

Index

AAVE. See African American Vernacular English Section 2, 389 accents, bias against, 156 Section 3, 390 accountability mechanisms. See also mechanical Section 4, 390-91 managers Section 5, 391 for makers of automated hiring systems, 352-57 Section 6, 391 Accounting for Slavery (Smith, W. J.), 18 Section 7, 391–92 Section 8, 391–92 ADA. See Americans with Disabilities Act ADAA, See Americans with Disabilities Act Section 9, 392 Amendments Act algorithmic affirmative action, 317 ADEA. See Age Discrimination in Employment Act algorithmic blackballing, 384-85 advertising algorithmic systems. See also Algorithmic through automated hiring, 297-98 Accountability Act for jobs, quantified racism in, 293-94 in automated hiring, 80-83 mechanisms of discrimination in, 97 discrimination through, 84-85 Affleck, Thomas, 18-19, 304 hiring algorithms and, 351-52 Affordable Care Act, U.S. (2010), 35 hiring algorithms, 296-97 African American Vernacular English (AAVE), 299 labor market discrimination and, 84-85 African Americans. See Black workers Algorithms at Work (Christin, Kellogg, and age discrimination, in labor markets Valentine), 15 under Age Discrimination in Employment Act, Alifas, N. P., 57 Allan, Patrick, 343 digital redlining, 97-98 Amazon Gross v. FBL, 94 automated hiring by, 83-84 through proxy variables, 93-99 wearable technology and, 266-67, 275, 276 standards of proof for, 94-95, 98 American Federation of Labor, 31, 32 Villarreal v. RJ Reynolds, 95-96 American Magazine, 22-23 Age Discrimination in Employment Act (ADEA), American Psychiatric Association (APA), 110-11 U.S. (1967), 93-99 Americans with Disabilities Act (ADA), U.S. (1990) The Age of Surveillance Capitalism (Zuboff), automated hiring and, 392-94 automated video interviews and, 157-61 176-77, 263 ageism, 93 Civil Rights Act of 1964 and, 161 AI technologies. See artificial intelligence genetic testing under, 232-233 personality job tests under, 107-108, 122-27, 158 technologies AIVIA. See Artificial Intelligence Video telecommuting under, 245, 246 Interview Act wearable technology under, 275, 276 Alexander, Larry, 75 exoskeletons, 272, 277 algoactivism, 15 workplace Covid-19 pandemic regulations and, Algorithmic Accountability Act, U.S. (2019), 249-50, 257-58 workplace wellness programs and, 235-36 388-92



446 Index

Americans with Disabilities Act Amendments Act (ADAA), U.S., 279 Anderson, Elizabeth, 27, 29 Anderson, Monica, 76 Anthropological Society, 146 anti-bias interventions, in automated decisionmaking, 78-79, 82 anti-labor repression, Pinkerton National Detective Agency and, 43 Anti-Pinkerton Act, U.S. (1893), 45, 70-72, 181 APA. See American Psychiatric Association applicant tracking system (ATS) technology, 301 Aristotle, 150 artificial intelligence (AI) technologies automated video interviews and, 138-41 programming bias with, 141 bias and discrimination in, programming bias, with AI, 141 in gig economy, 11 Artificial Intelligence Video Interview Act (AIVIA), U.S. (Illinois) (2019), 164-66 assembly line systems, Taylorism and, 36 assistive wearable technology, 278. See also specific technology ATS technology. See applicant tracking system technology at-will employment, 29 auditing imperatives, 364-68 autism spectrum, pre-employment tests and, 128-29 automated decision-making, 76-83 anti-bias interventions in, 78-79, 82 false binary of, 80-83 paradox of, 76-80, 82 automated hiring. See also Algorithmic Accountability Act; automated video interviews; discrimination; mechanical managers; quantified racism algorithms for, 80-83 discrimination through, 84-85 hiring, 351-52 by Amazon, 83-84 Americans with Disabilities Act and, 392-94 automated decision-making, 76-83 anti-bias interventions in, 78-79, 82 false binary of, 80-83 paradox of, 76-80, 82 under Civil Rights Act of 1964, 75-78 conceptual approach to, 75-76 Equal Employment Opportunity Commission guidelines on, 392-94 Fair Automated Hiring Mark, 372 future work on, 397-98 future-proofing and, 83

as gatekeeper mechanism, 99-101 human decision-making in, 80-83 Lochner v. New York and, 99-100 public opinion on, 76-77 automated video interviews. See also phrenology artificial intelligence and, 138-41 programming bias with, 141 bias and discrimination in against accents, 156 with artificial intelligence, programming biases and, 141 with emotion recognition and analysis, 148-50 with facial analysis, 148-51 legal protections against, limitations of, conceptual approach to, 138-39 emotion recognition and, 148-52 basic emotion theory, 150-51 discriminatory effects of, 148-50 historical precedents for, 150-51 micro-expressions, 151-52 as pseudoscience, 150-52 facial analysis in discriminatory effects of, 148-51 by HireVue, 148 by skin tone, 149 HireVue and, 139-41 facial analysis by, 148 privacy notices, 163 use of phrenology, 147-48 historical development and use of, 139-41 legal protections and, limitations of, 152-70 under Americans with Disabilities Act, against discrimination and bias, 152-57 disparate impact theory and, 153 under Title VII, of Civil Rights Act of 1964, 152-57, 161 phrenology and, 146-48 privacy protections and, 161-70 Artificial Intelligence Video Interview Act, Biometric Information Privacy Act, 166 Consumer Privacy Rights Act, 167 Fair Credit Reporting Act, 168-70 Fair Information Practice Principles, 162-63 by HireVue, 163 notice-and-consent frameworks, 162-64 in state law, 164-67 quantified racism in, 298 autonomy, of workers, 326-27, 335-36 meaningful work and, 331 Ayres, Ian, 101



Barocas, Solon, 163, 174, 175, 298	automated hiring bias and discrimination,
Barrett, Lisa Feldman, 152	298–99, 301
Barry, Adam, 177-78	productivity evaluation of, 306–308
Barth, Carl G., 56	wellness evaluation of, disparities in, 310–11
basic emotion theory, 150-51	workplace surveillance of, 303, 305–306
Bedoya, Alvaro M., 303–304	Blackmon, Douglas, 294–95
behaviorism, 146	Block, Sharon, 337–38
Behm, Kyle, 102, 104–105, 112–22	Bodie, Matthew, 177–78, 249, 290–92
Behm, Roland, 104-105, 112-22	Booker, Cory, 389
Bell, Alexander Graham, 219	Bornstein, Stephanie, 79–80, 360
Benjamin, Ruha, 293	bossware technology, 190-91
Bent, Jason, 317	Bourdieu, Pierre, 300–301
Bentham, Jeremy, 173, 184-85	Brandeis, Louis (Justice), 25–27
Bentham, Samuel, 184–85	Branson, Richard, 102
Berkers, Hannah, 330	Breen, Keith, 327
Berman, Skyler, 285, 286	Bridges, Khiara, 296–97
Between Truth and Power (Cohen), 11–12	Brison, Natasha T., 285, 286
bias, discrimination through, 85-88. See also	Broca, Paul, 146
anti-bias interventions; discrimination;	Brown, Elizabeth A., 286–87
employment discrimination	Brown, Jerry, 227
in automated hiring, 351–52	Brown, Sarah M., 285, 286
with automated hiring, against Black workers,	Buck v. Bell, 220–21
298–99, 301	Bui, Terri H., 283–84
in automated video interviews	Buolamwini, Joy, 149, 300
against accents, 156	Burawoy, Michael, 175
with artificial intelligence, programming	Bush, George W., 224
biases and, 141	
	and the state of t
with emotion recognition and analysis,	California Genetic Information
with emotion recognition and analysis, 148–50	California Genetic Information Nondiscrimination Act (CalGINA), U.S.
148–50	
6	Nondiscrimination Act (CalGINA), U.S.
148–50 with facial analysis, 148–51	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228
148–50 with facial analysis, 148–51 legal protections against, limitations of,	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88 wearable technology and, 276–77	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77 caps and helmets, as wearable technology, 270
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88 wearable technology and, 276–77 through workplace genetic testing, 224–28	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77 caps and helmets, as wearable technology, 270 captured capital theory, 177–78
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88 wearable technology and, 276–77 through workplace genetic testing, 224–28 through zip code parsing, 85–86	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77 caps and helmets, as wearable technology, 270 captured capital theory, 177–78 definition of, 177
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88 wearable technology and, 276–77 through workplace genetic testing, 224–28 through zip code parsing, 85–86 Bieber, Friedmann, 341–42 big data, scientific management and, 9–10 biometric data, misuse of, 287	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77 caps and helmets, as wearable technology, 270 captured capital theory, 177–78 definition of, 177 Restatement of Employment Law and, 178
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88 wearable technology and, 276–77 through workplace genetic testing, 224–28 through zip code parsing, 85–86 Bieber, Friedmann, 341–42 big data, scientific management and, 9–10 biometric data, misuse of, 287 Biometric Information Privacy Act, U.S. (Illinois)	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77 caps and helmets, as wearable technology, 270 captured capital theory, 177–78 definition of, 177 Restatement of Employment Law and, 178 Carbado, Devon, 90–91, 302–303
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88 wearable technology and, 276–77 through workplace genetic testing, 224–28 through zip code parsing, 85–86 Bieber, Friedmann, 341–42 big data, scientific management and, 9–10 biometric data, misuse of, 287 Biometric Information Privacy Act, U.S. (Illinois) (2008), 166	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77 caps and helmets, as wearable technology, 270 captured capital theory, 177–78 definition of, 177 Restatement of Employment Law and, 178 Carbado, Devon, 90–91, 302–303 Carnegie, Andrew, 181
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88 wearable technology and, 276–77 through workplace genetic testing, 224–28 through zip code parsing, 85–86 Bieber, Friedmann, 341–42 big data, scientific management and, 9–10 biometric data, misuse of, 287 Biometric Information Privacy Act, U.S. (Illinois)	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77 caps and helmets, as wearable technology, 270 captured capital theory, 177–78 definition of, 177 Restatement of Employment Law and, 178 Carbado, Devon, 90–91, 302–303 Carnegie, Andrew, 181 Carpenter v. United States, 288
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88 wearable technology and, 276–77 through workplace genetic testing, 224–28 through zip code parsing, 85–86 Bieber, Friedmann, 341–42 big data, scientific management and, 9–10 biometric data, misuse of, 287 Biometric Information Privacy Act, U.S. (Illinois) (2008), 166	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77 caps and helmets, as wearable technology, 270 captured capital theory, 177–78 definition of, 177 Restatement of Employment Law and, 178 Carbado, Devon, 90–91, 302–303 Carnegie, Andrew, 181 Carpenter v. United States, 288 Catholicism, capitalism and, 20
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88 wearable technology and, 276–77 through workplace genetic testing, 224–28 through zip code parsing, 85–86 Bieber, Friedmann, 341–42 big data, scientific management and, 9–10 biometric data, misuse of, 287 Biometric Information Privacy Act, U.S. (Illinois) (2008), 166 The Black Box Society (Pasquale), 11–12	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77 caps and helmets, as wearable technology, 270 captured capital theory, 177–78 definition of, 177 Restatement of Employment Law and, 178 Carbado, Devon, 90–91, 302–303 Carnegie, Andrew, 181 Carpenter v. United States, 288 Catholicism, capitalism and, 20 CBA. See Collective Bargaining Agreements CCPA. See Consumer Privacy Rights Act CCTV. See closed-circuit television
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88 wearable technology and, 276–77 through workplace genetic testing, 224–28 through zip code parsing, 85–86 Bieber, Friedmann, 341–42 big data, scientific management and, 9–10 biometric data, misuse of, 287 Biometric Information Privacy Act, U.S. (Illinois) (2008), 166 The Black Box Society (Pasquale), 11–12 Black Codes, 294–96	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77 caps and helmets, as wearable technology, 270 captured capital theory, 177–78 definition of, 177 Restatement of Employment Law and, 178 Carbado, Devon, 90–91, 302–303 Carnegie, Andrew, 181 Carpenter v. United States, 288 Catholicism, capitalism and, 20 CBA. See Collective Bargaining Agreements CCPA. See Consumer Privacy Rights Act
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88 wearable technology and, 276–77 through workplace genetic testing, 224–28 through zip code parsing, 85–86 Bieber, Friedmann, 341–42 big data, scientific management and, 9–10 biometric data, misuse of, 287 Biometric Information Privacy Act, U.S. (Illinois) (2008), 166 The Black Box Society (Pasquale), 11–12 Black Codes, 294–96 Black workers. See also bias; racism	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77 caps and helmets, as wearable technology, 270 captured capital theory, 177–78 definition of, 177 Restatement of Employment Law and, 178 Carbado, Devon, 90–91, 302–303 Carnegie, Andrew, 181 Carpenter v. United States, 288 Catholicism, capitalism and, 20 CBA. See Collective Bargaining Agreements CCPA. See Consumer Privacy Rights Act CCTV. See closed-circuit television
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88 wearable technology and, 276–77 through workplace genetic testing, 224–28 through zip code parsing, 85–86 Bieber, Friedmann, 341–42 big data, scientific management and, 9–10 biometric data, misuse of, 287 Biometric Information Privacy Act, U.S. (Illinois) (2008), 166 The Black Box Society (Pasquale), 11–12 Black Codes, 294–96 Black workers. See also bias; racism African American Vernacular English and, 299 quantified racism against	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77 caps and helmets, as wearable technology, 270 captured capital theory, 177–78 definition of, 177 Restatement of Employment Law and, 178 Carbado, Devon, 90–91, 302–303 Carnegie, Andrew, 181 Carpenter v. United States, 288 Catholicism, capitalism and, 20 CBA. See Collective Bargaining Agreements CCPA. See Consumer Privacy Rights Act CCTV. See closed-circuit television cerebral localization hypothesis, 143
148–50 with facial analysis, 148–51 legal protections against, limitations of, 152–57 in automation technologies, 293 against Black workers, through automated hiring, 298–99, 301 Genetic Information Nondiscrimination Act and, 224–28 name-based variables and, 86–88 wearable technology and, 276–77 through workplace genetic testing, 224–28 through zip code parsing, 85–86 Bieber, Friedmann, 341–42 big data, scientific management and, 9–10 biometric data, misuse of, 287 Biometric Information Privacy Act, U.S. (Illinois) (2008), 166 The Black Box Society (Pasquale), 11–12 Black Codes, 294–96 Black workers. See also bias; racism African American Vernacular English and, 299	Nondiscrimination Act (CalGINA), U.S. (California) (2011), 227, 228 capitalism Catholicism and, 20 laissez-faire, 12–14 quantified racism and, 316 Taylorism and, 59–60 Protestant work ethic and, 20 surveillance, 2–3, 176 The Age of Surveillance Capitalism, 176–77 caps and helmets, as wearable technology, 270 captured capital theory, 177–78 definition of, 177 Restatement of Employment Law and, 178 Carbado, Devon, 90–91, 302–303 Carnegie, Andrew, 181 Carpenter v. United States, 288 Catholicism, capitalism and, 20 CBA. See Collective Bargaining Agreements CCPA. See Consumer Privacy Rights Act CCTV. See closed-circuit television cerebral localization hypothesis, 143 Chander, Anupam, 83, 317



448 Index

Civil Rights Act, U.S. (1964), 75-78 Americans with Disabilities Act and, 161 automated video interviews under, 152-57, 161 mechanical managers under, regulation of, 358-59, 363, 380-81 Title VII, 152-57, 161 workplace Covid-19 pandemic regulations under, 257-58 civil society, ethics of worker quantification in, Clarke, Yvette, 389 Clarkson, Thomas, 17 Clayton Act, U.S. (1914), 51 Clements, Jessica, 138 clienteling, 175 closed-circuit television (CCTV), 186-87 Coase, Ronald, 29 Cofone, Ignacio, 375 Cohen, Julie, 11-12, 82-83, 171-72, 183, 349 Collective Bargaining Agreements (CBA), 285 collective bargaining approaches, to automated hiring, 377 collectivist approach, to wearable technology, 290 The Color of Surveillance (Bedoya), 303-304 Combe, George, 144. See also phrenology Combination Acts, U.K. (1799/1789), 42, 45-46 French Revolution as influence on, 46-47 labor laws under, 60 worker surveillance and, 179 common law conspiracy doctrine, 48 common law traditions, worker surveillance under, 178 Commonwealth v. Hunt, 47-49 common law conspiracy doctrine and, 48 Commonwealth v. Pullis, 47 compensation. See salary compensation; workers' compensation laws compliance, in pre-employment tests, 129-37 computer monitoring, surveillance of, 189-190 Congress, U.S., Pinkerton investigation by, 43-45 Connally v. General Constr. Co., 67-68 consent. See thin consent Constitution, U.S. Fourth Amendment, wearable technology under, 288 Fourteenth Amendment, Equal Protection Clause of, 220-21 Thirteenth Amendment Exception, 294-96 prison labor and, 295-96 Consumer Privacy Rights Act (CCPA), U.S. (2020), 167 context collapse, mechanical managers and, 383 Coolidge, Calvin, 61 corporate social responsibility (CSR), 368, 370

Costanza-Chock, Sasha, 316-17 Cotton Plantation Record and Account Book (Affleck), 18-10 Covid-19 pandemic Genetic Information Nondiscrimination Act and, 250 telecommuting during, 243-44 worker surveillance and, 243-44, 248-58 in workplace ADA regulations and, 249-50, 257-58 under Civil Rights Act of 1964, 257-58 enforced testing, 248-50 health surveillance and, 252-57 mask requirements, 250-251 privacy restrictions for, 257 screening guidelines, 250-53 temperature checks, 250-53 vaccine mandates, 257-58 workplace wellness programs during, 242 Crawford, Kate, 142, 151, 282 Crenshaw, Kimberlé, 315, 316 Criado-Perez, Caroline, 317-18 CSR. See corporate social responsibility "cultural fit," labor discrimination and, 88-93 customer surveillance, 175 clienteling and, 175 CVS pre-employment test, 129-37 da Vinci, Leonardo, 263-64 Darby v. Childvine, 234-35 Darwin, Charles, 150, 219 data collection Taylorism and, 21-22 through wearable technology, by third-parties, data control, for mechanical managers, 383-84 data doubles, 265 Data feminism (D'Ignazio and Klein), 316 data laundering, 85-88 data ownership, wearable technology and, 281-83 DeBlois, Lewis, 31 decision-making. See automated decision-making Dery, George M., 287-88 Design Justice (Costanza-Chock), 316-17 Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), 110-11 digital redlining, 97-98 D'Ignazio, Catherine, 316 disability issues social model of disability, 288 worker surveillance and, 258-59 Discipline and Punish (Foucault), 173 discrimination, in labor markets, 83-99 by age



under Age Discrimination in Employment	employee assistance programs, 222–23
Act, 93–99	Alcoholics Anonymous, 222
digital redlining, 97–98	substance abuse programs, 222
Gross v. FBL, 94	employee control systems, Taylorism and, 36, 45
through proxy variables, 93–99	employee productivity, 290
standards of proof for, 94–95, 98	of Black workers, racist evaluations of, 306–308
Villarreal v. RJ Reynolds, 95–96	quantified racism and, evaluations influenced
algorithmic systems and, 84–85	by, 306–308
data laundering and, 85–88	wage gaps as result of, 307, 308
hidden biases and, 85–88	employee rights, worker surveillance and, 198–214
name-based variables, 86–88	in case law, 198–201
through zip code parsing, 85–86	under National Labor Relations Act, 200
mechanisms of, 88–93	in privacy litigation, 198–99
"cultural fit" as criteria, 91–92, 88–93	privacy protections, 202
digital redlining, 97–98	state-specific laws and regulations, 199, 201, 202
"hiring for values fit," 92–93	employers
through job advertisement targeting, 97	during Industrial Revolution, 28
Natay v. Murray Sch. Dist., 91–92	in scientific management, 27-30
platform authoritarianism, 98	workers' compensation laws and, role in, 31–33
personality job tests and, 107–108	employment discrimination, quantified racism
societal noise and, 85–86	through, 296–302
Discrimination and Disparities (Sowell), 342	African American Vernacular English and, 299
discrimination per se doctrine, 358-64	with automated video interviewing, 298
disparate impact theory, 153	symbolic capital theory, 300–301
Doleac, Jennifer, 342–43	Employment Health Information Privacy Act
DSM-5. See Diagnostic and Statistical Manual of	(EHIPA), U.S., 385–86
Mental Disorders	employment law
Du Bois, W. E. B., 294–95	Restatement of Employment Law, 178
Dubal, Veena, 4	strict liability employment law theory, 365
Dunn, Craig, 329	Employment Non-Discrimination Act (ENDA),
Duru, Chika, 312	U.S., 371
	Employment Privacy Protection Act (EPPA),
The Economist, 238	U.S., 386–87
Edwards, Richard, 15	enforced testing, during Covid-19 pandemic,
EEOC. See Equal Employment Opportunity	248–250
Commission	EPPA. See Employment Privacy Protection Act
EHIPA. See Employment Health Information	Equal Employment Opportunity Commission
Privacy Act	(EEOC), 231–35
Einstein, Albert, 38	automated hiring guidelines, 392–94
Ekman, Paul, 150–51	workplace wellness programs and, guidelines
micro-expressions theory, 150–52	for, 235–36, 241–42
Electronic Communication Privacy Act, U.S.,	Equal Protection Clause, Fourteenth
275	Amendment, 220–21
The Electronic Sweatshop (Whyte), 2–3	Esch, Elizabeth, 304–305
Elliott, Carole, 328	Estlund, Cynthia, 101, 318, 334–36
Emancipation Proclamation, U.S. (1863), 75–76	ethics, of worker quantification
Emile (Rousseau), 215–19	autonomy of workers and, 326–27, 335–36
emotion recognition, in automated video	meaningful work and, 331
interviews, 148–52	civil society and, 323
basic emotion theory, 150–51	conceptual approach to, history of, 323-29
discriminatory effects of, 148-50	corporate risk shifting and, 338-42
historical precedents for, 150-51	gig economy and, 341-42
micro-expressions, 150-52	Personal Responsibility Crusade and, 339
as pseudoscience, 150-52	Principle of Inverse Coverage, 342



> Index 450 ethics, of worker quantification (cont.) Fahey, Sean, 139 future of, 343-48 Fair Automated Hiring Mark (FAHM), 372 in gig economy, 341-42 Fair Credit Reporting Act (FCRA), U.S. (1970), governmental policies for, 342-43 human rights and, 332 mechanical managers under, regulation of, meaningful work and, 329-35 355-57 definitions of, 329 Paycor, 356-57 qualities of, 329-30 Fair Information Practice Principles (FIPPs), robotization and, 330-31 162-63, 274 worker autonomy and, 331 Fair Labor Standards Act, U.S. (1938), 62-63, meritocracy and, 325 non-domination freedoms, 328, 328 fairness by design, in automated hiring, 380-83 False Claims Act, U.S. (1970), 70 personality job tests and, 345-47 Pymetrics, 347–48 Farrer v. State, 145 reciprocal power and, 328-29 Fasolo, Peter, 240 republicanism in workplace and, 327, 328 Fast, Scott, 178 responsibility principle and, 332 Fayol, Henri, 23 FCRA. See Fair Credit Reporting Act social contract theory and, 323, 324 state of nature and, 323, 324 Federation of Organized Trades and Labor Taylorism and, 336 Unions, 179-80 Theory of Justice and, 323-27 feminist approach, to quantified racism, 316-17 universal basic income and, 332-35 FIPPs. See Fair Information Practice Principles wearable technology and, 343 firms. See theory of firms worker power and, 335-38 Firth-Godbehere, Rich, 150 Fisk, Catherine, 177-78 fissuring of, 335-36 as reciprocal power, 328-29 fissuring, of worker power, 335-36 Fitbit, 269-70, 279, 282-83, 286-87 through unionization, 337-38 Five-Factor Model of personality, 109-122 worker surveillance and, 336 worker voice and, 326-27, 335-37 agreeableness trait, 109 workplace structure as influence on, 326-27 American Psychiatric Association adoption of, eugenics, 219-222 Buck v. Bell, 220-21 conscientiousness trait, 109 contemporary views on, 221-22 DSM-5 and, 110-11 extroversion in, 110 under Equal Protection Clause, 220-21 medical exams and, 125-27 forced sterilization and, 220-21 Hitler and, 221 Meyer-Briggs test and, 110 popularity of, 219-221 neuroticism levels, 109-110 Skinner v. State of Oklahoma, 220-21 openness scale, 110 forced sterilization, 220-21 in United States, 219-20 exoskeletons, as wearable technology, 272, 277, 280 Ford, Henry, 65, 304. See also Fordism exploitation. See labor exploitation; racial worker surveillance by, 185-87 Ford, Richard Thompson, 366-67 exploitation The Expression in the Emotions in Man and Ford Motor Company, labor protests by, 66-67 Animals (Darwin), 150 Fordism, 27 quantified racism and, 302 worker surveillance under, 185-87 Facebook automated hiring by, 297–98 Foucault, Michel, 173, 243 regulation of mechanical managers and, 354-55 Fourth Amendment, wearable technology facial analysis under, 288 Fowler, Lorenzo Niles, 144. See also phrenology automated hiring and, 299-300 discriminatory effects of, 148-51 freedom. See non-domination freedoms by HireVue, 148 French Revolution, Combination Acts quantified racism through, 299-300 influenced by, 46-47 skin tone as influence on, 149 Frick, Henry Clay, 44



Friedler, Sorelle, 85–86	GINA Act. See Genetic Information
Friesen, Wallace, 150-51	Nondiscrimination Act
"Future Work" (Hirsch), 15–16, 49, 64	Glenn, Mike, 268
future-proofing, 83	Gompers, Samuel, 57
1 0)	Gottier, Richard F., 103
Gall, Franz Joseph, 142-44, 146. See also	governmental certification systems, of mechanical
phrenology	managers, 373–74
Galton, Sir Francis, 219	GPS. See geo-positioning services
Gantt, Henry L., 36–37	GPS Act. See Geolocation Privacy and
GDPR. See General Data Protection Regulation	Surveillance Act
Gebru, Timnit, 149, 300	Graham, Mark, 294
General Data Protection Regulation (GDPR),	Grant, Adam, 329
EU, 289	Gray, Mary, 4, 314–15
Genetic Information Nondiscrimination Act	The Great Risk Shift (Hacker), 339–40
(GINA), U.S. (2008), 35	Greenfield, Kent, 178
Covid-19 pandemic and, 250	Griffin, Martyn, 328
definitions and terms in, 226	Grimmelman, James, 11–12, 155, 359
discrimination and, 224–28	Grint, Keith, 12–14
genetic testing	Gross, James, 61
under Americans with Disabilities Act, 232–33	Gross v. FBL, 94
under California Genetic Information	Guion, Robert M., 103
Nondiscrimination Act, 227, 228	Gulati, Mitu, 90–91, 302–303
Darby v. Childvine, 234–35	Gustafson, A. A., 53
under Genetic Information Nondiscrimination	Gustaison, 71. 71., 55
Act, 35	Habermas, Jürgen, criticism of technology, 10–11
definitions and terms in, 226	Hacker, Jacob S., 339–41
discrimination and, 224–28	Hall, Margaux, 178
HIPAA and, 224	Hanson, Erika, 168–70
limitations of, 227	Harlan, John Marshall (Justice), 59
workplace genetic testing after, 229–31 Human Genome Project, 223, 224	Hatters Act, U.K. (1777), 46 Health Insurance Portability and Accountability
Protected Health Information and, 229–31	Act (HIPAA), U.S. (1996), 224
in workplace, 222–35	wearable technology under, 277
discrimination through, 224–28	health surveillance, 252–57
Equal Employment Opportunity	with wearable technology, 276–77
Commission challenges to, 231–35 after Genetic Information	under Americans with Disabilities Act, 276
Nondiscrimination Act, 229–31	with Fitbit, 269–70, 279, 282–83
	under Health Insurance Portability and
under Genetic Information	Accountability Act, 277 misuse of biometric data, 287
Nondiscrimination Act, 224–28	· · · · · · · · · · · · · · · · · · ·
historical development of, 223	protected health information and, 277
legal challenges to, 231–35	Heath, Stephan, 268
Geolocation Privacy and Surveillance Act (GPS	Hicklin, Joseph, 52
Act), U.S., 275	high-tech vests, as wearable technology, 271
geo-positioning services (GPS), 186–87	HireVue, 139–41
George, James, 50	automated hiring by, 299
Ghosh, Dipayan, 370–71	facial analysis by, 148
Ghost Work (Suri), 4	privacy notices, 163
gig economy	use of phrenology, 147–48
artificial intelligence technologies in, 11	hiring algorithms, 296–97 "hiring for values fit," labor market discrimination
ethics of worker quantification in, 341–42	"hiring for values fit," labor market discrimination
quantified racism in, 293–94, 313–15	and, 92–93
Gilbreth, Frank B., 27	Hirsch, Jeffrey M., 15–16, 49, 64, 289
Gilman, Michele, 305	Hitler, Adolf, 221



452

Hobbes, Thomas, 323

Hobbs, F. E., 53, 171

Hodgetts, Richard M., 21

Holmes, H. L., 22-23

Hooker, John, 331-33

on universal basic income, 332-35

Hoover, Herbert, 25-27

Horrigan, Timothy, 346-47

Hosler v. Smithfield Packing Co., 70

Huang, Alex, 138

Human Genome Project, 223, 224

human relations approach, to scientific

management, 24

human resources perspective, on scientific

management, 24

human rights, ethics of worker quantification and, 332

In the Age of the Smart Machine (Zuboff), 176 incentives, in workplace wellness programs,

236-41

Industrial Revolution

employers during, 28

legal climate during, before scientific

management concept, 41-42

prison labor during, 295–96

quantification of workers during, 19-20

worker surveillance during, 179

International Association of Machinists, 57 intersectional identities, quantified racism and,

315-16

feminist approaches to, 316-17

inventions, technology compared to, 10 *Invisible Women* (Criado-Perez), 317–18

Jacoby, Sanford M., 338

Jefferson, Thomas, 263-64

Jones, Janelle, 315-16

"Justice at Work" (Nien-hê Hsieh), 326-27

Kaplinksky, Raphael, 12

Kellogg, Katherine C., 15

Kelly, Kevin, 265

Kim, Pauline, 154-55, 168-70

Kim, Tae Wan, 331-33

on universal basic income, 332-35

King, Martin Luther, Jr., 323, 397-98

Kingsley, Charles, 215-219

Klein, Lauren F., 316

Kleinberg, Jon, 298

knowledge sharing, through telecommuting,

245-46

Kroger pre-employment personality test, 112-22

Ku Klux Klan, 295

Index

labor exploitation

prison labor as, 295-96

quantified racism and, 294-96

labor laws. See also National Labor Relations

Roard

Anti-Pinkerton Act, 45, 70-72

United States v. Equifax, Inc., 70

Clayton Act, 51

under Combination Acts, 60

Connally v. General Constr. Co., 67-68

Fair Labor Standards Act, 62-63, 70-72

False Claims Act, 70

Hosler v. Smithfield Packing Co., 70

Lewis v. Smithfield Packing Co., 69-70

Lochner v. New York, 58-59

mechanical managers under, 376-80

National Industrial Recovery Act, 61

National Labor Relations Act (Wagner Act),

59-62, 72

amendments to, 65

creation of, political context for, 61

National Labor Relations Board and, 60-62

opposition to, 63

Progressive reforms of, 59-60

Sherman Act, 49-51

goals and purpose of, 50-51

Taft-Hartley Act, 63-64

United States ex rel. Weinberger v. Equifax,

Inc., 70

West Coast Hotel Co. v. Parrish, 62

labor markets. See discrimination

labor protests and strikes, 60

Ford Motor Company and, 66-67

Homestead Strike of 1892, 181

labor unions. See also anti-labor repression

under Clayton Act, 51

Collective Bargaining Agreements, 285

Commonwealth v. Hunt, 47-49

common law conspiracy doctrine and, 48

Federation of Organized Trades and Labor

Unions, 179-80

International Association of Machinists, 57

mechanical managers and, 395-96

protests and strikes by, 60

Railroad Labor Act and, 60

Railroad Labor Board and, 60

under Sherman Act, 49-51

goals and purpose of, 50-51

political context for, 50

under Taft-Hartley Act, 63-64

U.S. v. Workingmen's Amalgamated Council of

New Orleans, 51

worker power and, 337-38

laissez-faire capitalism, 12-14



Index 453

quantified racism and, 316
Taylorism and, 59–60
Larry P. v. Riles, 105
Latinx workers, quantified racism against, 316
Lawrence, Charles, 90
Lazar, Orlando, 333, 334
Le Brun, Charles, 150
Learmonth, Mark, 328
legalized worker quantification, 30-35
Leonard, F. S., 53
Leuders, Hugo F., 53
Levansaler, Leighanne, 238
Levy, Karen, 174, 175, 298
Lewis v. Smithfield Packing Co., 69–70
Lex Informatica (Reidenberg), 350
Lindblom, Lars, 323-25
Linter, Paul G., 54
Location Privacy Protection Act, U.S., 275
Lochner v. New York, 58–60, 99–100
Locke, John, 324
Lowe, Jack, 303
Luddism, 13–14
Lupton, Deborah, 266
M. C. J. M. L. O. O.
MacCarthy, Mark, 380–81
The Machine at Work (Grint and Woolgar), 12–14
machine learning algorithms, scientific
management and, 9–10
MAD Apparel, 267–68
Maher, Bill, 93
Manokha, Ivan, 300–301
Manufacturing Consent (Burawoy), 175
Marglin, Stephen, 183–84
Martin, Natasha, 90
mask requirements, during Covid-19 pandemic,
250–51 Mateuda Mari 156
Matsuda, Mari, 156
Maxmin, James, 176 McMahon, Michael, 249
Mead, Margaret, 151
meaningful work, 329–35
definitions of, 329
qualities of, 329–30
robotization and, 330–31
worker autonomy and, 331
Meaningful Work (Dunn, Grant, Michaelson,
and Pratt), 329
mechanical managers, regulation of. See also
Algorithmic Accountability Act
algorithmic blackballing and, 384–85
in automated hiring, 351–57
accountability mechanisms, for makers of

```
collective bargaining approaches to, 377
    design mandates for, 375-76, 380-83
     evaluation criteria for, 377-80
     fairness by design and, 380-83
     hiring algorithms and, 351-52
    labor law and, 376-80
     platform authoritarianism, 353
    tertius bifrons concept and, 353-55
     Uniform Guidelines on Employee Selection
       Procedures, 378-79
  brokering strategies for, 354
  under Civil Rights Act of 1964, 358-59, 363,
       380-81
  conceptual approach to, 349-50
  concurrent regulation of, 350-51
  context collapse and, 383
  data control for, 383-84
  data end uses, 380-83
  employer accountability, 358-71
    auditing imperatives, 364-68
     under Civil Rights Act of 1964, 358-59, 363
     Core Principles for, 368-69
     corporate social responsibility and, 368, 370
    discrimination per se doctrine, 358-64
     through external audits, 370-75
     through internal audits, 368-70
     under National Labor Relations Act, 358
    negligence per se doctrine, 360-63
  through external audits, 370-75
    under ENDA, 371
     under Fair Automated Hiring Mark, 372
     governmental certification system, 373-74
     non-governmental certification system,
       374-75
  Facebook and, 354–55
  under Fair Credit Reporting Act, 355-57
     Paycor, 356-57
  by government institutions, 350-51
  labor unions and, role in, 395-96
  portability and, 383-84
  strict liability employment law theory and, 365
  Worker Bill of Rights, 394-95
     model for, 395
  worker data used in, 395-96, 398
  for worker surveillance, 385-88
     under EHIPA, 385-86
     under EPPA, 386-87
     under HIPAA, 385-86
     industry-specific regulations, 386-87
     information-sensitive protections, 385-86
     omnibus bills for, 387-88
Mendel, Gregor Johann, 219
meritocracy, ethics for workers and, 325
Meyer-Briggs test, 110
```

automated hiring systems, 352-57

bias concerns in, 351-52



Index

454

Michaelson, Christopher, 329 micro-expressions, in emotion recognition, 150-52 Mieschler, Friedrich, 219 Miller, Alex, 78-79 Milroy, Jack, 338 Moggia, Jakob, 341-42 Moore, Adam D., 275 Morozov, Evgeny, 266 "Muscular Christianity," 215-19 Nafus, Dawn, 265 Natay v. Murray Sch. Dist., 91–92 National Industrial Recovery Act (NIRA), U.S. (1022), 61 National Labor Relations Act (Wagner Act), U.S. (1937), 29-30, 59-62, 72 amendments to, 65 creation of, political context for, 61 mechanical managers under, regulation of, 358 National Labor Relations Board and, 60-62 opposition to, 63 wearable technology under, 274-75 worker surveillance under, 200 right to unionize under, 202-214 National Labor Relations Board (NLRB) Bethlehem Steel Co. v. NLRB, 71 establishment of, 60 Fafnir Bearing Co. v. NLRB, 68-69 National Labor Relations Board v. Ford Motor Co., 65-67 National Labor Relations Board v. Jones & Loughlin Steel Corporation, 63 NLRB v. Otis Elevator Co., 69 Wagner Act and, 60-62 wearable technology and, 274–75 Neff, Gina, 265 negligence per se doctrine, 360-63 Neuberg, Brad, 243-44 "New Jim Code," 293 new technology, 10. See also specific technologies algoactivism and, 15 contested terrain and, 15 criticism of, 12-16 Habermas and, criticism of, 10-11 inventions compared to, 10

Luddism and, 13–14

social choice and, 11

Nien-hê Hsieh, 326–28

Nissenbaum, Helen, 163

Veblen on, 11

in political economy, 10

Nineteen Eighty-Four (Orwell), 172-73

NIRA. See National Industrial Recovery Act

NLRB. See National Labor Relations Board

non-domination freedoms, 328 non-governmental certification systems, for mechanical managers, 374-75 notice-and-consent frameworks, 162-64 Nyholm, Sven, 330 O'Connell, James, 57 O'Donnell, Hugh, 44 O'Leary, John, 52 O'Neil, Cathy, 301, 376 Oppenheimer, David Benjamin, 364-66 O'Rand, Angela, 339-41 The Organization Man (Whyte), 2-3 Orwell, George, 172-73 overtime work, telecommuting and, 247 Owensby, Matthew, 241 Paine, Thomas, 28 panopticon concept, 173, 174 Pinkerton Detectives and, 180 Taylorism and, 184-85 Papermakers Act, U.K. (1796), 46 Parker, Wendy, 100 Pasquale, Frank, 11-12 Paycor, 356-57 people analytics, 9 People v. Melvin, 47 Pepper, Irvin S., 56-57 Peppet, Scott R., 282 personal protective equipment (PPE), 283-84 Personal Responsibility Crusade, 339 personality job tests. See also CVS preemployment test; Five-Factor Model of personality; Kroger pre-employment personality test under Americans with Disabilities Act, 107-108, 122-27, 158 discrimination through, 107-108 employers' duties and, confidential medical information and, 127-28 ethics of worker quantification and, 345-47 Pymetrics, 347-48 guidelines for, 103-108 construct validity, 104 content validity, 103-104 criterion-related validity, 104 **Equal Employment Opportunity** Commission, 103, 122-25, 128-30 Uniform Guidelines on Employment Selection Procedures, 103 Larry P. v. Riles, 105 pre-employment tests, 128-37 for applicants on autism spectrum, 128-29 compliance guidelines for, 129-37



purpose of, 102–103	The Principles of Scientific Management (Taylor)
under Rehabilitation Act, 106–107	9, 20–21, 24, 36, 181–82
resurgence of, 104–105	prison labor, 295–96
Woodworth Personal Data Sheet, 102–103	privacy law, wearable technology and, 291
Pettit, Philip, 328	privacy rights. See also workers' privacy rights
Phelps, Edward, 35	during Covid-19 pandemic, 257
PHI. See protected health information	telecommuting and, 248
phrenology, 142–48	wearable technology and, 273–75, 280–81
Anthropological Society and, 146	worker surveillance and, 202
automated video interviews and, 146–48	Private Government (Anderson, E.), 27
behaviorism and, 146	private government, scientific management and,
cerebral localization hypothesis, 143	27–28
decline of, 145–46	productivity. See employee productivity
in employment evaluations, 144	professional sports
establishment of, 142–44	quantified racism in, compensation assessmen
Farrer v. State, 145	and, 309–310
global popularity of, 143–46	wearable technology in, 283–86
HireVue and, 147–48	Progressive Era
legal applications of, 144–46	labor laws during, reform of, 59–60
scientific community rejection of, 143–46	Lochner v. New York, 58–60
in social institutions, 145–46	property rights, wearable technology and, 291
Twain and, 144	protected health information (PHI), 229–31
physical fitness, workplace wellness programs	wearable technology and, 277
and, 215–19	The Protestant Ethic and the Spirit of Capitalism
piecework production, 19–20	(Weber), 20
pin manufacturing theory, 184	Protestant work ethic
Pinkerton, Allan, 42–43, 180	capitalism and, as foundation of, 20
Pinkerton, Robert, 43, 44	quantification of workers and, 16–20
Pinkerton National Detective Agency, 42–45	Weber on, 20
anti-labor repression and, 43	Pymetrics, 347–48
Anti-Pinkerton Act and, 45, 181	1 ymetres, 34/–40
	quantification of workers
congressional investigation of, 43–45	historical development of, 16–20
establishment of, 42–43	
Homestead Strike of 1892, 181	Industrial revolution and, 19–20
panopticon concept and, 180	during Roman Empire, in military
panopticon effect and, 180	context, 16
worker surveillance and, 180–81	transatlantic slave trade and, 16–19
Pitt, William, 46	piecework production and, 19–20
planetary labor market, 294	Protestant work ethic and, 16–20
platform authoritarianism, 98, 353	slavery and, transatlantic slave trade and, 16–19
Plato, 218, 219	Taylor on, 19–20
political economy, technology in, 10	quantified racism
portability. See also Health Insurance Portability	in advertising, 293–94
and Accountability Act	through automated hiring, 297–98
mechanical managers and, 383-84	through automated hiring, 296–302
Powderly, T. V., 44	applicant tracking system technology, 301
PPE. See personal protective equipment	against Black workers, 298–99, 301
Pratt, Michael G., 329	by Facebook, 297–98
pre-employment tests, 128-37. See also CVS pre-	facial recognition technology, 299-300
employment test; Kroger pre-employment	HireVue and, 299
personality test	hiring algorithms, 296–97
for applicants on autism spectrum, 128–29	in targeted job advertising, 297–98
compliance guidelines for, 129-37	automation technologies and, 296
principle of inverse coverage, 342	bias in, 293



456 Index

quantified racism (cont.)	radio-frequency identification (RFID)
Black Codes, 294–96	microchips, 186–87
against Black workers	wearable technology and, 271
African American Vernacular English and,	Raghavan, Manish, 298
299	Railroad Labor Act, U.S. (1926), 60
automated hiring bias and discrimination	Railroad Labor Board, 60
against, 298–99, 301	Raub, McKenzie, 153–54
productivity evaluation of, 306–308	Raushenbush, Carl, 65–66
wellness evaluation of, disparities in, 310–11	Rawls, John, 323–25
workplace surveillance of, 303–306	Reagan, Ronald, 339
compensation assessment, by race, 309–310	reciprocal power, 328–29
in professional sports, 309–310	Reed, Hudson, 56
conceptual approach to, 293-94	reentry organizations, 3
through employment discrimination, 296-302	refractive surveillance, 174
African American Vernacular English and,	Rehabilitation Act, U.S. (1973), 106–107
299	Reidenberg, Joel, 163, 350
with automated video interviewing, 298	relationship-building, through telecommuting, 246
symbolic capital theory, 300–301	Republicanism (Pettit), 328
in gig economy, 293–94, 313–15	republicanism, in workplace, 327, 328
intersectional identities and, 315-16	responsibility principle, 332
feminist approaches to, 316–17	Restatement of Employment Law, U.S., 178
labor exploitation and, 294–96	Reusskamp, Harry J., 56
laissez-faire capitalist approaches to, 316	Reynolds, Dennis, 303
against Latinx workers, 316	RFID chips. See radio-frequency identification
"New Jim Code," 293	microchips
productivity evaluation and, by race, 306–308	Rhue, Lauren, 149, 300
wage gaps as result of, 307, 308	right to unionize. See also labor unions
racial exploitation and, 313–15	worker surveillance and, 202–14
reform proposals for, 316–19	historical development of, 179–80
algorithmic affirmative action, 317	under National Labor Relations Act, 202–214
for labor protections, 318–19	risk shifting
for social protections, 318–19	by corporations, ethics of worker quantification
Thirteenth Amendment Exception and, 294–96	and, 338–42
prison labor and, 295–96	gig economy and, 341–42
wellness evaluation and, by race, 310–13	Personal Responsibility Crusade and, 339
against Black workers, 310–11	Principle of Inverse Coverage, 342
for medical diagnoses, 311–12	in workplace wellness programs, 236–41
workplace surveillance and, 296	from employers to workers, 237–38
of Black workers, 303, 305–306	robotics, meaningful work and, 330–31
Fordism and, 302 racialized effects of, 302–306	Robots in the Workplace (Berkers, Nyholm, and
	Smids), 330
quantified self movement, 265–66	Roediger, David, 304–305
quantified worker conceptual description of, 1–2	Rogers, Brishen, 318–19, 336 Roman Empire, quantification of workers
historical development of, 3–4	during, 16
	9
methodological approach to, 4–5	Rosenthal, Caitlin C., 304 Rousseau, Jean-Jacques, 215–19, 324
Race after Technology (Benjamin), 293	Rubenfeld, Ned, 75
racial exploitation, 313–15	Rucker, Edward, 42–43
racism. See also bias; discrimination; quantified	7 7 1 12
racism; slave trade; slavery	Sachs, Benjamin, 337–38

salary compensation, 277-80

quantified racism as influence on, 309-310

in professional sports, 309-310

Black Codes, 294-96

Ku Klux Klan and, 295 white supremacy and, 295



Saltwater Slavery (Smallwood), 16–17	Slavery by Another Name (Blackmon), 294–95
Scarborough, David, 75	Smallwood, Stephanie, 16–17
Scheiber, Noam, 93	smart watches, 269–70, 286–87
Schumpeter, Joseph, 20	Smids, Jilles, 330
Schwartz, Justin, 183	Smith, Aaron, 76
scientific management. See also socio-legal responses	Smith, Adam, 19, 47
big data and, 9–10	pin manufacturing theory, 184
conceptual approach to, 9–12	Smith, William James, 18
data sheets and, 22	social choice, technology and, 11
defense of, 54–56	social contract theory, 323, 324
classification of workers in, 55–56	social isolation, from coworkers, 246–47
evolution of, 55	social media, use of. See also Facebook
goal and purpose in, 54–55	worker surveillance of, 191–98
employer's role in, 27–30	state laws on, 192
firms and, theory of, 29	social model of disability, 288
human relations approach and, 24	Society of Human Resource Management, 241
human resources perspective on, 24	socio-legal responses, to scientific management
machine learning algorithms and, 9–10	labor law, after Taylorism, development of,
people analytics and, 9	58–65
private government's role in, 27–28	legal climate for, before scientific management
during slavery era, 304	concept, 41–45
Taylorism and, 19–27	during Industrial Revolution, 41–42
bureaucratic theory and, 23–24	under Sherman Act, 50–51
cleanliness and efficiency and, 25–27	Pinkerton National Detective Agency and,
The Principles of Scientific Management, 9,	
20–21, 24	42–45 during Progressive Era, 51
workers' personal choices and, 25–26	Sherman Act, 49–51
worker quantification theory compared to, 12	goals and purpose of, 50–51
worker surveillance and, 171–72	political context for, 50
workers' voices in, 29	Taylorism and
Self Tracking (Neff and Nafus), 265	labor law after, 58–65
Selmi, Michael, 100	labor policy development and, 45–51
Sherman, John, 50	shop management and, 52–58
Sherman Act, U.S. (1890), 49–51	timeline of, 38
goals and purpose of, 50–51	in U.K.
political context for, 50	Combination Acts, 42, 45–46
Shestakofsky, Benjamin, 14	U.S. response to, 38–41
Shuey, Kim M., 339–41	under Sherman Act, 49–51
Siegel, Reva, 317	Sowell, Thomas, 316, 342
Siegelman, Peter, 101	Spann, Girardeau, 360–61
Silkmakers Act, U.K. (1773), 46	Sperino, Sandra, 155
Simmel, Georg, 353–54	Spurzheim, Johann, 143
Singh, Jatinder, 360	Stark, Luke, 149
Skinner v. State of Oklahoma, 220–21	Stephens, Bret, 75
slave trade, 17	sterilization. See forced sterilization
quantification of workers and, 16–19	
slavery	strict liability employment law theory, 365 strikes. See labor protests and strikes
•	
Black Codes and, 294–96	Studnicka, Anthony, 284–86
Emancipation Proclamation, 75–76	Sunstein, Cass, 82
labor exploitation after, 294–96	Supinski, Liz, 241 The Support Feoremy (Zuboff and Maxmin), 176
scientific management during, 304 Thirteenth Amendment Exception and, 294–96	The Support Economy (Zuboff and Maxmin), 176 Suri, Siddharth, 4, 314–15
prison labor and, 295–96	surveillance capitalism, 2–3, 176
transatlantic slave trade and, 16–19	The Age of Surveillance Capitalism, 176–77



458 Index

Surveillance-Industrial complex, 171-72 by job type, 247 privacy issues, 248 Susser, Daniel, 162 symbolic capital theory, 300-301 social isolation from coworkers, 246-47 worker surveillance Taft, William H., 220 during Covid-19 pandemic, 243-44, 248-58 Taft-Hartley Act, U.S. (1947), 63-64 increase in, 247-48 Tavenner, Clyde, 182 tertius bifrons concept, 353-55 Taylor, Frederick Winslow, 9, 20-21, 24, 36, theory of firms, 29 181-82, 304. See also scientific Theory of Justice, 323-27 management; Taylorism Theory of Justice (Rawls), 323-25 Brandeis and, 25-27 thin consent, 275 on employee productivity, 290 Thirteenth Amendment Exception, 294–96 on piecework production, 19-20 prison labor and, 295–96 on quantification of workers, 19-20 Thomas, Bill, 93 scientific management concept, defense of, Thomas, R. J., 65 Tolson, Franita, 100 classification of workers, 55-56 Tomkins, Silvan, 150-51 evolution of, 55 Tribe, Lawrence, 387-88 goal and purpose of, 54-55 Turner, Wes, 289-90 on soldiering, 55 Tutt, Andrew, 371-72 worker surveillance and, 171-72, 181-85 Twain, Mark, phrenology and, 144 Taylorism, 19-27 assembly line systems and, 36 UBI. See universal basic income bureaucratic theory and, 23-24 U.K. See United Kingdom cleanliness and efficiency and, 25-27 Unconscious Racism (Lawrence), 90 data collection and, 21-22 Uniform Guidelines on Employee Selection employee control systems and, 36, 45 Procedures, 378-79 unions. See labor unions ethics of worker quantification and, 336 labor laws after, 58-65 United Kingdom (U.K.) laissez-faire capitalism and, 59-60 Combination Acts, 42, 45-46 The Principles of Scientific Management, 9, French Revolution as influence on, 46-47 20-21, 24, 36 labor laws under, 60 technocracy and, 36-37 worker surveillance and, 179 Hatters Act, 46 technologies of control and, 35-37 wearable technology and, 263-64 Papermakers Act, 46 worker surveillance and Silkmakers Act, 46 panopticon concept and, 184-85 United States (U.S.). See also Algorithmic Taylorism and, 171-72, 181-85 Accountability Act; Americans with Disabilities Act; Constitution; National workers' personal choices and, 25-26 technocracy, Taylorism and, 36-37 Labor Relations Act; specific topics Affordable Care Act, 35 technologies of control, 35-37 technology. See new technology Age Discrimination in Employment Act, 93-99 techno-solutionism, 266 Americans with Disabilities Act Amendments telecommuting Act, 279 advantages to, 244-46 Anti-Pinkerton Act, 45, 70–72, 181 knowledge sharing, 245-46 United States v. Equifax, Inc., 70 in relationship-building, 246 Artificial Intelligence Video Interview Act under Americans with Disabilities Act, 245, 246 (Illinois), 164-66 common locations for, 244 Biometric Information Privacy Act (Illinois), during Covid-19 pandemic, 243-44 worker surveillance and, 243-44, 248-58 California Genetic Information disadvantages of, 246-48 Nondiscrimination Act, 227, 228 increased overtime work, 247 Civil Rights Act of 1964, 75-78 Americans with Disabilities Act and, 161 increased worker surveillance, 247-48



Index 459

automated video interviews under, 152-57, 161 Title VII, 152–57, 161 workplace Covid-19 pandemic regulations under, 257-58 Clayton Act, 51 Consumer Privacy Rights Act, 167 Electronic Communication Privacy Act, 275 Emancipation Proclamation, 75-76 Employment Health Information Privacy Act, Employment Non-Discrimination Act, 371 Employment Privacy Protection Act, 386–87 eugenics in, 219-20 Fair Credit Reporting Act, 168-70 mechanical managers under, regulation of, Fair Labor Standards Act, 62-63, 70-72 False Claims Act, 70 Genetic Information Nondiscrimination Act, 35 Covid-19 pandemic and, 250 definitions and terms in, 226 discrimination and, 224-28 Geolocation Privacy and Surveillance Act, 275 Health Insurance Portability and Accountability Act, 275 wearable technology under, 277 Location Privacy Protection Act, 275 National Labor Relations Act, 29-30 Railroad Labor Act, 60 Rehabilitation Act, 106-107 Restatement of Employment Law, 178 Sherman Act, 49-51 Taft-Hartley Act, 63-64 United States ex rel. Weinberger v. Equifax, Inc., 70 United States v. Equifax, Inc., 70 universal basic income (UBI), 318-19 critiques of, 334 ethics of worker quantification and, 332-35 Urick, Lyndall F., 23 U.S. See United States U.S. v. Workingmen's Amalgamated Council of New Orleans, 51 257-58

vaccine mandates, during Covid-19 pandemic, 257–58 Valentine, Mellissa A., 15 Van Doorn, Niels, 4, 313–14 Van Loo, Rory, 371–72 Veblen, Thorsten, 11 Villarreal, Richard, 95 Villarreal v. RJ Reynolds, 95–96

wage gaps, quantified racism and, 307, 308 Wagner Act. See National Labor Relations Act

Waits, Isaac B., 48 Wall Street Journal, 1 Watanabe, Teresa, 221 Wax, Amy, 75 The Wealth of Nations (Smith, A.), 19, 47 Weapons of Math Destruction (O'Neil), 301, 376 wearable technology accuracy of data from, 281-83 Amazon and, 275, 276 under Americans with Disabilities Act, 275, 276 exoskeletons, 272, 277 under Americans with Disabilities Act Amendments Act, 279 assistive, 278 Carpenter v. United States, 288 collectivist approach to, 290 conceptual approach to, 263-64 data doubles, 265 data ownership and, control of, 281-83 under Electronic Communication Privacy Act, 275 employee concerns with, 273-81 discrimination and bias potential, 276-77 privacy expectations, 273-75, 280-81 worker safety, 277-80 workers' compensation, 277-80 ethics of, 343 Fair Information Practice Principles, 274 in Fourth Amendment case law, 288 under General Data Protection Regulation, under Geolocation Privacy and Surveillance Act, 275 health surveillance with, 276-77 under Americans with Disabilities Act, 276 with Fitbit, 269-70, 279, 282-83 under Health Insurance Portability and Accountability Act, 277 misuse of biometric data, 287 protected health information and, 277 under Location Privacy Protection Act, 275 long-term impact of, on employees, 286-92 by MAD Apparel, 267–68 under National Labor Relations Act, 274-75 National Labor Relations Board and, 274-75 personal protective equipment and, 283-84 privacy law and, 291 in professional sports, 283-86 property rights and, 291 quantified self movement and, 265-66 radio-frequency identification microchips, 271 Taylorism and, 263-64 as techno-solutionism, 266 thin consent and, 275



wearable technology (cont.)	customer surveillance and, 175
in workplace, 266–72	clienteling and, 175
caps and helmets, 270	disability implications of, 258–59
data collection by third-parties, 287-88	employee rights and, 198–214
exoskeletons, 272, 277, 280	in case law, 198–201
Fitbit, 269–70, 279, 282–83, 286–87	under National Labor Relations Act, 200
high-tech vests, 271	in privacy litigation, 198–99
international examples of, 272-73	privacy protections, 202
smart watches, 269-70, 286-87	state-specific laws and regulations, 199, 201, 202
Weber, Max, 20	under Employment Privacy Protection Act,
Weil, David, 335–36	386–87
wellness evaluation, quantified racism and, 310–13	ethics of, 336
against Black workers, 310–11	under Fordism, 185–87
for medical diagnoses, 311–12	Foucault on, 173
Wells, Samuel R., 144. See also phrenology	with geo-positioning services, 186–87
West Coast Hotel Co. v. Parrish, 62	historical development of, 179–87
Westreich, Daniel, 155, 359	Combination Acts and, 179
What Are Old People For? (Thomas, B.), 93	during Industrial Revolution, 179
white supremacy, 295	labor unions and, 179–80
Whittaker, Meredith, 367–68	Pinkerton Detectives and, role in, 180–81
Whyte, William, 2–3	literature on, 176–77
Wilberforce, William, 46	by mechanical managers, regulation of, 385–88
Wilson, H. James, 273	under EHIPA, 385–86
Wilson, Valerie, 315–16	under EPPA, 386–87
Windows on the Workplace (Whyte), 2–3	under HIPAA, 385–86
Winkler, H. F., 53	industry-specific regulations, 386–87
Wolf, Gavin, 265	information-sensitive protections, 385–86
Woodworth Personal Data Sheet, 102–103	omnibus bills for, 387–88
Woolgar, Steve, 12–14	under National Labor Relations Act, 200
worker behavior, surveillance of, 190–91	right to unionize under, 202–14
with bossware technology, 190–91	new technology for, 188
Worker Bill of Rights, 394–95	bossware technology, 190–91
worker domination, through worker	in Nineteen Eighty-Four, 172–73
quantification, 30	overview of, 187–98
worker power, 335–38	panopticon concept and, 173, 174
fissuring of, 335–36	Pinkerton Detectives and, 180
reciprocal power and, 328–29	Taylorism and, 184–85
through unionization, 337–38	quantified racism and, 296
worker productivity, surveillance of, 189–90	against Black workers, 303, 305–306
with computer monitoring, 189–90	Fordism and, 302
worker quantification	racialized effects of, 302–306
legalized, 30–35	with radio frequency identification chips,
theory of, 12	186–87
worker domination through, 30	refractive surveillance, 174
workers' compensation laws and, 30–35	right to unionize, 202–214
worker safety, 277–80	historical development of, 179–80
worker surveillance	under National Labor Relations Act, 202–214
captured capital theory, 177–78	scientific management and, 171–72
definition of, 177	of social media use, 191–98
Restatement of Employment Law and, 178	state laws on, 192, 198
categories of, 187	sociological approaches to, 185–87
with closed-circuit television, 186–87	surveillance-industrial complex, 171–72
common-law remedies, 178	Taylorism and, 171–72, 181–85
conceptual approach to, 171–77	panopticon concept and, 184–85
	1 / 1 /



Index 461

telecommuting and during Covid-19 pandemic, 243-44, 248-58 increase in surveillance, 247-48 for worker behavior, 190-91 with bossware technology, 190-91 for worker productivity, 189-90 with computer monitoring, 189-90 workplace relations influenced by, 175-76 Zuboff on, 176–77 Worker Surveillance and Class Power (Rogers), 336 worker voice, 326-27, 335-37 workers' compensation laws American Federation of Labor and, 31, 32 employers' role in, 31-33 worker quantification and, 30-35 workers' privacy rights, reconceptualization of, 15 Working Algorithm (Shestakofsky), 14 Working Identity (Carbado and Gulati), 302-303 Working Together (Estlund), 101 workplace genetic testing, 222-35 discrimination through, 224-28 Equal Employment Opportunity Commission challenges to, 231-35 after Genetic Information Nondiscrimination Act, 229-31 under Genetic Information Nondiscrimination Act, 224-28

historical development of, 223 legal challenges to, 231-35 workplace wellness programs Americans with Disabilities Act and, 235–36 during Covid-19 pandemic, 242 employee experiences with, 238-40 employer attitudes toward, 240-41 Equal Employment Opportunity Commission guidelines on, 235–36, 241–42 government support of, 282 historical development of, 215-19 incentives in, 236-41 "Muscular Christianity," 215-19 physical fitness and, 215-19 risk shifting in, 236-41 from employers to workers, 237–38 Society of Human Resource Management, 241 timelines for, 215 Wrege, Charles D., 21 Wyden, Ron, 389 Zuboff, Shoshana, 176-77, 263 on worker surveillance, 176-77

Zuboff, Shoshana, 176–77, 263 on worker surveillance, 176–7 Zuboff, Shoshanna, 2–3 Zuckerberg, Mark, 93 Zuckerman, Mark, 337, 396