SYMPOSIUM: AFROFUTURISM AND THE LAW

ESSAYS

Artificial Intelligence, Afrofuturism, and Economic Justice

IFEOMA AJUNWA*

Artificial intelligence (AI) work technologies have been lauded for their efficiency, cost savings, and ability to democratize access to work. Indeed, AI work technologies make a "planetary labor market" possible. But what does this mean for the future of work for Black workers both in the Diaspora and on the African continent? Building on the Afrofuturist works of Derrick Bell and N. K. Jemisin, this Essay argues that concepts from Afrofuturism hold insights into how to regulate AI technologies for the good of all rather than a select few. In Part I, the Essay discusses the notion of "sacrificial lambs" as a narrative device for challenging the mantra of innovation or "progress" at any price. Part I starts with an examination of Ursula K. Le Guin's The Ones Who Walk Away from Omelas as an example of the trope of sacrificial lambs in colorblind science fiction and contrasts it with Derrick Bell's Afrofuturist fiction The Space Traders, where the sacrificial lambs are people of African descent. Part I also offers an alternative ending to Derrick Bell's The Space Traders that highlights a linked-fate hypothesis as the path to racial justice in the future of work. In Part II, I contrast the notion of a sacrificial lamb with Lani Guinier and Gerald Torres's notion of racialized Americans as the "miner's canary" for what ails our society, and I surface examples of how Black workers are already being harmed in the AI revolution of work. In Part III, I deploy N. K. Jemisin's rebuttal, The Ones Who Stay and Fight, to show how an embrace of human vulnerability, linked-fate thinking, the Ubuntu philosophy of interconnected personhood, and equity by design can ensure that the AI revolution works for all.

"Legal storytelling is a means by which representatives of new communities may introduce their views into the dialogue about the way society should be

^{*} Asa Griggs Candler Professor of Law, Emory University School of Law; L.L.M., Yale Law School; Ph.D in Sociology (Organizational Studies and Law & Society), Columbia University. © 2024, Ifeoma Ajunwa. Many thanks to Professors Bennett Capers, Etienne Toussaint, Jessica Eaglin, Paul Gowder, and other attendees of the Afrofuturism and the Law Symposium at Georgetown Law. A special thanks to my research assistant, Aseelah Saiyed and to the Editors of *The Georgetown Law Journal* for their fastidious cite-checking.

governed. Stories are in many ways more powerful than litigation or briefwriting and may be necessary precursors to law reform."

— Richard Delgado and Jean Stefancic¹

"But automation can be used to generate an abundance of wealth for a people or an abundance of poverty for millions as its human-like machines turn out human scrap, along with machine scrap, as a by-product of production. And I am convinced that our society, with its ability to perform miracles with machinery, has the capacity to make some miracles for men, if it values men as highly as it values machines."

— Dr. Martin Luther King, Jr., December 11, 1961²

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^{1.} Richard Delgado & Jean Stefancic, *Derrick Bell's Chronicle of the Space Traders: Would the U.S. Sacrifice People of Color if the Price Were Right?*, 62 U. COLO. L. REV. 321, 328 (1991).

^{2.} Martin Luther King, Jr., Address Delivered at the Fourth Constitutional Convention of the AFL-CIO (Dec. 11, 1961), *in* 7 The Papers of Martin Luther King, Jr.: To Save the Soul of America, January 1961–August 1962, at 333, 336–37 (Clayborne Carson & Tenisha Armstrong eds., 2014).

Introduction

What is to be the future of work for Black Americans as artificial intelligence (AI) technologies shape the future? An Afrofuturism deeply rooted in the history of the United States offers some insights and a warning.³ AI technologies have been lauded for their efficiency, cost savings, and have even been proclaimed as democratizing access to work.⁴ Indeed, they have created a "planetary labor market."⁵ But will the AI revolution truly elevate the economic status of Black workers?

After several centuries of racial chattel slavery, the Thirteenth Amendment declared the freedom of all enslaved people in the United States,⁶ and the Fourteenth Amendment granted citizenship to all persons "born or naturalized in the United States" and provided for "equal protection of the laws" to those within the United States' jurisdiction.⁷ Yet, the same Thirteenth Amendment that announced itself as an emancipatory document also codified "slavery" and "involuntary servitude" as a form of punishment.⁸ And the equal protection doctrine provided by the Fourteenth Amendment has been read to apply only to acts by the State and not to discriminatory actions of private actors.⁹ In fact, recent Supreme Court rulings raise the question of whether private actors may act or

^{3.} Previous legal scholars whose work I classify as Afrofuturist have been pessimistic about the future of Black Americans. *See, e.g.*, DERRICK BELL, *Introduction: Divining Our Racial Themes, in* FACES AT THE BOTTOM OF THE WELL: THE PERMANENCE OF RACISM 1, 12 (1992) (characterizing racism in the United States as "likely permanent"); Derrick Bell, *Black History and America's Future*, 29 VAL. U. L. REV. 1179, 1191 (1995) (describing "future calamities" for Black Americans).

^{4.} Sachin Dev Duggal, Expanding Access to Technology by Democratizing Access to AI-Powered Software, FORBES (Sept. 15, 2022, 6:15 AM), https://www.forbes.com/sites/forbestechcouncil/2022/09/15/expanding-access-to-technology-by-democratizing-access-to-ai-powered-software/? sh=3eb0939374fc; Lori Perri, Generative AI Can Democratize Access to Knowledge and Skills, GARTNER (Oct. 17, 2023), https://www.gartner.com/en/articles/generative-ai-can-democratize-access-to-knowledge-and-skills.

^{5.} Mark Graham & Mohammad Amir Anwar, *The Global Gig Economy: Towards a Planetary Labor Market, in* THE DIGITAL TRANSFORMATION OF LABOR: AUTOMATION, THE GIG ECONOMY AND WELFARE 213, 217, 230 (Anthony Larsson & Robin Teigland eds., 2020) (noting that AI technologies now allow employers and companies to recruit workers (and gain their labor) from any part of the world).

^{6.} U.S. CONST. amend. XIII, § 1 ("Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.").

^{7.} *Id.* amend. XIV, § 1 ("All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.").

^{8.} *Id.* amend. XIII, § 1 ("Neither slavery nor involuntary servitude, *except as a punishment for crime whereof the party shall have been duly convicted*, shall exist within the United States, or any place subject to their jurisdiction." (emphasis added)).

^{9.} See United States v. Cruikshank, 92 U.S. 542, 554–55 (1875) (holding that the Fourteenth Amendment's Equal Protection Clause primarily addressed state actions); see also Bolling v. Sharpe, 347 U.S. 497, 499–500 (1954) (holding that equal protection was required on the part of the federal government through the Due Process Clause, not the Fourteenth Amendment's Equal Protection Clause); United States v. Carolene Prods. Co., 304 U.S. 144, 152 n.4 (1938) (establishing that state laws required greater scrutiny than federal laws under the Equal Protection Clause).

refuse to act based on discriminatory beliefs if they allege those beliefs to be part of their religion. The Civil Rights Act of 1964¹¹ was promulgated to allow racial and other minorities the access to the labor market that de facto racism and de jure racism, like Jim Crow laws, had blocked. Yet, many years later, many Black Americans remain at the bottom for multiple economic metrics, including employment opportunities, in income, is and generational wealth.

- 12. See President John F. Kennedy, Televised Address to the Nation on Civil Rights (June 11, 1963) (transcript available at https://www.jfklibrary.org/learn/about-jfk/historic-speeches/televised-address-to-the-nation-on-civil-rights [https://perma.cc/P93J-HXY2]) (highlighting the issue of unemployment among Black Americans to encourage the passage of legislation to combat widespread racial injustice); see also President Lyndon B. Johnson, Radio and Television Remarks Upon Signing the Civil Rights Bill, 1 Pub. Papers 842 (July 2, 1964) (lauding the signing of the Civil Rights Act as critical to fighting racial discrimination).
- 13. In this Essay, I use the word "Black American" as an umbrella term for people of African descent in the United States and on the North American continent. I capitalize the word (following the example of Kimberle Crenshaw) to distinguish it from a color or phenotype and to denote that it is a cultural, social, and political descriptor. See Kimberle Crenshaw, Mapping the Margins: Intersectionality, Identity Politics, and Violence Against Women of Color, 43 STAN. L. REV. 1241, 1244 n.6 (1991) ("I use 'Black' and 'African American' interchangeably throughout this article. I capitalize 'Black' because 'Blacks, like Asians, Latinos, and other "minorities," constitute a specific cultural group and, as such, require denotation as a proper noun."). This also takes note that among people who live in Africa and people who live in the African Diaspora, there is a shared underlying culture and shared histories of political and economic subjugation (colonialism or chattel slavery).
- 14. See Katherine Schaeffer, Black Workers' Views and Experiences in the U.S. Labor Force Stand Out in Key Ways, PEW RSCH. CTR. (Aug. 31, 2023), https://www.pewresearch.org/short-reads/2023/08/31/black-workers-views-and-experiences-in-the-us-labor-force-stand-out-in-key-ways/ [https://perma.cc/N2VJ-6R2L] (highlighting barriers faced by Black workers in the U.S. workforce, including that the unemployment rate for Black Americans is the highest of any racial or ethnic group); see also Devah Pager, The Mark of a Criminal Record, 108 Am. J. Socio. 937, 960 (2003) (finding that white applicants with a criminal record received interview callbacks at a higher rate than Black applicants with no criminal record).
- 15. See On Views of Race and Inequality, Blacks and Whites Are Worlds Apart, PEW RSCH. CTR. (June 27, 2016), https://www.pewresearch.org/social-trends/2016/06/27/1-demographic-trends-and-economic-well-being/ [https://perma.cc/D3BT-79KR] ("[A]mong those with a bachelor's degree, blacks earn significantly less than whites (\$82,300 for black householders vs. \$106,600 for whites). In fact, the income of blacks at all levels of educational attainment lags behind that of their white counterparts."); see also Schaeffer, supra note 14 ("Among full-time wage and salary workers, the median weekly earnings for Black workers ages 16 and older are \$878, compared with \$1,059 for all U.S. workers in the same age group. Among workers of other races and ethnicities in the same age group, the median weekly earnings are \$823 for Hispanic workers, \$1,085 for White workers and \$1,401 for Asian workers. And the differences hold when accounting for education level Black workers earn less than those in other groups even among workers with bachelor's or advanced degrees.").
- 16. See Benjamin Harris & Sydney Schreiner Wertz, Racial Differences in Economic Security: The Racial Wealth Gap, U.S. DEP'T TREASURY: FEATURED STORIES (Sept. 15, 2022), https://home.treasury.gov/news/featured-stories/racial-differences-economic-security-racial-wealth-gap [https://perma.cc/5TPB-REJ2] ("[R]esearchers... [found] that the median white family had \$184,000 in wealth in 2019 compared to just \$38,000 and \$23,000 for the median Hispanic and Black families, respectively."); see also Catarina Saraiva, Black-White Wealth Gap Getting Worse, 160 Years of US Data Show,

^{10.} See, e.g., 303 Creative LLC v. Elenis, 600 U.S. 570, 596, 602–03 (2023) (holding that a website designer can lawfully discriminate for religious reasons against classes of customers on the basis of the Free Speech Clause of the First Amendment); Masterpiece Cakeshop, Ltd. v. Colo. C.R. Comm'n, 584 U.S. 617, 642 n.* (2018) (Kagan, J., concurring) (describing Justice Gorsuch's view as one that allows for a commercial baker to lawfully discriminate against classes of customers for religious reasons).

^{11.} Pub. L. No. 88-352, 78 Stat. 241.

Racist narratives that attempt to justify the persistence of economic disadvantages for American citizens of African descent abound.¹⁷ Even more alarming, there are Orwellian efforts to rewrite the known history of subjugation and labor exploitation that has continued to disadvantage Black Americans.¹⁸ As George Orwell writes in his dystopian novel *1984*, "Who controls the past, ... controls the future: who controls the present controls the past."¹⁹ Given that the past writes the future, current efforts to rewrite the history of people of African descent constitute a ploy to justify their continued subjugation and to reestablish dominion over their futures.

Afrofuturism, then, is an imperative liberatory praxis that seeks to name and claim alternate futures for Black people—futures different from their assigned downtrodden roles. Although there are several definitions of Afrofuturism, all point toward centering the experiences and concerns of Black people.²⁰ According to the National Museum of African American History and Culture,

BLOOMBERG (June 7, 2022, 7:00 AM), https://www.bloomberg.com/news/articles/2022-06-07/black-white-wealth-gap-getting-worse-160-years-of-us-data-show ("Black Americans in 2019 had one-sixth the wealth of White Americans on a per capita basis ").

17. See generally RICHARD J. HERRNSTEIN & CHARLES MURRAY, THE BELL CURVE: INTELLIGENCE AND CLASS STRUCTURE IN AMERICAN LIFE (1994) (claiming to show empirical proof of a lower intelligence level on average for Black people). For example, in his manifesto, Dylan Roof, who murdered nine Black churchgoers in 2015, wrote:

Anyone who thinks that White and black people look as different as we do on the outside, but are somehow magically the same on the inside is delusional Negroes have lower [IQs], lower impulse control, and higher testosterone levels in generals. These three things alone are a recipe for violent behavior.

Michael E. Ruane, *A Brief History of the Enduring Phony Science that Perpetuates White Supremacy*, WASH. POST (Apr. 30, 2019, 11:38 AM), https://www.washingtonpost.com/local/a-brief-history-of-the-enduring-phony-science-that-perpetuates-white-supremacy/2019/04/29/20e6aef0-5aeb-11e9-a00e-050dc7b82693_story.html.

18. See Hannah Natanson, All the Ways Ron DeSantis Is Trying to Rewrite Black History, WASH. POST (July 24, 2023, 7:27 PM), https://www.washingtonpost.com/education/2023/07/24/desantisflorida-black-history/ ("A 2022 [Florida] law mandates students may not be made to 'feel guilt, anguish, or other forms of psychological distress' because they were forced to reflect on bad acts committed in the past by members of their race. And now, according to curriculum standards released last week, Florida students must learn that enslaved people 'developed skills' that 'could be applied for their personal benefit' — an assertion that immediately drew fire from historians."); Brian Lopez, State Education Board Members Push Back on Proposal to Use "Involuntary Relocation" to Describe Slavery, TEX. TRIB. (June 30, 2022, 6:00 PM), https://www.texastribune.org/2022/06/30/texas-slaveryinvoluntary-relocation/ [https://perma.cc/Y5M9-ECPU] ("A group of Texas educators have proposed to the Texas State Board of Education that slavery should be taught as 'involuntary relocation' during second grade social studies instruction "); Randall L. Kennedy, The Right-Wing Attack on Racial Justice Talk, Am. PROSPECT (Sept. 28, 2021), https://prospect.org/civil-rights/right-wing-attack-onracial-justice-talk/ ("The right-wing attacks against efforts to educate the public realistically about the history and current role of anti-Black racism should be answered by a redoubled commitment to disseminating accurate information undergirded by anti-racist values.").

19. GEORGE ORWELL, NINETEEN EIGHTY-FOUR 44 (1949).

20. See Afrofuturism, GRINNEL COLL.: SUBCULTURES & SOCIO., https://haenfler.sites.grinnell.edu/afrofuturism/ [https://perma.cc/D8UK-FLLX] (last visited May 11, 2024) ("Though there are many definitions of Afrofuturism, they all have themes of reclamation, black liberation, and revisioning of the past and predictions of the future through a black cultural lens in common.").

"Afrofuturism expresses notions of Black identity, agency and freedom through art, creative works and activism that envision liberated futures for Black life." The term "Afrofuturism" is thought to have been coined by Mark Dery in 1994 to describe "[s]peculative fiction that treats African-American themes and addresses African-American concerns in the context of twentieth-century technoculture—and, more generally, African-American signification that appropriates images of technology." In sum, Afrofuturism imagines how Black people can survive and thrive in a technocratic legal and political economy.

Following that definition, the writer and one of the first Black women to win a MacArthur "Genius Grant," Octavia Butler, is widely regarded as the "mother of Afrofuturism" because, starting in the 1970s, she began to publish science fiction novels that centered African-American characters.²³ Afrofuturism is heir to science fiction, but it is also a rebuke of its colorblind disregard for the persisting role of race in a technocratic world.²⁴ In 1980, Octavia Butler wrote *The Lost Races of Science Fiction*, critiquing the commonly held belief at the time that science fiction should not "dwell on matters of race." As Butler notes, "Science fiction reaches into the future, the past, the human mind. It reaches out to other worlds and into other dimensions. Is it really so limited, then, that it cannot reach into the lives of ordinary everyday humans who happen not to be white?" ²⁶

In 1998, the sociologist Alondra Nelson launched an Afrofuturism listsery, and in 2002 she produced a special issue of *Social Text* that focused on Afrofuturism.²⁷ Per the issue's description:

Challenging mainstream technocultural assumptions of a raceless future, *Afrofuturism* explores culturally distinct approaches to technology. This special issue addresses the intersection between African diasporic culture and technology through literature, poetry, science fiction and speculative fiction, music, visual art, and the Internet and maintains that racial identity fundamentally influences technocultural practices.²⁸

^{21.} Afrofuturism: A History of Black Futures, NAT'L MUSEUM AFR. AM. HIST. & CULTURE, https://nmaahc.si.edu/explore/exhibitions/afrofuturism [https://perma.cc/48NU-ZASM] (last visited May 11, 2024).

^{22.} Mark Dery, *Back to the Future: Interviews with Samuel R. Delany, Greg Tate, and Tricia Rose, in* FLAME WARS: THE DISCOURSE OF CYBERCULTURE 179, 180 (Mark Dery ed., 1994).

^{23.} See Remembering Afrofuturist Octavia Butler, NAT'L MUSEUM AFR. AM. HIST. & CULTURE, https://nmaahc.si.edu/explore/stories/remembering-afrofuturist-octavia-butler [https://perma.cc/B4EL-BKVT] (last visited May 11, 2024).

^{24.} See Dery, supra note 22, at 180.

^{25.} Octavia E. Butler, *The Lost Races of Science Fiction*, TRANSMISSION MAG. (1980), *reprinted in* Octavia E. Butler, *In 1980: Octavia Butler Asked, Why Is Science Fiction So White?*, GARAGE MAG. (Sept. 4, 2018, 10:30 AM) [https://perma.cc/GU92-9CY3].

^{26.} Id.

^{27.} See Alondra Nelson, Introduction: Future Texts, SOCIAL TEXT: AFROFUTURISM, Summer 2002, at 1, 9. Social Text is a journal of cultural theory. Social Text: About the Journal, DUKE U. PRESS, https://read.dukeupress.edu/social-text (last visited May 11, 2024).

^{28.} Afrofuturism, DUKE U. PRESS, https://www.dukeupress.edu/afrofuturism-1 (last visited May 11, 2024).

Afrofuturist narratives, then, are first and foremost about expanding the aperture of the reader's mind to include a sympathetic view of people of African descent and their plight. These narratives are also about the unsettling of the received wisdom of a natural racial hierarchy (that places people of African descent at the bottom), a questioning of existing power asymmetries, and an avenue for introducing alternative ways of organizing a legal and political economy. Several scholars have started to deploy Afrofuturism in their critiques of American law—this Essay joins that scholarly discussion.²⁹ Specifically, this Essay argues that Black Americans should not be disregarded as "sacrificial lambs" in the AI revolution but should be understood as the "miner's canaries" whose experiences reflect the potential dire consequences for all that arise from the unethical and exploitative practices in AI development. The Essay then argues for the adoption of the Afrofuturist concept of Ubuntu (the idea of interconnected personhood), which should prompt a linked-fate realization—that is, the notion that our fates are all tied. An Afrofuturist approach to the governance of AI technologies will lead to the adoption of practices that privilege equity by design to address the issues of exploitation and inequality arising from the AI revolution.

The Essay is organized as follows. In Part I, I discuss the notion of sacrificial lambs as a narrative device and highlight how it is tied to the ideology of innovation or "progress" at any price. I start in Section I.A with an examination of Ursula Le Guin's The Ones Who Walk Away from Omelas as an example of the trope of sacrificial lambs in a piece of colorblind science fiction and trace the use of sacrificial lambs as a storytelling device throughout history, with a particular focus on the Bible. In Section I.B, I juxtapose Le Guin's fiction with that of Derrick Bell, in whose works of fiction—The Space Traders being a prime example—the sacrificial lambs are not faceless or unnamed. Rather, they are rendered in vivid color as people of African descent. In Section I.C, I offer an alternative take to Derrick Bell's Space Traders that highlights an Ubuntu or linkedfate hypothesis (the idea that the fates of all humans are linked) as the path to racial justice in the future of work. In Part II, I contrast the trope of the sacrificial lamb with Guinier and Torres's notion of racialized Americans as the miner's canary for what ails our society and I surface examples of how Black workers are already being harmed in the AI revolution of work. This includes a description of Black African workers as the draught horses of the AI development machine in Section II.A, the rise of the use of AI Blackface and labor arrangements that I deem "virtual slavery" in Section II.B, and the dangers of automated hiring for perpetuating inequality through unlawful but discreet employment discrimination in Section II.C. In Part III, I deploy N. K. Jemisin's story The Ones Who Stay and Fight, which is a rebuttal of Le Guin's colorblind utopia/dystopia, to discuss steps that could be taken to ensure that the AI revolution is beneficial for all and does

^{29.} See, e.g., Bennett Capers, Afrofuturism and the Law, 9 CRITICAL ANALYSIS L., no. 1, 2022, at 1, 5; Ngozi Okidegbe, Of Afrofuturism, Of Algorithms, 9 CRITICAL ANALYSIS L., no. 1, 2022, at 35 (2022).

not discard Black people as sacrificial lambs. In Part III's subsequent sections, I then propose several theoretical frameworks for achieving this AI equity goal. For example, Section III.A embraces the Afrofuturist concept of Ubuntu with its focus on interconnected personhood. Section III.B calls for a focus on universal human vulnerability, which means looking to the figurative "canaries in the mine" as a reflection of our linked vulnerability and how bettering their conditions will benefit us all. Finally, Section III.C calls for equity by design by adopting design justice principles that center marginalized communities.

I. SACRIFICIAL LAMBS

The motif of the "sacrificial lamb" can be found in many ancient texts³⁰ and is powerful at describing, reinforcing, or dismantling existing power structures. Notably, this theme is a through line in the Bible. Starting in the first book of the Bible, Genesis, Abraham is asked by God to sacrifice his only son, Isaac.³¹ And Abraham, despite the fact that he and his wife had waited many years to bear their beloved child, Isaac, sets out to do so.³² This describes a power structure at play during Abraham's time—humans recognized that they were subordinate to the whims and caprices of gods, and human sacrifices were not an uncommon act meant to sway the gods in one's favor.³³ In the Old Testament of the Bible, the story of Isaac as a would-be sacrificial lamb at first reinforces this power structure—Abraham remains obedient to God even though he has no desire to sacrifice his son. But that power paradigm is shattered when God stays Abraham's hand and does not let him carry out the act of sacrificing his son.³⁴

^{30.} There are several mentions of human sacrifice in the Bible. In 2 *Kings* 16:3, Ahaz sacrifices his son. In 2 *Chronicles* 33:6, King Manasseh sacrifices his sons. *See generally* S. Farron, *Aeneas' Human Sacrifice*, 28 ACTA CLASSICA 21 (1985) (citing "references to human sacrifice by ancient Greek and then Pomen authors")

^{31. &}quot;Then God said, 'Take your son, your only son, Isaac, whom you love, and go to the region of Moriah. Sacrifice him there as a burnt offering on one of the mountains I will tell you about." *Genesis* 22:2 (New Int'l Version).

^{32.} Genesis 17:1–4, 16–19 (New Int'l Version); Genesis 22:9–10 (New Int'l Version) ("When they reached the place God had told him about, Abraham built an altar there and arranged the wood on it. He bound his son Isaac and laid him on the altar, on top of the wood. Then he reached out his hand and took the knife to slay his son.").

^{33.} In the Bible, Jeremiah criticizes the people of Israel and Judah who offer up their sons and daughters to the Ammonite god Molech in Jerusalem's Ben Hinnom Valley. *Jeremiah* 32:35 (New Int'l Version); *see Leviticus* 18:21 (New Int'l Version); *see also* Hershel Shanks, *First Person: Human Sacrifice to an Ammonite God?*, BIBLICAL ARCHAEOLOGY SOC'Y: BIBLE HIST. DAILY (Feb. 15, 2024), https://www.biblicalarchaeology.org/daily/ancient-cultures/daily-life-and-practice/first-person-human-sacrifice-to-an-ammonite-god/ [https://perma.cc/R67Q-MGRW] (noting that in 1955, the late Australian archaeologist John Basil Hennessy excavated a Late Bronze Age (thirteenth century B.C.E.) structure with charred bones that could have been a site for the human sacrifice referred to in the Bible); Anthony Leahy, *Death by Fire in Ancient Egypt*, 27 J. ECON. & SOC. HIST. ORIENT 199, 201–02 (1984) (illustrating instances of human sacrifices by fire in ancient Egypt).

^{34. &}quot;But the angel of the LORD called out to him from heaven, 'Abraham! Abraham!' 'Here I am,' he replied. 'Do not lay a hand on the boy,' he said. 'Do not do anything to him. Now I know that you fear God, because you have not withheld from me your son, your only son.'" *Genesis* 22: 11–12 (New Int'l Version).

This hails the beginning of the Christian tradition. It ushers in an era of a God that requires not human sacrifice but good citizenship and love.³⁵ However, the old notion of a human sacrifice has persisted in the human imagination. In the New Testament, Jesus is referred to several times as "sacrificing himself" for our sins.³⁶ He is referred to as "the lamb" (meaning the sacrificial lamb)³⁷ and as having been the ultimate sacrifice from God to redeem humans of sin.³⁸ This Essay argues that, unless we change its course, the AI revolution is poised to exploit or disregard Black people and other marginalized populations as sacrificial lambs. In this section, I explore the theme of the sacrificial lamb in literature, first as found in the science fiction of Ursula Le Guin, then in the Afrofuturist fiction of the legal scholar, Derrick Bell.

A. THOSE WHO WALK AWAY

Ursula Le Guin, a white American author, published the short story *The Ones Who Walk Away from Omelas* in 1973, in volume 3 of the anthology *New Dimensions*.³⁹ In 1974, it won one of the highest science fiction awards, the Hugo Award for Best Short Story.⁴⁰ Although Le Guin has referred to the doomed character in the story as "the scapegoat," I argue instead that this figure should best be understood as a "sacrificial lamb." I make this argument because central to the notion of a scapegoat is that the goat escapes.⁴² In Le Guin's story, there is no escape for the tragic character.⁴³ Furthermore, Le Guin herself notes that she took the idea from the Russian writer Fyodor Dostoevsky's *The Brothers Karamazov*, and that novel has allusions to the idea of a sacrificial lamb.⁴⁴

^{35.} See Psalm 40:6 (New Int'l Version) ("Sacrifice and offering you did not desire, but my ears you have pierced; burnt offerings and sin offerings you did not require."); Proverbs 21:3 (New Int'l Version) ("To do what is right and just is more acceptable to the LORD than sacrifice.").

^{36.} Hebrews 9:28 (New Int'l Version) ("[S]o Christ was sacrificed once to take away the sins of many people"); Mark 10:45 (New Int'l Version) ("For even the Son of Man did not come to be served, but to serve, and to give his life as a ransom for many."); 1 John 4:10 (New Int'l Version) ("This is love: not that we loved God, but that he loved us and sent his Son as an atoning sacrifice for our sins.").

^{37. &}quot;The next day John saw Jesus coming towards him and said, 'Look, the Lamb of God, who takes away the sin of the world!" John 1:29 (New Int'l Version).

^{38. 1} *John* 4:10 (New Int'l Version). One of the most iconic Bible verses is John 3:16—"For God so loved the world that he gave his one and only Son, that whoever believes in him shall not perish but have eternal life." *John* 3:16 (New Int'l Version).

^{39.} See generally Ursula K. Le Guin, The Ones Who Walk Away from Omelas, in 3 New DIMENSIONS 1 (Robert Silverberg ed., 1973).

^{40. 1974} Hugo Awards, Hugo Awards, https://www.thehugoawards.org/hugo-history/1974-hugo-awards/[https://perma.cc/3AQL-PPA9] (last visited May 11, 2024).

^{41.} Ursula K. Le Guin, *The Ones Who Walk Away from Omelas*, in The Wind's Twelve Quarters 224, 224 (1975).

^{42. &}quot;[Aaron] is to lay both hands on the head of the live goat and confess over it all the wickedness and rebellion of the Israelites—all their sins—and put them on the goat's head. He shall send the goat away into the desert in the care of a man appointed for the task. The goat will carry on itself all their sins to a solitary place; and the man shall release it in the desert." *Leviticus* 16:21–22 (New Int'l Version).

^{43.} See Le Guin, supra note 39, at 6.

^{44.} See LE GUIN, supra note 41, at 224; FYODOR DOSTOEVSKY, THE BROTHERS KARAMAZOV 258 (1880) ("Imagine that you are creating a fabric of human destiny with the object of making men happy

In Le Guin's story, the reader is transported to an unknown town during its Festival of Summer. ⁴⁵ Le Guin paints a portrait of a festive town bustling in merriment and good cheer. ⁴⁶ The horses are resplendent with streamers of silver, gold, and green braided into their manes. ⁴⁷ And there is joy. ⁴⁸ As Le Guin describes them, the people of Omelas are an egalitarian society; there are neither kings nor slaves. ⁴⁹ There is no violence and no guilt. ⁵⁰ It is a utopia. But as Le Guin soon reveals, this utopia comes at a cost. The price for the town's happiness is the pain and suffering of a solitary figure—held captive in a broom closet. Le Guin describes the plight of this pitiful figure and the circumstances in which it has been kept:

The room is about three paces long and two wide: a mere broom closet or disused toolroom. In the room a child is sitting. It might be a boy or a girl. It looks about six, but actually is nearly ten. It is feebleminded. Perhaps it was born defective, or perhaps it has become imbecile through fear, malnutrition, and neglect. It picks its nose and occasionally fumbles vaguely with its toes or genitals, as it sits hunched in the corner farthest from the bucket and the two mops. It is afraid of the mops. It finds them horrible. It shuts its eyes, but it knows the mops are still standing there; and the door is locked; and nobody will come. The door is always locked; and nobody ever comes, except that sometimes—the child has no understanding of time or interval—sometimes the door rattles terribly and opens, and a person, or several people, are there. One of them may come in and kick the child to make it stand up. The others never come close, but peer in at it with frightened, disgusted eyes. The food bowl and the water jug are hastily filled, the door is locked, the eyes disappear. The people at the door never say anything, but the child, who has not always lived in the toolroom, and can remember sunlight and its mother's voice, sometimes speaks. "I will be good," it says. "Please let me out. I will be good!" They never answer. The child used to scream for help at night, and cry a good deal, but now it only makes a kind of whining, "eh-haa, eh-haa," and it speaks less and less often. It is so thin there are no calves to its legs; its belly protrudes; it lives on a half-bowl of cornmeal and grease a day. It is naked. Its buttocks and thighs are a mass of festered sores, as it sits in its own excrement continually.51

in the end, giving them peace and rest at last, but that it was essential and inevitable to torture to death only one tiny creature—that baby beating its breast with its fist, for instance—and to found that edifice on its unavenged tears, would you consent to be the architect on those conditions? Tell me, and tell the truth.").

^{45.} LE GUIN, supra note 41, at 225.

^{46.} See id.

^{47.} *Id*.

^{48.} Id. at 226.

^{49.} *Id*.

^{50.} Id. at 227.

^{51.} Le Guin, *supra* note 39, at 5–6.

An important point that Le Guin makes is that all the people of Omelas know that the child is suffering there, and that most accept this suffering as a necessary sacrifice for their own happiness. Le Guin writes:

They all know that it has to be there. Some of them understand why, and some do not, but they all understand that their happiness, the beauty of their city, the tenderness of their friendships, the health of their children, the wisdom of their scholars, the skill of their makers, even the abundance of their harvest and the kindly weathers of their skies, depend wholly on this child's abominable misery.⁵²

Glaringly missing in Le Guin's story is any concept of race or intersectional identity. We do not know the racial identity of the people of Omelas or that of the child described. We do not even know if the child is male or female. Are most of the people of Omelas able to accept the child's suffering because of a difference (and perceived inferiority) in race, religion, caste, gender, etc.? Why do the people of Omelas come to believe that the assurance of their happiness lies in the deprivation of this child? Furthermore, the story offers no possibility of succor for the child—the denizens of Omelas who are disturbed by the arrangement merely walk away. Le Guin's story is an example of colorblind storytelling that fails to lay bare the roots of inequality or indifference to suffering. Thus, her story stands in direct contrast to Derrick Bell's *Space Traders*, which points a finger directly at the racial cause for such indifference.

B. THOSE WHO ARE GIVEN AWAY

The Afrofuturist fiction of the American legal scholar Derrick Bell diverges from Ursula Le Guin's elliptical storytelling and grounds its story in the American history of racial oppression. Informed by historical examples of who may be considered the sacrificial lamb in the United States, Bell's fiction names its sacrificial lambs as American citizens of African descent.⁵⁴ The early history of the United States is rife with the accepted suffering of those considered different and inferior for the benefit of those deemed their superiors. For example, the United States Constitution barred Congress from outlawing the Transatlantic Slave Trade for twenty years.⁵⁵ It is widely understood that slavery in America played a large part in the economic growth of the nation.⁵⁶ Also, the cultural

^{52.} *Id.* at 6.

^{53.} Id. at 7-8.

^{54.} See Derrick Bell, The Space Traders, in Faces at the Bottom of the Well: The Permanence of Racism, supra note 3, at 158, 160.

^{55.} See U.S. CONST. art. I, § 9, cl. 1; id. art. V; see also id. art. I, § 2, cl. 3 ("Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other Persons.").

^{56.} See Steven Mintz, Historical Context: Was Slavery the Engine of American Economic Growth?, GILDER LEHRMAN INST. AM. HIST., https://web.archive.org/web/20230713020326/https://www.

concept of Manifest Destiny emboldened early settlers from Europe to spread out across the American continent.⁵⁷ Thus, Native Americans (the Cherokee, Choctaw, Chickasaw, Creek, and Seminole) in places now known as Georgia, Tennessee, Alabama, North Carolina, and Florida were displaced from their agriculturally rich ancestral homelands by a forced march for hundreds of miles, that is, the "Trail of Tears," and corralled into the arid plains of Oklahoma.⁵⁸

Similarly, Bell's *The Space Traders* opens with a proposed displacement. Ships from outer space have landed in the United States of America.⁵⁹ The aliens onboard the ship have a proposition for the American people. The aliens would give them treasures and advanced technologies, but the American people must sacrifice all Black Americans in exchange:

Th[eir] mammoth vessels carried within their holds treasure of which the United States was in most desperate need: gold, to bail out the almost bankrupt federal, state, and local governments; special chemicals capable of unpolluting the environment, which was becoming daily more toxic, and restoring it to the pristine state it had been before Western explorers set foot on it; and a totally safe nuclear engine and fuel, to relieve the nation's all-but-depleted supply of fossil fuel. *In return, the visitors wanted only one thing—and that was to take back to their home star all the African Americans who lived in the United States.* ⁶⁰

Thus, Bell sets up a scenario in which African Americans are to be the sacrificial lamb that is exchanged for technological progress.

Also, a rather pointed detail in Bell's story is the date of the requested exchange: January 17th, that is, the American national holiday observed as Martin Luther King, Jr. Day.⁶¹ In the American imagination, Dr. King has been transformed from a civil rights leader who advocated fiercely and adamantly for economic justice to something of a folksy orator. Dr. King's trenchant *Letter from Birmingham Jail* calling out liberal racism in the form of incremental justice or

gilderlehrman.org/history-resources/teaching-resource/historical-context-was-slavery-engine-american-economic-growth (last visited May 11, 2024).

^{57.} See Manifest Destiny and Indian Removal, SMITHSONIAN AM. ART MUSEUM, https://americanexperience.si.edu/wp-content/uploads/2015/02/Manifest-Destiny-and-Indian-Removal.pdf [https://perma.cc/J9UQ-XZY2] (last visited May 11, 2024).

^{58.} In 1830, President Andrew Jackson signed the Indian Removal Act into law. Indian Removal Act, Pub. L. No. 21-148, 4 Stat. 411 (1830). The result of this Act was the compelled relocation of thousands of Native Americans from land in the cotton kingdom east of the Mississippi to the "Indian colonization zone" located in what is now Oklahoma. Dianna Everett, *Indian Territory*, OKLA. HIST. SOC'Y: THE ENCYC. OF OKLA. HIST. & CULTURE (Jan. 15, 2010), https://www.okhistory.org/publications/enc/entry? entryname=INDIAN%20TERRITORY [https://perma.cc/4W8Z-5W2S]; *see Indian Removal*, PBS: AFRICANS IN AM., https://www.pbs.org/wgbh/aia/part4/4p2959.html [https://perma.cc/C2ST-V9J3] (last visited May 11, 2024); *Manifest Destiny and Indian Removal*, *supra* note 57. *See generally* AMERICA'S EXILES: INDIAN COLONIZATION IN OKLAHOMA (Arrell Morgan Gibson ed., 1976).

^{59.} BELL, *supra* note 54, at 158.

^{60.} Id. at 159-60 (emphasis added).

^{61.} Id. at 160.

slow integration⁶² has receded in the collective memory to be replaced by his more anodyne "I Have a Dream" speech on racial harmony.⁶³ Thus, by picking that date, Bell is throwing down the gauntlet. If Dr. King's memory is truly cherished as emblematic of the American ideal of racial solidarity, would the American people stand by their African-American neighbors and refuse to give them up—especially on Martin Luther King, Jr. Day?

Akin to Le Guin's story where there is no relief for the suffering child, Bell offers a dispiriting answer. In Bell's tale, most American citizens are in favor of the trade.⁶⁴ Not surprisingly, the government frames the exchange in the rhetoric of sacrifice. A spokesperson is exhorted to "talk about patriotism, about the readiness of black people to make sacrifices for this country."⁶⁵ Some Americans do not agree with the trade on both humanistic⁶⁶ and other less altruistic grounds.⁶⁷ But at the end, the majority wins out and African Americans are relinquished to the aliens:

The last Martin Luther King holiday the nation would ever observe dawned on an extraordinary sight. In the night, the Space Traders had drawn their strange ships right up to the beaches and discharged their cargoes of gold, minerals, and machinery, leaving vast empty holds. Crowded on the beaches were the inductees, some twenty million silent black men, women, and children, including babes in arms.⁶⁸

C. THOSE WHO RETURN

Bell's ending to *The Space Traders* has been categorized as bleak, and he has been accused of promoting racial pessimism.⁶⁹ Thus, several scholars have

^{62.} See generally Martin Luther King, Jr., The Negro Is Your Brother, ATL. MONTHLY, Aug. 1963, at 78 (becoming commonly known later as "Letters from Birmingham Jail").

^{63.} See generally Martin Luther King Jr., I Have a Dream, Speech at the March on Washington (Aug. 28, 1963) (transcript available at https://www.gilderlehrman.org/sites/default/files/inline-pdfs/king.dreamspeech.excerpts.pdf [https://perma.cc/7PH7-BCH6]).

^{64.} BELL, supra note 54, at 162.

^{65.} Id. at 172.

^{66.} Id. at 186. Jewish-American leaders rally against the trade. Id.

^{67.} *Id.* at 181. Corporate and business leaders objected to the trade because it would represent a loss of consumer capital. *Id.*

^{68.} Id. at 194.

^{69.} See Derrick A. Bell, Jr., Comment, Brown v. Board of Education and the Interest-Convergence Dilemma, 93 HARV. L. REV. 518, 523 (1980) ("Translated from judicial activity in racial cases both before and after Brown, this principle of 'interest convergence' provides: The interest of blacks in achieving racial equality will be accommodated only when it converges with the interests of whites. However, the fourteenth amendment, standing alone, will not authorize a judicial remedy providing effective racial equality for blacks where the remedy sought threatens the superior societal status of middle and upper class whites."); see also Richard Delgado, Derrick Bell's Racial Realism: A Comment on White Optimism and Black Despair, 24 Conn. L. Rev. 527, 528 (1992); cf. JUSTIN DRIVER, THE SCHOOLHOUSE GATE: PUBLIC EDUCATION, THE SUPREME COURT, AND THE BATTLE FOR THE AMERICAN MIND 240–60 and passim (2018) (implying that the interest convergence paradigm could be a positive strategy for racial reconciliation because the Supreme Court's decisions, at times, align with societal interests that can advance civil rights).

undertaken the project of rewriting a more positive ending for *The Space Traders*. Missing from those retellings are tangible considerations for how we, as a society, move towards regarding Black people as miner's canaries rather than sacrificial lambs. Consider, for example, Richard Delgado and Jean Stefancic's rewrite that paints an optimistic picture of reconciliation and harmony among white and Black people. In their retelling, the aliens' proposition is met with a different response. Delgado and Stefancic write:

Citizens met in small groups to discuss refusal of the offer. "We may have to tighten our belts, but it's better than selling our souls," most agreed. Blacks and whites crossing in the streets met each other's glances and smiled. Neighbors who had never met or spoken got together across color lines and embraced. Schoolchildren, urged on by their teachers, wrote thousands of letters opposing the trade. The referendum held on the twelfth day was but a formality: The vote was 93 percent against the trade, seven for. America had achieved catharsis. Most vowed never again to allow relations between the races to deteriorate to their previous sorry level.⁷¹

Delgado and Stefancic note that this alternate ending is more plausible and point to "abolition, the Underground Railway, *Brown v. Board of Education*, the Great Society, the Marshall Plan, the Civil Rights Act of 1964, Selma, Alabama, and the March on Washington" as examples of how "equality and brotherhood are powerful chords resonating throughout our culture and history."⁷²

Bell's story is salient today in the wake of promises that AI technologies will make work easier and business more lucrative.⁷³ Even after the examples of racial integration that Delgado and Stefancic nod to, we have seen a retrenchment in civil rights like the recent Supreme Court decision in *Students for Fair Admissions (SFFA) v. President & Fellows of Harvard College* where the Court severely curtailed the use of affirmative action to redress educational disparities stemming from race.⁷⁴ While Bell's story has been characterized as too pessimistic, could Delgado and Stefancic rightfully be accused of the opposite—of being too optimistic?⁷⁵ Here, I imagine another ending to Bell's story: one in which the

^{70.} See, e.g., Adrien Katherine Wing, Space Traders for the Twenty-First Century, 11 BERKELEY J. AFR.-AM. L. & POL'Y 49, 61–70 (2009); Delgado & Stefancic, supra note 1, at 324–26.

^{71.} Delgado & Stefancic, supra note 1, at 326 (footnote omitted).

^{72.} Id. at 327.

^{73.} See Lydia Dishman, Five Ways AI Will Make Your Job Easier, FAST CO. (June 7, 2018), https://www.fastcompany.com/40580330/five-ways-ai-will-make-your-job-easier [https://perma.cc/PR4P-U8Z5]; Michael Chui & Lareina Yee, AI Could Increase Corporate Profits by \$4.4 Trillion a Year, According to New Research, MCKINSEY GLOB. INST. (July 7, 2023), https://www.mckinsey.com/mgi/overview/in-the-news/ai-could-increase-corporate-profits-by-4-trillion-a-year-according-to-new-research [https://perma.cc/6DBP-XYPN].

^{74. 600} U.S. 181, 230-31 (2023).

^{75.} This is not to argue that Black Americans have not experienced any notable improvements in life experience since the end of slavery in the United States and the end of *de jure* segregation. Rather, it is to say that there is still room for more progress. *See*, *e.g.*, Randall Kennedy, THE PERSISTENCE OF THE COLOR LINE (2011) (providing a clear-eyed view of the racial politics of Barack Obama's presidency as

aliens are not as alien as they appear, and we come to a major realization as a society, but not without some necessary reflection first.

It was just another Tuesday when they came. A Tuesday in July with clear blue skies and bright sunshine. First, one large aerial craft shaped like a pyramid appeared over the Lincoln Memorial Reflecting Pool in Washington, D.C. The aircraft was an obsidian black color, the sort of dark that reflected the light. The bottom of the pyramid opened, and a small ship shaped like a chariot in the same color descended from it. The two beings who stood in the chariot were shaped like human beings, except that their skin glimmered like water, in rippling iridescent waves. Their clothing was reminiscent of the ancient cloth found in many parts of Africa—it was brown with several abstract symbols stamped on it in black. If you looked closer, the symbols arranged themselves in patterns—some representing mathematical formulae. The aliens had an outstanding tale to tell. Many eons ago, they had traveled from their home planet Kebula, which was many light years away, and seeded the Earth with several genetically modified members of their community to populate the Earth. At that time, the Earth was still Pangea, one large supercontinent.⁷⁶ The genetically modified pioneers looked the same as each other. Rather than being ninety percent water like the original Kebulans, the Earth pioneers were genetically modified to be only sixty percent water by the time they reached adulthood. Furthermore, in preparation to withstand the Earth sun's ultraviolet rays, other modifications had been made: the darker skin that would not burn easily, the soft wooly hair that protected the scalp from the sun's harmful rays. Over time, as the continents separated and the conditions on each started to evolve, the Earth pioneers also continued to evolve to match their environmental conditions. The representative for the Kebulans spoke:

We return to you from Kebula because it is time to take action. For millennia, we have watched you through the aid of aerial devices (what you call UFOs), and we have come to understand that you are on a collision course to destruction. We have witnessed you come to hate one another based on the slightest changes, including perceived genetic differences in skin color, hair texture, facial features, and even the different stories you have developed to explain your existence after your ancestors forgot about us. We are distressed by your continued predilection towards hate, crime, warfare, and environmental disaster. Thus, we have a proposition for you: please select all the people you think removing would help improve your society and give them to us. In return, we will share our advanced technologies, including AI that can complete the most complex tasks, renewable clean energy, and unlimited food supply. The only condition is that you cannot ask us what will happen to the people you hand over to us, and you must be prepared to never see them again.

opposed to the frequent portrayal of that achievement as a racial kumbaya moment); *c.f.* Kennedy, *supra* note 18 ("The notion that there has been no appreciable advancement by Black people since 1950 is ridiculous.").

^{76.} See TED NIELD, SUPERCONTINENT: TEN BILLION YEARS IN THE LIFE OF OUR PLANET (2009) (describing Pangea as a supercontinent).

There was a flurry of meetings to decide what to do. Several interest groups jockeyed to get the President's ear. Finally, the President called his nine advisors to the situation room to come up with a plan. They poured over the various submitted statements and proposals. A group calling themselves BlackOUT had submitted the following statement:

People of African descent have never been fully integrated into American society despite decades of effort and money wasted on welfare benefits. There continues to be a Black—white achievement gap,⁷⁷ our prisons are filled with people of African descent,⁷⁸ and many Black people still live below the poverty line.⁷⁹ They have not contributed to our society in any way. We should send them to the aliens.

The President took a vote of his advisors, and all but one (the lone Black man) agreed.

Then, a second statement was read from another group calling themselves "Men Empowerment Nationalists" (MEN):

Women have always been the weaker sex, both physically and intellectually. Every significant technological advance we have made in our society has been because of men. It is men that do all the hard labor. Women are parasites in our society who contribute nothing apart from childbearing. They have placed themselves in the role of victim to disempower men. We already have humanoid robots to do all the housework. Soon, we will perfect the technology for artificial wombs. We will no longer need women for the survival of the human race. We should give all the women over to the aliens.

The men on the council shifted uncomfortably in their seats as this statement was read, as all but one of them was married to a woman. One man made the crude joke that his house robot would not be able to perform all the "functions" he needed. The others laughed nervously. One man, who was in the midst of a contentious divorce, said, "I think we should seriously consider this." The lone

^{77.} See Shervin Assari, Abbas Mardani, Maryam Maleki, Shanika Boyce & Mohsen Bazargan, Black-White Achievement Gap: Role of Race, School Urbanity, and Parental Education, 12 PEDIATRIC HEALTH MED. & THERAPEUTICS 1, 2, 6–7 (2021) (noting the existence of the Black-white achievement gap and observing the role of variables such as parental education, socio-economic status, and attendance of an urban or suburban school).

^{78.} See ASHLEY NELLIS, SENT'G PROJ., THE COLOR OF JUSTICE: RACIAL AND ETHNIC DISPARITY IN STATE PRISONS 5 (2021), https://www.sentencingproject.org/reports/the-color-of-justice-racial-and-ethnic-disparity-in-state-prisons-the-sentencing-project/ [https://perma.cc/4EKP-SSUR] ("Black Americans are incarcerated in state prisons at a rate that is roughly five times the rate of white Americans.").

^{79.} See Em Shrider, Poverty Rate for the Black Population Fell Below Pre-Pandemic Levels, U.S. CENSUS BUREAU (Sept. 12, 2023), https://www.census.gov/library/stories/2023/09/black-poverty-rate. html [https://perma.cc/S8LG-ZMBT] ("The 2022 official poverty rate for Black adults ages 18 to 64 was 14.9%, numerically a historic low (though not statistically different from 2019). The official poverty rate for Black adults 65 and older was 17.6%, not statistically different from 2021. . . . Despite the overall decline in the poverty rate for Black individuals, racial inequalities persist. . . . [T]he Black population [is] overrepresented in poverty.").

woman advisor sat silently. When they took a vote, most of the men and the lone white woman advisor voted to keep the women.

Then, another statement from a group calling themselves the "United Genetic Empiricists for Natural Evolution and Selection" (UGENES) was read:

We believe that many of our societal ills, such as crime and unemployment, are wrought by faulty or vestigial genetic programming. As seen in Buck v. Bell, the federal government had earlier attempted to weed out genetically inferior citizens from the gene pool but were stymied by misguided unscientific views about human autonomy. We have also seen advances in human genetic editing processes, such as CRISPR, that have been used by those with the monetary means and forethought to design babies free of the deleterious genetic mutations of their parents. Soon, we will have perfected the technology for human cloning, meaning we could make exact replicas of ourselves. We should want only genetically sound individuals to take advantage of this opportunity. Today, we have a chance to purify the human gene pool. We suggest that the government collaborate with health data brokers to pinpoint all citizens with genetic defects and hand them over to the aliens.

The President and his advisors pondered over this last statement for some time. One advisor thought of his beloved son, Joey, who had been diagnosed as being on the autism spectrum. Joey's need for rigid routines could prove difficult at times, but Joey was also incredibly deadpan funny and was the most conscientious worker he knew. Another thought of his daughter, born with spina bifida, who was confined to a wheelchair. His daughter was the most caring and empathetic person he knew. She was in pain for much of her life, but she always seemed more concerned about other people's suffering. One advisor asked a question: "What do we consider a genetic defect? Dimples are technically a genetic defect, but we're not going to give away people with dimples, are we?" This sparked a long and fractious discussion about what is genetically superior and what is not. Finally, the President was tired. He rapped on the table and said:

I think the only group we can agree on sending are people of African descent. Let's just send them and be done with it. Given that we now have Advisory Democracy, we don't need a national election to decide this. We can take a final vote among our members here, and as long as we have a fifty-one percent majority voting 'yes,' the matter will be concluded.

The President then called for a final vote on the proposal to sacrifice the Black citizens. But something had changed. During the discussion of the statement of the MEN group, one man who deeply loved his wife felt how keenly he would miss

^{80.} Cf. 247 U.S. 200, 207–08 (1927) (upholding a state's sterilization law as constitutional).

^{81.} Mike Smith, *CRISPR*, NAT'L HUM. GENOME RSCH. INST. (May 9, 2024), https://www.genome.gov/genetics-glossary/CRISPR [https://perma.cc/8TBT-2LTS].

^{82.} Cf. Clyde Haberman, Scientists Can Design 'Better' Babies. Should They?, N.Y. TIMES (June 10, 2018), https://www.nytimes.com/2018/06/10/us/11retro-baby-genetics.html.

her if she were suddenly gone. Prior to his vote, another advisor thought of the imaginable loss of his wheelchair-bound, beloved daughter, whom society considered a burden. Another advisor's heart ached for his neurodivergent son, shunned from social events because he was too rigid and because his sense of humor was sometimes misinterpreted. Another's heart swelled at the thought of his new baby with dimples who some might consider as having a genetic defect. The lone white woman advisor thought about how some of the men had voted to give up all women. At the end, when the votes were tallied, there were only three "yeas" and six "nays" to sacrifice American citizens of African descent.

The President was incensed. He was also tired and wanted to retreat to the security of his underground mansion where he could play virtual reality games and only appear in public three times a year to give speeches. He decided to take unilateral action. He requested a meeting with the aliens and shared the events and outcome of the meeting with his advisors. He then said, "I still think the group to give up are Black Americans, but I'm curious. Can you tell me what will happen to them?" At this time, the aliens revealed a secret: their plan was to take whatever group American society gave up back to their home planet where an area had been retrofitted to look like Earth. Those individuals would live out their lives there in peace. They had decided to do this because whatever group was given up would be the most persecuted group. The President was shocked: "And what would happen to the people left behind?" The alien representative answered: "We will give you all the materials we had promised, but frankly it won't make much of a difference for your survival—your country is on the path to self-destruction. The United States and most of the people in it will no longer exist in fifteen years." The President was aghast at the news. He pleaded with the aliens to change their mind, but the aliens were resolute.

Soon, the aliens released a radio broadcast that went out to everyone's technological devices, announcing their decision and revealing the secret. Black Americans sobbed with relief. Some remembered and sang the ancient song: "Swing low, sweet chariot, coming for to carry me home." Many sang in a bittersweet melody. As relieved as they were to be going to a better place, they did not want to leave their neighbors to their demise. Many Black Americans petitioned the aliens to change their minds and take everyone. But the aliens refused.

The day of departure arrived, a clear Monday morning. Dressed in their Sunday best or most Afrocentric garments, the Black Americans walked solemnly to the Lincoln Memorial where the aliens awaited them. Some Black Americans had, for various reasons, petitioned the aliens to allow them to stay behind and all such petitions had been granted. At the stroke of noon, the Black Americans climbed into the chariots that had descended from the mothership. The chariots lifted them into the mothership, and they were transported back to Kebula.

^{83.} Swing Low Sweet Chariot, a Story, AF. AM. REGISTRY, https://aaregistry.org/story/swing-low-sweet-chariot-a-story/ [https://perma.cc/Q3PE-LLLS] (last visited May 11, 2024).

II. CANARIES IN THE MINE

Like the trope of the sacrificial lamb, the concept of a "miner's canary" is found in both literary and legal texts. ⁸⁴ The metaphor of the miner's canary is that the suffering of the most vulnerable groups, the canary, can alert us to latent adverse conditions. ⁸⁵ This is what the advisors in my story should have immediately realized when Black Americans were judged as worthless. But it took the creep of that same judgement onto their own groups for them to realize the collective inhumanity of even weighing the proposal.

The notion of a miner's canary shares some commonalities with the concept of a sacrificial lamb, but there are also important differences between the two. In both cases, the subject (whether the lamb or the canary) is exposed to danger because of its vulnerability. But a significant difference is that the lamb is expected to die, while the hope is that the canary does not. More significantly, the death of the lamb (even if regrettable) is accepted as unavoidable or even as a desired outcome to achieve a positive result—that is, preventing further deaths. ⁸⁶ On the other hand, the death of the canary is not expected, and it is treated as a warning. The death of the canary is cause for alarm, and an opportunity to change course and find a true solution to adverse circumstances. Conversely, the death of the lamb is a false solution, steeped in superstition, that provides no true deliverance from the dire straits. Lani Guinier and Gerald Torres write:

Race, for us, is like the miner's canary. Miners often carried a canary into the mine alongside them. The canary's more fragile respiratory system would cause it to collapse from noxious gases long before humans were affected, thus alerting the miners to danger. The canary's distress signaled that it was time to get out of the mine because the air was becoming too poisonous to breathe.⁸⁷

In this Part, I discuss how, rather than merely serving as disposable sacrificial lambs in the AI work revolution, Black workers are canaries in the mine that alert us to the underlying problems of (1) labor exploitation, (2) the erosion of personhood, and (3) obfuscated unlawful discrimination, which threaten to undermine the American democratic ideals of self-determination and equal opportunity for all.

^{84.} See, e.g., LANI GUINIER & GERALD TORRES, THE MINER'S CANARY: ENLISTING RACE, RESISTING POWER, TRANSFORMING DEMOCRACY 11 (2002) (noting, in an iconic piece of legal scholarship, that the miner's canary can be seen as a metaphor for how race conditions reveal the tears in the fabric of society); see also Rennard Strickland, Indian Law and the Miner's Canary: The Signs of Poison Gas, 39 CLEV. St. L. Rev. 483, 483–84 (1991) (noting how the treatment of Native Americans "acts as a barometer, a miner's canary for society"); José David Saldívar, Making Democracy Surreal: Political Race and the Miner's Canary, 20 Am. LITERARY HIST. 609, 617–18 (2008) (affirming Guinier and Torres's arguments that the historical examples of miner's canary have a "distinctive feature . . . located in the common struggle for socio-political control of American historicity").

^{85.} GUINIER & TORRES, supra note 84, at 11–12.

^{86.} See supra Part I.

^{87.} GUINIER & TORRES, supra note 84, at 11 (footnote omitted).

A. THE DRAUGHT HORSES OF THE AI REVOLUTION

In January of 2023, it came to light that OpenAI, the corporation responsible for creating ChatGPT, ⁸⁸ had been paying its workers in Kenya as little as \$1.32 to \$2 per day to moderate harmful content for the chatbot's training data. ⁸⁹ The paltry pay was in exchange for the workers' tasks of viewing and labeling text "pulled from the darkest recesses of the internet." Some of the text "described situations in graphic detail like child sexual abuse, bestiality, murder, suicide, torture, self harm, and incest."

OpenAI is not alone in adopting this business model of using African workers for this unpleasant yet necessary job. Sama, the San Francisco-based outsourcing firm that OpenAI used in Kenya, had also procured African workers for Google, Meta, and Microsoft, ⁹² which are all companies developing AI technologies. ⁹³ Despite what the low pay of African workers might suggest, "[t]he work was vital for OpenAI." This is because earlier iterations of ChatGPT were "prone to blurting out violent, sexist and racist remarks"—a proximate result of the fact that the AI had been trained on data scraped directly from the internet. ⁹⁵ The internet is rife with hate speech and other toxic speech. ⁹⁶ These African workers were essential for training ChatGPT to recognize objectionable text and filter such text out of its results. Yet, these workers are omitted from the story of ChatGPT's development.

This story reveals a troubling side to the AI revolution that I first noted in another article: that Global South workers are the hidden draught horses for the AI machine. The labor of Global South workers is integral to the technological leaps that make the AI revolution lucrative for business, yet their contributions are obscured and minimized. An article in *Time Magazine* describes the reality:

^{88.} Will Douglas Heaven, *The Inside Story of How ChatGPT Was Built from the People Who Made It*, MIT TECH. REV. (Mar. 3, 2023), https://www.technologyreview.com/2023/03/03/1069311/inside-story-oral-history-how-chatgpt-built-openai/ [https://perma.cc/G45C-NCSD].

^{89.} Billy Perrigo, Exclusive: OpenAI Used Kenyan Workers on Less than \$2 per Hour to Make ChatGPT Less Toxic, TIME (Jan. 18, 2023, 7:00 AM), https://time.com/6247678/openai-chatgpt-kenyaworkers/ [https://perma.cc/39Z9-V4GP].

^{90.} Id.

^{91.} Id.

^{92.} Id.

^{93.} See Rachel Hespell, Our 10 Biggest AI Moments So Far, GOOGLE: THE KEYWORD (Sept. 26, 2023), https://blog.google/technology/ai/google-ai-ml-timeline/ [https://perma.cc/8QEX-X56C] (providing a timeline of Google's AI development efforts); AI Research by Meta: Seamless Communication, META, https://ai.meta.com [https://perma.cc/Z76Y-6AZ2] (last visited May 12, 2024) (describing Meta's AI development); Microsoft AI, MICROSOFT, https://news.microsoft.com/ai/ [https://perma.cc/7YED-566D] (last visited May 12, 2024) (detailing Microsoft's AI development).

^{94.} Perrigo, supra note 89.

^{95.} Id.

^{96.} See id.

^{97.} See Ifeoma Ajunwa, Race, Labor, and the Future of Work, in THE OXFORD HANDBOOK OF RACE AND LAW IN THE UNITED STATES (Devon Carbado et al. eds.) (forthcoming) (manuscript at 1–2, 13–14) (describing how Global South workers are employed by Global North technology companies to "ensure that apps run smoothly" and moderate content).

Computer-generated text, images, video, and audio will transform the way countless industries do business, the most bullish investors believe, boosting efficiency everywhere from the creative arts, to law, to computer programming. But the working conditions of data labelers reveal a darker part of that picture: that for all its glamor, AI often relies on hidden human labor in the Global South that can often be damaging and exploitative. These invisible workers remain on the margins even as their work contributes to billion-dollar industries.⁹⁸

The stories of Kenyan workers should alert us to the plight of content moderators everywhere. It should direct our attention to the limits of the extraterritoriality of American labor and employment protections⁹⁹—a legal anachronism given the existence of multinational corporations—which holds dire human rights consequences for Global South workers.¹⁰⁰ It should remind us that many workers in America and throughout the world toil without the safety net of accessible mental health services even though they must confront disturbing images as part of their work.¹⁰¹ This labor issue is not merely confined to the AI revolution. For instance, the COVID-19 pandemic saw a rise in the suicide of frontline workers, such as doctors and nurses, who lacked the support of adequate mental health services to address the scale of human suffering and death they witnessed.¹⁰² AI technologies not only present mentally challenging situations for the worker, but they can also be deployed in ways that degrade the worth and personhood of the worker. That Global South workers (Black and

^{98.} Perrigo, supra note 89.

^{99.} See Alina Veneziano, The Extraterritoriality of U.S. Employment Laws: A Story of Illusory Borders and the Indeterminate Applications of U.S. Employment Laws Abroad, 41 BERKELEY J. EMP. & LAB. L. 121, 124–25 (2020) (noting the limits of the extraterritoriality of American employment laws); James Michael Zimmerman, Extraterritorial Application of Federal Labor Laws: Congress's Flawed Extension of the ADEA, 21 CORNELL INT'L L.J. 103, 106 (1988) ("United States labor laws, however, have generally been an exception to extraterritorial application."); see also Fair Labor Standards Act Advisor, U.S. DEP'T LAB.: ELAWS ADVISORS, https://webapps.dol.gov/elaws/whd/flsa/scope/screen9.asp [https://perma.cc/6QZQ-P3R8] (last visited May 13, 2024) ("The [Fair Labor Standards Act (FLSA)] applies to employment within any state of the United States, the District of Columbia or any territory or possession of the United States. An employee working in a foreign country is not protected by the FLSA even though the employer has its main office in the United States.").

^{100.} See Ajunwa, supra note 97, at 13–14.

^{101.} See Miriah Steiger, Timir J. Bharucha, Sukrit Venkatagiri, Martin J. Riedl & Matthew Lease, The Psychological Well-Being of Content Moderators: The Emotional Labor of Commercial Moderation and Avenues for Improving Support, PROC. 2021 CHI CONF. ON HUMAN FACTORS COMPETING SYSTEMS, 2021, at 1, 3, https://crowd.cs.vt.edu/wp-content/uploads/2021/02/CHI21_final__The_Psychological_Well_Being_of_Content_Moderators-2.pdf [https://perma.cc/6L73-BSJ6]. See generally SARAH T. ROBERTS, BEHIND THE SCREEN: CONTENT MODERATION IN THE SHADOWS OF SOCIAL MEDIA (2019) (detailing the psychologically disturbing materials that content moderators must confront).

^{102.} See Juan Jesús García-Iglesias, Juan Gómez-Salgado, Francisco Javier Fernández-Carrasco, Luciano Rodriguez-Díaz, Juana María Vázquez-Lara, Blanca Prieto-Callejero & Regina Allande-Cussó, Suicidal Ideation and Suicide Attempts in Healthcare Professionals During the COVID-19 Pandemic: A Systematic Review, 10 Frontiers Pub. Health, 2022, at 1, 17.

Brown workers) should bear the burden of this work raises issues of racial capitalism and economic justice. 103

B. AI BLACKFACE AND VIRTUAL SLAVERY

One question the AI revolution raises is whether it will truly be emancipatory for workers or rather usher in other means of exploitation and enslavement. The phenomena of what I term "AI Blackface" and "virtual slavery" should alert us to the ways that AI technologies may be used to displace, exploit, or disempower creative workers. Consider this: in 2017, Shudu, a Black model, became popular on Instagram, quickly amassing followers, modeling for fashion houses like Fenty Beauty and Balmain, appearing in Vogue, and scoring brand deals. 104 But she had two secrets: First, Shudu Gram was not a real person—she was an AI-created image. 105 Second, Shudu was created by a twenty-eight-year-old white man named Cameron-James Wilson. 106 I term Wilson's creation of a Black woman avatar for commercial purposes, "AI Blackface." That Shudu, a Black AI model, was able to swiftly gain the attention, acclaim, and monetary rewards that thousands of real-life Black models can merely dream of should give us pause. The idea that any money earned by the Black AI model Shudu could go directly to her creator, a white man, should be further cause for concern. Was this merely an elaborate example of AI Blackface? If there was no actual Black person behind Shudu, isn't Wilson merely appropriating Blackness for capital gains in the same manner as the legendary blackface performer Thomas D. Rice, also known as "Jim Crow"?107 What does this mean for the economic survival of human Black models when fashion houses can choose to ignore them and turn to AI Black models?

^{103.} See Nancy Leong, Racial Capitalism, 126 HARV. L. REV. 2151, 2152 (2013) (arguing that "[r]acial capitalism — the process of deriving social and economic value from the racial identity of another person — is a longstanding, common, and deeply problematic practice"); see also CEDRIC J. ROBINSON, BLACK MARXISM: THE MAKING OF THE BLACK RADICAL TRADITION 2 (1983) (arguing that racial exploitation is a part of the capitalist system, Robinson notes that "[t]he development, organization, and expansion of capitalist society pursued essentially racial directions, so too did social ideology").

^{104.} Alexa Tietjen, Shudu: Fashion's First Avatar Supermodel?, WOMEN'S WEAR DAILY (June 13, 2018, 12:01 AM), https://wwd.com/eye/people/shudu-digital-fashion-model-avatar-1202683320/ [https://perma.cc/C49C-X465]; Rachel Hosie, Balmain Reveals Line-Up of Virtual Models for Latest Campaign, INDEPENDENT (Sept. 3, 2018, 3:09 PM), https://www.independent.co.uk/life-style/fashion/balmain-virtual-models-digital-campaign-fashion-shudu-a8520871.html [https://perma.cc/NX8Y-9628]; see Zara Wong, Meet Shudu, the Digital Supermodel Who is Changing the Face of Fashion One Campaign at a Time, VOGUE AUSTL. (Sept. 20, 2018), https://www.vogue.com.au/fashion/trends/meet-shudu-the-digital-supermodel-who-is-changing-the-face-of-fashion-one-campaign-at-a-time/news-story/80a96d3d70043ed2629b5c0bc03701c1.

^{105.} Tietjen, supra note 104.

^{106.} Id.

^{107.} See David Pilgrim, Who Was Jim Crow?, JIM CROW MUSEUM (2023), https://jimcrowmuseum. ferris.edu/who/index.htm [https://perma.cc/SR28-HNAT] ("Rice, a white man, was one of the first performers to wear blackface makeup – his skin was darkened with burnt cork. His Jim Crow song-and-dance routine was an astounding success that took him from Louisville to Cincinnati to Pittsburgh to Philadelphia and finally to New York in 1832. He also performed to great acclaim in London and Dublin. By then 'Jim Crow' was a stock character in minstrel shows, along with counterparts Jim Dandy and Zip Coon. Rice's subsequent blackface characters were Sambos, Coons, and Dandies.").

The advent of AI Blackface is not the only issue to consider when confronting AI images; there is also the issue of what I term "virtual slavery." Slavery is prohibited by the Thirteenth Amendment of the U.S. Constitution, 108 yet in an increasingly digital society, could certain labor arrangements amount, in essence, to involuntary servitude? Some real-life humans have had their images captured by AI, and this imagery may then be used for any purpose, including to act in pornographic or other scenarios that the individual from whom the image was captured would find humiliating or objectionable. 109 Recently, a working actor paid a few hundred dollars as an extra detailed how her entire body was scanned as part of one production and her lack of knowledge of how exactly her image might be used. 110 With this digitally captured image, the actor can "act" in many movie productions in perpetuity and never get paid more than the initial fee received to get scanned.¹¹¹ This raises the question of perpetual virtual slavery. Consider that, in an AI-enabled necromancer act, the owners of the publicity rights of Black musicians have "resurrected" them to perform at concerts long after they are dead. For example, a Tupac Shakur hologram performed at Coachella in 2012, sixteen years after his death, 112 and a Whitney Houston hologram sang in a Las Vegas residency in 2021, 113 nearly a full decade after her death. This practice is not limited to Black performers, as the holograms of white musicians like Frank Zappa have been performing long after the demise of the musician. 114 The legal issues here are both about consent and compensation: can a creative worker give meaningful consent to how their creative work may be used? Secondly, what does this mean for the creative soul of our society? AI Blackface makes a mockery of Black art and reduces Black artistic expression to tired tropes. The virtual slavery enabled by AI could establish new ways to exploit not just Black workers, but all workers.

^{108.} U.S. CONST. amend. XIII, § 1.

^{109.} See Bobby Allyn, Movie Extras Worry They'll Be Replaced by AI. Hollywood Is Already Doing Body Scans, NPR (Aug. 2, 2023, 9:58 AM), https://www.npr.org/2023/08/02/1190605685/movie-extras-worry-theyll-be-replaced-by-ai-hollywood-is-already-doing-body-scan [https://perma.cc/8X4C-U5Z5] (describing a production crew that scanned the bodies of actors who were never told "how or if" the scans would be used); Samantha Murphy Kelly, It's Not Just Taylor Swift: AI-Generated Porn Is Targeting Women and Kids All Over the World, CNN Bus. (Jan. 26, 2024, 3:51 PM), https://www.cnn. com/2024/01/26/tech/taylor-swift-ai-porn-women/index.html [https://perma.cc/34PN-DYHV] (discussing how AI is being used to create pornographic images of both celebrities and "everyday people").

^{110.} See Allyn, supra note 109.

^{111.} See id.

^{112.} See Maura Judkis, Tupac Resurrected Via Hologram for Coachella Performance with Snoop Dogg (Video), WASH. POST (Apr. 16, 2012, 10:09 AM), https://www.washingtonpost.com/blogs/arts-post/post/tupac-resurrected-via-hologram-for-coachella-performance-with-snoop-dogg-video/2012/04/16/gIQAOcKPLT_blog.html.

^{113.} See Steven Zeitchik, Nine Years After She Died, Whitney Houston Is Back to Entertain You, WASH. POST (Oct. 29, 2021, 12:40 PM), https://www.washingtonpost.com/technology/2021/10/29/whitney-houston-hologram-concert-innovations/.

^{114.} Graeme Virtue, *The Bizarre World of Frank Zappa Review – Toking Poodles and Holographic Necromancy*, GUARDIAN (May 10, 2019, 6:43 AM), https://www.theguardian.com/music/2019/may/10/the-bizarre-world-of-frank-zappa-review-edinburgh-playhouse [https://perma.cc/MC96-PGHK].

C. AUTOMATED HIRING AND DISCRIMINATION

In an AI-driven future of work, a concern is whether, rather than access to work becoming democratized, AI processes will instead allow for the obfuscation and replication of bias and unlawful discrimination at a larger scale. As I have previously written, automated decision-making presents a paradox: although many turn to AI-enabled decision-making as an anti-bias intervention, in reality, such decision-making can calcify bias and allow for discreet unlawful discrimination painted with a veneer of objectivity.¹¹⁵ This paradox is made evident in the context of automated hiring, as Black workers are the canaries in the mine that illustrate AI's potential for employment discrimination. A recent lawsuit brought against Workday, an automated hiring platform, illustrates the problem:

Mobley, a Black man older than 40 who suffers from anxiety and depression, allegedly applied to 80-100 positions since 2018 that use Workday as a screening tool. He has been denied employment every time, despite him holding a bachelor's degree in finance from Morehouse College and an associate's degree in network systems administration from ITT Technical Institute.¹¹⁶

These allegations are not far-fetched given the true impetus for automated hiring. Based on an empirical study in which we parsed the trade literature behind the development of automated hiring platforms, my co-author and I found that the most prominent tagline for marketing from a top automated hiring platform was "clone your best [worker]." Thus, one could argue that the standard automated hiring platform was never designed to find a diversity of workers, rather, it is meant to "clone" a singular model of an ideal worker. The legal scholar Charles Lawrence notes: "The employer perceives the white candidate as 'more articulate,' 'more collegial,' 'more thoughtful,' or 'more charismatic.' He is unaware of the learned stereotype that influenced his decision." As Professors Devon Carbado and Mitu Gulati have found, white women and racial minorities have to expend extra energy to do the extra identity work to conform to

^{115.} See generally Ifeoma Ajunwa, The Paradox of Automation as Anti-Bias Intervention, 41 CARDOZO L. REV. 1671 (2020).

^{116.} Annelise Gilbert, *Workday AI Biased Against Black, Older Applicants, Suit Says (1)*, BLOOMBERG L. (Feb. 22, 2023, 2:41 PM), https://news.bloomberglaw.com/daily-labor-report/workday-ai-biased-against-black-disabled-applicants-suit-says; *see also* Complaint at 1, Mobley v. Workday, Inc., No. 23-cv-00770 (N.D. Cal. Feb. 21, 2023) (filing a complaint against Workday for "engaging in a pattern or practice of illegal discrimination on the basis of race, age, and disability").

^{117.} Ifeoma Ajunwa & Daniel Greene, *Platforms at Work: Automated Hiring Platforms and Other New Intermediaries in the Organization of Work, in* 33 WORK AND LABOR IN THE DIGITAL AGE 61, 79 (2019).

^{118.} See id.; Charles R. Lawrence III, The Id, the Ego, and Equal Protection: Reckoning with Unconscious Racism, 39 STAN. L. REV. 317, 343 (1987) (arguing that employer ideas of what makes a model worker are guided by implicit racism).

^{119.} Lawrence III, supra note 118, at 343.

workplace perceptions of cultural fit, and this amounts to a form of employment discrimination. ¹²⁰

As I write in *The Quantified Worker*: "Beyond merely serving as a hiring tool, automated hiring platforms also concretize and quantify theories and presuppositions about what or who makes a good worker." While AI hiring systems might depend on facially neutral variables such as gaps in employment or even zip codes, the net result is that racial and other types of minorities, such as women who have taken time away from work, are excluded from employment consideration. 122 In a continued effort to parse the idea of the ideal worker, the use of personality tests as part of automated hiring, for example, has served to exclude people with mental health issues and neurodivergent applicants. 123

III. THOSE WHO STAY AND FIGHT

What the above examples of Black workers as canaries in the mine of AI innovation reflect is that the disadvantages of the AI revolution are concentrated for, but not exclusive to, Black workers. This should prompt a realization of the vulnerability of all workers in the AI revolution. Furthermore, akin to the canary whose fate presages that of the miners if they continue down the mine, an affirmation of the linked fate of Black workers and all workers in the AI reorganization of work should drive important legal and policy changes to enable economic justice in the AI future of work.

N. K. Jemisin's Afrofuturist fiction, *The Ones Who Stay and Fight*, is a rebuttal of Ursula Le Guin's trope of human sacrifice in *The Ones Who Walk Away from Omelas*. ¹²⁴ In Jemisin's imperfect utopia, rather than walk away from injustice,

^{120.} See Devon W. Carbado & Mitu Gulati, Working Identity, 85 CORNELL L. REV. 1259, 1262 (2000).

^{121.} IFEOMA AJUNWA, THE QUANTIFIED WORKER: LAW AND TECHNOLOGY IN THE MODERN WORKPLACE 75 (2023).

^{122.} See Ariella S. Kristal, Leonie Nicks, Jamie L. Gloor & Oliver P. Hauser, Reducing Discrimination Against Job Seekers With and Without Employment Gaps, 7 NATURE HUM. BEHAV. 211, 211 (2022) ("While penalties associated with employment gaps have been shown to affect male and female workers, motherhood penalties may particularly penalize women for childcare-related leaves. There is a long literature noting the detrimental effects of gaps in employment and a closely aligned literature exploring the impact of maternity leave and adjacent career breaks on individuals' career trajectories,"); Jenny R. Yang, Three Ways AI Can Discriminate in Hiring and Three Ways Forward, URB. INST. (Feb. 12, 2020), https://www.urban.org/urban-wire/three-ways-ai-can-discriminate-hiring-and-three-ways-forward [https://perma.cc/YKZ4-Y2UJ] (noting that zip codes can be a proxy for race and furthers employment discrimination when used as a variable in AI hiring); Ajunwa, supra note 115, at 1691 (noting that the use of gaps in employment as a variable in automated hiring disadvantages women).

^{123.} AJUNWA, supra note 121, at 102, 108.

^{124.} See N.K. Jemisin, The Ones Who Stay and Fight, LIGHTSPEED MAG.: FICTION (Jan. 2020), https://www.lightspeedmagazine.com/fiction/the-ones-who-stay-and-fight/ [https://perma.cc/2RNH-MD8F]; Abigail Bereola, A True Utopia: An Interview with N. K. Jemisin, PARIS REV. (Dec. 3, 2018), https://www.theparisreview.org/blog/2018/12/03/a-true-utopia-an-interview-with-n-k-jemisin/ [https://perma.cc/EA6F-EUS3].

the residents fight to change the history of inequity and deliberately work to enact racial economic justice:

What have I forgotten to mention? Oh, it is the thing that will seem most fantastic to you, friend: the variety! The citizens of Um-Helat are so many and so wildly different in appearance and origin and development. People in this land come from many others, and it shows in sheen of skin and kink of hair and plumpness of lip and hip. If one wanders the streets where the workers and artisans do their work, there are slightly more people with dark skin; if one strolls the corridors of the executive tower, there are a few extra done in pale. There is history rather than malice in this, and it is still being actively, intentionally corrected—because the people of Um-Helat are not naive believers in good intentions as the solution to all ills. No, there are no worshippers of mere tolerance here, nor desperate grovelers for that grudging pittance of respect which is *diversity*. Um-Helatians are learned enough to understand what must be done to make the world better, and pragmatic enough to actually enact it. 125

Creating a more equitable AI-driven future of work requires not shying away from confronting the history of labor exploitation that has undergirded many economic revolutions 126 and is, at present, driving the AI revolution. 127 It requires a careful examination of the fault lines of the AI revolution in relation to economic justice. It requires reconsidering the current employment paradigms that prey on the vulnerability of all workers, with Black workers bearing the brunt of their effects because they are the most vulnerable. To reorient AI development for the benefit of all workers, we must (1) adopt the Afrofuturist concept of Ubuntu (interconnected personhood) as a guiding philosophy, (2) consider universal human vulnerability and the concept of linked fate, and (3) commit to promoting equity through the very design of AI technologies.

A. UBUNTU AS GUIDING AFRICAN PHILOSOPHY

An Afrofuturist contemplation of the AI revolution is not merely reactionary. Rather, it is prescriptive and seeks to enact countervailing ideologies for progress, such as the African philosophy of Ubuntu, which goes beyond an extractive or exploitative model of capitalism. According to the journalist Nkem Ifejika, Ubuntu

^{125.} Jemisin, supra note 124.

^{126.} See generally Sara Horrell & Jane Humphries, "The Exploitation of Little Children": Child Labor and the Family Economy in the Industrial Revolution, 32 EXPLORATIONS ECON. HIST. 485 (1995) (discussing the link between child labor and the "spread of domestic industry" in the Industrial Revolution).

^{127.} See Rebecca Tan & Regine Cabato, Behind the AI Boom, an Army of Overseas Workers in 'Digital Sweatshops,' WASH. POST (Aug. 28, 2023, 2:00 AM), https://www.washingtonpost.com/world/2023/08/28/scale-ai-remotasks-philippines-artificial-intelligence/ ("[San Francisco start-up] Scale AI [had] paid [its Filipino] workers at extremely low rates, routinely delayed or withheld payments and provided few channels for workers to seek recourse, according to interviews with workers, internal company messages and payment records, and financial statements. Rights groups and labor researchers say Scale AI is among a number of American AI companies that have not abided by basic labor standards for their workers abroad.").

is a derivative of the Zulu phrase, "Umuntu ngumuntu ngabantu," which translates to "a person is a person through other people." Ifejika explains: "Ubuntu has its roots in humanist African philosophy, where the idea of community is one of the building blocks of society. Ubuntu is that nebulous concept of common humanity, oneness: humanity, you and me both."

The Ubuntu philosophy of relational personhood as a governing philosophy for AI fits within the framework of a linked-fate motivation for action. Sabelo Mhlambi, the AI ethicist, has argued for the theory of Ubuntu as an ethical and human rights frame for AI governance. 130 According to Mhlambi, a key failure of the "irrational" or selective personhood offered by Western reasoning is that "[t]he perceived infallibility and supremacy of rationality, especially as administered through machines, exacerbates the marginalization of those in society whose exclusion has been rationalized or found 'productive.'"¹³¹ Thus, selective personhood privileges the ease, convenience, comfort, and prosperity of select humans (those in the Global North) over other humans (those in the Global South). A move away from selective personhood to the interconnected personhood of Ubuntu means understanding that the cares and concerns of those in the Global South matter equally—that attention to them improves life conditions for everyone. Mhlambi notes: "The relational Sub-Saharan African philosophy of ubuntu reconciles the ethical limitations of rationality as personhood by linking one's personhood to the personhood of others." Thus, Mhlambi argues: "African philosophy may be a means to not only respond to AI's disproportionate negative effect on people, but to achieve global equality and protections from the bottom-up."133

Ubuntu as a guiding principle for AI governance will reorient us to both upstream and downstream effects of the AI revolution. An Ubuntu approach to governance to ensure economic justice should prompt an examination of the treatment of African workers doing the janitorial work for AI development and the limits of the extraterritorial application of American labor laws, ¹³⁴ the plight of all workers summarily excluded from employment by automated hiring systems, ¹³⁵ and the enduring environmental havoc wrought by the mining of the natural materials needed to power AI. ¹³⁶

^{128.} Nkem Ifejika, *What Does Ubuntu Really Mean*?, GUARDIAN (Sept. 28, 2006, 7:05 PM), https://www.theguardian.com/theguardian/2006/sep/29/features11.g2 [https://perma.cc/H89X-4FSL].

^{129.} *Id*

^{130.} See generally Sabelo Mhlambi, From Rationality to Relationality: Ubuntu as an Ethical & Human Rights Framework for Artificial Intelligence Governance (Carr Ctr., Discussion Paper No. 009, 2020).

^{131.} Id. at 5.

^{132.} Id. at 1.

^{133.} Id. at 6.

^{134.} See supra note 99 and accompanying text.

^{135.} See supra Section II.C.

^{136.} See generally Kate Crawford, Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence (2021) (noting environmental issues related to the development of AI technologies).

B. HUMAN VULNERABILITY AND LINKED FATE

The recognition of universal human vulnerability and the belief in linked fate are essential to an Afrofuturist recapitulation of the AI revolution. Just as the canary and the miners are linked in their vulnerability to noxious underground gases, so too are all humans linked in their vulnerability as subjects in an inequitable system. The legal theorist Martha Fineman has expounded on the theory of vulnerability as part of the legal system. She notes:

[V]ulnerability is—and should be understood to be—universal and constant, inherent in the human condition. The vulnerability approach . . . is an alternative to traditional equal protection analysis; it is a "post-identity" inquiry in that it is not focused only on discrimination against defined groups, but concerned with privilege and favor conferred on limited segments of the population by the state and broader society through their institutions. As such, vulnerability analysis concentrates on the structures our society has and will establish to manage our common vulnerabilities. This approach has the potential to move us beyond the stifling confines of current discrimination-based models toward a more substantive vision of equality. ¹³⁷

The recognition of vulnerability as a universal human condition is necessary to awaken a linked-fate understanding of the future of the human race. The linked fate theory of motivation is typically observed as existing within racial groups. According to a 2019 Pew Research Center study, Black adults are the demographic most likely to believe that events concerning their own racial group significantly impact them. This feeling of linked fate is especially true for Black individuals with a bachelor's degree or higher. In contrast, only about a quarter of white adults said they feel a strong linked fate with other white individuals. The notion of linked fate was first observed by Michael C. Dawson in the 1994 book *Behind the Mule: Race and Class in African-American Politics*. Dawson refers to political motivations being driven by "the perceived link between one's own fate and the fate of the race." Scholars also credit Patricia Gurin, Shirley Hatchett, and James Jackson's measure of "common fate" as the foundation for the idea of linked fate. According to Ismail White and Chryl Laird, there are

^{137.} Martha Albertson Fineman, *The Vulnerable Subject: Anchoring Equality in the Human Condition*, 20 YALE J.L. & FEMINISM 1, 1 (2008).

^{138.} Kiana Cox, *Most U.S. Adults Feel What Happens to Their Own Racial or Ethnic Group Affects Them Personally*, PEW RSCH. CTR. (July 11, 2019), https://www.pewresearch.org/short-reads/2019/07/11/linked-fate-connectedness-americans/ [https://perma.cc/Q9ZK-EGPW].

^{139.} See id.

^{140.} See id.

^{141.} MICHAEL C. DAWSON, BEHIND THE MULE: RACE AND CLASS IN AFRICAN-AMERICAN POLITICS 61 (1994).

^{142.} See Ismail K. White & Chryl N. Laird, Steadfast Democrats: How Social Forces Shape Black Political Behavior 29 (2020) (referencing Patricia Gurin, Shirley Hatchett & James S. Jackson, Hope and Independence: Blacks' Response to Electoral and Party Politics (1989) for the concept of "common fate").

two dimensions to Gurin and her co-authors' concept of common fate, which are interdependence (impact of the group on the individual) and centrality (how important racial identity is to an individual and their sense of commonality with other people of that same race). The linked fate hypothesis posits that individuals will vote in ways that maximize not just their own self-interests but that of their group. The problem, as the studies above show, is that not all individuals believe in the idea of linked fate, and even when they do, that belief is generally limited to their racial group. The problem is generally limited to their racial group.

Albeit that the linked fate belief was first thought to exist solely within racial groups, the same Pew Research Center study found that white adults with higher education are more likely to perceive a linked fate with other racial groups, and the survey also revealed that a sense of linked fate is shared among Black and Hispanic individuals who have experienced racial discrimination. 146 Outside shared traumatic events can also inspire a sense of linked fate. For example, Susan Sturm and her co-authors argue that the COVID-19 pandemic has resulted in a heightened sense of linked fate among all communities, leading to an increased push for justice in the carceral system. 147 The pandemic's public health crisis, coupled with the connection between the well-being of incarcerated individuals and public health, has led to significant alliances and collective actions. 148 This mobilization involves community members, advocates, public health experts, academics, lawyers, artists, and public officials, such as district attorneys and correction boards. 149 Furthermore, the public health crisis of COVID-19 has provided an opportunity to address the systemic failures wrought by mass incarceration. 150 The question of how to prompt a linked fate ideology among Americans in relation to the ill-effects of the AI revolution can be addressed by adopting Afrofuturist ideologies like the Ubuntu concept. 151

^{143.} See id.

^{144.} See id.

^{145.} See supra notes 138–40 and accompanying text.

^{146.} See Cox, supra note 138.

^{147.} See generally Susan P. Sturm, Faiz Pirani, Hyun Kim, Natalie Behr & Zachary D. Hardwick, Linked Fate: Justice and the Criminal Legal System During the COVID-19 Pandemic, in LAW IN THE TIME OF COVID-19, at 17 (Katharina Pistor ed., 2020). There are also some reports that the COVID-19 crisis has spurred new unionization efforts. See, e.g., Kate Rogers, Covid Upended the Labor Market, and Now These Workers Are Using Their Leverage to Push for Unions, CNBC (Mar. 29, 2022, 12:46 PM), https://www.cnbc.com/2022/03/29/amazon-starbucks-workers-push-for-unions-after-covid-upended-labor-market.html [https://perma.cc/92MG-TFC2] (detailing that retail workers such as employees of Amazon and Starbucks have pushed for unionization in response to pandemic work conditions); see also Abigail Adams, The Challenges Posed by COVID-19 Pushed Many More Workers to Strike. Will the Labor Movement See Sustained Interest?, Time (Jan. 25, 2021, 12:46 PM), https://time.com/5928528/frontline-workers-strikes-labor/ [https://perma.cc/8YYQ-VKT3] (noting an uptick in interest in unionization from healthcare workers).

^{148.} See Sturm et al., supra note 147, at 18.

^{149.} See id.

^{150.} See id.

^{151.} For a helpful guide to the cultural evolution of ideology, see generally J. M. BALKIN, CULTURAL SOFTWARE: A THEORY OF IDEOLOGY (1998).

The well-publicized missteps of the AI revolution¹⁵² should alert us to the tears in the fabric of our democratic system. Beyond merely viewing AI-driven mistakes as the halting steps of a growing toddler who would soon become surefooted, we should see them as reflecting to us the flaws in our society.¹⁵³ The recognition of a linked fate and the embrace of the interconnected personhood concept of Ubuntu should prompt governmental action to address the critical flaws in AI development.

C. EQUITY BY DESIGN

To put a linked-fate motivation and Ubuntu philosophy for AI governance into action, *ex ante* interventions that focus on the design and implementation of AI systems are more efficacious than *ex post* remedial actions. Equity by design is a necessary part of enacting Ubuntu principles as it accounts for the personhood of *all* who encounter the AI machine rather than solely the personhood of the putative norm. As Sasha Constanza-Chock, a communications scholar, writes in *Design Justice*: "I worry that the current path of AI development will reproduce systems that erase those of us on the margins, whether intentionally or not, through the mundane and relentless repetition of reductive norms structured by the *matrix of domination*." ¹⁵⁴

Equity by design is not the well-intentioned but still paternalistic notion of designing AI systems *for* marginalized populations. True equity lies in designing AI systems *with* those seen as the most vulnerable as full participants and architects. Consider that Kate Crawford, the AI ethicist, has identified what she terms "Artificial Intelligence's White Guy Problem." Crawford observes:

^{152.} See Daniel Victor, Microsoft Created a Twitter Bot to Learn From Users. It Quickly Became a Racist Jerk., N.Y. TIMES (Mar. 24, 2016), https://www.nytimes.com/2016/03/25/technology/microsoft-created-a-twitter-bot-to-learn-from-users-it-quickly-became-a-racist-jerk.html (detailing Microsoft's first chatbot trained on the internet which started using hate speech); see also Rachel Goodman, Why Amazon's Automated Hiring Tool Discriminated Against Women, ACLU (Oct. 12, 2018), https://www.aclu.org/news/womens-rights/why-amazons-automated-hiring-tool-discriminated-against [https://perma.cc/CM37-UJLW] (detailing how Amazon's bespoke hiring algorithm was found to discriminate against women). See generally SAFIYA UMOJA NOBLE, ALGORITHMS OF OPPRESSION: HOW SEARCH ENGINES REINFORCE RACISM (2018) (showing how search results discriminate against Black people).

^{153.} See Sandra G. Mayson, Bias In, Bias Out, 128 YALE L.J. 2218, 2225, 2264–65 (2019) (noting that no matter how well intentioned the algorithm, if it operates on data tainted by historical racism, it will obtain racist results).

^{154.} Sasha Costanza-Chock, Design Justice: Community-Led Practices to Build the Worlds We Need 5 (2020).

^{155.} See, e.g., Ngozi Okidegbe, Discredited Data, 107 CORNELL L. REV 2007, 2016 (2022) (arguing that the expertise and experience of communities affected by criminal justice AI systems should be afforded credence); see also Jessica M. Eaglin, When Critical Race Theory Enters the Law & Technology Frame, 26 MICH. J. RACE & L., Special Issue, Winter 2021, at 151, 155 (2021) (arguing that against attempting to fix AI technologies without first considering the social context within which those technologies arose).

^{156.} Kate Crawford, *Artificial Intelligence's White Guy Problem*, N. Y. TIMES (June 25, 2016), https://www.nytimes.com/2016/06/26/opinion/sunday/artificial-intelligences-white-guy-problem.html; *see also* Anupam Chander, *The Racist Algorithm?*, 115 MICH. L. REV. 1023, 1025 (2017) ("We must design our algorithms for a world permeated with the legacy of discriminations past and the reality of discriminations present.").

Like all technologies before it, artificial intelligence will reflect the values of its creators. So inclusivity matters—from who designs it to who sits on the company boards and which ethical perspectives are included. Otherwise, we risk constructing machine intelligence that mirrors a narrow and privileged vision of society, with its old, familiar biases and stereotypes. 157

There are perhaps no better illustrations of the current lack of equity by design than the empirical work of the computer scientists Joy Buolamwini and Timnit Gebru revealing acute failures of facial recognition for dark-skinned women, ¹⁵⁸ or field audits which reveal how automated hiring design interfaces insidiously eliminate women with caretaking responsibilities from the applicant pools. ¹⁵⁹ To avoid such outcomes, Constanza-Chock proposes ten key principles for design justice, which include: (1) using design to "sustain, heal, and empower," (2) centering "the voices of those who are directly impacted," (3) placing the focus on "design's impact on the community" rather than the designer's intent, (4) focusing on an "accountable, accessible, and collaborative process," (5) emphasizing the "designer as a facilitator rather than an expert," (6) highlighting that expertise is based on lived experience, (7) "shar[ing] design knowledge and tools," (8) recognizing "sustainable, community-led and controlled outcomes," (9) looking for non-exploitative solutions, and (10) looking for what is working at a community level. 160 These principles should be implemented, not just as desirable add-ons, but as the very foundation upon which all AI technology is designed and executed. It is only through equity by design that we can envision systems that work for, and not against, our shared human frailty.

CONCLUSION

There is yet another ending to *The Space Traders* in which the aliens arrive with their unsavory proposition. This time, they are met with a united front. Although there is still disease, human suffering, and environmental challenges, all Americans are united in attempting to solve these intractable problems. The Americans have come to embrace human frailty and human difference as a beautiful part of life that awakens us to humility, empathy, and love. The AI tools they possess have been created with careful deliberation over how they might best serve the most vulnerable. The tools have been put in service of community rather than for the extractive profit of an elite few. Upon witnessing all this, the aliens never mention their proposition. They congratulate the leaders of the United States on their interconnected state of humanity, they share their advanced AI technologies, and they return to Kebula empty-handed but full of hope for humanity.

^{157.} Crawford, supra note 156.

^{158.} See generally Joy Buolamwini & Timnit Gebru, Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification, 81 PROC. MACH. LEARNING RSCH., Feb. 2018, at 1.

^{159.} See Ifeoma Ajunwa, An Auditing Imperative for Automated Hiring Systems, 34 HARV. J.L. & TECH. 621, 622 (2021) (discussing the encountered difficulty of completing an online application when applying with constrained hours of availability).

^{160.} COSTANZA-CHOCK, supra note 154, at 6-7.