Law & Technology* 19 (2017): 1–76; Nathan Newman, “Reengineering Workplace Bargaining: How Big

Data Drives Lower Wages and How Reframing Labor Law Can Restore Information Equality in the Workplace,” *University of Cincinnati Law Review* 85, no. 3 (2017): 693–760; Richard A. Bales and Katherine V.W. Stone, “The Invisible Web at Work: Artificial Intelligence and Electronic Surveillance in the Workplace,” *Berkeley Journal of Employment and Labor Law* 41, no. 1 (2020): 1–60; and Jeffrey M. Hirsch, “Future Work,” *University of Illinois Law Review* 2020, no. 3 (2020) 889–958.

14. Michael Polanyi, *The Tacit Dimension* (Chicago: University of Chicago Press, 1966), discussed in David H. Autor, “Polanyi’s Paradox and the Shape of Employment Growth,” in *Re-Evaluating Labor Market Dynamics* (Kansas City, MO: Federal Reserve Bank of Kansas City, 2015), 136.

15. See Frank Pasquale, *New Laws of Robotics: Defending Human Expertise in the Age of AI* (Cambridge, MA: Belknap Press, 2020), 211–213 (reviewing philosophical literature and its relevance to problems in AI development).

16. See Autor, “Polanyi’s Paradox,” 135–138 (breaking work tasks into “routine,” “abstract,” and “manual,” and arguing that the latter two, though quite difficult to automate using traditional means, may at times be susceptible to automation using machine learning and related technologies).

17. James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven, CT: Yale University Press, 1998), 87–102 (discussing “authoritarian high modernism”), 309–341 (discussing and distinguishing two forms of knowledge: “*techné*,” which is similar to what this book calls “formal” knowledge, and “*metis*,” which is similar to what this book calls “tacit” knowledge).

18. Scott, *Seeing Like a State*, 6, 256, 310–311.

19. See Pauline T. Kim, “Data-Driven Discrimination at Work,” *William and Mary Law Review* 58, no. 3 (February 2017): 879 (describing machine learning as “inductive and atheoretical”).

20. Julie E. Cohen, *Between Truth and Power: The Legal Constructions of Informational Capitalism* (New York: Oxford University Press, 2019), 76–89. See also Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: Public Affairs, 2019) (prominent account of these developments). In my view, as discussed in chapter 1, Zuboff’s account is less analytically or normatively compelling than Cohen’s.

21. Helen Nissenbaum, “Contextual Integrity Up and Down the Data Food Chain,” *Theoretical Inquiries in Law* 20, no. 1 (2019): 238–240. See also Neil M. Richards and Jonathan H. King, “Three Paradoxes of Big Data,” *Stanford Law Review* 66 (2013): 42 (“Big data analytics depend on small data inputs, including information about people, places, and things collected by sensors, cell phones, click patterns, and the like” that are “aggregated to produce large datasets which analytic techniques mine for insight”); Neil M. Richards and Jonathan King, “Big Data Ethics,” *Wake Forest*

Law Review 49, no. 2 (2014): 394 (The “big” aspect of “big data” is often defined in terms of the “3 Vs”: big data analytics help process data that are available in high volume, with a high variety, and are increasingly available or delivered at high velocity). See also Matthew T. Bodie, Miriam A. Cherry, Marcia L. McCormick, and Jintong Tang, “The Law and Policy of People Analytics,” *University of Colorado Law Review* 88, no. 4 (2017): 961–1042 (giving an overview of such practices and their intersection with labor laws).

22. See Federal Trade Commission, *Big Data: A Tool for Inclusion or Exclusion?* (January 2016), 1, <https://www.ftc.gov/system/files/documents/reports/big-data-tool-inclusion-or-exclusion-understanding-issues/160106big-data-rpt.pdf> (noting that “when consumers engage digitally” by shopping, using social media, or using fitness trackers or similar devices, “companies collect information about their choices, experiences, and individual characteristics” which can be used both to discern “market-wide tastes and emerging trends” and “to predict the preferences of specific individuals”).

23. Nissenbaum, “Data Food Chain,” 240–241. See generally Frank Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information* (Cambridge, MA: Harvard University Press, 2016).

24. Pedro Domingos, *The Master Algorithm: How the Quest for the Ultimate Learning Machine Will Remake Our World* (New York: Basic Books, 2015), 5.

25. Domingos, *The Master Algorithm*, 5.

26. See Gary Marcus, “Deep Learning: A Critical Appraisal” (January 2, 2018): 3, <https://arxiv.org/abs/1801.00631> (“Deep learning . . . is essentially a statistical technique for classifying patterns, based on sample data, using neural networks with multiple layers”). See also Bodie et al., “People Analytics,” 970 (describing data mining as an “automated process of analysis of large databases to find new patterns and relations”).

27. See, e.g., Dan Cirean, Ueli Meier, and Jürgen Schmidhuber, “Multi-Column Deep Neural Networks for Image Classification,” *2012 IEEE Conference on Computer Vision and Pattern Recognition* (2012): 3642–3649; Alex Krizhevsky, Ilya Sutskever, and Geoffrey E. Hinton, “ImageNet Classification with Deep Convolutional Neural Networks,” *Communications of the Association of Computing Machinery* 60, no. 6 (June 2017): 84–90.

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31. Cade Metz, “AI Is Transforming Google Search. The Rest of the Web Is Next,” *Wired*, February 4, 2016; Quoc V. Le and Mike Schuster, “A Neural Network for Machine Translation, at Production Scale,” *Google AI Blog*, September 27, 2016, <https://ai.googleblog.com/2016/09/a-neural-network-for-machine.html>.

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35. Kim, “Data-Driven Discrimination at Work,” 879. See also Autor, “Polanyi’s Paradox,” 158–162 (summarizing capabilities and limits of machine learning).

36. Bodie et al., “People Analytics,” 970; Nissenbaum, “Data Food Chain,” 240–242.

37. Bodie et al., “People Analytics,” 971.

38. Salomé Viljoen, “A Relational Theory for Data Governance,” *Yale Law Journal* 131, no. 2 (2022): 580. See also Cohen, *Truth and Power*, 67 (describing such processes as “biopolitical in character” in the sense that “they are designed to enable the statistical construction, management of, and trade in populations”).

39. See generally, Viljoen, “Democratic Data.”

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46. Autor, “Polanyi’s Paradox,” 131–133. See also the Center for the Study of Democratic Institutions, “The Triple Revolution: Open Memorandum to President Lyndon B. Johnson,” April 6, 1963, <http://scarc.library.oregonstate.edu/coll/pauling/peace/papers/1964p.7.html> (discussing “triple revolution” of cybernation, new weaponry, and global concern for human rights).
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48. Nick Bostrom, *Superintelligence: Paths, Dangers, Strategies* (Oxford: Oxford University Press, 2014), 26–62 (discussing paths to “superintelligence”). See also Erik Brynjolfsson and Andrew McAfee, *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies* (New York: W.W. Norton & Company, 2014), 39–56; Klaus Schwab, *The Fourth Industrial Revolution* (New York: Crown Business, 2016), 3; Stern (with Kravitz), *Raising the Floor*, 57–60; Domingos, *Master Algorithm*, 43–45 (all discussing the possibility of accelerating technological change due to exponential progress in underlying technologies).
49. Domingos, *Master Algorithm*, 25.
50. Bostrom, *Superintelligence*, 149–153.
51. Despite the prominence of automation fears in public debates, it is challenging to determine the net impact of automation on work. One recent study measured the impact of the introduction of robots on employment levels and wages in local labor markets between 1990 and 2007. In manufacturing, each robot per thousand workers eliminated between three and six jobs within the local labor market and reduced wages by between 0.25 percent and 0.5 percent. Daron Acemoglu and Pascual Restrepo, “Robots and Jobs: Evidence from U.S. Labor Markets,” *Journal of Political*

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52. Martha Gimbel (@marthagimbel), Twitter, August 27, 2020, 11:19 p.m., <https://twitter.com/marthagimbel/status/1299184706693599233?s=20>.

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54. US Bureau of Labor Statistics, “Labor Productivity and Costs” (productivity growth in manufacturing around 0.4 percent annually from 2007 to 2019). Levels of “occupational churn,” or the net creation of jobs in growing occupations and the loss of jobs in declining occupations, were also low in the 2000s and 2010s. Robert D. Atkinson and John Wu, “False Alarmism: Technological Disruption and the U.S. Labor Market, 1850–2015,” *Information Technology & Innovation Foundation* (May 8, 2017): 18.

55. See US Bureau of Labor Statistics, “Labor Force Statistics from the Current Population Survey,” <https://data.bls.gov/timeseries/LNS14000000> (accessed November 19, 2021) (showing the unemployment rate falling under 4 percent in May 2018).

56. “A Supply Chain Consultant Evaluation of Kiva Systems,” *MWPVL International Inc.*, https://www.mwpvl.com/html/kiva_systems.html (accessed November 19, 2021).

57. See Steve LeVine, “Artificial Intelligence Pioneer Says We Need to Start Over,” *Axios*, September 15, 2017, <https://www.axios.com/artificial-intelligence-pioneer-says-we-need-to-start-over-1513305524-f619efbd-9db0-4947-a9b2-7a4c310a28fe.html> (the programmer who developed “back-propagation” method that is at the heart of machine learning now believes that it is a dead end). See also Gary Marcus and Ernest Davis, *Rebooting AI: Building Artificial Intelligence We Can Trust* (New York: Penguin Random House, 2019) (elaborating on the argument that machine learning is not a path to artificial general intelligence). Marcus and Davis nevertheless predict

that once artificial general intelligence is developed using tools other than machine learning (which are not yet available), it will displace a substantial number of workers. *Rebooting AI*, 203–206.

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63. Kevin Lacker, “Giving GPT-3 a Turing Test,” *Kevin Lacker’s Blog*, July 6, 2020, <https://lacker.io/ai/2020/07/06/giving-gpt-3-a-turing-test.html>.

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Südekum, and Nicole Woessner, “The Rise of Robots in the German Labour Market,” *VoxEU*, September 19, 2017, <https://voxeu.org/article/rise-robots-german-labour-market>; Yochai Benkler, “The Role of Technology in Political Economy: Part 3,” *LPE Project*, July 27, 2018 (discussing the work of Hollinger and Dauth et al.), <https://lpeproject.org/blog/the-role-of-technology-in-political-economy-part-3>. But see Steve Crowe, “Inside the Rethink Robotics Shutdown,” *The Robot Report*, November 13, 2018, at <https://www.therobotreport.com/rethink-robotics-shutdown> (reporting that a leading co-bot company shut down due to low sales; one challenge was keeping co-bots safe for humans to work with, while also engineering them to be strong and accurate enough).

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83. See Laura Tyson and Michael Spence, “Exploring the Effects of Technology on Income and Wealth Inequality,” in *After Piketty: The Agenda for Economics and Inequality*, eds. Heather Boushey, J. Bradford DeLong, and Marshall Steinbaum (Cambridge, MA: Harvard University Press, 2017), 182 (arguing that one effect of these developments is “disintermediation: a reduction in the vertical layers of middle managers engaged in supervision and an increase in the efficiency and quality of management oversight”); see also *id.* at 183 (noting that there are no guarantees that resulting efficiency or productivity gains will be shared with workers).

84. See generally Gutelius and Theodore, *The Future of Warehouse Work*. See also Edward P. Lazear, Kathryn L. Shaw, and Christopher Stanton, “Making Do with Less: Working Harder during Recessions,” *Journal of Labor Economics* 34, no. S1 (2016): 333–360 (finding empirical evidence that intensified supervision led to greater worker effort, and most of the increase in studied industries came from greater effort rather than task substitution).

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93. Kronos, “Hannaford Supermarkets: Hannaford Uses Kronos Optimized Scheduling and Navigator to Streamline Workforce Management,” Kronos.com (accessed November 21, 2021), <https://www.kronos.com/customers/hannaford-supermarkets>.

94. Peter Szekely, “Not So Fast: U.S. Restaurant Workers Seek Ban on Surprise Scheduling,” *Reuters*, July 17, 2017, <https://www.reuters.com/article/us-usa-fastfood-schedules/not-so-fast-u-s-restaurant-workers-seek-ban-on-surprise-scheduling-idUSKBN1A20VC>.

95. Amazon worker, interview by author.

96. Kantor, “Starbucks to Revise Policies.”

97. Kantor, “Starbucks to Revise Policies.”

98. 29 U.S.C. § 207 (2018).

99. Julia Wolfe, Janelle Jones, and David Cooper, “‘Fair Workweek’ Laws Help More than 1.8 Million Workers,” *Economic Policy Institute*, July 19, 2018, <https://www.epi.org/publication/fair-workweek-laws-help-more-than-1-8-million-workers>.

100. Tippet et al., “When Timekeeping Software Undermines Compliance.” For an illustrative recent wage and hour case and judgment, see *Braun v. Wal-Mart Stores*, 630 Pa. 292 (Pa. 2014) (upholding jury verdict for almost \$200 million in back wages and liquidated damages due to the company’s failure to pay workers for break times, and other forms of wage theft).

101. See Kirstie Ball, “Workplace Surveillance: An Overview,” *Labor History* 51, no. 1 (February 2010): 87–106 (discussing workplace surveillance, both historically and today).

102. Harry Braverman, *Labor and Monopoly Capital* (New York: Monthly Review Press, 1974), 256–258.

103. See generally Levy, “Contexts of Control.”

104. Kaplan, “The Spy Who Fired Me.” See also *Planet Money*, “The Future of Work Looks Like a UPS Truck,” May 2, 2014, podcast, <https://www.npr.org/sections/money/2014/05/02/308640135/episode-536-the-future-of-work-looks-like-a-ups-truck> (discussing speedups and increased rate of injuries at UPS).

105. Alexandra Mateescu, *Electronic Visit Verification: The Weight of Surveillance and the Fracturing of Care* (New York: Data & Society, 2021), https://datasociety.net/wp-content/uploads/2021/11/EVV_REPORT_11162021.pdf.

106. Danielle Abril and Drew Harwell, “Keystroke Tracking, Screenshots, and Facial Recognition: The Boss May Be Watching after the Pandemic Ends,” *Washington Post*, September 24, 2021. See also Communication Workers of America, “CWA Issue Brief: Protections against Abusive Monitoring,” February 2014, https://cwa-union.org/sites/default/files/protections-against-abusive-monitoring_cwa-issue-brief.pdf (describing contract language around automated surveillance negotiated by call center workers and others).

107. Colin Lecher, “How Amazon Automatically Tracks and Fires Warehouse Workers for ‘Productivity,’” *The Verge*, April 25, 2019, <https://www.theverge.com/2019/4/25/18516004/amazon-warehouse-fulfillment-centers-productivity-firing-terminations>. See also Callaci, “Digital Scab” (observing that “Amazon’s strategy for increasing output in the pandemic seems to be getting its human employees to work harder”).

108. Lecher, “How Amazon Tracks and Fires.”

109. Lecher, “How Amazon Tracks and Fires.”

110. Lecher, “How Amazon Tracks and Fires.”

111. Knight, “A Radar for Industrial Robots.”

112. For example, Amazon has patented a wristband that tracks workers’ movements through warehouses and may vibrate to communicate to workers that they

are grabbing the wrong item. Ceylan Yeginsu, “If Workers Slack Off, the Wristband Will Know. (And Amazon Has a Patent for It),” *New York Times*, February 1, 2018.

113. See Carl Shapiro and Joseph E. Stiglitz, “Equilibrium Unemployment as a Worker Discipline Device,” *American Economic Review* 74, no. 3 (June 1984): 433–444 (efficiency wages increase equilibrium unemployment, raising costs to workers of job loss). See also Janet L. Yellen, “Efficiency Wage Models of Unemployment,” *American Economic Review* 74, no. 2 (May 1984): 203 (arguing that efficiency wages may be a means of selecting for high-performing workers); George A. Akerlof, “Labor Contracts as Partial Gift Exchange,” *Quarterly Journal of Economics* 97, no. 4 (November 1982): 543–569 (arguing that employers may pay efficiency wages in response to norms of fair treatment within the firm or workplace).

114. See Yellen, “Efficiency Wage Models of Unemployment,” 201 (arguing that efficiency wages may also be less important “in the secondary sector, where the wage-productivity relationship is weak or nonexistent”).

115. Chen Liang, Yili Hong, and Bin Gu, “Does Monitoring Lead to a ‘Warm’ Start in Online Platforms?” (working paper, August 31, 2016): https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2838045.

116. See Robert Gibbons, “Piece-Rate Incentive Schemes,” *Journal of Labor Economics* 5, no. 4 (October 1987): 416 (without the capacity to collectively restrict output, workers cannot hold employers to any promises around pace of work, including pay under piece-rate schemes).

117. See Rosenblat, *Uberland*, 133–37.

118. Transport for London, *The Knowledge of London: An Introduction to Learning the Knowledge of London and the Examination Process* (March 2014), <http://content.tfl.gov.uk/introduction-to-knowledge-booklet-04-19.pdf>.

119. Ton, *Good Jobs Strategy*, 37–54.

120. Regarding practices in the retail sector, see Bartholomew Clark Watson, *Nations of Retailers: The Comparative Political Economy of Retail Trade* (PhD diss., University of California Berkeley, 2014), <https://escholarship.org/uc/item/18z1138t> (comparing retailers’ integration of information and communications in the US, Denmark, and Germany, finding that Denmark and Germany pursued fewer labor discipline strategies). But see Maarten Hermans and Miet Lamberts, “Digitalization in the Belgian Retail Sector: Tensions, Discourses, and Trade Union Strategy,” April 25, 2019 (on file with author) (demonstrating changes in Belgian retail sector that parallel US changes despite substantially different industrial relations systems). Regarding practices in call centers, see Virginia Doellgast, “Collective Voice under Decentralized Bargaining: A Comparative Study of Work Reorganization in U.S. and German Call Centres,” *British Journal of Industrial Relations* 48, no. 2 (June 2010): 375 (arguing that US call centers use “a narrow division of labour, tight discipline and individual

incentives” along with managerial efforts to homogenize jobs, while German centers utilize “high-involvement employment systems with broad skills and worker discretion”).

121. Thomas Black, “Highly Paid Union Workers Give UPS a Surprise Win in Delivery Wars,” *Bloomberg*, November 4, 2021, <https://www.bloomberg.com/news/articles/2021-11-04/labor-shortage-ups-union-drivers-give-delivery-service-edge-over-fedex-fdx>.

Chapter 4

1. See generally Georgios Paris Loizides, *Deconstructing Fordism: Legacies of the Ford Sociological Department* (PhD. diss., Western Michigan University, 2004), <https://scholarworks.wmich.edu/dissertations/1122>; Henry Ford Museum of American Innovation, “Popular Research Topics: Ford Motor Company Sociological Department & English School,” <https://www.thehenryford.org/collections-and-research/digital-resources/popular-topics/sociological-department> (accessed November 23, 2021).

2. Henry Ford Museum, “Sociological Department & English School.”

3. Henry Ford Museum, “Sociological Department & English School.”

4. Loizides, *Deconstructing Fordism*, 145 (detectives), 156 (monitoring outside political activities), 139 (Ford sought to convince workers that their “interests were or should be aligned with the interests of the company and its management,” which “of course kept the unions outside the equation”).

5. Daniel Solove, “Introduction: Privacy Self-Management and the Consent Dilemma,” *Harvard Law Review* 126, no. 7 (2013): 1883. As Julie Cohen notes, that model is indebted to liberal political theory in its view that individual agents are autonomous and in its focus on individual choice as the basis for political legitimacy. Julie E. Cohen, “What Privacy Is For,” *Harvard Law Review* 126, no. 7 (May 2013): 1907.

6. Neil M. Richards and Jonathan H. King, “Big Data Ethics,” *Wake Forest Law Review* (2014): 412.

7. See, e.g., Richards and King, “Big Data Ethics,” 413 (noting these practical difficulties).

8. Solove, “Privacy Self-Management,” 1880.

9. Pauline T. Kim, “Data Mining and the Challenges of Protecting Employee Privacy Under U.S. Law,” *Comparative Labor Law & Policy Review* 40, no. 3 (2019): 407 (emphasis in original). A company called Identified claimed as long ago as 2014 to have social media data on half a billion individuals. Nathan Newman, “Reengineering Workplace Bargaining: How Big Data Drives Lower Wages and How Reframing Labor Law Can Restore Information Equality in the Workplace,” *University of Cincinnati Law Review* 85, no. 3 (2017): 713.

10. Helen Nissenbaum, “Contextual Integrity Up and Down the Data Food Chain,” *Theoretical Inquiries in Law* 20, no. 1 (2019): 240–241. See generally Frank Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information* (Cambridge, MA: Harvard University Press, 2016).

11. Pasquale, *Black Box Society*.

12. This hierarchical representation of data draws both from Helen Nissenbaum’s and Daniel Solove’s work. See Helen Nissenbaum, *Privacy in Context: Technology, Policy, and the Integrity of Social Life* (Stanford, CA: Stanford University Press, 2009), 11; Nissenbaum, “Data Food Chain,” 223. Nissenbaum’s third stage involves dissemination or publication, but those are not the major use cases with regard to employment. Rather, in the workplace, the major use cases involve decisions to hire, promote, fire, and the like. See also Daniel Solove, *Understanding Privacy* (Cambridge, MA: Harvard University Press, 2008), 103 (breaking information use into four contexts that may trigger privacy concerns: collection, processing, dissemination, and invasion); Matthew T. Bodie, Miriam A. Cherry, Marcia L. McCormick, and Jintong Tang, “The Law and Policy of People Analytics,” *University of Colorado Law Review* 88, no. 4 (2017): 969 (steps in people analytics include “data collection, data preparation, data mining, interpretation, and acting upon the discovered knowledge”).

13. Nissenbaum, “Data Food Chain,” 236.

14. This has long been the case, as welfare scholars have documented. Frances Fox Piven and Richard A. Cloward, *Regulating the Poor: The Functions of Public Welfare* (New York: Pantheon, 1971). See also Virginia Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor* (New York: St. Martin’s Press, 2017); Mary Madden, Michele E. Gilman, Karen Levy, and Alice E. Marwick, “Privacy, Poverty and Big Data: A Matrix of Vulnerabilities for Poor Americans,” *Washington University Law Review* 95, no. 1 (2017): 53–125.

15. Charles Duhigg, “How Companies Learn Your Secrets,” *New York Times*, February 16, 2012, discussed in Nissenbaum, “Data Food Chain,” 239.

16. Nissenbaum, “Data Food Chain,” 244.

17. See Pauline T. Kim, “Manipulating Opportunity,” *Virginia Law Review* 106, no. 4 (2020): 871–874 (discussing growth of and effects of online hiring intermediaries).

18. Kim, “Manipulating Opportunity,” 871, n12 (compiling evidence).

19. See, e.g., “Chatbot and Candidate Messaging Software,” *Ideal.com*, <https://ideal.com/product/recruiting-chatbot> (accessed November 24, 2021).

20. See generally Bodie et al., “People Analytics.” See also Kim, “Data Mining,” 406 (through data analytics companies can “make inferences about worker characteristics and to try to predict future job performance”).

21. Josh Bersin, “The Datafication of HR,” *Deloitte Review* 14, January 18, 2014, <https://www2.deloitte.com/us/en/insights/deloitte-review/issue-14/dr14-datafication-of-hr.html>.

22. Bodie et al., “People Analytics,” 973. See also Bo Cowgill and Catherine Tucker, “Algorithmic Bias: A Counterfactual Perspective” (working paper, *NSF Trustworthy Algorithms*, Arlington, VA, December 2017): 1 (“In many practical settings, the alternative to a biased algorithm is not an unbiased one, but another decision method such as another algorithm or human discretion” that may itself be more biased).

23. See, e.g., Pauline T. Kim and Matthew T. Bodie, “Artificial Intelligence and the Challenges of Workplace Discrimination and Privacy,” *ABA Journal of Labor & Employment Law* 35, no. 2 (2021): 289–315; Ifeoma Ajunwa, “Age Discrimination by Platforms,” *Berkeley Journal of Employment and Labor Law* 40, no. 1 (2019): 1–27; Solon Barocas and Andrew D. Selbst, “Big Data’s Disparate Impact,” *California Law Review* 104, no. 3 (June 2016): 671–732; Pauline T. Kim, “Data-Driven Discrimination at Work,” *William and Mary Law Review* 58, no. 3 (February 2017): 857–936.

24. For a helpful summary of past and recent scholarship on the embeddedness of intelligence and its effects on AI, see Frank Pasquale, *New Laws of Robotics* (Cambridge, MA: Belknap, 2020), 211–213. See also Safiya Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (New York: NYU Press, 2018).

25. Kim, “Data-Driven Discrimination at Work,” 873.

26. Jeffrey Dastin, “Amazon Scraps Secret AI Recruiting Tool That Showed Bias Against Women,” *Reuters*, October 9, 2018, <https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G>.

27. Cody Cook, Rebecca Diamond, Jonathan V. Hall, John A. List, and Paul Oyer, “The Gender Earnings Gap in the Gig Economy: Evidence from over a Million Ride-share Drivers” (working paper, National Bureau of Economic Research, Cambridge, MA, June 2018).

28. Bodie et al., “People Analytics,” 993–994.

29. Drew Harwell, “A Face-Scanning Algorithm Increasingly Decides Whether You Deserve the Job,” *Washington Post*, November 6, 2019.

30. Harwell, “Face-Scanning Algorithm.”

31. See Angela Chen and Karen Hao, “Emotion AI Researchers Say Overblown Claims Give Their Work a Bad Name,” *MIT Technology Review*, February 14, 2020 (quoting various researchers).

32. Lisa Feldman Barrett, Ralph Adolphs, Stacy Marsella, Aleix M. Martinez, and Seth D. Pollak, “Emotional Expressions Reconsidered: Challenges to Inferring

Emotion from Human Facial Movements,” *Psychological Science in the Public Interest*, 20, no. 1 (2019): 1.

33. See Chen and Hao, “Emotion AI Researchers” (reporting that HireVue declined to comment); Harwell, “Face-Scanning Algorithm” (reporting that the company offered “only the most limited peek into its interview algorithms”).

34. See generally Barocas and Selbst, “Big Data’s Disparate Impact”; Kim, “Data-Driven Discrimination.” See also Manish Raghavan, Solon Barocas, Jon Kleinberg, and Karen Levy, “Mitigating Bias in Algorithmic Hiring: Evaluating Claims and Practices” (*ACM Conference on Fairness, Accountability, and Transparency*, January 2020): 9–10. <https://arxiv.org/pdf/1906.09208.pdf>.

35. Harwell, “Face-Scanning Algorithm.” HireVue may also serve as a liability shield, since companies typically have no liability for labor law violations by third parties. Hiring platforms that screen candidates for jobs in ways that violate labor laws may *themselves* be liable since Title VII forbids “employment agencies” from discriminating in hiring processes. 2002e-2(b) (forbidding discrimination by employment agencies); 2000e(c) (defining an “employment agency”). See generally Kim, “Manipulating Opportunity.”

36. In the national origin context, see *Fragante v. City & County of Honolulu*, 888 F.2d 591, 596 (9th Cir. 1989) (stating that accent and national origin are “obviously inextricably intertwined,” so district courts should conduct “a very searching look” into claims where an adverse employment decision was allegedly based on an applicant’s nonnative accent); in the race context, see Equal Employment Opportunity Commission, *Compliance Manual, Section 15: Race and Color Discrimination* (April 19, 2006) (stating that “an employment decision based on a person having a so-called ‘Black accent,’ or ‘sounding White,’ violates Title VII if the accent or manner of speech does not materially interfere with the ability to perform job duties”).

37. See, e.g., *Karraker v. Rent-A-Center*, 411 F.3d 831 (7th Cir. 2005) (defendant’s use of Minnesota Multiphasic Personality Inventory was an unlawful medical exam under Americans with Disabilities Act since it was designed to determine whether individuals were suffering from mental health conditions, including depression and schizophrenia). Discussed in Bodie et al., “People Analytics,” 993.

38. As several prominent scholars observed in 2019: “The study of algorithmic bias and fairness in machine learning has quickly matured into a field of study in its own right, delivering a wide range of formal definitions and quantitative metrics.” Raghavan et al., “Mitigating Bias,” 1.

39. Raghavan et al., “Mitigating Bias,” 9. It is conceivable that such efforts could be challenged by majority applicants under antidiscrimination laws on a “reverse discrimination” theory, but a company that designs an algorithm to mitigate or eliminate bias faces a very low risk of liability. See Pauline T. Kim, “Auditing Algorithms

for Discrimination,” *University of Pennsylvania Law Review Online* 166, no. 1 (2017): 197–202 (arguing that current law does not prohibit companies from taking potential bias into account when seeking to design those systems in ways that do not discriminate).

40. Equal Employment Opportunity Commission, “EEOC Launches Initiative on Artificial Intelligence and Algorithmic Fairness,” October 28, 2021, <https://www.eeoc.gov/newsroom/eeoc-launches-initiative-artificial-intelligence-and-algorithmic-fairness>. See also the discussion in chapter 5.

41. See, e.g., Samuel R. Bagenstos, “The Structural Turn and the Limits of Antidiscrimination Law,” *California Law Review* 94, no. 1: 40–45 (discussing the challenges of addressing background distributions of wealth, opportunities, and power through antidiscrimination laws, in large part because judges view those laws as primarily prohibiting wrongful employer conduct rather than seeking to eliminate pervasive status disparities).

42. This heuristic of concentric circles of privacy borrows from Michael D. Birnhack, “A Quest for a Theory of Privacy,” *Jurimetrics* 51, no. 4 (Summer 2011): 455 (review of Nissenbaum, *Privacy in Context*).

43. See, e.g., Cohen, “What Privacy Is For,” 1911 (privacy protections “creat[e] spaces for the play and the work of self-making”).

44. Ari Ezra Waldman, “Safe Social Spaces,” *Washington University Law Review* 96, no. 6 (2019): 1541.

45. See generally Kate Andrias, “Union Rights for All: Toward Sectoral Bargaining in the United States,” in *Cambridge Handbook of Labor Law for the Twenty-First Century*, eds. Richard Bales and Charlotte Garden (Cambridge: Cambridge University Press, 2019), 56–63 (discussing how enterprise bargaining encourages employer opposition to unionization).

46. See Benjamin I. Sachs, “Enabling Employee Choice: A Structural Approach to the Rules of Union Organizing,” *Harvard Law Review* 123, no. 3 (2010): 684–685 (summarizing empirical evidence on incidence of retaliatory terminations and their effect on union campaigns).

47. In a recent case arising out of organizing efforts at McDonald’s, for example, an administrative law judge wrote that “the evidentiary issues raised by McDonald’s and the Franchisee Respondents have simply been extraordinary,” including questioning the authenticity of documents that the company itself had produced under subpoena and refusing to hold pretrial conference calls unless the calls were transcribed. National Labor Relations Board, *McDonald’s USA*, Nos. 02-CA-093893 et al., Order Denying Motions to Approve Settlement Agreements (July 17, 2018), 11. See also Noam Scheiber, “Judge Rejects Settlement over McDonald’s Labor Practices,” *New York Times*, July 17, 2018.

48. *Phelps Dodge Corp. v. NLRB*, 313 U.S. 177 (1941).
49. See Robert A. Gorman, Matthew Finkin, and Timothy P. Glynn, *Cox & Bok's Labor Law*, 16th ed. (New York: Foundation Press, 2016), 81–87 (summarizing current elections process, common criticisms of it, and proposals for reform).
50. See generally Paul Weiler, “Promises to Keep: Securing Workers’ Rights to Self-Organization under the NLRA,” *Harvard Law Review* 96, no. 8 (1983): 1769–1827; Craig Becker, “Democracy in the Workplace: Union Representation Elections and Federal Labor Law,” *Minnesota Law Review* 77, no. 3 (1993): 495–603; Cynthia Estlund, “The Ossification of American Labor Law,” *Columbia Law Review* 102, no. 6 (October 2002): 1527–1612; Sachs, “Enabling Employee Choice”: 655–728.
51. See generally James J. Brudney, “Card Check and Neutrality: Prospect for Changing Paradigms,” *Iowa Law Review* 90, no. 3 (2005): 819–886. See also Brishen Rogers, “Passion and Reason in Labor Law,” *Harvard Civil Rights–Civil Liberties Law Review* 47, no. 2 (2012): 348–354 (summarizing contemporary union campaign tactics).
52. *Cemex Construction Materials*, National Labor Relations Board Case Nos. 28-CA-230115 et al., Brief in Support of the General Counsel’s Exceptions to the Administrative Law Judge’s Decision (April 11, 2022).
53. See generally E. P. Thompson, *The Making of the English Working Class* (New York: Penguin Books, 1963); Guy Mundlak, *Organizing Matters: Two Logics of Trade Representation* (Cheltenham, UK: Edward Elgar Publishing, 2020), 31 (arguing that enterprise bargaining helps to constitute workers’ interests and identities).
54. Gordon Lafer, “What’s More Democratic than a Secret Ballot? The Case for Majority Sign-up,” *Working USA: The Journal of Labor and Society* 11, no. 1 (March 2008): 85.
55. Rick Fantasia, *Cultures of Solidarity: Consciousness, Action, and Contemporary American Workers* (Berkeley: University of California Press, 1989), 110. See also Mundlak, *Two Logics*, 28 (observing that such organizing can “forge a vibrant daily life in which people actively engage in making decisions affecting their lives” in the workplace).
56. *Lechmere, Inc. v. NLRB*, 502 U.S. 527 (1992); *NLRB v. Babcock & Wilcox*, 351 U.S. 105 (1956). See also Cynthia Estlund, “Labor, Property, and Sovereignty After Lechmere,” *Stanford Law Review* 46, no. 2 (1994): 308 (“Lechmere essentially recognized an employer’s right to exclude others not only for good reasons, but for bad reasons or for no reason at all.”).
57. For an overview and discussion of some of the key players, see John Logan, “The Union Avoidance Industry in the United States,” *British Journal of Industrial Relations* 44, no. 4 (Dec. 2006): 651–676. See also Nelson Lichtenstein, *The Retail Revolution: How Wal-Mart Created a Brave New World of Business* (New York:

Macmillan, 2019): 187–196 (discussing Walmart’s union avoidance efforts, targeted at worksites where unrest seemed to be brewing). When one group of butchers in Canada unionized in 2000, the company stopped employing butchers in stores across its entire North American operations, instead selling only prepackaged meat. Frank Swoboda, “Wal-Mart Ends Meat-Cutting Jobs,” *Washington Post*, March 4, 2000.

58. *Peerless Plywood Co.*, 107 NLRB 427 (1953) (holding that such “captive audience” meetings are prohibited only if held within twenty-four hours of an election).

59. Charles Hughes, one prominent anti-union consultant, has argued that “any management that gets a union deserves it,” although he insisted that he meant that management can avoid unionization through good employee relations. Logan, “Union Avoidance Industry,” 664.

60. Noam Scheiber, “Amazon Workers Who Won a Union Their Way Open Labor Leaders’ Eyes,” *New York Times*, April 7, 2022.

61. However, an employer often may not grant new benefits to workers during an organizing drive without violating the NLRA. *NLRB v. Exchange Parts*, 375 U.S. 405 (1964).

62. *NLRB v. Gissel Packing Co.*, 395 U.S. 575, 618–619 (1969). The distinction between “threats” and “predictions” has proved difficult to apply in practice. See Robert A. Gorman and Matthew W. Finkin, *Basic Text on Labor Law: Unionization and Collective Bargaining*, 2nd ed. (St. Paul, MN: Thomson West 2004), 177–188.

63. *Republic Aviation Corp. v. NLRB*, 324 U.S. 793, 803 (1945), citing *Peyton Packing Co.*, 49 NLRB 828, 843–844 (1943).

64. *Republic Aviation*, 324 U.S. at 801, citing *Intermediate Report, Republic Aviation*, 51 NLRB 1195.

65. *The Register Guard*, 351 NLRB 1110 (2007); *Purple Communications Inc.*, 361 NLRB 1050 (2014); *Caesar’s Entertainment*, 368 NLRB No. 143 (2019).

66. *Caesar’s* at 6, also comparing email systems to other property such as “televi- sions, bulletin boards, copy machines, telephones, or public address systems.”

67. *Caesar’s* at 10.

68. E.g. *Whole Foods Mkt.*, 363 NLRB No. 87 (2015) at 4; *Rio All-Suites Hotel & Casino*, 362 NLRB No. 190 (2015) at 5.

69. *Whole Foods* at 3.

70. *The Boeing Co.*, 365 NLRB No. 154 (2017) at 5–6.

71. *Design Technology Group*, 359 NLRB No. 96 (2013) (discussion on Facebook about supervisor’s harassing, unprofessional behavior, in which workers planned collective

action is protected); *Hispanics United of Buffalo*, 359 NLRB No. 37 (2012) (conversation about coworker’s allegedly abusive behavior on Facebook protected).

72. The NLRB’s new rules around employer work policies, from *Boeing Co.*, may also create more room for companies to discipline workers for public online speech. See, e.g., *Bemis Company*, 370 NLRB No. 7 (2020) at 2 (finding lawful a social media policy that required employees to be “respectful and professional when using social media tools . . . so as to effectively safeguard the reputation and interests” of the employer and not create an “intimidating, offensive, or hostile work environment”).

73. Email to author from Israeli graduate student who is a former union organizer, May 14, 2018.

74. Harold Meyerson, “What Now for Unions?” *The American Prospect*, March 26, 2018.

75. Jodi Kantor and Karen Weise, “How Two Best Friends Beat Amazon,” *New York Times*, April 2, 2022 (updated April 14, 2022).

76. See generally, Philip N. Howard and Muzammil M. Hussain, *Democracy’s Fourth Wave? Digital Media and the Arab Spring* (Oxford: Oxford University Press, 2013).

77. Andrew Chadwick, *Internet Politics: States, Citizens, and New Communication Technologies* (Oxford: Oxford University Press, 2006), 135–136.

78. Alex J. Wood, “Three Lessons the Labour Movement Must Learn from the Fight for 15 at Walmart,” Sheffield Political Economy Research Institute, June 8, 2018, <http://speri.dept.shef.ac.uk/2018/06/08/three-lessons-the-labour-movement-must-learn-from-the-fight-for-15-at-walmart>.

79. See Kate Andrias, “The New Labor Law,” *Yale Law Journal* 126, no. 2 (2016): 50 (discussing the use of social media by Fight for 15).

80. See, e.g., Nahed Eltantawy and Julie B. Wiest, “Social Media in the Egyptian Revolution: Reconsidering Resource Mobilization Theory,” *International Journal of Communication* 5 (2011): 1208 (“internet-based communication technologies provide an important additional resource for social movements implemented by ‘resource poor’ actors, offering a means for mass communication that may have previously been restricted by financial, temporal, or spatial constraints”) (citing Donatella Della Porta and Lorenzo Mosca, “Global-net for Global Movements? A Network of Networks for a Movement of Movements,” *Journal of Public Policy* 25, no. 1 (2005): 165–190).

81. Fight for \$15, Facebook, <https://www.facebook.com/Fightfor15>; Fight for \$15 (@fightfor15), Twitter, <https://twitter.com/fightfor15>.

82. The Chicago teachers, for example, demanded not just raises and benefits, but also a robust set of welfare and other rights for their students and their families:

racial equity in school funding, resources for homeless students, nurses in every school, and sanctuary schools for immigrant students. Sarah Jaffe, “The Chicago Teachers Strike Was a Lesson in 21st-Century Organizing,” *The Nation*, November 16, 2019.

83. See Jamillah Bowman Williams, Naomi Mezey, and Lisa O. Singh, “#BlackLives-Matter: Getting from Contemporary Social Movements to Structural Change,” *California Law Review Online* 12 (2021) (presenting a theoretical model of how movements can use social media to move supporters into offline action). But see Zeynep Tufekci, *Twitter and Tear Gas: The Power and Fragility of Networked Protest* (New Haven, CT: Yale University Press, 2017) (suggesting that the capabilities of online organizing may distract movement leaders from the less-glamorous work of building stable institutions).

84. Andrew J. Hawkins, “Uber and Lyft Had an Edge in the Prop 22 Fight: Their Apps,” *The Verge*, November 4, 2020, <https://www.theverge.com/2020/11/4/21549760/uber-lyft-prop-22-win-vote-app-message-notifications>.

85. Mark Barenberg, “Democracy and Domination in the Law of Workplace Cooperation: From Bureaucratic to Flexible Production,” *Columbia Law Review* 94, no. 3 (1994): 941. The analogy is to threads in fabric: the “warp” run lengthwise and the “woof” crosswise.

86. 29 U.S.C. §158(a)(3) (2018).

87. *Struksnes Constr. Co.*, 165 NLRB 1062 (1967) (employer commits an unfair labor practice by polling employees regarding union support unless: the employer does so to assess a union’s claim that it has majority support, that purpose is communicated to the workers, workers are given assurances against reprisals, the poll is performed via secret ballot, and the employer does not engage in other unfair labor practices). See the discussion of this topic in Newman, “Reengineering Workplace Bargaining,” 738–739.

88. Newman, “Reengineering Workplace Bargaining,” 709–714.

89. *Great Lakes Chem. Corp.*, 298 NLRB 615, 621 (1990) (considering and rejecting the claim that a commonly used personality test “revealed a person’s union sympathies”). See also Sarah Kessler, “Companies Are Using Employee Survey Data to Predict—and Squash—Union Organizing,” *OneZero*, July 30, 2020 (quoting former NLRB Chair Wilma Liebman, and the head of data analytics at the law firm Littler Mendelson, Zev Eigen, to the effect that personality tests cannot discern union sympathies), <https://onezero.medium.com/companies-are-using-employee-survey-data-to-predict-and-squash-union-organizing-a7e28a8c2158>.

90. Newman, “Reengineering Workplace Bargaining,” 709–713.

91. Barbara Ehrenreich, *Nickel and Dimed: On (Not) Getting by in America* (New York: Macmillan, 2011), 123–124, cited and discussed in Newman, “Reengineering Workplace Bargaining,” 709.

92. Ehrenreich, *Nickel and Dimed*, 123–124, cited in Newman, “Reengineering Workplace Bargaining,” 709.

93. Gregory M. Saltzman, “Job Applicant Screening by a Japanese Transplant: A Union-Avoidance Tactic,” *Industrial & Labor Relations Review* 49, no. 1 (October 1995): 88–104, discussed in Newman, “Reengineering Workplace Bargaining,” 712–713. For a good summary of past literature finding that companies could use screening and hiring mechanisms to deter unionization, see Nicole Kreisberg and Nathan Wilmers, “Blacklist or Short List: Do Employers Discriminate against Union Supporter Job Applicants?” *ILR Review* 75, no. 4 (August 2022): 945–948.

94. Saltzman, “Job Applicant Screening,” 88.

95. *McDonald’s USA*, Charging Parties’ Post-Hearing Brief in Opposition to Proposed Settlement Agreements at 15–16 (April 27, 2018).

96. See the discussion in section 2.3 in chapter 2.

97. Paul Mozur, “In Hong Kong Protests, Faces Become Weapons,” *New York Times*, July 26, 2019. Similarly, a recorded video interview would give HireVue and other platforms a decent scan of not only an applicant’s face, but also of their voice, another possible means of identification.

98. Kreisberg and Wilmers, “Blacklist or Short List,” 943.

99. Lichtenstein, *Retail Revolution*, 186.

100. Ryan Gallagher, “Google Accused of Creating Spy Tool to Squelch Worker Dissent,” *Bloomberg*, October 23, 2019, <https://www.bloomberg.com/news/articles/2019-10-23/google-accused-of-creating-spy-tool-to-squelch-worker-dissent>.

101. Noam Scheiber and Daisuke Wakabayashi, “Google Hires Firm Known for Anti-Union Efforts,” *New York Times*, November 20, 2019.

102. Lauren Kaori Gurley and Janus Rose, “Amazon Employee Warns Internal Groups They’re Being Monitored for Labor Organizing,” *VICE*, September 24, 2020, <https://www.vice.com/en/article/m7jz7b/amazon-employee-warns-internal-groups-theyre-being-monitored-for-labor-organizing>.

103. Lee Fang, “Facebook Pitched New Tool Allowing Employers to Suppress Words Like ‘Unionize’ in Workplace Chat Product,” *The Intercept*, June 11, 2020, <https://theintercept.com/2020/06/11/facebook-workplace-unionize>.

104. Kessler, “Employee Survey Data.”

105. Lorenzo Franceschi-Bicchierai, “Amazon Is Hiring an Intelligence Analyst to Track ‘Labor Organizing Threats,’” *VICE*, September 1, 2020, <https://www.vice.com/en/article/qj4aqw/amazon-hiring-intelligence-analyst-to-track-labor-organizing-threats>.

106. *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 215 (1938).

107. *Kenworth Truck Co.*, 327 NLRB 497, 501 (1999), discussed in Charlotte Garden, “Labor Organizing in the Age of Surveillance,” *St. Louis University Law Review* 63, no. 1 (2018): 61.

108. 29 U.S.C. 158(a)(1) (2018). As Charlotte Garden explains in a summary of the subsequent case law, examples of such “overly intrusive” surveillance include “watching employees with binoculars, watching union activity on a daily basis and for hours at a time, posting guards in previously unguarded areas, [and] photographing or videotaping employees and monitoring their phone calls in response to union activity.” Garden, “Labor Organizing,” 61–62.

109. Salvador Rodriguez, “Facebook Adds More Guidelines for Internal Employee Speech, Banning Political Images in Profile Pics,” *CNBC*, September 24, 2020, <https://www.cnbc.com/2020/09/24/facebook-wont-let-employees-use-political-profile-photos-internally.html>.

110. Garden, “Labor Organizing,” 55.

111. See Garden, “Labor Organizing,” 62 (discussing *The Broadway*, 267 NLRB 385, 400 (1983) (after a union drive began, the employer was permitted to expand a “good-night policy,” in which senior management stood at the door while workers left to ensure that all packages were sealed and prevent theft, since that policy was in place before the drive and the workers “had become fully familiar” with it).

112. During the Trump administration, two members of the NLRB signaled a willingness to revisit the longstanding rule that management surveillance of union activity can be unlawful even when the workers do not know of the surveillance. *National Captioning Institute*, 368 NLRB No. 105 (2019), n17.

113. Protecting the Right to Organize Act of 2019, H.R. 2474, 116th Cong. (2019). For expert testimony regarding discussion of the act’s provisions, see US Congress, House Committee on Education and Labor, Subcommittee on Health, Employment, Labor and Pensions, *Hearing on the Protecting the Right to Organize Act: Detering Unfair Labor Practices*, May 8, 2019, 116th Congress (testimony of Mark Gaston Pearce, NLRB’s former Chairman, and AFL-CIO President Richard L. Trumka); US Congress, House Committee on Education and Labor, Subcommittee on Health, Employment, Labor and Pensions, *Hearing on Protecting the Right to Organize Act: Modernizing America’s Labor Laws*, July 25, 2019, 116th Congress (testimony of Richard F. Griffin, Jr., former NLRB Board member and general counsel, and Charlotte Garden, professor of labor and constitutional law at Seattle University School of Law).

114. Nissenbaum, “Data Food Chain,” 245.

115. See generally Salomé Viljoen, “A Relational Theory for Data Governance,” *Yale Law Journal* 131, no. 2 (2022): 573–654.

Chapter 5

1. *NLRB v. Hearst Publ'ns*, 322 U.S. 111 (1944).
2. *O'Connor v. Uber Tech.*, 82 F. Supp. 3d 1133 (N.D. Cal. 2015) (denying defendant Uber's motion for summary judgment on the issue of employment status in a case arising under California law), final settlement approved by *O'Connor v. Uber Tech.*, 2019 WL 439401 (N.D. Cal, Sept. 13, 2019); *Cotter v. Lyft*, 60 F. Supp. 3d 1067 (N.D. Cal. 2015) (denying defendant Lyft's motion for summary judgment in parallel case), final settlement approved by *Cotter v. Lyft*, 193 F. Supp. 3d 1030 (N.D. Cal. 2016).
3. *Hearst*, 322 U.S. at 117, 120.
4. *Hearst*, 322 U.S. at 120.
5. *Cotter*, 60 F. Supp. 3d at 1081; *O'Connor*, 82 F. Supp. 3d at 1149–1153.
6. *Hearst*, 322 U.S. at 134–135.
7. *Hearst*, 322 U.S. at 117–119.
8. *Hearst*, 322 U.S. at 119.
9. *O'Connor*, 82 F. Supp. 3d at 1149–1153.
10. *Alexander v. FedEx Ground Package Sys.*, 765 F.3d 981, 985 (9th Cir. 2014).
11. *O'Connor*, 82 F. Supp. 3d at 1151.
12. *O'Connor*, 82 F. Supp. 3d at 1149.
13. *O'Connor*, 82 F. Supp. 3d at 1151–1152 quoting Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (New York: Pantheon Books, 1979).
14. Alex Rosenblat, *Uberland: How Algorithms Are Rewriting the Rules of Work* (Berkeley: University of California Press, 2018), 139 (discussing Uber's use of its app to monitor drivers' braking and acceleration); Alex Rosenblat and Luke Stark, "Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers," *International Journal of Communication* 10 (2016): 3765 (discussing Uber's monitoring of drivers' routes).
15. See generally David Weil, *The Fissured Workplace: Why Work Became So Bad for So Many and What Can Be Done to Improve It* (Cambridge, MA: Harvard University Press, 2014).
16. See, for example, 29 U.S.C. 152 (2–3) (2018) (defining "employer" and "employee" under the NLRA); 29 U.S.C. 203 (2018) (same, under the FLSA). See generally Catherine Ruckelshaus, Rebecca Smith, Sarah Leberstein, and Eunice Cho, *Who's the Boss: Restoring Accountability for Labor Standards in Outsourced Work* (New York: National Employment Law Project, 2014).

17. See Ruckelshaus et al., *Who's the Boss*, 27–29 (discussing how employee misclassification undermines funding for state unemployment insurance and worker compensation systems).

18. Weil, *Fissured Workplace*, 43–60.

19. Weil, *Fissured Workplace*, 61 (fissuring depends on low costs “of gathering information and undertaking monitoring in light of developments in the digital world”).

20. Ruckelshaus et al., *Who's the Boss*, 7.

21. Ruckelshaus et al., *Who's the Boss*, 7, 15–17. See *Yellow Cab Cooperative v. Workers' Comp. Appeals Bd.*, 226 Cal.App.3d 1288 (1991) (finding that cab companies misclassified drivers as independent contractors for purposes of California workers compensation act); *Alexander*, 765 F.3d 981 (finding that FedEx misclassified drivers under California laws regarding wages, hours, and work-related expenses).

22. See Weil, *Fissured Workplace*, 99–121 (discussing history of and recent growth in subcontracting).

23. See Ruckelshaus et al., *Who's the Boss*, 8. For an unusually lucid analysis of subcontracting in agriculture, see *Reyes v. Remington Hybrid Seed Co.*, 495 F.3d 403 (7th Cir. 2005).

24. See Weil, *Fissured Workplace*, 122–158 (discussing franchising and its effects).

25. Weil, *Fissured Workplace*, 131.

26. Samuel Berlinski, “Wages and Contracting Out: Does the Law of One Price Hold?” *British Journal of Industrial Relations* 46, no. 1 (2008): 59–75 (finding wage disparities between in-house and subcontracted janitors and security guards); Rosemary Batt and Hiroatsu Nohara, “How Institutions and Business Strategies Affect Wages: A Cross-National Study of Call Centers,” *Industrial & Labor Relations Review* 62, no. 4 (2009): 533–552 (finding wage disparities between in-house and subcontracted call centers).

27. Weil, *Fissured Workplace*, 43–60.

28. Weil, *Fissured Workplace*, 81–85.

29. For a history of legal battles around employee status at the turn of the twentieth century and how those battles influenced the definition of employment under the FLSA, see Bruce Goldstein, Marc Linder, Laurence E. Norton II, and Catherine K. Ruckelshaus, “Enforcing Fair Labor Standards in the Modern American Sweatshop: Rediscovering the Statutory Definition of Employment,” *UCLA Law Review* 46, no. 4 (1999): 983–1163.

30. *Hearst*, 322 U.S. at 121.

31. Restatement (First) of Agency § 220 (1933), cited in *Hearst*, 322 U.S. at 120. See also Restatement (Second) of Agency § 220(2) (American Law Institute, 1958)

(updating test for employment, listing factors that should be used to determine whether a relationship constitutes employment).

32. *Hearst*, 322 U.S. at 120.

33. *Hearst*, 322 U.S. at 121.

34. Jennifer Middleton, “Contingent Workers in a Changing Economy: Endure, Adapt, or Organize?” *NYU Review of Law & Social Change* 22, no. 3 (1997): 568–569 (cited in *Dynamex Operations W. v. Superior Ct.*, 416 P.3d 1, 34 (Cal. 2018)).

35. *Hearst*, 322 U.S. at 129.

36. *Hearst*, 322 U.S. at 127–128.

37. Courts and agencies have not always avoided the term “working class.” See *Briggs Mfg. Co.*, 75 NLRB 569, 570 (1947) (stating that the statutory term “employee” is “broad enough to include members of the working class generally”). *Briggs* did not involve the employee/independent contractor distinction, but rather the question of whether a worker who has been terminated during a labor dispute can still be an employee of his or her former employer under the NLRA.

38. *Rutherford Food Corp. v. McComb*, 331 U.S. 722 (1947).

39. Labor Management Relations Act of 1947, Pub. L. 80–101 (1947), relevant provision now codified at 29 U.S.C. 152(3) (providing that the term “‘employee’ . . . shall not include . . . any individual having the status of an independent contractor”).

40. *NLRB v. United Ins. Co. of Am.*, 390 U.S. 254, 256 (1968) (observing that the “obvious purpose” of that provision was “to have the Board and the courts apply general agency principles in distinguishing between employees and independent contractors” under the NLRA).

41. *Nationwide Mut. Ins. Co. v. Darden*, 503 U.S. 318, 324–29 (1992) (common law agency test applies under NLRA, Social Security Act, and ERISA).

42. *Rutherford*, 331 U.S. at 727; *Darden*, 503 U.S. at 326.

43. *Cotter*, 60 F. Supp. 3d at 1075–1076; *O’Connor*, 82 F. Supp. 3d at 1138–1140 (both summarizing the test from *S.G. Borello & Sons v. Department of Industrial Relations*, 769 P.2d 399 (Cal. 1989)).

44. *Cotter*, 60 F. Supp. 3d at 1075 (internal quotations and citations omitted).

45. Noah D. Zatz, “Beyond Misclassification: Tackling the Independent Contractor Problem without Redefining Employment,” *ABA Journal of Labor & Employment Law* 26, no. 2 (Winter 2011): 282–283.

46. *FedEx Home Delivery v. NLRB (FedEx I)*, 563 F.3d 492, 497 (D.C. Cir. 2009) (quoting *North American Van Lines v. NLRB*, 869 F.2d 596, 599 (D.C. Cir. 1989)).

47. *FedEx I*, 563 F.3d at 502 (quoting *North American Van Lines*, 869 F.2d at 599).
48. *FedEx I*, 563 F.3d at 497.
49. Zatz, “Beyond Misclassification,” 282–283.
50. Joseph Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper Brothers, 1942).
51. *SuperShuttle DFW and Amalgamated Transit Union Loc. 1338*, Case 16-RC-010963 (NLRB, January 25, 2019) at 5.
52. NLRB, Joint Employer Status Under the National Labor Relations Act, Final Rule, 29 C.F.R. Part 103, 85 Fed. Reg. No. 38 (February 26, 2020), 11184 (providing that one entity is the joint employer of another entity’s employees “only if the two share or codetermine the employees’ essential terms and conditions of employment,” and that “share or codetermine” signifies that the putative joint employer exercises “substantial direct and immediate control over one or more essential terms or conditions of their employment”). The NLRB announced in early 2022 that it was planning another round of rulemaking to determine the standard for joint employment. NLRB, Semiannual Regulatory Agenda, 87 Fed. Reg. No. 20 (January 31, 2022), 5376.
53. NLRB, Joint Employer Status, 11235–11236.
54. See *Plumbers Loc. 447 (Malbaff Landscape Constr.)*, 172 NLRB 128, 129 (1968) (finding no 8(a)(3) violation in this situation).
55. The NLRB pushed back on this practice in the Obama years, armed with a broader standard for joint employment. See *CNN America & Team Video Services*, 361 NLRB No. 47 (September 15, 2014) (finding that CNN violated the NLRA by replacing a unionized subcontractor where the network jointly employed that subcontractor’s workers). See also Nathan Newman, “Reengineering Workplace Bargaining: How Big Data Drives Lower Wages and How Reframing Labor Law Can Restore Information Equality in the Workplace,” *University of Cincinnati Law Review* 85, no. 3 (2017): 747–749 (discussing these developments).
56. See, for example, *Preferred Bldg. Services*, 366 NLRB No. 159 (August 28, 2018) (holding that certain picketing by subcontracted workers against a user firm was unprotected under the NLRA).
57. This is essentially because vertical tie-ups between the two are permissible. Brian Callaci, “Vertical Power and the Creation of a Fissured Workplace: The Case of Franchising” (PhD diss., University of Massachusetts at Amherst, 2019), 4–13, https://scholarworks.umass.edu/dissertations_2/1696; Sanjukta Paul, “Fissuring and the Firm Exemption,” *Law & Contemporary Problems* 82, no. 3 (2019): 68–72.
58. See *Reyes v. Remington Hybrid Seed Co.*, 495 F.3d 403, 409 (7th Cir. 2005) (noting that user firms may have incentives to hire judgment-proof contractors and escape

FLSA liability unless employment is defined broadly enough to capture subcontracted workers).

59. Erik Brynjolfsson and Kristina McElheran, “Data in Action: Data-Driven Decision Making in U.S. Manufacturing,” U.S. Census Bureau, Center for Economic Studies, Paper No. CES-WP-16–06 (January 2016): 5, citing R. E. Bohn, “From Art to Science in Manufacturing: The Evolution of Technological Knowledge,” *Foundations and Trends in Technology, Information, and Operations Management* 1, no. 2 (2005): 1–82.

60. See National Academies of Sciences, Engineering, and Medicine, *Information Technology and the U.S. Workforce: Where Are We and Where Do We Go from Here?* (Washington, DC: National Academies Press, 2017), 66 (noting that “computer-mediated communications” have made it far easier for companies to outsource and offshore various aspects of production); Weil, *Fissured Workplace*, 63 (companies can use new technologies to “carefully scrutinize performance” by suppliers).

61. Stephen A. Marglin, “What Do Bosses Do? The Origins and Functions of Hierarchy in Capitalist Production,” *Review of Radical Political Economics* 6, no. 2 (1974): 91–92.

62. See Mark Anner, Jennifer Bair, and Jeremy Blasi, “Learning from the Past: The Relevance of Twentieth-Century New York Jobbers’ Agreements for Twenty-First-Century Global Supply Chains,” in *Achieving Workers’ Rights in the Global Economy*, ed. Richard P. Appelbaum and Nelson Lichtenstein (Ithaca, NY: ILR Press, 2016), 239–258 (describing “sweating system” and how union “jobbers agreements” stabilized prices and practices).

63. See Nelson Lichtenstein, *The Retail Revolution: How Wal-Mart Created a Brave New World of Business* (New York: Macmillan, 2019), 46–69 (discussing Walmart’s logistics system, its technological innovations, and its role in the company’s growth). See also Weil, *Fissured Workplace*, 64–72 (discussing companies’ monitoring strategies in retail and fast food).

64. Erik Brynjolfsson, Lorin Hitt, and Shinkyu Yang, “Intangible Assets: Computers and Organizational Capital,” *Brookings Papers on Economic Activity* (2002): 146.

65. Lichtenstein, *Retail Revolution*, 120, 121–125 (discussing Walmart’s wage-setting and employee discipline strategies for its own workers), 174–196 (discussing Walmart’s union avoidance strategies at its stores).

66. See Bartholomew Clark Watson, *Nations of Retailers: The Comparative Political Economy of Retail Trade* (PhD diss., University of California Berkeley, 2014), <https://escholarship.org/uc/item/18z1138t> (arguing that Walmart’s business model in the US involved “dominating relationships with suppliers and workers,” in contrast with a more collaborative “relational contracting” model that emerged among retailers in Denmark and Germany).

67. Lichtenstein, *Retail Revolution*, 64. In contrast, auto manufacturers often collaborate with suppliers on design and work closely with them on their internal processes in a strategy that several authors term “learning by monitoring.” Susan Helper, John Paul MacDuffie, and Charles Sabel, “Pragmatic Collaborations: Advancing Knowledge while Controlling Opportunism,” *Industrial and Corporate Change* 9, no. 3 (2000): 443–488.

68. Nathan Wilmers, “Wage Stagnation and Buyer Power: How Buyer-Supplier Relations Affect U.S. Workers’ Wages, 1978 to 2014,” *American Sociological Review* 83, no. 2 (2018): 216.

69. Josh Eidelson and Matt Day, “Amazon Work Rules Govern Tweets, Body Odor of Contract Drivers,” *Bloomberg*, May 5, 2021, <https://www.bloomberg.com/news/articles/2021-05-05/amazon-work-rules-govern-tweets-body-odor-of-contract-drivers>.

70. See generally Weil, *Fissured Workplace*, 123–132; Callaci, *The Creation of a Fissured Workplace*; Paul, “Fissuring and the Firm Exemption.”

71. Charging Parties’ Post-Hearing Brief in Opposition to Proposed Settlement Agreements at 17–18, *McDonald’s USA*, National Labor Relations Board Cases 02-CA-093893 and 04-CA-125567 (April 27, 2018).

72. Charging Parties’ Post-Hearing Brief, *McDonald’s USA*, 20 (citing McDonald’s regulations providing that “[g]uests should wait no more than 90 seconds from your greeting to the completion of their order” and that their “total experience time should not exceed 3 minutes, 30 seconds”).

73. *Browning-Ferris Industries of California*, NLRB Case 32-RC-109684, Amicus Brief of the General Counsel, (June 26, 2014), 15.

74. Weil, *Fissured Workplace*, 146.

75. Nell Walker, “How Marriott Has Achieved the Mammoth Task of Streamlining Its Worldwide Supply Chain,” *Supply Chain*, June 3, 2020, <https://supplychaindigital.com/company/how-marriott-has-achieved-mammoth-task-streamlining-its-worldwide-supply-chain>.

76. Weil, *Fissured Workplace*, 145–46.

77. See Annie Lowrey, “The Rise of the Zombie Small Business,” *The Atlantic*, September 4, 2018 (discussing similar business structures in chicken farming).

78. Gabriel Winant, *The Next Shift: The Fall of Industry and the Rise of Health Care in Rust Belt America* (Cambridge, MA: Harvard University Press, 2021), 1.

79. E. Tammy Kim, “The Gig Economy Is Coming for Your Job,” *New York Times*, January 10, 2020.

80. See, e.g., *SuperShuttle DFW* (holding that drivers for SuperShuttle, a service that carries passengers to and from airports, were independent contractors); National

Labor Relations Board, Office of the General Counsel, Advice Memorandum, *Uber Technologies, Inc.*, No. 13-CA-163062 et al. (April 16, 2019) (applying *SuperShuttle* to conclude that Uber drivers are independent contractors). See also *Bexar County Performing Arts Center Foundation*, 368 NLRB No. 46 (2019) (holding that unionized musicians whose employer rented space from a performing arts center had very limited rights to enter the center's property for organizational purposes), *enft denied*, Local 23, *Am. Fed. Musicians v. NLRB*, no. 20–1010 (D.C. Cir., Aug 31, 2021) (finding the NLRB ruling arbitrary).

81. See, e.g., *Lowman v. Unemployment Compensation Bd. of Rev.*, 235 A.3d 278 (Pa. 2020) (holding that Uber drivers are employees for the purposes of unemployment compensation under Pennsylvania law); Karla Adam, "Britain's Supreme Court Rules Uber Drivers Are 'Workers' Entitled to Minimum Wage and Paid Vacation," *Washington Post*, February 19, 2021; Ed Taylor, "Uber Drivers Are Employees, Brazil Court Rules," *BNA Bloomberg*, April 17, 2017.

82. European Commission, *Proposal for a Directive of the European Parliament and of the Council on Improving Working Conditions in Platform Work*, COM(2021) 762 final (December 9, 2021), proposed Article 4.

83. See *Dynamex Operations W. v. Super. Ct. of L.A.*, 416 P.3d 1, 7 (Cal. 2018) (adopting the ABC test for the purposes of state wage orders); California Assembly Bill 5 (2019) (applying the ABC test to all employment status questions under California law; California Proposition 22 (2020) (successful ballot initiative sponsored by gig-economy companies exempting them from Assembly Bill 5). In August 2021 a state judge held Proposition 22 unconstitutional, *Castellanos v. State*, 2021 Cal. Super. LEXIS 7285 (Aug. 20, 2021). The gig-economy companies then appealed. *Castellanos et al. v. State of California et al.*, Calif. App, 1st App. Dist., Div. 4, Case No. A163655 (filed Sept. 21, 2021). The appeal was pending when this book went to press.

84. Protecting the Right to Organize Act of 2019, H.R. 2474, 116th Cong. (2019).

85. Small companies that are treated as contractors by larger firms raise more complicated issues, but they too should perhaps be permitted to coordinate to set prices and minimum terms—at least when confronting a large company that has substantially more market power and operational capacity. See generally Paul, "Fissuring and the Firm Exemption."

86. Noam Scheiber, "Uber and Lyft Ramp up Legislative Efforts to Shield Business Model," *New York Times*, June 9, 2021.

87. Brian Callaci, "Uber and Lyft Are Thinking about a Franchise Model. That Won't Fix the Gig Economy's Problems," *Slate*, August 24, 2020, <https://slate.com/technology/2020/08/uber-lyft-franchise-model.html>.

88. "Delivery Services: FedEx Will Pay \$27 Million to Settle Lawsuit over Classification of Drivers," *Daily Labor Report (BNA)*, No. 236, December 9, 2008.

89. See, e.g., California Labor Code § 218.7 (2018) (providing that construction contractors are liable for unpaid wages owed to employees of their subcontractors).

90. The NLRB is forbidden by statute from employing individuals to engage in “economic analysis.” 29 U.S.C. 154 (2018).

91. Wilmers, “Wage Stagnation and Buyer Power,” 216.

92. Kate Andrias and Brishen Rogers, *Rebuilding Worker Voice in Today's Economy* (New York: Roosevelt Institute, 2018), 16–20.

93. In New York City, for example, Uber and Lyft became larger than the entire taxi sector in 2017 and continued to gain market share steadily until the pandemic. Nicu Calcea, “Uber and Lyft Are Cutting Even Further into the Taxi Market during the Pandemic,” Citymonitor.ai, August 21, 2020, <https://citymonitor.ai/transport/uber-lyft-rides-during-coronavirus-pandemic-taxi-data-5232>.

94. David Autor, David Dorn, Lawrence F. Katz, Christina Patterson, and John Van Reenen, “The Fall of the Labor Share and the Rise of Superstar Firms,” *Quarterly Journal of Economics* 135, no. 2 (2020): 645–709; Gustavo Grullon, Yelena Larkin, and Roni Michaely, “Are US Industries Becoming More Concentrated?,” *Review of Finance* 23, no. 4 (2019): 697–743; Lina Khan and Sandeep Vaheesan, “Market Power and Inequality: The Antitrust Counterrevolution and Its Discontents,” *Harvard Law & Policy Review* 11, no. 1 (2017): 246–260. But see Kevin Rinz, “Labor Market Concentration, Earnings Inequality, and Earnings Mobility,” U.S. Census Bureau, September 2018, <https://www.census.gov/library/working-papers/2018/adrm/carra-wp-2018-10.html> (arguing that local industrial concentration has declined since the 1980s and that national concentration dropped in the early 1980s before rising in the 1990s).

95. Immanuel Wallerstein, *World-Systems Analysis: An Introduction* (Durham, NC: Duke University Press, 2004), 26.

96. See generally Lina M. Khan, “Amazon’s Antitrust Paradox,” *Yale Law Journal* 126, no. 3 (2017): 710–805. See also K. Sabeel Rahman, “Curbing the New Corporate Power,” *Boston Review*, May 4, 2015; Ganesh Sitaraman, “Regulating Tech Platforms: A Blueprint for Reform,” *Great Democracy Initiative*, May 1, 2018; Jonathan Tepper, “The Conservative Case for Antitrust,” *The American Conservative*, January 28, 2019.

97. Accessible summaries of this doctrinal evolution and its effects include Khan, “Amazon’s Antitrust Paradox,” 717–722, and Jedediah Britton-Purdy, David Singh Grewal, Amy Kapczynski, and K. Sabeel Rahman, “Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis,” *Yale Law Journal* 129, no. 6 (2020): 1801–1802.

98. See Amy Kapczynski, “The Law of Informational Capitalism,” *Yale Law Journal* 129, no. 5 (2020): 1476–1477 (discussing the dominance of Facebook and Google in their markets, observing that “information-intensive markets may incline toward

concentration” because “the informational sector is highly scaleable,” enabling companies with “small advantages” to “capture larger shares of the market”).

99. On Walmart’s growth, see generally Lichtenstein, *Retail Revolution*; on Amazon’s growth, see generally Khan, “Amazon’s Antitrust Paradox.”

100. See Winant, *The Next Shift*, 242–252 (tracing the consolidation of health care in Pittsburgh).

101. Representative works include Autor et al., “The Fall of the Labor Share”; José Azar, Ioana Marinescu, and Marshall Steinbaum, “Labor Market Concentration,” *Journal of Human Resources* 57, no. 5 (April 2022): S167–S199; Efraim Benmelech, Nittai Bergman, and Hyunseob Kim, “Strong Employers and Weak Employees: How Does Employer Concentration Affect Wages?,” *Journal of Human Resources* 57, no. 5 (April 2022): S200–S250. On the role of law in fostering market concentration, see Suresh Naidu, Eric A. Posner, and Glen Weyl, “Antitrust Remedies for Labor Market Power,” *Harvard Law Review* 132, no. 2 (2018): 536–601; Callaci, “Vertical Power,” 4–13; Paul, “Fissuring and the Firm Exemption,” 68–72; Hiba Hafiz, “Labor Antitrust’s Paradox,” *University of Chicago Law Review* 87, no. 2 (2019): 381–412.

102. See Sydnee Caldwell and Suresh Naidu, “Wage and Employment Implications of U.S. Labor Market Monopsony and Possible Policy Solutions,” in *Vision 2020: Evidence for a Stronger Economy* (Washington, DC: Washington Center for Equitable Growth, 2020), 33–43 (summarizing economic models of monopsony and evidence regarding monopsony power in US labor markets).

103. Elena Prager and Matt Schmitt, “Employer Consolidation and Wages: Evidence from Hospitals,” *American Economic Review* 11, no. 2 (February 2021): 397–427.

104. Rachel Abrams, “7 Fast-Food Chains to End ‘No Poach’ Deals That Lock Down Low-Wage Workers,” *New York Times*, July 12, 2018.

105. Prager and Schmitt, “Employer Consolidation and Wages.” See also Benmelech et al., “Strong Employers and Weak Employees” (positing that unionization mitigates the effects of industrial concentration on wages).

106. See Nicholas Bloom, Fatih Guvenen, Benjamin S. Smith, Jae Song, and Till von Wachter, “The Disappearing Large-Firm Wage Premium,” *AEA Papers and Proceedings* 108 (2018): 317–322 (presenting historical evidence of this phenomenon and its recent decline).

107. See generally Robert Solow, *The Labor Market as a Social Institution* (New York: Blackwell Publishers, 1990). While the large-firm premium has declined in recent years, many large companies have raised wages substantially in the wake of COVID. Michael Sasso, “McDonald’s, Amazon Accelerate Push toward Higher Minimum Wage,” *Bloomberg*, May 14, 2021. There are no guarantees that they will continue to do so to keep pace with inflation.

108. Bloom et al., “Disappearing Large-Firm Wage Premium.”
109. See generally Julie E. Cohen, *Between Truth and Power: The Legal Constructions of Informational Capitalism* (New York: Oxford University Press, 2019), 15–47.
110. Cohen, *Truth and Power*, 37–46; Rahman, “Taming the New Corporate Power.” See also generally Nick Srnicek, *Platform Capitalism* (Cambridge, UK: Polity Press, 2017).
111. Each site does, however, employ many content moderators who spend all day reviewing posts that others have flagged for child pornography, depictions of violence, or racist content. Many suffer serious emotional harm from the job. Sandra E. Garcia, “Ex-Content Moderator Sues Facebook, Saying Violent Images Caused Her PTSD,” *New York Times*, September 25, 2018. Moreover, microprocessors depend on mining the rare-earth metals necessary for their manufacture, and the affordability of computers and new electronic devices depends on cheap electronics manufacturing—especially in China, where workers have no formal freedoms of speech or association and may face arrest and prosecution for seeking to organize independent unions. On labor practices in China, see Mary E. Gallagher, “China’s Workers Movement and the End of the Rapid-Growth Era,” *Daedalus: Journal of the American Academy of Arts & Sciences* 143, no. 2 (2014): 81–96.
112. See Khan, “Amazon’s Antitrust Paradox,” 780–783 (summarizing how Amazon gained market share by exploiting its access to consumer and vendor data); 748–754 (summarizing how Amazon gained market share by foregoing profits for a time).
113. See Khan, “Amazon’s Antitrust Paradox,” 774–777 (discussing Amazon’s competition with delivery services such as UPS, which it and its competitors both utilize); 780–782 (discussing Amazon’s exploitation of buyer and seller data to undercut vendors who sell on Amazon Marketplace).
114. Wallerstein, *World-Systems Analysis*, 54.
115. Kapczynski, “Law of Informational Capitalism,” 1489. See also Cohen, *Truth and Power*, 42; Khan, “Amazon’s Antitrust Paradox,” 172 (both noting the tendency toward monopoly among platforms).
116. See Rosenblat, *Uberland*, 114, 129–132 (analyzing how Uber’s algorithms may mislead drivers regarding the possibility of surge pricing). See also the discussion in chapter 3 of this book.
117. See generally Cohen, *Truth and Power*, 86–89.
118. Kapczynski, “Law of Informational Capitalism,” 1489–1490.
119. Some platforms have implemented appeals processes for such decisions, which give them some indicia of legality. See generally Kate Klonick, “The Facebook Oversight Board: Creating an Independent Institution to Adjudicate Online Free Expression,” *Yale Law Journal* 129, no. 8 (2020): 2418–2499.

120. On these and other challenges of regulating platforms, see generally Cohen, *Truth and Power*, 170–201.

121. Friedrich Hayek, “The Use of Knowledge in Society,” *American Economic Review* 35, no. 4 (1945): 519.

122. Frank Pasquale, “Tech Platforms and the Knowledge Problem,” *American Affairs* 2, no. 2 (Summer 2018): <https://americanaffairsjournal.org/2018/05/tech-platforms-and-the-knowledge-problem/>.

123. Rebecca A. Johnson and Tanina Rostain, “Tool for Surveillance or Spotlight on Inequality? Big Data and the Law,” *Annual Review of Law and Social Science* 16 (2020): 453.

124. Brishen Rogers, “The Social Costs of Uber,” *University of Chicago Law Review Dialogue* 82, no. 1 (2016): 89–90, 99–100.

125. Rogers, “The Social Costs of Uber,” 96.

126. Brishen Rogers, “Fissuring, Data-Driven Governance, and Platform Economy Labor Standards,” in *Cambridge Handbook of the Law of the Sharing Economy*, ed. Nestor M. Davidson, Michele Finck, and John J. Infranca (Cambridge: Cambridge University Press, 2018), 311–314.

127. Rogers, “Platform Economy Labor Standards,” 311–312.

128. See, e.g., New York Attorney General, “Gristedes to Pay \$3.2 Million in Back Wages and Fees in Deliverymen Case,” December 17, 2003, <https://ag.ny.gov/press-release/2003/gristedes-pay-325-million-back-wages-and-fees-deliverymen-case>.

129. See generally Susan Sturm, “Second-Generation Employment Discrimination: A Structural Approach,” *Columbia Law Review* 101, no. 3 (2001): 458–568; Cynthia Estlund, *Regoverning the Workplace: From Self-Regulation to Co-Regulation* (New Haven, CT: Yale University Press, 2010), 75–104.

130. *Faragher v. City of Boca Raton*, 118 S. Ct. 2275, 2293 (1998) (suggesting that a small employer may not need a written sexual harassment policy to avoid vicarious liability for a supervisor’s hostile work environment harassment, but that a large employer almost surely would).

131. Noam Scheiber and Julie Creswell, “Sexual Harassment Cases Show the Ineffectiveness of Going to H.R.,” *New York Times*, December 12, 2017.

132. Chen Liang, Yili Hong, and Bin Gu, “Does Monitoring Lead to a ‘Warm’ Start in Online Platforms?” August 31, 2016, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2838045.

133. *NLRB v. Catherine McAuley Health Ctr.*, 885 F.2d 341 (6th Cir. 1989).

Chapter 6

1. See Wolfgang Streeck, *Buying Time: The Delayed Crisis of Democratic Capitalism* (New York: Verso, 2014), 96 (arguing that under neoliberalism, capitalism is “emptied of democracy”).
2. Erik Olin Wright, “Taking the Social in Socialism Seriously,” *Socio-Economic Review* 10, no. 2 (2012): 387. See also Axel Honneth, *The Idea of Socialism: Towards a Renewal*, trans. Joseph Ganahl (Cambridge, UK: Polity Press, 2017), 88–89 (arguing that today, the socialist ideal requires democracy in all spheres of social action, including politics, economy, and civil society).
3. Ruth Dukes and Wolfgang Streeck, “Labor Constitutions and Occupational Communities: Social Norms and Legal Norms at Work,” *Journal of Law & Society* 47, no. 4 (2020): 612–638; Ruth Dukes and Wolfgang Streeck, *Democracy at Work: Contract, Status and Post-Industrial Justice* (Cambridge, UK: Polity Press, forthcoming). For a complementary recent account of the role of labor law in delegating norm-authorship away from formal state institutions, see Guy Mundlak, *Organizing Matters: Two Logics of Trade Representation* (Cheltenham, UK: Edward Elgar Publishing, 2020), 27–28.
4. All of these issues are discussed in prior chapters of this book. In addition, on fissuring, see David Weil, *The Fissured Workplace: Why Work Became So Bad for So Many and What Can Be Done to Improve It* (Cambridge, MA: Harvard University Press). On management’s capacity to resist unionization, see Paul Weiler, “Promises to Keep: Securing Workers’ Rights to Self-Organization under the NLRA,” *Harvard Law Review* 96, no. 8 (1983): 1769–1827; Craig Becker, “Democracy in the Workplace: Union Representation Elections and Federal Labor Law,” *Minnesota Law Review* 77, no. 3 (1993): 495–603; and Benjamin I. Sachs, “Enabling Employee Choice: A Structural Approach to the Rules of Union Organizing,” *Harvard Law Review* 123, no. 3 (2010): 655–728. On how our labor law restricts the right to strike, see James G. Pope, “How American Workers Lost the Right to Strike, and Other Tales,” *Michigan Law Review* 103, no. 3: 518–553.
5. In recent years, scholars who have proposed far-reaching reforms to our labor laws have also emphasized the need to bolster local union representation. See Kate Andrias and Brishen Rogers, *Rebuilding Worker Voice in Today’s Economy* (New York: Roosevelt Institute, 2018), 20–23 (proposing reforms to bolster enterprise-based unionization) and 26–33 (proposing more far-reaching reforms that would complement enterprise-based representation); Sharon Block and Benjamin Sachs, *Clean Slate for Worker Power: Building a Just Economy and Democracy* (Cambridge, MA: Harvard Labor and Worklife Program, 2020), 28–31 (proposing a set of reforms to “transform representation rights,” explaining how they would interact with and build upon existing NLRA model of enterprise-based unionism).
6. Block and Sachs, *Clean Slate for Worker Power*, 2 (“Democracy at work should be a right, not a fight.”).

7. Sachs, “Enabling Employee Choice,” 659–660 (discussing the possibility of a union default); Brishen Rogers, “Libertarian Corporatism Is Not an Oxymoron,” *Texas Law Review* 94, no. 7 (June 2016): 1642 (considering the possibility of default representation at the sectoral level); Michael M. Oswalt, “Automatic Elections,” *University of California Irvine Law Review* 4, no. 2 (2014): 801–856 (proposing automatic union elections at regular intervals).

8. Oswalt, “Automatic Elections”; Andrew Strom, “Why Not Hold Union Representation Elections on a Regular Schedule,” *OnLabor.org*, November 1, 2017, <https://onlabor.org/why-not-hold-union-representation-elections-on-a-regular-schedule/>.

9. Congress could also guarantee workers a voice at the company level via board seats as Senator Elizabeth Warren and others have proposed. Matthew Yglesias, “Elizabeth Warren Has a Plan to Save Capitalism,” *Vox.com*, August 15, 2018, <https://www.vox.com/2018/8/15/17683022/elizabeth-warren-accountable-capitalism-corporations>. See also Isabelle Ferreras, *Firms as Political Entities: Saving Democracy through Economic Bicameralism*, trans. Miranda Richmond Mouillot (Cambridge: Cambridge University Press, 2020) (proposing a system of 50–50 bicameral governance in firms). There are various examples of worker representation on corporate boards in our own history. Ewan McGaughey, “Democracy in America at Work: The History of Labor’s Vote in Corporate Governance,” *Seattle University Law Review* 42, no. 2 (2019): 697–753.

10. 29 U.S.C. § 158(a)(2) (2018). See also *Electromation, Inc.*, 309 NLRB. 990, 998 (1992) (holding that an employer violated that provision of the NLRA by unilaterally establishing “action committees” of workers and management to address employee complaints).

11. For detailed proposals along these lines, see Block and Sachs, *Clean Slate for Worker Power*, 37–45; Andrias and Rogers, *Rebuilding Worker Voice*, 26–33; Mark Barenberg, *Widening the Scope of Worker Organizing: Legal Reforms to Facilitate Multi-Employer Organizing, Bargaining, and Striking* (New York: Roosevelt Institute, 2015).

12. In Germany, for example, most collective bargaining agreements are sectoral and negotiated at the regional level. In Italy, sectoral agreements typically cover the entire nation, but regional agreements are also permitted. In both countries, additional terms may be negotiated at the company level. “Living and Working in Germany,” European Foundation for the Improvement of Living and Working Conditions, August 6, 2021, <https://www.eurofound.europa.eu/country/germany/>; “Living and Working in Italy,” European Foundation for the Improvement of Living and Working Conditions, August 9, 2021, <https://www.eurofound.europa.eu/country/italy/>.

13. Jelle Visser and Daniele Checchi, “Inequality and the Labor Market: Unions,” in *Oxford Handbook of Economic Inequality*, ed. Wiemer Salverda, Brian Nolan, and Timothy M. Smeeding (New York: Oxford University Press, 2011), 230–256. The overall complex of policies backing social bargaining also helps backstop social democratic

politics generally. See Streeck, *Buying Time*, 111 (“Central to the Keynesian political economy were the corporatist interest associations of labour and capital, together with the negotiating system established between them”).

14. On the tensions between social bargaining and worksite bargaining, see Munklak, *Two Logics*, 9–34, and 27–28.

15. Various labor law scholars have argued that the US legal regime encouraged such “business unionism” by foreclosing broad-based collective action. William E. Forbath, *Law and the Shaping of the American Labor Movement* (Cambridge, MA: Harvard University Press, 1991) (discussing the US labor movement’s comparatively narrow political vision, which reflected decades of confrontation with the judiciary); Melvyn Dubofsky, “Book Review: Christopher L. Tomlins, *The State and the Unions: Labor Relations, Law, and the Organized Labor Movement in America, 1880–1960*,” *Law and History Review* 4, no. 2 (1986): 472 (discussing the early history of NLRB, which set the stage for Taft-Hartley and more conservative unionism).

16. Kate Andrias, “An American Approach to Social Democracy: The Forgotten Promise of the Fair Labor Standards Act,” *Yale Law Journal*, 128, no. 3 (January 2019): 625. Various state Departments of Labor retain the power to establish such committees under state law. Kate Andrias, “The New Labor Law,” *Yale Law Journal* 126, no. 2 (2016): 83–86.

17. Andrias, “Forgotten Promise,” 686.

18. Andrias and Rogers, “Rebuilding Worker Voice,” 30–31; Block and Sachs, *Clean Slate for Worker Power*, 37–43. For an overview and analysis of important administrative law issues that such proposals may raise, see Andrias, “Forgotten Promise,” 693–695.

19. See Block and Sachs, *Clean Slate for Worker Power*, 28–45. Congress could also approximate European “extension laws,” for example, by requiring that employers in various sectors pay “prevailing wages,” as is now often required in construction for public works and publicly funded projects. Block and Sachs, *Clean Slate for Worker Power*, 43–44.

20. Rideshare Drivers United rejected Uber and Lyft’s proposal for what the companies termed a “sectoral bargaining” system in California, in part because it lacked a right to strike. Alexia Fernandez Campbell, “California Just Passed a Landmark Law to Regulate Uber and Lyft,” *Vox.com*, September 18, 2019, <https://www.vox.com/2019/9/11/20850878/california-passes-ab5-bill-uber-lyft>.

21. Matthew Dimick, “Labor Law, New Governance, and the Ghent System,” *North Carolina Law Review* 90, no. 2 (2012): 319–378 (arguing that the Ghent System enables significant union strength in Denmark and Sweden despite lack of union security devices in those nations).

22. Lucio Baccaro and Marco Simoni, “Policy Concentration in Europe: Understanding Government Choice,” *Comparative Political Studies* 41, no. 10 (2007): 1323–1348.

23. “Social Dialogue,” European Commission, accessed November 8, 2021, <https://ec.europa.eu/social/main.jsp?catId=329&langId=en>.

24. European Commission, *Digital Transformation Monitor, Germany: Industrie 4.0* (January 2017), https://ec.europa.eu/growth/tools-databases/dem/monitor/sites/default/files/DTM_Industrie%204.0.pdf.

25. See, e.g., “National Advisory Committee on Occupational Safety & Health,” Occupational Safety and Health Administration, accessed November 8, 2021, <https://www.osha.gov/dop/nacosh/nacosh.html> (committee has two members representing labor).

26. Gary E. Marchant, “The Growing Gap Between Emerging Technologies and the Law,” in *The Growing Gap between Emerging Technologies and Legal-Ethical Oversight: The Pacing Problem*, eds. Gary E. Marchant, Braden R. Allenby, and Joseph R. Herkert (New York: Springer, 2011), 19–33; Simon Deakin and Christopher Markou, “The Law-Technology Cycle and the Future of Work,” *Giornale di Diritto del Lavoro e di Relazioni Industriali* 158, no. 2 (2018): 445–462.

27. See Astra Taylor, “The Insecurity Machine,” *Logic Magazine*, May 4, 2020, <https://logicmag.io/security/the-insecurity-machine> (adding “de-digitize” to the contemporary movement slogan “decommodify, democratize, de-carbonize”).

28. Ben Tarnoff, “From Manchester to Barcelona,” *Logic Magazine*, December 7, 2019, <https://logicmag.io/nature/from-manchester-to-barcelona>. See also Taylor, “The Insecurity Machine.”

29. Movement for Black Lives Policy Platform, “End Surveillance,” accessed November 8, 2021, <https://m4bl.org/policy-platforms/end-surveillance>.

30. American Civil Liberties Union, “ACLU Comment on Appeals Court Ruling in No Fly List Challenge,” October 21, 2019, <https://www.aclu.org/press-releases/aclu-comment-appeals-court-ruling-no-fly-list-challenge>.

31. See Julie E. Cohen, *Between Truth and Power: The Legal Constructions of Informational Capitalism* (New York: Oxford University Press, 2019), 90–93 (discussing this phenomenon and its ideological and legal roots).

32. Michael D. Birnhack, “A Quest for a Theory of Privacy,” *Jurimetrics* 51, no. 4 (2011): 451 (noting that once technologies become “socially locked,” they are difficult to displace or regulate).

33. See also American Law Institute, *Restatement of Employment Law*, 2nd ed. (St. Paul, MN: American Law Institute Publishers, 2015): §§ 7.02–7.05 (clarifying that employees have protected privacy interests in their person, physical and electronic locations, and information of a personal nature); and § 7.06 (employers are only liable for intrusions into those interests where that intrusion would be “highly offensive to a reasonable person”).

34. Julie E. Cohen, “Turning Privacy inside Out,” *Theoretical Inquiries in Law* 20, no. 1 (2019): 9.
35. See Pauline T. Kim, “Collective and Individual Approaches to Protecting Employee Privacy: The Experience with Workplace Drug Testing,” *Louisiana Law Review* 66, no. 4 (2006): 1009–1034 (overview and critique of early drug testing laws).
36. Genetic Information Non-Discrimination Act, Pub.L. 110–233, 122 Stat. 881 (2008).
37. Marko Mrkonich, Allan King, Rod Fliegel, *The Big Move toward Big Data in Employment* (Littler Mendelson, P.C., August 2015): 14.
38. 18 U.S.C. § 2701 *et seq.* (2018). See also the discussion of this topic in chapter 2.
39. Annette Bernhardt, Lisa Kresge, and Reem Suleiman, *Data and Algorithms at Work: The Case for Worker Technology Rights* (Berkeley: University of California Berkeley Labor Center, November 2021): 22.
40. Bernhardt et al., *Data and Algorithms at Work*, 22, 23.
41. See the discussion of this topic in chapter 4.
42. Ira S. Rubinstein, “Regulating Privacy by Design,” *Berkeley Technology Law Journal* 26, no. 3 (2011): 1408–1456.
43. Langdon Winner, *Autonomous Technology: Technics-out-of-Control as a Theme in Political Thought* (Cambridge, MA: MIT Press, 1977): 98–99. See also James Bessen, *Learning by Doing: The Real Connection between Innovation, Wages, and Wealth* (New Haven, CT: Yale University Press, 2015) (discussing the need to ensure that workers have adequate education and skills training to effectively incorporate new technologies).
44. Cynthia Estlund, *Working Together: How Workplace Bonds Strengthen a Diverse Democracy* (New York: Oxford University Press, 2003).
45. See the discussion of this topic in section 2.2 in chapter 2.
46. See Block and Sachs, *Clean Slate for Worker Power*, 67 (proposing that topics of bargaining be expanded to include “technology with impacts on job quality or employment levels”). See also Bernhardt et al., *Data and Algorithms at Work*, 24 (proposing that unions have the right to bargain around employers’ use of data-driven technologies).
47. See Block and Sachs, *Clean Slate for Worker Power*, 33–34, 66 (proposing works councils with consultative rights, including around technology).
48. Dimick, “Ghent System,” 330n49. See also European Trade Union Institute, “Workplace Participation: Germany,” <https://www.worker-participation.eu/National-Industrial-Relations/Countries/Germany/Workplace-Representation> (accessed March 30, 2020) (summarizing legal rights of German works councils).

49. Jane McAlevey, “The West Virginia Teachers Strike Shows That Winning Big Requires Creating a Crisis,” *The Nation*, March 12, 2018, <https://www.thenation.com/article/archive/the-west-virginia-teachers-strike-shows-that-winning-big-requires-creating-a-crisis>.

50. Juliana Feliciano Reyes, “Hotel Housekeeping on Demand: Marriott Cleaners Say This App Makes Their Job Harder,” *Philadelphia Inquirer*, July 2, 2018. See also Sarah Holder, “Why Marriott Workers Are Striking,” *Bloomberg CityLab*, October 19, 2018, <https://www.bloomberg.com/news/articles/2018-10-19/marriott-staff-won-t-be-replaced-by-tech-without-a-fight>.

51. Samantha Winslow, “Marriott Hotel Strikers Set a New Industry Standard,” *Labor Notes*, December 20, 2018, <https://labornotes.org/2018/12/marriott-hotel-strikers-set-new-industry-standard>.

52. In sectors where technological innovation can substantially enhance productivity, robust bargaining rights may even want to be coupled with policies that *limit* labor costs for very productive firms, as under the Rehn-Meidner model, so that those firms have incentives to reinvest profits in innovation. See Lennart Erixon, “Progressive Supply-Side Economics: An Explanation and Update of the Rehn-Meidner Model,” *Cambridge Journal of Economics* 42, no. 3 (2018): 653–697 (summarizing the Rehn-Meidner model). While productivity growth is tepid in most low-wage sectors today, productivity growth is decent in warehouses and advanced industrial policies may enable higher productivity growth in manufacturing and elsewhere.

53. Feliciano Reyes, “Hotel Housekeeping on Demand.”

54. See Archon Fung and Erik Olin Wright, “Thinking about Empowered Participatory Governance,” in *Deepening Democracy: Institutional Innovations in Empowered Participatory Governance*, eds. Archon Fung and Erik Olin Wright (London: Verso, 2003), 3, 5 (highlighting neighborhood governance councils, participatory budgeting, and other public processes as key areas for reform).

55. Anthony Giddens, *The Nation-State and Violence: Volume Two of a Contemporary Critique of Historical Materialism* (Cambridge, UK: Polity Press, 1985), 309. See also Rebecca A. Johnson and Tanina Rostain, “Tool for Surveillance or Spotlight on Inequality? Big Data and the Law,” *Annual Review of Law and Social Science* 16 (2020): 453–472 (discussing various uses of novel data-driven technologies to advance public goals).

56. Anouk Ruhaak, “Data Trusts: What Are They and How Do They Work?,” Blog, *The Royal Society for Arts, Manufactures, and Commerce*, June 11, 2020, <https://www.thersa.org/blog/2020/06/data-trusts-protection>.

57. Salomé Viljoen, “A Relational Theory for Data Governance,” *Yale Law Journal* 131, no. 2 (2022): 645–647.

58. European Commission, *Proposal for a Regulation of the European Parliament and of the Council on a Single Market for Digital Services (Digital Services Act) and Amending*

Directive 2000/31/EC, COM (2020) 825 final (December 15, 2020), Article 31. See also Mathis Vermeulen, “The Keys to the Kingdom,” *Knight First Amendment Institute at Columbia University*, July 27, 2021, <https://knightcolumbia.org/content/the-keys-to-the-kingdom> (discussing that proposal).

59. K. Sabeel Rahman, “Curbing the New Corporate Power,” *Boston Review*, May 4, 2015, <https://bostonreview.net/forum/k-sabeel-rahman-curbing-new-corporate-power>.

60. Rahman also argues that more robust antitrust enforcement is part of the solution, so that dominant companies would be subjected to greater market competition or even broken up. Rahman, “Curbing the New Corporate Power.”

61. Equal Employment Opportunity Commission, “EEO-1 Data Collection,” accessed November 9, 2021, <https://www.eeoc.gov/employers/eeo-1-survey>.

62. *Excelsior Underwear*, 156 NLRB 111 (1966).

63. April Glaser, “Instacart Workers Are Striking because of the App’s User Interface,” *Slate*, Nov. 5, 2019, <https://slate.com/business/2019/11/instacart-workers-striking-app-user-interface-dark-pattern-design.html>; Kate Conger, Vicky Xiuzhong Xu, and Zach Wichter, “Uber Drivers’ Day of Strikes Circles the Globe before the Company’s I.P.O.,” *New York Times*, May 8, 2019.

64. For a related proposal, see Block and Sachs, *Clean Slate for Worker Power*, 53 (recommending that workers be permitted to use “the full panoply of employer technology—Slack, Google Docs, online chat, or other means—to be in contact with co-workers during non-work time”).

65. The Supreme Court has found such consumer communications important enough to protect them under the First Amendment, even in circumstances where they may have been prohibited by the NLRA as amended. *NLRB v. Fruit and Vegetable Packers and Warehousemen*, 377 U.S. 58, 71–73 (1964).

66. Si Se Puede Women’s Cooperative, <https://wecandoit.coop> (accessed November 9, 2021) (domestic work); Ridefair, <https://ridefair.io> (accessed November 9, 2021) (taxi and ride share cooperative in Australia). See also Andrew Willis Garcés, “How Uber and Lyft Were Driven from Austin and Replaced with a Worker Cooperative,” *Waging Nonviolence*, November 8, 2016, <https://wagingnonviolence.org/2016/11/austin-uber-worker-coop> (discussing the formation of a similar cooperative in Austin, Texas).

67. Trebor Scholz, “Platform Cooperativism vs. the Sharing Economy,” *Medium.com*, December 5, 2014, <https://medium.com/@trebors/platform-cooperativism-vs-the-sharing-economy-2ea737f1b5ad>; Trebor Scholz and Nathan Schneider, eds., *Ours to Hack and Own: The Rise of Platform Cooperativism, a New Vision for the Future of Work and a Fairer Internet* (New York: OR Books, 2016).

68. Erik Olin Wright, *Envisioning Real Utopias* (London: Verso, 2010), 139.

69. See National Cooperative Business Association, <https://ncbaclusa.coop/resources/7-cooperative-principles/> (accessed May 10, 2022) (listing seven principles of cooperative businesses, one of which is “democratic member control”).

70. Michelle Camou, “Cities Developing Worker Co-ops: Efforts in Ten Cities,” *Imagined Economy Project* (2016), http://imaginedeconomy.org/wp-content/uploads/2016/08/report3_citycoops.pdf (noting how cities have assisted cooperatives through financing and via preferences in procurement efforts).

71. Wright, *Envisioning Real Utopias*, 139–140.

72. See the discussion of this topic in chapter 4. See also Manish Raghavan, Solon Barocas, Jon Kleinberg, and Karen Levy, “Mitigating Bias in Algorithmic Hiring: Evaluating Claims and Practices,” Cornell University, December 6, 2019, <https://arxiv.org/abs/1906.09208> (providing an overview of the field, including companies’ efforts to reduce bias).

73. US Equal Employment Opportunity Commission, “Press Release: EEOC Launches Initiative on Artificial Intelligence and Algorithmic Fairness,” October 28, 2021, <https://www.eeoc.gov/newsroom/eeoc-launches-initiative-artificial-intelligence-and-algorithmic-fairness>.

74. Annette Zimmermann, Elena Di Rosa, and Hochin Kim, “Technology Can’t Fix Algorithmic Injustice,” *Boston Review*, January 9, 2020, <https://bostonreview.net/science-nature-politics/annette-zimmermann-elena-di-rosa-hochan-kim-technology-cant-fix-algorithmic>.

75. For a representative contemporary UBI proposal, see Andy Stern with Lee Kravitz, *Raising the Floor: How a Universal Basic Income Can Renew Our Economy and Rebuild the American Dream* (New York: PublicAffairs, 2016) (proposing a UBI of \$12,000/year). For earlier UBI proposals, see Philippe Van Parijs, *Real Freedom for All: What (If Anything) Can Justify Capitalism?* (Oxford: Oxford University Press, 1997); Robert J. van der Veen and Philippe Van Parijs, “A Capitalist Road to Communism,” *Theory and Society* 15, no. 6 (1986): 635–655.

76. Charles Murray, “A Guaranteed Income for All Americans,” *Wall Street Journal*, June 3, 2016 (proposing a UBI that would replace “all other transfer payments and the bureaucracies that oversee them”). Murray’s espousal of scientific racism in the past is well known and in my view diminishes the power of his UBI arguments.

77. Chris Weller, “The Inside Story of One Man’s Mission to Give Americans Unconditional Free Money,” *Business Insider*, June 26, 2016, <https://www.businessinsider.com.au/inside-y-combinators-basic-income-project-2016-6>.

78. There is another major problem with proposals that would do away with existing benefits: depending on its design, a UBI could easily exacerbate rather than alleviate racialized income gaps. For example, if a UBI were denied to formerly

incarcerated individuals or recent immigrants, that group could then become a permanent underclass of low-paid labor. Brishen Rogers, “Basic Income and the Resilience of Social Democracy,” *Comparative Labor Law & Policy Journal* 40, no. 2 (2019): 116–118; Brishen Rogers, “Basic Income in a Just Society,” *Boston Review*, May 15, 2017, <https://bostonreview.net/forum/brishen-rogers-basic-income-just-society>.

79. See Nick Srnicek and Alex Williams, *Inventing the Future: Postcapitalism and a World without Work*, 2nd ed. (London: Verso, 2016), 111 (asserting that “everyone from stock analysts to construction workers to chefs to journalists is vulnerable to being replaced by machines”), 117–123 (advocating for a UBI as a means of both transferring resources from rich to poor and democratizing the political economy).

80. Gøsta Esping-Andersen, *The Three Worlds of Welfare Capitalism* (Princeton, NJ: Princeton University Press, 1990), 37. See also Cynthia Estlund, “Three Big Ideas for a Future of Less Work and a Three-Dimensional Alternative,” *Law and Contemporary Problems* 82, no. 3 (2019): 3–4 (arguing that a suite of programs—universal social benefits, expanded investment in care and infrastructure, and mandatory paid leave—would likely be as effective as a UBI and more politically palatable).

81. Esping-Andersen, *Three Worlds*, 26–27; Frances Fox Piven and Richard A. Cloward, *Regulating the Poor: The Functions of Public Welfare* (New York: Vintage Books, 1972). Corporatist welfare states have been better in this regard, though they also link benefits to contributions, while Scandinavian or “social democratic” welfare states have provided more generous and universal benefits. Esping-Andersen, *Three Worlds*, 27–29.

82. See Wright, *Envisioning Real Utopias*, 219–220 (UBI would raise workers’ reservation wage); Stern with Kravitz, *Raising the Floor*, 188 (UBI would be “the ultimate permanent strike fund”).

83. See Gabriel Winant, *The Next Shift: The Fall of Industry and the Rise of Health Care in Rust Belt America* (Cambridge, MA: Harvard University Press, 2021), 2–4 (discussing the effects of socialization on job quality in a health-care context).

84. Esping-Andersen, *Three Worlds*, 26–28.

85. See Joshua Cohen and Joel Rogers, “My Utopia or Yours,” *Politics & Society* 22, no. 4 (1994): 507–521 (making similar argument in the context of proposals for market socialism). See also Cynthia Estlund, “What Should We Do After Work? Automation and Employment Law,” *Yale Law Journal* 128, no. 2 (2018): 282n120 (explicitly setting aside the relationship between collective bargaining and automation, but stating plans to return to the issue in future work).

86. While the US hasn’t always had an explicit industrial policy, it has long had a tacit industrial policy around military spending, including technological development efforts through the Defense Advanced Research Projects Agency (DARPA). See

Fred L. Block and Matthew R. Keller, *State of Innovation: The U.S. Government's Role in Technology Development* (New York: Routledge, 2011).

87. Dani Rodrik and Charles Sabel, “Building a Good Jobs Economy,” in *A Political Economy of Justice*, eds. Danielle Allen, Yochai Benkler, Leah Downey, Rebecca Henderson, and Josh Simons (Chicago: University of Chicago Press, 2022), 61–95 (proposing policies to encourage greater technological diffusion); Frank Pasquale, *New Laws of Robotics: Defending Human Expertise in the Age of AI* (Cambridge, MA: Belknap Press, 2020), 170–198 (discussing the political economy of automation and the possibility of upskilling or increasing the autonomy of nonprofessional jobs); David H. Autor, “Polanyi’s Paradox and the Shape of Employment Growth,” in *Re-Evaluating Labor Market Dynamics* (Kansas City, MO: Federal Reserve Bank of Kansas City, 2015), 163–164 (calling for policy reforms that would encourage the use of inductive learning technologies to complement semi-professional workers such as phlebotomists); Joshua Cohen, “Research Brief: Good Jobs,” MIT Task Force on Work of the Future, October 29, 2020, <https://workofthefuture.mit.edu/research-post/good-jobs> (proposing similar reforms). On the applicability of such efforts in service workplaces, see Zeynep Ton, *The Good Jobs Strategy: How the Smartest Companies Invest in Employees to Lower Costs and Boost Profits* (Boston: Houghton Mifflin Harcourt, 2014).

88. Varshini Prakash and Guido Girgenti, eds., *Winning the Green New Deal: Why We Must, How We Can* (New York: Simon & Schuster, 2020). See also Movement for Black Lives (M4BL), *2020 Policy Platform*, <https://m4bl.org/policy-platforms> (accessed November 10, 2021) (proposing interrelated policy reforms to advance economic justice and reshape our political economy).

89. See Kate Aronoff, Alyssa Battistoni, Daniel Aldana Cohen, and Thea Riofrancos, “Strike for Sunshine: To Defeat Fossil Fuel, We Need a Low-Carbon Labor Movement,” *The Nation*, November 20, 2019, <https://www.thenation.com/article/archive/green-newdeal-labor-movement> (observing that “care and education are inherently low-carbon work”).

90. For a helpful discussion that links workers’ rights to questions of industrial policy and normative theory, see Cohen, “Good Jobs.”

91. Jonah Furman and Gabriel Winant, “The John Deere Strike Shows the Tight Labor Market Is Ready to Pop,” *The Intercept*, October 17, 2021, <https://theintercept.com/2021/10/17/john-deere-strike-labor-market>.

92. For a recent discussion of how political parties can use policy levers to demobilize opposing parties, see Alexander Hertel-Fernandez, “Asymmetric Partisan Polarization, Labor Policy, and Cross-State Political Power-Building,” *Annals of the American Academy of Political and Social Science* 685, no. 1 (2019): 64–79. See also Paul Pierson, “When Effect Becomes Cause: Policy Feedback and Political Change,” *World Politics* 45, no. 4 (July 1993): 595–628.

93. Kathleen Foody and Don Babwin, “Affordable Housing among Chicago Teachers’ Demands,” Associated Press, October 21, 2019, <https://apnews.com/article/chicago-schools-us-news-il-state-wire-strikes-ca-state-wire-7bc567d71d974a8789ffe955df254b02>.

Afterword

1. See Julie E. Cohen, “What Privacy Is For,” *Harvard Law Review* 126, no. 7 (May 2013): 1922 (noting the influence of “technological sublime” in the US). See also Langdon Winner, *Autonomous Technology: Technics-out-of-Control as a Theme in Political Thought* (Cambridge, MA: MIT Press, 1977).

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