## We Must Find a Stronger Theological Voice: A Copeland Dialectic to Address Racism, Bias, and Inequity in Technology

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DIVIDE THE GENERAL FIELD OF TECHNOLOGY ethics into two distinct parts: the ethics of applied technology and ethics of technology and society. Over the past 25 years, the vast majority of scholarly writing on technology has been on the ethics of applied technology, defined as ethical reflections based upon new possibilities from technological development. For example, now that a computer can do X, what are the ethical implications of X? Self-driving cars, general application robots, medical robotics, smartphones, smart bombs, drones, social media usage, disinformation, and personal artificial intelligence applications (Siri, Alexa, etc.) fall into this category. The second category, ethics of technology and society (hereafter ETS), covers a host of issues directly related to the production, development, and implementation of new technologies.<sup>2</sup> There are a small but growing number of topics in this field, including digital access to places of poverty; diversity, equity, and inclusion among employees at tech companies (pushing against "tech bro" culture); and identifying and fixing racial, gender, and other biases built into technology at every possible stage of development (e.g., Google Assistant

<sup>&</sup>lt;sup>1</sup> E.g., Nick Bostrom, Superintelligence: Paths, Dangers, Strategies (Oxford: Oxford University Press, 2014); Hans Jonas, The Imperative of Responsibility: In Search of an Ethics for the Technological Age (Chicago: University of Chicago Press, 1984); and Michael J. Quinn, Ethics for the Information Age, 7th ed. (New York: Pearson, 2017).

<sup>&</sup>lt;sup>2</sup> This imperfect binary categorization is indebted to Ruha Benjamin's search for a new method of discussing racism alongside science and technology studies in *Race After Technology*. Benjamin sees her work as a cross between "science and technology studies (STS) and critical race studies" and terms her new work falling under something she calls "race critical code studies." While inspired by integration of science and technology studies with explicit social issues, I found her delineation too narrow, and so opted for the wider binary used in this essay. See Ruha Benjamin, *Race After Technology: Abolitionist Tools for the New Jim Code* (Cambridge: Polity, 2020), "Introduction."

can understand men's voices better,<sup>3</sup> facial recognition technology identifies white faces better<sup>4</sup>).<sup>5</sup>

This essay seeks to offer a stronger theological dialectic to ongoing discussions of technology ethics by examining the recent influx of works in the ETS subfield. I will first provide a brief review of key theological reflections on technology ethics in order to situate this essay and delineate the need. Second, I will introduce recent works from the subfield of ETS that carry particular weight for theological reflection, highlighting the ways in which they address bias, inequity, and racism. Third, I will reflect on the difficulty of common good language to address these injustices and draw upon M. Shawn Copeland's utilizations of Bernard Lonergan's human good that draw upon Black and womanist theology. Fourth and finally, I will offer my contribution to the field by analyzing and employing a framework from Copeland's discussions of mystical and political theology through her implementations of both Lonergan and Metz. I will argue that theological utilizations of the common good are insufficient to provide a theological response to the biases and injustices within modern technological systems unless they are properly couched in an interruptive mystical-political framework of individual self-transcendence, marked by forgiveness, reconciliation, witness, memory, and lament.

#### THEOLOGICAL REFLECTIONS

Theological reflections on issues of technology fall into two categories. First, theological anthropology has dealt largely with issues of technological transhumanism and the possibilities of an artificial general intelligence (AGI), defined as the hypothetical ability of a computer program to perform any intellectual task a human can perform, and to do so better than any human could.<sup>6</sup> From the point of view of

<sup>&</sup>lt;sup>3</sup> Selena Larson, "Research Shows Gender Bias in Google's Voice Recognition," *The Daily Dot*, July 15, 2016, www.dailydot.com/debug/google-voice-recognition-gender-bias/.

<sup>&</sup>lt;sup>4</sup> Queenie Wong, "Why Facial Recognition's Racial Bias Problem Is So Hard to Crack," *CNET*, March 27, 2019, www.cnet.com/news/why-facial-recognitions-racial-bias-problem-is-so-hard-to-crack/.

<sup>&</sup>lt;sup>5</sup> E.g., Benjamin, *Race After Technology*; Ruha Benjamin, ed., *Captivating Technology: Race, Carceral Technoscience, and Liberatory Imagination in Everyday Life* (Durham, NC: Duke University Press, 2019); and Thomas S. Mullaney, Benjamin Peters, Mar Hicks, and Kavita Philip, eds., *Your Computer is on Fire* (Cambridge: MIT Press, 2021).

<sup>&</sup>lt;sup>6</sup> Whether this will happen in "30 or 300 or 3000 years really does not matter," although everyone in this field of study seems to agree that there's a big leap between making a program that can beat a human at a board game and making AGI. See Müller, "Ethics of Artificial Intelligence and Robotics"; Hal Hodson, "DeepMind and Google: The Battle to Control Artificial Intelligence," *The Economist*, March 1, 2019, www.economist.com/1843/2019/03/01/deepmind-and-google-the-battle-to-control-artificial-intelligence.

theological anthropology, the possibility of AGI raises questions of the *imago Dei*, creation itself, extraterrestrial life, salvation, and augmented humanity (transhumanism). Scholars with strong backgrounds in theological interactions with the sciences have waded into this discussion (e.g., Ronald Cole-Turner, Ted Peters, and Ilia Delio, and others), and several conversations can be found in related journals such as *Zygon* and *Theology & Science*. The most impactful theologian to date in this area may be Noreen Herzfeld, who, from her first booklength reflection in 2002 to a special issue of the journal *Religions* in 2017, has continued to prod the depths of technology's impact on theological anthropology and expand the discussion to an increasing number of theologians. 8

The second major area of theological reflection is within theological ethics. On this front there has been even less work, although an uptick can be seen in the past few years, particularly in survey essays that seek to bring more theologians to the field, as I am doing partially here. I am grateful for the work of Derek Schuurman, Brian Patrick Green, and Beth Singler in the past five years, whose surveys of the field prove useful in mapping the possibilities of theological engagement. Green's introduction of *Laudato Si'* as a framework for Catholic ethical reflection on technology is particularly helpful in laying foundations for a comprehensive Catholic theological ethic for technology, especially when combined with powerful applications of *Laudato Si'* onto the digital age, such as Brianne Jacobs's recent work on Google and the technocratic paradigm. <sup>10</sup>

<sup>&</sup>lt;sup>7</sup> Ronald Cole-Turner, "The Singularity and the Rapture: Transhumanist and Popular Christian Views of the Future," *Zygon* 47, no. 4 (2012): 777–96; Ronald Cole-Turner, *Transhumanism and Transcendence: Christian Hope in an Age of Technological Enhancement* (Washington: Georgetown University Press, 2011); Ilia Delio, OSF, "Artificial Intelligence and Christian Salvation: Compatibility or Competition?," *New Theology Review* 16 (2013): 39–51; and Brent Waters, *From Human to Posthuman: Christian Theology and Technology in a Postmodern World* (London: Routledge, 2016).

<sup>&</sup>lt;sup>8</sup> Noreen Herzfeld, *In Our Image: Artificial Intelligence and the Human Spirit* (Minneapolis: Fortress, 2002); and Noreen Herzfeld, "Introduction: Religion and the New Technologies," *Religions* 8, no. 7 (2017): 129, doi.org/10.3390/rel8070129.

<sup>&</sup>lt;sup>9</sup> Brian Patrick Green, "The Catholic Church and Technological Progress: Past, Present, and Future," *Religions* 8, no. 6 (June 2017): 106, doi.org/10.3390/rel8060106; Derek C. Schuurman, "Artificial Intelligence: Discerning a Christian Response," *Perspectives on Science and Christian Faith* 71, no. 2 (2019): 75–82; and Beth Singler, "An Introduction to Artificial Intelligence and Religion for the Religious Studies Scholar," *Implicit Religion* 20, no. 3 (2017): 215–31.

<sup>&</sup>lt;sup>10</sup> See Brian Patrick Green, "Ethical Reflections on Artificial Intelligence," *Scientia et Fides* 6, no. 2 (October 9, 2018): 9–31, doi.org/10.12775/SetF.2018.015; and Brianne Jacobs, "Personhood, Bodies, and History in Google's Manifestation of the Technocratic Paradigm," in *Integral Ecology for a More Sustainable World: Dialogues with Laudato Si'*, ed. Dennis O'Hara, Matthew Eaton, and Michael Ross (New York: Lexington, 2019), 221–34.

Given the limited number of theological reflections on technology ethics in general and the recent emergence of what I call ethics of technology and society, it should not be surprising that there is little theological reflection directly on the subfield, or hardly any surveys of this subfield beyond minor inclusions in the works above. Before offering my own contribution to this discussion, I would like to expand briefly upon some new studies within ETS, focusing on the previously mentioned concentrations of access, representation, and structural biases.

# ETHICS OF TECHNOLOGY AND SOCIETY: ADDRESSING BIAS, INEQUITY, AND RACISM

I identify three main concentrations within the last two decades of work in the subfield of ETS: access, representation, and structural biases. These questions and problems each have their own bibliographies, key players, and policy initiatives, but are tied together in their shared reflection on technology's relationship to ethical issues of bias, inequity, and racism. The following discussion will draw attention to key figures and issues in each concentration, focusing more on representation and structural biases than on questions of access, for reasons that will become clear.

In the early development of the internet, sociologist Ruha Benjamin writes, "Much of the early research and commentary on race and information technologies coalesced around the idea of the 'digital divide,' with a focus on unequal access to computers and the [i]nternet that falls along predictable racial, class, and gender lines." As such, many proposed solutions to the problem of unequal access are themselves riddled with biases, assumptions, and savior complexes of a techno-utopia. In nearly every instance of techno-utopia, writes Alondra Nelson, "racial identity, and blackness in particular" becomes "the anti-avatar of digital life. Blackness gets constructed as always oppositional to technologically driven chronicles of progress. That race (and gender) distinctions would be eliminated with technology

<sup>&</sup>lt;sup>11</sup> See especially, Green, "Catholic Church and Technological Progress," 1–6.

<sup>&</sup>lt;sup>12</sup> In this essay, I differentiate these terms as follows: bias defines intentional or unintentional preferential treatment of one group of people over another for any reason whatsoever (e.g., women, Jews, immigrants). Inequity defines any state of inequality which can be defined as unfair or unjust. For example, economic inequality could define the macroeconomic imbalance of wealth towards some countries or some individuals, whereas economic inequity would name this inequality as a systemic injustice. Both terms are differentiated from racism, which, following Matthew Clair, Jeffrey Denis, and W. J. Wilson, I define as "an ideology of racial domination," different from both racial discrimination (a bias) and racial inequality (an inequity). See Matthew Clair and Jeffrey S. Denis, "Sociology of Racism," in *The International Encyclopedia of the Social and Behavioral Sciences*, ed. James D. Wright (Amsterdam: Elsevier, 2015), 19:857–63.

<sup>&</sup>lt;sup>13</sup> Benjamin, *Race After Technology*, 41–42.

was perhaps the founding fiction of the digital age." Access discussions too often eliminate, rather than celebrate, difference, minimizing the actual, vital conversations needed around providing safe, affordable, and fast internet access to many people, a problem accentuated during the Covid-19 pandemic. As the pandemic worsened nearly every measurable aspect of inequality, policy changes concerning technology access are interwoven with policy discussions around childcare, taxation, wages, health care, and education.

Gender and racial representation among hiring practices at tech companies has been an issue in the tech sector since its origin. Discussions of representation, write scholars from the AI Now nonprofit, are "about gender, race, and most fundamentally, about power." Diversity affects "how AI companies work, what products get built, who they are designed to serve, and who benefits from their development." In the past ten years, even as companies have become more aware of the problematic nature of discriminatory hiring processes, progress has been slow. According to a 2019 report from Wired, four of the major tech companies (Apple, Facebook, Google, and Microsoft) each reported less than 6 percent of Black Americans in their workforce, less than half the representative 13 percent population of Black Americans. 16 These numbers seem consistent throughout the technology sector, with Pew Research reporting 7 percent Black workers in the general computer industry.<sup>17</sup> The same study shows that women "remain underrepresented" in computer/tech occupations, with the percentage of women actually decreasing from 30 percent to 25 percent from 2000 to 2019.<sup>18</sup>

Discussions of diversity within the field of technology reveal many underlying cultural biases, but the least obvious and most insidious in its subtlety may be the primacy of meritocracy. "Studies have shown that a belief in your own personal objectivity, or a belief that you are not sexist, makes you less objective and more likely to behave in a sexist way," writes Caroline Criado Perez in *Invisible Women: Data* 

<sup>&</sup>lt;sup>14</sup> Alondra Nelson, "Introduction: Future Texts," Social Text 20, no. 2 (2002): 1.

<sup>&</sup>lt;sup>15</sup> S. M. West, M. Whittaker, and K. Crawford, "Discriminating Systems: Gender, Race, and Power in AI," *AI Now Institute*, April 2019, ainowinstitute.org/discriminatingsystems.html.

<sup>&</sup>lt;sup>16</sup> Sara Harrison, "Five Years of Tech Diversity Reports—and Little Progress," Wired, October 1, 2019, www.wired.com/story/five-years-tech-diversity-reports-little-progress/.

<sup>&</sup>lt;sup>17</sup> Brian Kennedy, Richard Fry, and Cary Funk, "6 Facts about America's STEM Workforce and Those Training for It," *Pew Research Center*, April 14, 2021, www.pewresearch.org/fact-tank/2021/04/14/6-facts-about-americas-stem-workforce-and-those-training-for-it/.

<sup>&</sup>lt;sup>18</sup> Kennedy, Fry, and Funk, "6 Facts about America's STEM Workforce and Those Training for It."

Bias in a World Designed for Men. 19 "Men who believe that they are objective in hiring decisions are more likely to hire a male applicant than an identically described female applicant. And in organizations which are explicitly presented as meritocratic, managers favor male employees over equally qualified female employees. 20 The belief in pure meritocracy decreases the propensity for objectivity in qualified hiring practices, revealing the idea of meritocracy as it is: a philosophy heavily influenced by misogynistic, ableist, white supremacist notions of intelligence, ambition, and social norms, largely utilized by people thinking themselves objective to perpetuate systems of inequity. 21

The intersecting issues of access to technology and representation within the tech industry significantly contribute to and are affected by the third major concentration of technology and society studies: structural bias in technology itself. The very idea of structural bias in technology is deeply related to assumptions of objectivity in math and sciences, including the notion of meritocracy. The question of structural bias in technological development rejects deterministic theories of technological progress that allow discussions of access and diversity, as well as all ethical discussions of applied technology, but insist that the technology itself is objective. In this view, argues Benjamin, "Technology is often depicted as neutral, or as a blank state developed outside political and social contexts, with the potential to be shaped and governed" like any tool "through human action."22 These deterministic and progressive technological philosophies reject any notion of social influence on the development of technology itself. Such philosophies have been widely rejected both throughout the wider field of science and technology studies since its origin (e.g., Jacques Ellul, The Technological Society), as well as throughout its intellectual offspring, the subfield of ethics discussed here. Both fields describe and analyze the deeply entangled ways in which culture, humanity, and identity have forever been transformed, and will continue to be transformed, by modern technology. "Technology is society," writes Manuel Castells in *The Rise of the Network Society* in 2009, "and society

<sup>&</sup>lt;sup>19</sup> Caroline Criado Perez, *Invisible Women: Data Bias in a World Designed for Men* (New York: Abrams, 2019), "The Myth of Meritocracy"; Eric Luis Uhlmann and Geoffrey Cohen, "I Think It, Therefore It's True": Effects of Self-Perceived Objectivity on Hiring Discrimination," *Organizational Behavior and Human Decision Processes* 104, no. 2 (2007): 207–23.

<sup>&</sup>lt;sup>20</sup> Perez, *Invisible Women*.

<sup>&</sup>lt;sup>21</sup> See Mar Hicks, "Meritocracy and Feminization in Conflict: Computerization in the British Government," in *Gender Codes: Why Women Are Leaving Computing*, ed. Thomas Misa (Hoboken, NJ: IEEE-CS/Wiley, 2010); Daniel Markovits, *The Meritocracy Trap: How America's Foundational Myth Feeds Inequality, Dismantles the Middle Class, and Devours the Elite* (New York: Penguin, 2019); and Michael J. Sandel, *The Tyranny of Merit: What's Become of the Common Good?* (New York: Farrar, Straus, and Giroux, 2020).

<sup>&</sup>lt;sup>22</sup> Benjamin, Race After Technology, 41.

cannot be understood or represented without its technological tools."<sup>23</sup> Society's inherent biases, affectations, and desires are forever intertwined with the development of technology and science.

This argument has opened the door to several areas of new research within ETS, including algorithmic development biases, dataset biases, production biases, default statuses of (almost always) white men, objectivity biases, and confirmation biases. Several excellent examples of this research include works by Ruha Benjamin, Cristina Perez, Cathy O'Neill, and Kate Crawford. Benjamin's work brings together critical race studies with science and technology studies to examine the role of bias and racism throughout technological systems, from biometric technology to DNA tracking to policing to search engines. In the aforementioned book *Invisible Women*, Perez reflects upon the myriad ways that datasets and algorithms allocate resources inequitably by treating men as "standard" and women as "atypical." In Cathy O'Neil's Weapons of Math Destruction, she explains that Big Data solutions are almost always flawed, perpetuating and often exacerbating inequality, by examining systems like insurance, policing, college admissions, and job applications.<sup>25</sup> Finally, Kate Crawford's 2021 Atlas of AI analyzes technological systems as the physical products they are, utilizing vast amounts of minerals, energy, labor, space, political power, and secrecy, and requiring ethical investigations into every aspect:

Artificial intelligence is both embodied and material, made from natural resources, fuel, human labor, infrastructures, logistics, histories, and classifications. AI systems are not autonomous, rational, or able to discern anything without extensive, computationally intensive training with large datasets or predefined rules and rewards. In fact, artificial intelligence as we know it depends entirely on a much wider set of political and social structures. And due to the capital required to build AI at scale and the ways of seeing that it optimizes AI systems are ultimately designed to serve existing dominant interests. In this sense, artificial intelligence is a registry of power.<sup>26</sup>

Crawford's descriptions of AI can serve a metonymic function in relationship to technological development as a whole, establishing parameters and hermeneutics through which the entire field of tech is wrenched from its false objectivity, its male-dominated systems, and its belief that technology will solve all the problems that humanity

<sup>&</sup>lt;sup>23</sup> Benjamin, *Race After Technology*, 41; Manuel Castells, *The Rise of the Network Society*, 2<sup>nd</sup> ed. (Oxford: Wiley Blackwell, 2009), 5.

<sup>&</sup>lt;sup>24</sup> Perez, *Invisible Women*, "Introduction."

<sup>&</sup>lt;sup>25</sup> Cathy O'Neil, Weapons of Math Destruction (New York: Crown, 2016).

<sup>&</sup>lt;sup>26</sup> Katie Crawford, *Atlas of AI* (New Haven: Yale University Press, 2021), "Introduction," 8.

cannot. For example, in the process of examining labor practices, Crawford explicitly does not engage with robotic replacement debates, but focuses instead on "how humans are increasingly treated like robots and what this means for the role of labor."<sup>27</sup>

While many more examples of this subfield exist,<sup>28</sup> the above texts exemplify an approach to technology and society that should resonate with theological scholars. I found particular resonance with the work of M. Shawn Copeland as I came to know this subfield. In the following sections of this essay, I will attempt to establish a novel theological dialectic using Copeland's employment of Lonergan and Metz in her mystical-political theology of the common, human good.

#### A COMMON, HUMAN GOOD

In 2019, at a conference called "The Common Good in the Digital Age," Pope Francis commended the participants for working to bridge the gap between technological development and the common good:

If technological advancement became the cause of increasingly evident inequalities, it would not be true and real progress. If humanity's so-called technological progress were to become an enemy of the common good, this would lead to an unfortunate regression to a form of barbarism dictated by the law of the strongest....A better world is possible thanks to technological progress, if this is accompanied by an ethic inspired by a vision of the common good, an ethic of freedom, responsibility and fraternity, capable of fostering the full development of people in relation to others and to the whole of creation.<sup>29</sup>

<sup>&</sup>lt;sup>27</sup> Crawford, Atlas of AI, "Two: Labor."

<sup>&</sup>lt;sup>28</sup> E.g., Meredith Broussard, Artificial Unintelligence: How Computers Misunderstand the World (Cambridge: MIT Press, 2018); Simone Browne, Dark Matters: On the Surveillance of Blackness (Durham, NC: Duke University Press, 2015); Joy Buolamwini and Timnit Gebru, "Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification," in Conference on Fairness, Accountability, and Transparency (2018), 77-91; Wendy Hui Kyong Chun, "Introduction: Race and/as Technology; or How to Do Things to Race," Camera Obscura: Feminism, Culture, and Media Studies 24, no. 1 (70) (2009): 7-35; Jessie Daniels, Cyber Racism: White Supremacy Online and the New Attack on Civil Rights (Lanham, MD: Rowman & Littlefield, 2009); Virginia Eubanks, Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor (New York: St. Martin's, 2018); Mar Hicks, Programmed Inequality: How Britain Discarded Women Technologists and Lost its Edge in Computing (Cambridge: MIT Press, 2017); and Emily Denton, Ben Hutchinson, Margaret Mitchell, and Timnit Gebru: "Detecting Bias with Generative Counterfactual Face Attribute Augmentation," arXiv arXiv:1906.06439 (2019).

<sup>&</sup>lt;sup>29</sup> Pope Francis, "To the Participants in the Seminar 'The Common Good in the Digital Age,' Organized by the Dicastery for Promoting Integral Human Development (DPIHD) and the Pontifical Council for Culture (PCC)," September 27, 2019, www.vatican.va/content/francesco/en/speeches/2019/september/documents/papa-francesco 20190927 eradigitale.html.

The cautious technological optimism that Pope Francis displays here is founded upon his vision of the *common good*, a phrase with centuries of philosophical and ethical tradition and theological interpretation.<sup>30</sup> As an ethic of solidarity, community, and accountability, it can be a powerful rhetorical device upon which to build consensus, but given its wide usage, the phrase alone requires further explanation in order to carry any demonstrable weight. The *Catechism of the Catholic Church* casts the idea of the human good as one rooted in individual human dignity, community development, peace, justice, stability, and progress, and one that has become a treasured inheritance from ancient Christian traditions (nos. 1905–12). Despite its use in discussions of tech ethics, including in a wide range of secular and ecclesial ethical guidelines,<sup>31</sup> the common good is not a phrase that seems to add new insight into contemporary discussions of technological ethics, especially for scholars of technology and society.

In order to understand and address this situation, in which a powerful ethical idea has lost its value. I will now examine M. Shawn Copeland's utilization of Bernard Lonergan's idea of the human (common) good. Lonergan worked throughout his life to develop a more concrete vision of the common good, which he termed the "human good." Lonergan's human good was a central part of his overall systematic theology, representing not an eschatological unobtainable goal but a "comprehensive, and hence not abstract" goal for human society.<sup>32</sup> The human good "is not a system, a legal system or a moral system. It is a history, a concrete, cumulative process resulting from developing human apprehension and human choices that may be good or evil."<sup>33</sup> The proceeding analysis will examine a transformation of Copeland's understanding of Lonergan's human good in order to develop a framework of mystical-political theology. This framework will then connect with the works of Benjamin, O'Neil, Perez, and Crawford, who serve as exemplars through which an application of

<sup>&</sup>lt;sup>30</sup> Green articulates the nuanced path that Francis tries to walk both here and in *Laudato Si'*: "For nearly its entire history the Church has stood for the preservation and advancement of knowledge and technology, with exceptions only for a few of those technologies [e.g., weapons of mass destruction, embryonic stem cell research, environmentally unsustainable technologies] which it evaluates as preventing or harming human life. *Laudato Si'* is best interpreted in light of this tradition" (Green, "The Catholic Church and Technological Progress," 9).

<sup>&</sup>lt;sup>31</sup> Pontifical Academy for Life, "The Call—Rome Call For AI Ethics," www.rome-call.org/the-call/. For a good summary of commonalities and differences between various ethical guidelines, see Anna Jobin, Marcello Ienca, and Effy Vayena, "The Global Landscape of AI Ethics Guidelines," *Nature Machine Intelligence* 1, no. 9 (2019): 389–99; Berkman Klein Center, "Principled Artificial Intelligence," February 5, 2020, cyber.harvard.edu/publication/2020/principled-ai.

<sup>&</sup>lt;sup>32</sup> Bernard Lonergan, *Topics in Education: The Cincinnati Lectures of 1959 on the Philosophy of Education* (Toronto: University of Toronto Press, 1993), 28.

<sup>33</sup> Lonergan, *Topics in Education*, 33.

Copeland's mystical-political theological dialectic can be discerned and developed.

#### THE PRACTICAL HUMAN GOOD

M. Shawn Copeland has been a student of Bernard Lonergan's work since her doctoral studies in the 1980s. She is one of the leading interlocutors of Lonergan's theories in the 21st century, and one of the foremost Catholic theologians in the world, best known for her work within womanist Catholic theology. To understand how Copeland interacts with Lonergan's concept of the human good, one must begin with Copeland's understanding of four concepts central to Lonergan's work: horizon, bias, progress, and decline. "Horizon," writes Copeland, "connotes a worldview" and "bias may participate in the construction and control of it, but both govern meaning-making."<sup>34</sup> Horizon is what we see; bias distorts that vision by disrupting our judgment, intelligence, common sense, and sense of what makes community.<sup>35</sup> Our present existence, then, consists of a personal and social horizon constantly inhibited by various forms of bias. How we move beyond this present condition is described by progress and decline within an overall matrix termed human good.

At first glance, the concepts are self-explanatory. We aim and search for the overall human (common) good. We experience progress and decline in this search. Progress is the lessening of biases; decline is the increase of biases. For Lonergan and Copeland, though, the human good is not only the endpoint but the structure within which everything occurs. Progress is not merely positive movement but the example of "persons struggling to live attentively, intelligently, rationally, and responsibly." Decline exists as a result of "oversight, inattention, unreasonableness, and irresponsibility." 36

For Lonergan, bias, horizon, progress, and decline are necessary to form the methodological framework of the human good. This brings us to the first definition of human good for Copeland: the human good is a *structure* which allows for interaction between religion and the "cultural matrix" of society.<sup>37</sup> To be effective, this structure of the

<sup>&</sup>lt;sup>34</sup> M. Shawn Copeland, *Enfleshing Freedom: Body, Race, and Being* (Fortress, Minneapolis: 2010), 9.

<sup>&</sup>lt;sup>35</sup> These four facets of bias are properly considered dramatic (judgment), individual (intelligence), general (common sense), and group (community). Copeland describes them numerous times throughout her corpus, including in *Enfleshing Freedom*, 12–15.

<sup>&</sup>lt;sup>36</sup> M. Shawn Copeland, "The Interaction of Racism, Sexism, and Classism in Women's Exploitation," in *Women, Work, and Poverty*, ed. Elisabeth Schüssler Fiorenza, Anne E. Carr, and Marcus Lefébure (Edinburgh: T. & T. Clark, 1987), 20.

<sup>&</sup>lt;sup>37</sup> "If theology mediates between a cultural matrix and the significance and role of religion in that matrix, then the theologian needs some framework by which to attend concretely to the cultural matrix as it is in process" (Copeland, "The Interaction of Racism," 19).

human good must anticipate complexities as well as offer explanatory accounts of meaning in the relationship between religion and the social matrix. As such, the human good "charts progress and change as well as decline and breakdown" by focusing on three areas of interaction with society: "(a) individuals in their potentialities and actuations, (b) cooperating groups, and (c) the ends, the values by and for which individuals and groups act."<sup>38</sup> In each of these groups, the human good is "a field theory" and "a set of fixed terms" which allows us to understand how bias influences our horizons, which in turn allows us to see whether we are achieving progress or decline.<sup>39</sup>

This concrete structural matrix of cultural interaction retains significant power for Copeland's theological approaches to real instances of bias and oppression. Her early reflections on Black theology, for example, indicate the importance of this structure: "As a politically responsible methodical theology, black theology mediates the significance of religion within a cultural matrix. Black theology as politically responsible methodical theology must apprehend and understand the social and cultural matrix in which it seeks to mediate Christian religion. The structure of the human good provides a way for the theologian to think concretely about that matrix, since the structure is the form of society."40 In this definition of the human good, Copeland finds an effective "heuristic structure or implicit definition or field theory for apprehending, criticizing, and evaluating the objective components of the social order and for inquiring into the condition of the human good which is interchangeable with human history. Neither an abstraction nor a utopian ideal, the human good is the concrete, cumulative process resulting from the development of human apprehension and choice, from the integrated completion of various moments and stages of human potentiality."41

In this structure, rooted in practicality, Copeland sees "the basic terms for a political theology" since "Lonergan's theology offers the appropriate locus for the integration of the empirical human sciences in their approach to the problems that pervade the social order, because sin is manifest in the concrete human situation, with concrete results that can be disclosed as crime, as aberration, as an evil component in the social progress."<sup>42</sup> Crawford's descriptions of human rights abuses in the development of AI, for example, would constitute an ideal constructive use of human sciences, and this essay could be an example of theological integration therein.

<sup>&</sup>lt;sup>38</sup> Copeland, "The Interaction of Racism," 20.

<sup>&</sup>lt;sup>39</sup> Copeland, "The Interaction of Racism," 20.

<sup>&</sup>lt;sup>40</sup> M. Shawn Copeland, "A Genetic Study of the Idea of the Human Good in the Thought of Bernard Lonergan," (Doctor of Philosophy Thesis, Boston College, 1991), 290.

<sup>&</sup>lt;sup>41</sup> Copeland, "A Genetic Study," 197.

<sup>&</sup>lt;sup>42</sup> Copeland, "A Genetic Study," 198.

This application of the human good has immediate import for Copeland, who employs Lonergan in her understanding of womanist theology. It is the "cognitive praxis" of enslaved Black women, Copeland writes in 1993, that formed their narratives and serves as the basis for a theology of suffering. 43 "Womanist theology claims the experiences of Black women as proper and serious data for theological reflection. Its aim is to elucidate the differentiated range and interconnections of Black women's gender, racial-ethnic, cultural, religious, and social (i.e., political, economic, and technological) oppression."44 Since illumination of biases brings progress and self-transcendence on our path within and towards the human good, womanist theology offers "proper and serious data" in order to achieve this progress. "Only by attending to Black women's feelings and experiences, understanding and reflection, judgment and evaluation about their situation, can we adequately challenge the stereotypes about Black women—especially those stereotypes that coalesce around that most popular social convention of female sexuality, the 'cult of true womanhood."<sup>45</sup>

Several years later, in laying out a feminist theological solidarity as praxis, Copeland argues that the possibility for individual and social progress lay in our ability to "be attentive, to be intelligent, to be rational, and to be responsible." Furthermore, Copeland's balance between the eschatological and the possible plays a direct role in her solidaristic conclusions. "By focusing on solidarity as a theological category," she writes, "I have hoped to call attention to the gap between rhetoric and Christian social praxis in expressions of feminist theology. Moreover, I have hoped to encourage diffuse, halting, yet, unfulfilled efforts toward a critical Christian feminist theology that aims for 'the basic transformation of [the whole of] society: a new order, not a new deal ... [but] ...a new humanity." 47

#### THE MYSTICAL-POLITICAL HUMAN GOOD

In Copeland's dissertation, written in 1987 and focused on Lonergan's ideas of the human good, she notes that the practical, structural definition of human good fails to consider Lonergan's own description of the self-transcendent nature of the human subject. By tracing the

<sup>&</sup>lt;sup>43</sup> M. Shawn Copeland, "Wading Through Many Sorrows: Toward a Theology of Suffering in Womanist Perspective," in *A Troubling in My Soul: Womanist Perspectives on Evil and Suffering*, ed. Emilie M. Townes (Maryknoll, NY: Orbis, 1993): 123–24. <sup>44</sup> Copeland, "Wading Through Many Sorrows," 111. Emphasis added.

<sup>&</sup>lt;sup>45</sup> Copeland, "Wading Through Many Sorrows," 111.

<sup>&</sup>lt;sup>46</sup> M. Shawn Copeland, "Toward a Critical Christian Feminist Theology of Solidarity," in *Women and Theology*, ed. Mary Ann Hinsdale and Phyllis H. Kaminsky (Maryknoll, NY: Orbis, 1995), 23.

<sup>&</sup>lt;sup>47</sup> Copeland, "Toward a Critical Christian Feminist Theology of Solidarity," 32–33. See Beatriz Melano Couch, "Statement," in *Theology in the Americas*, ed. Sergio Torres and John Eagelson (Maryknoll, NY: Orbis, 1976), 374.

account of the concept in Lonergan's *Method in Theology*, Copeland begins to develop another, overlapping definition for the human good as a "transcultural and transhistorical structure within which solutions to the problems of human living are worked out.... The standard of the human good is a complete life of authentic self-transcendence—the real life of good women and good men, authentic self-transcending subjects." 48

This "transhistorical" vision of the human good played only a small role in Copeland's practical structure until, arguably, her address to the Catholic Theological Society of America in 1998.<sup>49</sup> There, Copeland begins to explore Lonergan's "Mystical Body of Christ" as a way in which to locate individual transcendence while still working towards the overall human good. "The Mystical Body of Christ is ... not a theology; it is a 'divine solidarity in grace.' That solidarity makes a claim on each of us and a claim on theology: It obliges each of us to a social praxis in the here and now that resists the destructive deformation of sin in ourselves and in our society."<sup>50</sup> For Christopher Pramuk, this 1998 address marked a turning point in Copeland's theology and the beginning of Copeland's integration of Johann Baptist Metz's categories of mystical-political praxis and solidarity. Copeland's reflections on the mystical, he writes, were "never just mystical but always mystical-political, never triumphal but always rooted in 'the anguish of the victims." 51

Copeland constructs this mystical vision alongside discussions of the practical, as can be seen in her essay on racism and Christian vocation from 2002: "Inasmuch as that determination is to be made before the cross of Christ, our theology must stand with society's most abject, despised, and oppressed. In this posture, our theology must repudiate the principalities and powers of society and resist their efforts to seduce its spirit-filled, prophetic, critical, and creative impulse." Emphasizing the mystical, she adds that "only from rootedness in prayer and a desire for God and life in God can our theology elucidate

<sup>&</sup>lt;sup>48</sup> Copeland, "A Genetic Study," 261.

<sup>&</sup>lt;sup>49</sup> M. Shawn Copeland, "The New Anthropological Subject at the Heart of the Mystical Body of Christ," *Proceedings of the Catholic Theological Society of America* 53 (1998): 25–47.

<sup>&</sup>lt;sup>50</sup> Copeland, "The New Anthropological Subject," 47. Bernard Lonergan, "Finality, Love, Marriage," in *Collection: Papers by Bernard Lonergan, S.J.*, ed. Frederick E. Crowe (Montreal: Palm, 1967): 26.

<sup>&</sup>lt;sup>51</sup> See Christopher Pramuk, "Living in the Master's House': Race and Rhetoric in the Theology of M. Shawn Copeland," *Horizons* 32, no. 2 (2005): 315. See Johannes Baptist Metz, *A Passion for God: The Mystical-Political Dimension of Christianity*, trans. J. Matthew Ashley (New York: Paulist, 1998).

<sup>&</sup>lt;sup>52</sup> M. Shawn Copeland, "Racism and the Vocation of the Christian Theologian," *Spiritus* 2 (2002): 22.

a new and redemptive solidarity in the transforming reality that is Christ."<sup>53</sup>

From the late 1990s onward, the mystical-political framework grounds Copeland's descriptions of the human good in a political praxis of solidarity situated in "self-transcendence or being-in-love-with-God," understood through Jesus's example and his call to carry our cross and follow. The Christian discipleship, she argues in 2003, as a lived mystical-political way forms the locus for the fundamental grasp of who Jesus of Nazareth is and what following and believing in him means. This framework leads her to espouse a new vision for political theology more generally, presented as her presidential address to the CTSA in 2004:

Our political theology recognizes that life is vested with an "apocalyptic goal," which orients the horizon of our expectation toward the coming of the Lord; yet that orientation never surrenders its cultural and social responsibilities. Hence, political theology will scrutinize from the perspective of the excluded, despised, and poor, the development, promotion, and advance of programs and schemes that propose to resolve violence, injustice, and oppression. Further, political theology will provide a critique of the Church whenever it attempts to evade the dangerous memory of the crucified Jesus by slipping into what Metz names a "fatal banality" or an irenic conformity so passive that it glides over the resolute work of authentic peace, thereby betraying its mystery.<sup>56</sup>

As Copeland turns toward Christological embodiment and begins to engage with Metz's notion of mystical-political discipleship, Lonergan's framework of the human good subtly shifts. Note the difference between her piece on the human good in 1987 and her presidential address in 2004:

If theology mediates between a cultural matrix and the significance and role of religion in that matrix, then the theologian needs some framework by which to attend concretely to the cultural matrix as it is in process....

<sup>54</sup> M. Shawn Copeland, "Knowing Christ Crucified: Dark Wisdom from the Slaves," in *Missing God?: Cultural Amnesia and Political Theology (Festschrift for Johann Baptist Metz)*, ed. John K. Downey, Steven T. Ostovich, and Jürgen Manemann (Berlin: LIT, 2006), 60.

<sup>&</sup>lt;sup>53</sup> Copeland, "Racism and the Vocation," 27.

<sup>&</sup>lt;sup>55</sup> M. Shawn Copeland, "The Cross of Christ and Discipleship," in *Thinking of Christ: Proclamation, Explanation, Meaning*, ed. Tatha Wiley (New York: Continuum, 2003), 179.

<sup>&</sup>lt;sup>56</sup> M. Shawn Copeland, "Political Theology as Interruptive," *Proceedings of the Catholic Theological Society of America* 59 (2004): 79; Johann Baptist Metz, *Love's Strategy: The Political Theology of Johann Baptist Metz*, ed. John K. Downey (Harrisburg PA: Trinity International, 1999), 150.

Such an instrument is provided by Bernard Lonergan's concept of the human good. (1987)<sup>57</sup>

If a function of theology is "to mediate between a cultural matrix and the significance and role of religion in that matrix," then political theology constitutes a crucial, even necessary, framework for doing theology in our time, in the United States. (2004)<sup>58</sup>

"Political theology" replaces Lonergan's "human good" in describing the overall framework that Copeland desires for the function of theology. Of course, Copeland is not replacing Lonergan: the 2004 address is actually dedicated to Bernard Lonergan, "my teacher and yours." Copeland continues to work constructively within the practical structure of Lonergan's human good, including an essay also published in 2004 that speaks powerfully of the need for the transformation of industry in Detroit via the framework of the human good. 60

Nevertheless, the transformation from a concept of human good which *subsumes political aspects of theology* to a concept of human good which *is subsumed within a mystical-political theology* speaks to a significant maturation of Copeland's thought. To be faithful to Copeland's loyalty to Lonergan, it perhaps signals Copeland's ability to be more creative with Lonergan's thought in order to make room for a theological hermeneutic that might better address the needs of contemporary society and contemporary theology.

#### FORGIVENESS, WITNESS, MEMORY, AND LAMENT

In the search for a unique theological voice in the ethics of technology and society, one must look past the usual places in this diverse and highly charged ethical discussion. Condemnations of bias in machine learning, technological development, hiring practices, and digital access are necessary and ethical, but not uniquely theological. For example, the works by Benjamin, Crawford, Perez, and O'Neil argue strongly for ethical principles such as those affirmed by the Vatican's "Rome Call for AI Ethics": transparency, inclusion, responsibility, impartiality, reliability, security, and privacy. 61

<sup>&</sup>lt;sup>57</sup> Copeland, "The Interaction of Racism," 19.

<sup>&</sup>lt;sup>58</sup> Copeland, "Political Theology as Interruptive," 72.

<sup>&</sup>lt;sup>59</sup> Copeland, "Political Theology as Interruptive," 71.

<sup>&</sup>lt;sup>60</sup> M. Shawn Copeland, "A Theologian in the Factory: Toward a Theology of Social Transformation in the United States," in *Spirit in the Cities: Searching for Soul in the Urban Landscape*, ed. Kathryn Tanner (Minneapolis: Fortress, 2004), 20–46.

<sup>&</sup>lt;sup>61</sup> "The Rome Call for AI Ethics," Pontifical Academy for Life, www.rome-call.org/the-call/. As I will discuss later, these principles are themselves vague and heavily corporatized, relying on previously established ethical frameworks from tech companies like Microsoft rather than originating values from the *Catechism*. The Rome Call, for example, is nearly identical to the previously published "Responsible

Furthermore, calls for employment of the common good, while enjoying a rich heritage within the Christian tradition, do not hold a unique space for theological voices in the technological ethics community, as such ethical guidelines and principles have been wholly incorporated into secular spaces. Emiliar to calls against bias, this does not mean that arguments for the common good from Christian ethics are pointless—on the contrary! Following the lead of the Vatican, other Christian leaders must speak out strongly in favor of ethical principles throughout the tech industry. Such calls will likely bolster better conversations and actions among faithful Christians, but I fear they may have a small impact in the community of technological ethics.

In searching for a unique voice for theology within this growing field of technological ethics, I found Copeland's transformation of the practical, structural human good revelatory. Her mystical-political framework holds together related but easily disjointed strains within ethical teaching: the difficult, rational, practical development of the human good and the individual self-transcendence of being known and being in love with God. This duality—this both/and—was clearly a desired articulation for Copeland for a while, as it is presented in a nascent form in one of her earliest discussions of the power and promise of Black theology. "As politically responsible and methodical, black theology stands as a higher viewpoint which can reinforce the social scientist's detached, disinterested, unrestricted desire to know; it urges the social scientist to seek concrete practically intelligent and reasonable solutions to human problems. It calls the social scientist to put his or her intellectual efforts to the service of the progress of the common human good, to assume responsibility for creative and healing solutions to those problems even when the situation seems most opaque."63 She continues, asking the social scientist—and by extension all who work on the critical discovery of social inequities—to examine their own self-transcendence:

Moreover, a politically responsible methodical black theology proposes that the social scientist advert to his or her own interiority. The theologian poses to the social scientist sustained engagement with the very same questions with which he or she is committed to wrestle: What does it mean to know? ... Do I know what it means to respect others, to be in love with them? Do I know what it means to be a human person? ... Do I know concretely what self-transcending love means?... Do I know what it means to suffer? Do I know what it means

AI Principles" from Microsoft. Microsoft, "Responsible AI," www.microsoft.com/en-us/ai/responsible-ai.

<sup>&</sup>lt;sup>62</sup> Jobin, Ienca, and Vayena, "The Global Landscape of AI Ethics Guidelines"; Berkman Klein Center, "Principled Artificial Intelligence."

<sup>63</sup> Copeland, "A Genetic Study," 290.

to be vanquished, to be colonized, to be a victim? Do I know what it means to be privileged, to be a colonizer, to be a victor?<sup>64</sup>

Two decades later, as she presented her call for an interruptive mystical-political theology to the members of the CTSA, she called all theology—not just Black theology—to be political, interruptive, and anti-oppressive. In doing so, she expounded a vision of mystical self-transcendence rooted in political theology, employing categories of forgiveness, reconciliation, memory, lament, and witness.<sup>65</sup>

Each category offers a modern approach from an ancient faith to technocratic systems that wield increasingly alarming levels of power and contribute unhelpfully to the state of violence, bias, and inequity. Forgiveness and reconciliation ground the initial approach to the modern world: they are neither "abstract concepts, nor mere emotion or feeling." For the followers of Jesus, Copeland writes, "The only appropriate responses to violence and malevolence are forgiveness and reconciliation." <sup>66</sup> Following this grounding, Copeland challenges each of us to confront inequities through witness, memory, and lament.

To witness is to tell the truth in a world living in falsehood. "The martyr witnessed for her or his faith even if that witness involved self-sacrifice or death....The witness is never a spectator, never a dilettante. In order to interrupt the violence that tears at the fabric of our society, in order to do political theology, we theologians must be willing to sacrifice—our comforts, our security, our joys, perhaps, our lives." Witness leads to remembrance, to allowing ourselves dangerous memories. As a part of this witness, we must "recover and expose memories that we have been too fearful and too ashamed to admit and confront.... We theologians must take seriously the 'negativity of history in its interruptive and catastrophic character,' for these histories of suffering form the theological locus of our truth-telling." 68

Witness and memory, together, call us to lament. Part and parcel of this truth telling and recovery of memory, we must lead the community in a lament that "announces aloud and publicly what is unjust in the here-and-now." Lament, she continues, "protests, pushes against that calculus of power by which the weak and the vulnerable suffer oppression and abuse. Lament not only dialogues, but also boxes with God—questions, argues, and rebukes. In this way, lament takes seriously God's compassionate love and care in the midst of suffering and privation....Lament names and grieves injustice,...lament

<sup>&</sup>lt;sup>64</sup> Copeland, "A Genetic Study," 291–92.

<sup>&</sup>lt;sup>65</sup> Copeland, "Political Theology as Interruptive," 79–81.

<sup>&</sup>lt;sup>66</sup> Copeland, "Political Theology as Interruptive," 79–80.

<sup>&</sup>lt;sup>67</sup> Copeland, "Political Theology as Interruptive," 80.

<sup>&</sup>lt;sup>68</sup> Copeland, "Political Theology as Interruptive," 81. See Metz, *Love's Strategy*, 150, 139.

names and grieves social pain...[and] lament makes 'spaces of recognition and catharsis' that prepare for justice."<sup>69</sup>

As forgiveness and reconciliation ground our initial focus of self-transcendence, lament grounds the space from which we must witness, speak the truth, and lift up the dangerous memories of the past, which both ground our present and determine our future. "Without pain brought to the open, seen, and heard, paid attention to and acknowledged," writes Kathleen O'Connor, genuine change of long-held biases, now appearing in technocratic systems of power and privilege, is impossible.<sup>70</sup>

Now, finally, we find a unique voice, a unique space, for theology. We begin with the common human good, with statements from the Vatican, bishops, theological ethicists, and governing bodies joining the chorus of secular ethicists and scholars of technology and society in arguing for things like autonomy, dignity, transparency, privacy, equity, diversity, and inclusion. 71 Following Lonergan's framework of praxis, we are attentive, intelligent, reasonable, and responsible, working with tech companies, developing policy, writing code, and informing the public. In the same breath, we break for the individual, for the community, for the world. We witness, we remember, we lament actions which may come across as impractical, but which ground us as Church, as humans, as individuals before God. We give space in our churches and in our schools to witness, remember, and lament injustice, bias, and hate. We seek forgiveness for our complicities and seek reconciliation where it can be found. We find holiness in the suffering individual and the community. We name, remember, and lament the lives torn apart and lost:

- 1. The millions of people whose images are used without consent in facial recognition and biometric databases by governments and private industries;<sup>72</sup>
- 2. Countless people of color who have been unjustly arrested, harassed, incarcerated, and killed from the use of the policing algorithm PredPol;<sup>73</sup>
- 3. The millions of workers who labor in poor conditions without unions around the world, in order to generate massive quantities of wealth for the billionaire tech class;<sup>74</sup>

<sup>&</sup>lt;sup>69</sup> Copeland, "Political Theology as Interruptive," 81. See Kathleen O'Connor, *Lamentations and the Tears of the World* (Maryknoll, NY: Orbis, 2002), 128.

<sup>&</sup>lt;sup>70</sup> O'Connor, Lamentations, 132.

<sup>&</sup>lt;sup>71</sup> A wonderful example of theological articulation of this is Brianne Jacobs's aforementioned arguments for labor transparency and human dignity, found in "Personhood, Bodies, and History," 230–32.

<sup>&</sup>lt;sup>72</sup> Crawford, Atlas of AI, "Three: Data."

<sup>&</sup>lt;sup>73</sup> Benjamin, *Race After Technology*, 80–87.

<sup>&</sup>lt;sup>74</sup> Jay Greene, "Riots, Suicides, and Other Issues in Foxconn's iPhone Factories," *CNET*, September 25, 2012, www.cnet.com/news/riots-suicides-and-other-issues-in-

- 4. Countless women who met untimely deaths or suffered needlessly because most of the default medical data used in textbooks is, to this day, from male bodies;<sup>75</sup>
- 5. The children who labor in rare mineral mines around the world, for "to understand the business of AI, we must reckon with the war, famine, and death that mining brings with it";<sup>76</sup>
- 6. Black, Jewish, LGBTQ, Muslim, Asian, Asian-American, African, Latinx, and all individuals who have been targets of online extremism and hate, which has frequently turned into in-person violence, made so much easier through the non-regulation of social media:
- 7. The Earth itself, in a climate emergency, exacerbated by the relentless stripping of nonrenewable elements such as cobalt, lithium, nickel, and so many others at such a frenzied pace that tech tycoons are now spending billions attempting to escape the Earth;<sup>77</sup>

And then we break again for praxis, new policies, guidelines, apps, companies, and public awareness. The two movements sit apart and yet together, mystical and political, contemplation and action, prayer and work. It is the oldest both/and in the Christian tradition, and perhaps the most important.

The import of this dialectic is both individual and social, personal and corporate. Corporations must be held accountable for their historical and continued failings, including perpetuating inequities, insufficiently addressing bias, and ignoring racist practices and policies. We, the Church, must be active participants in framing the future of technology, and we must neither be compromised by the wealth nor lured into pronouncing toothless guidelines. For example, how does the Rome Call for AI Ethics ensure accountability to the practices so many corporations have now promised to uphold? Will there be ecclesial delegates that inspect algorithms, hiring practices, and use guidelines? If we allow tech leaders to take pictures with the Pope and sign a document without holding them accountable for inequitable practices, we fall victim to the same allure of power that tech giants wield effortlessly around the globe.

The Church has no responsibility to the modern giants of technology, but it holds a deep responsibility to those who suffer continued

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foxconns-iphone-factories/; Michael Sainato, "'I'm Not a Robot': Amazon Workers Condemn Unsafe, Grueling Conditions at Warehouse," *The Guardian,* February 5, 2020, www.theguardian.com/technology/2020/feb/05/amazon-workers-protest-unsafe-grueling-conditions-warehouse.

<sup>&</sup>lt;sup>75</sup> Perez, *Invisible Women*, "Part IV: Going to the Doctor."

<sup>&</sup>lt;sup>76</sup> Crawford, *Atlas of AI*, "One: Earth"; Siddharth Kara, "Is Your Phone Tainted by the Misery of 35,000 Children in Congo's Mines?," *The Guardian*, October 12, 2018, www.theguardian.com/global-development/2018/oct/12/phone-misery-children-congo-cobalt-mines-drc.

<sup>&</sup>lt;sup>77</sup> Crawford, Atlas of AI, "Coda: Space."

inequities through the modern technocratic paradigm, as Pope Francis himself has noted: "Science and technology are not neutral; from the beginning to the end of a process, various intentions and possibilities are in play and can take on distinct shapes. [We need] to appropriate the positive and sustainable progress which has been made, but also to recover the values and the great goals swept away by our unrestrained delusions of grandeur" (*Laudato Si'*, no. 114). We, as individuals, communities, scholars, and Church must bear witness to the loss, discover the bias, support the researchers who look for injustice, lift up hackers and coders whose hearts burn for equity and justice, and demand righteous policies and practices from corporations and governments that ensure the dignity, privacy, and security of all individuals. Only then, in the holy tradition of the mystical and political, can we find a unique, potent, and liberative theological voice.

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