Journal of Moral Theology, Vol. 11, Special Issue 1 (2022): 87–111

Artificial Intelligence and the Marginalization of the Poor

Levi Checketts

At the end of Ridley Scott's 1982 film *Blade Runner*, after nearly killing the film's protagonist Deckard, replicant Roy Batty reflects: "Quite an experience to live in fear—that's what it's like to be a slave."[1] The movie's replicants are biologically engineered humans, but the book on which it is based, Philip K. Dick's *Do Androids Dream of Electric Sheep?*, portrays Batty and friends as androids, artificially intelligent robots. Nonetheless, the setting of the story and themes of the film set up an interesting question which, until now, has been radically under-addressed in artificial intelligence (AI) ethics: how can AI inform our understandings of the experience of poverty and our obligation to the poor and oppressed?

This question is of major concern for Catholic social thought in its relation to AI. The so-called "preferential option for the poor," a major pillar of Catholic thought in the modern era, requires us to consider seriously the experience and plight of those who are worst off. While this has often been understood to mean arranging material and economic systems to elevate the poor, deeper reflections—such as those articulated by Latin American liberation theologians—emphasize the need to understand the lived experience of poverty and not just do charitable works. In other words, the issue is not just the problem of wealth inequality but also how one's experience of the world is colored by being poor. Applied to AI, our social inquiries must not only ask whether AI will make some richer and others poorer, but also whether it will better help give authentic voice to the voiceless in our societies.

In this paper I contend that as currently designed, not only will AI systems be unable to articulate the "intelligence" of the poor, but—worse—they will serve to further marginalize the experience and embodied truth of those worst off in our society. The assumptions of what makes something "intelligent" grounded in the aim of artificial intelligence, that is the epistemological models on which AI is built, are rooted in a predominantly bourgeois, Enlightenment-based

[1] Ridley Scott, *Blade Runner*, Warner Bros., 1982.

epistemological model which ignores the ways socioeconomic conditions shape cognition and experience of the world. AI thus represents a version of human intelligence which does not actually correspond to the epistemology of the poor. Worse, as AI becomes a more accepted model of human consciousness, it serves to delegitimize and derogate nonconforming epistemes.

Through this paper, I proceed by first examining the epistemological assumptions of AI research, especially general AI. Following this, I consider how this epistemology conflicts with an epistemology informed by a hermeneutic of poverty. I approach this section by first summarizing some critiques of AI already laid out through leading philosophers and social theorists, and then proposing a hermeneutical framework of the experience of poverty through work done in social theory and liberation theology. Finally, using work done in Science and Technology Studies (STS), I examine the problem of AI "constructing" human intelligence and the potential this has for undermining a social order that takes seriously the experience of the poor.

FEEDBACK SYSTEMS AND COMPUTATIONAL MACHINES

From the beginning, a critical point needs to be made clear: not all AIs are created the same. The term AI is used rather equivocally, in fact, and this is somewhat deliberate. First, when most people think of AI, they envision a computer that is conscious and thinks like we do or, depending on their philosophy of mind, at least can act like it.[2] This view is sometimes called Strong AI, or General AI. Second, however, when the term AI is used by major tech firms like Google, Samsung, Facebook, Apple, and others to sell products, or make big announcements, they often use AI as a synonym for advanced software programs using sophisticated algorithms to make automated decisions in narrow AI. Most often, these are examples of machine learning, adaptive programming, or merely instances of automated assistance. AI is used for IBM's Watson, and DeepMind's AlphaGo, which are highly advanced learning programs rivaling human cognitive abilities in some areas, as well as Alexa and Siri, which are much more akin to Microsoft Word's "Clippy."[3] The reason why a Samsung air conditioner's adaptive setting is called AI is not the same reason why the people at Google's DeepMind call their work AI. Indeed, the people at DeepMind call their work AI because it is—or at least they believe

[2] This idea undergirds much of philosophical discussion of AI in general, from the 1970s until present. Authors such as the late Hubert Dreyfus, John Searle, Nick Bostrom and, most recently, Mark Coekelbergh focus on this aspect of AI as among the most paradigmatic and most philosophically controversial. See, e.g., Mark Coekelbergh, *AI Ethics* (Cambridge, MA: MIT Press, 2020), 11.

[3] Clippy was a Microsoft Office "Assistant" bot that offered suggestions to users, often about formatting, searching for help or optimizing their programs, from 1997 until 2007.

it is—part of the process necessary for achieving General AI.[4] While they recognize that machine learning is not, itself, yet the achievement of a conscious machine, they believe that machine learning and adaptive programming help us see how humans think and how to program computers to do the same.

The push for developing a human-like calculating machine has a surprisingly long genealogy. In 1666, Gottfried Wilhelm Leibniz hypothesized that logical thought was merely a consequence of manipulating inputs and receiving expected outputs, so a machine could be built that housed an "alphabet of human thoughts" and could process human ideas as a mind does.[5] Ada Lovelace, considered by many to be the first programmer, argued in contrast that a machine can never be as intelligent as a human because it does not create original works.[6] However, artificial intelligence work got its applied grounding in the 1940s. The computer pioneer Alan Turing is credited with proposing the first clear vision of AI in terms of human intelligence. He believed digital computers—that is, computing machines with components that are either on or off—were Universal Turing Machines, machines that can simulate any other machine. In his 1950 essay "Computing Machinery and Intelligence," Turing hypothesized that a digital computer can be said to "think" if it can successfully win the "Imitation Game," a test where a judge must choose which responses to questions are from a computer and not a human being, now commonly referred to as the Turing Test.[7] His hypothesis sets the tone and direction of computer engineering generally and AI specifically. To this day, in popular opinion, a computer that successfully passes the Turing Test is, for most purposes, a conscious person.

Also in 1950, Norbert Wiener published *The Human Use of Human Beings*, the foundational text for the field of cybernetics. Within this text, Wiener advanced the ontology that everything is reducible to information. Material is insignificant, and the content of all that is can be understood through its informational context. Indeed, predicting the surge in genomics following Crick, Watson, and Franklin's Nobel Prize-winning work on DNA, Wiener asserted: "We are not the stuff that abides, but patterns that perpetuate themselves."[8] Following this,

---

[4] See "About," *DeepMind*, deepmind.com/about.

[5] Oscar Schwartz, "In the 17th Century, Leibniz Dreamed of a Machine That Could Calculate Ideas," *IEEE Spectrum* (November 4, 2019), spectrum.ieee.org/tech-talk/artificial-intelligence/machine-learning/in-the-17th-century-leibniz-dreamed-of-a-machine-that-could-calculate-ideas. See Gottfried Wilhelm Leibniz, *Dissertation on Combinatorial Art*, ed. M. Mugnai, H. van Ruler, trans. M Wilson (Oxford: Oxford University Press, 2020).

[6] Alan Turing, "Computing Machinery and Intelligence," *Mind* 49 (1950): 446.

[7] Turing, "Computing Machinery and Intelligence," 433.

[8] Norbert Wiener, *The Human Use of Human Beings: Cybernetics and Society* (London: Free Association, 1950), 130.

the physical movement of things in space is a question of information and feedback. Cybernetics as a field, then, focuses on feedback to stimuli, often through mechanistic functioning. Wiener and others also believed the human mind was essentially a massive feedback mechanism. Hypothesizing about automated processes, Wiener writes that "the nervous system and the automatic machine are fundamentally alike in that they are devices which make decisions on the basis of decisions they have made in the past"—i.e., a programmed response.[9] Cybernetics, then, reinforced the view of Turing that the human mind is the same in its operation as and can be replicated by a machine. When interpreted by the human brain, a given input of information will yield a predictable and given output. If a human brain can be understood as a sophisticated information processor, then it is conceivable that a sophisticated information processor can replicate the phenomenon of "consciousness" humans seem to possess.

From the 1950s until now, the field of AI research has pursued the dream of replicating human conscious experience. While modern applications of AI are now often directed toward applied types of cognitive activity, such as stock trading, text preservation, or prison bail determinations, all areas of AI work assume the human capacity for any given tasks as the baseline, and many researchers still aim toward the holy grail of General AI. Many obstacles in the process of achieving this have directed contemporary AI researchers into paths the pioneers of the field did not anticipate seventy years ago, such as neural networks, machine learning, and natural language processing, which seek to emulate the more organic way by which human cognition occurs. Nonetheless, no AI has clearly passed either the Turing Test or other proposed human intelligence tests such as the Winograd Schema Test.[10] Each measure of AI's capability is predicated upon an understanding of human intelligence *as primarily a function of calculation and information processing*. Indeed, Ray Kurzweil—one of today's leading artificial general intelligence (AGI) theorists—assumes that the primary uniqueness of human minds is pattern recognition and nothing more.[11]

The measure of AI's success, therefore, is ultimately a measure of how well the program can solve puzzles, perform intellectual tasks, or carry out basic conversations assuming, in each of these, specific metrics for satisfactory or unsatisfactory performance. AI is, for the most

---

[9] Wiener, *The Human Use of Human Beings,* 48.

[10] The Winograd Schema test asks the participant to identify ambiguous pronouns, such as "it" in the sentence, "Mary saw the puppy in the window and wanted *it*." See Ernest Davis, Leora Morgenstern, and Charles Ortiz, "The Winograd Schema Challenge," New York University, cs.nyu.edu/~davise/papers/WinogradSchemas/WS.html.

[11] Ray Kurzweil, *The Singularity is Near: When Humans Transcend Biology* (New York: Viking, 2005), 107.

part, not being trained to do things human beings cannot already do, and those things it is programmed to do tend to be strictly analytic processes. While these may be hallmarks of human distinctiveness in the world, one would hardly call the achievements of AI exhaustive of human intelligence or consciousness. The science fiction depiction of AI, for example, has often hinted at the problem of emotional intelligence, itself only one aspect of the larger depiction of human experience, which includes our senses of wonder and awe, relationality, creativity and aesthetics, moral responsibility, and, most importantly for this work, the interdependent nature of human consciousness and experience of the world. These remain excluded from any meaningful AI research, yet AGI is supposed to replicate human intelligence.

I thus challenge AI's representation of human intelligence as calculation below on two grounds. First, it is dismissive of the varieties of human cognitive experience. In particular, I will consider the disjuncture between AI models of consciousness and the consciousness of the poor, a disjuncture which should be enough to complicate the language and goals of AI. Second, this assumption denies the human dignity of those whose cognitive function is not represented by AI programming goals. If calculation is the model for human cognition, human dignity tends to be contingent upon calculative rationality. This is of special concern for Christians, especially Catholics, whose social obligations prioritize the voice of the voiceless and the experience of those living in the margins of society.

COMPUTER SCIENCE FROM BELOW

The vision of intelligence generally and human intelligence in particular held by AI theorists is one that is highly specific to a particular set of philosophical anthropological beliefs. Hubert Dreyfus notes that the model of epistemology underlying AI theory is one inherently Platonic: human rationality operates on a largely mathematical, formal understanding of the world, with objects corresponding to pure forms and judgments resulting from implicit or explicit calculations.[12] The world is formal, logical, and mathematical. Hava Tirosh-Samuelson also points out latent Cartesianism manifest in the presupposition that intelligence or consciousness is separable from the embodied context. Intelligence is ethereal and programmable into machinery, and embodiment only serves to deceive our rational minds.[13] Noreen Herzfeld takes this further, framing it not merely as a relative problem of philosophical school, but of privileged epistemological context. She notes

[12] Hubert Dreyfus, *What Computers Still Can't Do: A Critique of Artificial Reason* (Cambridge, MA: MIT Press, 1994), 67.

[13] Hava Tirosh-Samuelson, "Engaging Transhumanism," in *H±: Transhumanism and Its Critics*, ed. G. Hansell and W. Grassie (Philadelphia: Metanexus Institute, 2011), 44.

that the perspective of intelligence presented by AI—typical of wealthy, able-bodied, heterosexual, white men—excludes many other viable perspectives; intelligence is what fits into the hegemonic models of intelligence in Western society.[14]

The suggestion offered by these authors and others is not that Aristotelian or Leibnizian epistemology will fix the problem, but rather that different contexts of thinking beyond the typical Western philosophical "canon" are necessary. How to get beyond these assumptions is an important question for AI ethics. Dreyfus began such a venture by bringing continental philosophy in as a critique against AI. Using the epistemologies of Ludwig Wittgenstein and Maurice Merleau-Ponty, Dreyfus argued that AI programmed with all information will fail because human beings encounter the world as a *gestalt* and operate in that world based on "rules of thumb" (heuristics) rather than algorithmic procedures.[15] His own thought revolutionized AI and encouraged researchers to pursue machine learning and neural networks rather than massive manual data coding.

Dreyfus's thought does a great deal to "humanize" intelligence, but his context is still as a white man. Critical AI theorists, especially feminist AI theorists, have expanded this vision to include the voices of others. Sherry Turkle and Seymour Papert, for example, found that the gendered assumptions of logical processing and coding were more a product of convention than necessity in computer programming, and that intuitive approaches to computer programming have the same efficacy as procedural approaches.[16] Their work challenges both gendered understandings of logical talent and the dogmatic epistemologies of computer science. Donna Haraway has challenged much in science and technology, including the sterilized "god's eye view" image of science endorsed by white male scientists.[17] She challenges the binary ontologies of roboticists and AI researchers with a hybridized "cyborg" ontology she proposes for feminist approaches to science

---

[14] Noreen L Herzfeld, *In Our Image: Artificial Intelligence and the Human Spirit* (Minneapolis: Augsburg Fortress, 2002), 73. As AI has advanced as a field, it has gone beyond the purview of white Western males to include much research from Asia, especially China. In the US context, however, much of the tech industry is still dominated by white men, though more Asian men now work as software engineers than twenty years ago. The theoretical groundings and pedagogical stylings of the field, however, belie this seeming diversity, and recent problems of "racist" AI illustrate this reality quite clearly.

[15] Dreyfus, *What Computers* Still *Can't Do*, 296.

[16] Sherry Turkle and Seymour Papert, "Epistemological Pluralism: Styles and Voices within the Computer Culture," *Signs* 16, no. 1 (Autumn 1990): 128–57.

[17] Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," *Feminist Studies* 14, no. 3 (Autumn 1988): 575–99.

and technology.[18] Francesca Ferrando's post-human philosophy welcomes the possibility of "artificial" intelligences, but rejects both dualism and the humanist tradition typical of AI epistemology. Artificial intelligence, far from being a replica of human consciousness, should expand our perspectives of what "counts" for intelligence and consciousness.[19] Each of these authors, and many others, assert authentic experiences of the human which are not typified by thought models that support regnant epistemological frameworks in computer science generally and AI especially.

The focus of the rest of this paper is to uplift such a challenge to AI that should be normative for Catholic thinkers—the position of the poor. To frame this challenge, it is important to consider some elements of the lived experience of the poor, with the caveat, as Jon Sobrino notes, that the poor are diverse: poverty exists as disability, sexual discrimination, violence, and other forms of silencing, and looks different across demographics and geographies.[20] Put another way, there is no one poverty, as poverty exists as an element of social marginalization. Something like Kimberlé Williams Crenshaw's thesis of "intersectionality" is key for understanding how poverty is experienced by different people in different ways;[21] the poverty of a disabled peasant widow in El Salvador is different from the poverty of a child factory worker in Nepal, which is also different from the poverty of a low-income black family in the United States.

Despite the rich diversity presented by poverty writ large, the fact remains that nearly all theology is written from non-poor perspectives. Much more needs to be written "from below," by those who have lived in poverty and not merely studied it. I enter this conversation as someone who grew up in first-world poverty, experiencing lack of resources, stunted opportunities, economic contingency, and so forth. Nonetheless, there are important aspects of poverty I never experienced, such as the ways race, gender, disability, and addiction often exacerbate or contextualize the struggles of being poor. The hermeneutic of poverty I outline below reflects my experience but also trends generally among the poor. In a nearly meaningless generalization, I outline in this section poverty as the experience of resource scarcity and insecurity, marginalization and domination. The particular areas I examine in which the normativizing lens of AI

---

[18] Donna Haraway, "A Cyborg Manifesto," in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 149–82.

[19] Francesca Ferrando, *Philosophical Posthumanism* (London: Bloomsbury, 2019), 146.

[20] Jon Sobrino, *No Salvation outside the Poor: Prophetic-Utopian Essays* (Maryknoll: Orbis, 2007), 22.

[21] Kimberlé Williams Crenshaw, "Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color," in *The Public Nature of Private Violence*, ed. M. Fineman and R. Tykitiuk (New York: Routledge, 1994), 93–118.

epistemology is challenged by the experience of poverty include the cultivation of taste, the struggle to flourish, and the emergence of class consciousness, sometimes manifest as solidarity, but often as disdain.[22]

BLESSED ARE THE POOR

Let us bracket the question of AI epistemology for the time being. While the poor are a subject of great interest within moral theology, my experience has been that the poor are rarely well-understood. Too often they are treated as objects of our compassion: those to whom charity is done, not active moral agents. It is necessary, then, to consider the poor on their own, to articulate a sketch of their experience before comparing them to the epistemological model operative in AI. This section outlines particular aspects of the episteme of poverty that suggest a hermeneutical approach for considering the perspective of the poor. The remaining sections will apply the hermeneutic articulated in this section to the specific question of AI programming, the greater social implications for the conflict between these models, and a potential *rapprochement* between AI and liberation theology. Let us then consider the experience of being poor.

To begin with, to be poor means to cultivate the "taste"—in the words of Pierre Bourdieu—or preferences, of being poor. We are socialized into the tastes we have, socialization itself being based on our socio-economic class. Our material circumstances shape the concrete constellations of our opportunities, dispositions, health outcomes, and other realities. As Karl Marx wrote, "The nature of individuals thus depends on the material conditions determining their production."[23] The material tastes of classes, from culinary preferences to fashion, entertainment to commodities, exist as effects of socioeconomic conditions. Tastes exist among all classes, but Bourdieu notes that the upper classes tend to pursue the *avant-garde* in their tastes, while the poor often develop a taste for the cheap and gaudy, including processed and preserved foods high in sugar and salt, movies and television with expensive special effects or formulaic plotlines, clothing brands appealing to the image of labor or home-fashion, and religion

[22] A great deal has been written on other forms of marginalization, but poverty seems to primarily be written *about* not written *from*. Iris Marion Young, for example, lays out five "faces of oppression" in her prophetic *Justice and the Politics of Difference* including exploitation, marginalization, powerlessness, cultural imperialism, and violence. While the first four of these characteristics clearly do map onto poverty, as I argue below, Young tends to assume the oppressed have solidarity within their group. As I note below, while the poor are conscious of their poverty, they are not always sympathetic to others who suffer the same fate. See Iris Marion Young, *Justice and the Politics of Difference* (Princeton, NJ: Princeton University Press, 1990), 39–65.

[23] Karl Marx, "The German Ideology: Part I," in *the Marx-Engels Reader*, 2nd ed., ed. R. C. Tucker (New York: W. W. Norton, 1978), 150.

that promises good things to those who endure.[24] The distinction between these two preferences demonstrates a sense of traditional aesthetic versus the refined.

Bourdieu further notes that the relationship between classes and tastes is one of repulsion and rejection. "Tastes are perhaps first and foremost distastes, disgust provoked by horror or visceral intolerance ('sick-making') of the tastes of others."[25] Thus, Bourdieu re-appropriates Marx's theory of class conflict as a model of late capitalist culture. Within this sphere, however, not all agonists are equal. The "sole function" of working-class tastes "is to serve as a foil, a negative reference point, in relation to which all aesthetics define themselves by successive negations."[26] The lower classes get to be defined *as* lower: everything from their education, careers, hobbies, entertainment, food, and dress is de-legitimated from the perspective of the upper classes. For example, a band like Nickelback, which appeals to lower-class aesthetics with its working-class themes, formulaic composition, and gritty sound quality, simultaneously has numerous Billboard chart-topping hits while being one of the most hated contemporary music groups.[27] What appeals to the masses *must* by definition be cheap and valueless.

The most sinister element of this reality, however, lies in the fact that the tastes of the poor are not necessarily their own design. The poor are subjects of "cultural hegemony," a process by which the values and disvalues of the upper classes are imposed on the lower classes irrespective of whether these are truly valuable to them.[28] Bourdieu notes that "working-class 'aesthetic' is a dominated 'aesthetic,' which is constantly obliged to define itself in relation to dominant aesthetics."[29] This domination results in the working classes experiencing a "distaste" for "legitimate" culture while being susceptible to the creations of upper-class taste producers. Consider the popularity among working classes in the United States of "Blue Collar Comedy," whose leading member, Jeff Foxworthy, rose to prominence for jokes about being a "redneck" despite him being the son of an IBM executive. Or note how, in 2016, Donald Trump, Jr., claimed that his father was a "blue collar billionaire," a patent *contradiction in verbo* meant to assert that somehow Donald Trump was really a "salt of the earth"

---

[24] Pierre Bourdieu, *Distinction: A Social Critique of the Judgment of Taste*, trans. R. Nice (Cambridge, MA: Harvard University Press, 1984), 34.
[25] Bourdieu, *Distinction*, 56.
[26] Bourdieu, *Distinction*, 57.
[27] Mark LePage, "Why Nickelback Is the World's Most Hated Band," *The Gazette* (April 3, 2010) web.archive.org/web/20120111021850/http://www.montrealgazette.com/entertainment/nickelback+world+most+hated+band/2757349/story.html.
[28] Marx, "The German Ideology," 174.
[29] Bourdieu, *Distinction*, 41.

worker.[30] This characterization worked; Trump's election victory in 2016 largely rested on support from working-class whites.[31]

It is critical to understand the cultivation of taste among the poor. One reason is that this can result in otherwise non-beneficial choices. Dietary preferences of the poor, for example, shaped by income, access to food, leisure time, and social context, skew largely toward "instant" food over carefully prepared fresh foods or high-quality restaurant food. The poor also are more likely to buy cheap consumer goods, which tend to be poorer quality, and to use more of their limited disposable income on personal gratification over investment. It may seem that these choices are "irrational," but they must be understood in light of the socialization and realities of the working classes. Another important part of taste is how one understands what is available to him or her and the right he or she has to it. Ronald Reagan's narrative of the "Welfare Queen" has led to the perception among many poor that government aid is for the lazy and morally bereft. The vision of autonomy and freedom from taxation, of benefit primarily to the upper classes, is socialized among the poor as a morality, the "American way."[32] This creates a division among the poor, with some seeking to take advantage of what social goods are available to them, while others despise those who do so. Even attitudes toward socialized medicine differ among the poor; the divergence between low-income and middle-income attitudes toward the Affordable Care Act is correlated more closely to one's ethnic background than one's economic background, with poor whites being split nearly 50/50 on the ACA, but 75 percent of poor blacks supporting it.[33]

Apart from the conflictual and dominated framework of taste that the poor experience, they also experience restrictions on their flourishing. Materially, this is quite apparent; being poor means at the very least impoverished material conditions, the effects of which psychologically or spiritually are easy to predict. More to the point, scarcity and insecurity primarily define the situation of the poor: scarcity of wealth, nutrition, and opportunity, insecure living and working conditions, and so forth. The experience of scarcity takes different forms:

---

[30] Jon Delano, "Donald Trump Jr. Refers to Dad as 'The Blue-Collar Billionaire' During Pittsburgh Campaign Stop," *KDKA2 CBS Pittsburgh* (September 14, 2016), pittsburgh.cbslocal.com/2016/09/14/donald-trump-jr-refers-to-dad-as-the-blue-collar-billionaire-during-pittsburgh-campaign-stop/.

[31] Stephen L. Morgan and Jiwon Lee, "Trump Voters and the White Working Class," *Sociological Science* 5 (April 16, 2018): 234–45.

[32] John D. Huber and Piero Stanig, "Why Do the Poor Support Right-Wing Parties? A Cross-National Analysis," Presented at RSF Inequality Conference, University of California Los Angeles, January 2007.

[33] Sean McElwee, Jesse Rhodes, and Brian F. Schaffner, "Is America More Divided by Race or Class?," *Washington Post* (October 12, 2016), www.washingtonpost.com/news/monkey-cage/wp/2016/10/12/how-do-race-ethnicity-and-class-shape-american-political-attitudes-heres-our-data/.

in extreme cases, this means not knowing where or when one's next meal may be or whether one will survive the night; in more moderate forms, it means having no "safety net" if any of the many insecure aspects of one's life go awry. This scarcity has significant physical and psychological effects. Physically, it results in malnutrition, poor general health, chronic illness, stunted growth, and lower life expectancy. Psychologically, it can lead to anxiety, stress, aggression, fatigue, and even psychosis.[34]

Nineteenth-century social reformers recognized within the experience of the poor a correlating situation of desperation. This desperation led inevitably to an increase of vice and crime. In 1844, Friedrich Engels argued that for the destitute, three options present themselves: starvation over time, immediate suicide, or crime. Of the three, Engels supposes that "there is no cause for surprise that most of them prefer stealing to starvation and suicide."[35] Decades earlier, Robert Owen recognized that by increasing the wages of his workers and lowering their drudgery, the moral character and flourishing of his employees increased dramatically.[36] This tracks with our current models of crime: as income inequality increases in a region, so too does property crime (e.g., theft, vandalism, breaking and entering).[37] The rise of social Christianity, whether manifest in Catholic voices such as magisterial Catholic social thought and the Fribourg Union, or in Protestant efforts such as the Salvation Army and Walter Rauschenbusch's "Social Gospel," is consequently contextualized by the causally connected facts of industrial poverty, suffering, and social unease.

Lest one gets the idea that the poor are more inherently vicious, we should note that research indicates that the poor tend to be more virtuous than their non-poor counterparts. Researchers at UC Berkeley, for

---

[34] Paul D. Hastings, Lisa A. Serbin, William Bukowski, Jonathan L. Helm, Dale M. Stack, Daniel J. Dickson, Jane E. Ledingham, Alex E. Schwartzman, "Predicting Psychosis-Spectrum Diagnosis in Adulthood from Social Behaviors and Neighborhood Contexts in Childhood," *Development and Psychopathology* 32, no. 2 (2019): 465–79.

[35] Friedrich Engels, *The Conditions of the Working-Class in England* (London: George Allen & Unwin, 1892), 115.

[36] Robert Owen, *A New View of Society, and Other Writings* (London: Dent, 1927), 140, 160.

[37] Neil Metz and Mariya Burdina, "Neighbourhood Income Inequality and Property Crime," *Urban Studies* 55, no. 1 (April 2016): 133–50. NB: In contrast to many misconceptions, *violent* crimes (e.g., murder, assault, rape) are not prevalent simply because of income inequality, but rather perpetuated by minuscule segments of the population (roughly one percent of total population). Criminologists note that *group* membership (i.e., gang activity) rather than income is a better predictor for violent crime activity, and that this can be traced to highly concentrated segments of the population. Most poor neighborhoods are not more violent than affluent neighborhoods. See Stephen Lurie, "There's No Such Thing as a Dangerous Neighborhood," *Bloomberg City Lab* (February 25, 2019), www.bloomberg.com/new/articles/2019-02-25/beyond-broken-windows-what-really-drives-urban-crime.

example, found that lower socioeconomic status corresponds to greater amounts of "prosocial behavior," including greater generosity, charity, trust, and help.[38] Other studies find that the poor are more likely to give directly to the homeless and needy in their communities than to charity organizations.[39] Poorer communities tend to be more socially engaged, generous, and cooperative than affluent ones. A paradox then emerges: why does poverty simultaneously correspond to seemingly anti-social (i.e., property crime) and prosocial behavior? The answer, oddly enough, is itself rather straightforward: survival. As Jon Sobrino says, the poor cannot take their own lives for granted.[40] Survival is key for understanding the experience of the poor: it can be secured through cooperation which benefits all, or through destructive behavior that benefits one. The prosocial orientation is not, however, a "rational self-interested" move; it is an empathically-motivated response. The experience of desperation among the poor prompts them to act with generosity to others who experience similar desperation.[41] On the contrary, those with greater economic resources have been known to act less pro-socially, prioritizing their own well-being and success above others. This must be kept in mind in examining the distinctive difference between the operative cognitive assumptions of the upper-class AI programmers and the poor and what they value in terms of social behaviors.

Finally, the poor experience the world through a filtered class consciousness, a consciousness of the shame of poverty applied to oneself and other poor persons. Maurice Merleau-Ponty argues that "the economic and social drama [of human life] offers each consciousness a certain background or again a certain *imago* that it will decode in its own manner," which, he notes, will manifest in understanding oneself in relation to others in response to material and economic experience.[42] Georg Lukács points out that as a poor person becomes explicitly aware of this economic drama and the sharp division between herself and the upper classes, she is open to experiencing "class consciousness."[43] However, Lukács further notes, the poor may experience a type of "false consciousness" by which they ascribe a greater amount of autonomy and possibility to their economic life than is true for their

[38] Paul K. Piff, Michael W. Kraus, Stéphane Côté, Bonnie Hayden Cheng, and Dacher Keltner, "Having Less, Giving More: The Influence of Social Class on Prosocial Behavior," *Journal of Personality and Social Psychology* 99, no. 5 (2010): 771–84.
[39] Arthur C. Brooks, *Who Really Cares: The Surprising Truth about Compassionate Conservatism* (Philadelphia: Basic Books, 2006), 80.
[40] Sobrino, *No Salvation Outside the Poor*, 16.
[41] Piff, Kraus, Côté, Cheng, and Keltner, "Having Less, Giving More," 780.
[42] Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. D. Landes (London: Routledge, 2012), 177.
[43] Georg Luckács, *History and Class Consciousness: Studies in Marxist Dialectics*, trans. R. Livingstone (Cambridge, MA: MIT Press, 1971), 51.

material conditions.[44] It is often the case, then, that the poor experience a disgust for others in their socio-economic bracket and seek to distance themselves from this reality by trying to "pass" as non-poor. To borrow from Frantz Fanon's contrast of the experience of Jews and blacks, the poor man can be unknown in his poverty: "He may be a white man, and, apart from some characteristics, he can sometimes go unnoticed."[45] The poor are not always seen as poor, especially when they learn how to act and live in upper-class society, but they are always conscious of their poverty and its social significance.

Within the American ethos, especially the Western United States, where I grew up and which most American tech companies call home, poverty is experienced as a moral failure or shame. Inspired in no small part by the "Spirit of Capitalism" and the message of the prosperity gospel, many Americans believe that the free market system inevitably rewards hard work. Those who are in poverty, then, are lazy and vicious. The image of the trailer park or housing project and the ideas these images evoke of criminality and decadence are well understood in American culture.[46] Additionally, union membership tracks with class consciousness,[47] but it only includes 10.3 percent of American workers and has been declining.[48] The effect of this is a sort of cognitive dissonance among American working poor. The poor, they are told, are those who have earned their place through defective character. The "good poor"—i.e., those who have a strong work ethic—consider themselves to be only temporarily poor: their ship will come in and when it does, they will finally receive the reward for their hard work. Many believe this despite the fact that the US has less social mobility than many other industrialized nations.[49] The belief in moral desert must be internalized among the poor in order to ensure that they continue to be poor (for the benefit of the rich).

A result of this is that many hard-working poor often deny their situation. The poor who wish not to experience public shame must "play" the part of non-poor. The shame of poverty leads the poor to portray themselves as "non-poor," whether that be through dress and mannerisms or through identifying themselves as "middle class" or

---

[44] Lukács, 50.
[45] Frantz Fanon, *Black Skin, White Masks*, trans. C. Markmann (London: Pluto, 1986), 115.
[46] E.g., Lurie, "There's No Such Thing as a Dangerous Neighborhood."
[47] Pravin J. Patel, "Trade Union Participation and Development of Class-Consciousness," *Economic and Political Weekly* 29, no. 36 (September 3, 1994): 2376.
[48] "Union Members Summary," U.S. Bureau of Labor Statistics (January 22, 2020).
[49] Alberto Alesina, Stefanie Stantcheva, and Edoardo Teso, "Intergenerational Mobility and Preferences for Redistribution," *American Economic Review* 108, no. 2 (2018): 521–54.

some other tactic.[50] Some may learn to do this well, but, as Pierre Bourdieu suggests, this requires having a rich cache of cultural capital from which to draw, which is, as a matter of reality, the purview of the upper classes.[51] Tattered jeans and a ratty t-shirt can be chic if worn with the right demeanor, but the best skirt and top from Wal-Mart still look like bargain bin clothing. In essence, the "good poor" must continually present themselves in public as being non-poor, while simultaneously aspiring to be like the rich and resenting those who share their common economic fate. To be fully conscious of one's material conditions and the unlikelihood of escaping poverty, that is, to unmask the illusion of the American Dream, leads either to despair or radicalization, which is further maligned as laziness and poor character (i.e., "hand-out" culture).[52]

The above may seem somewhat disjointed and topical, but the conjunction of these facets of poverty is artfully demonstrated through the narrative of Bong Joon-Ho's *Parasite*, the first non-US film to win Best Picture at the Academy awards. This film illustrates these facets of poverty through the depiction of the poor Kim family and their relation to the rich Park family.[53] Struggling to make ends meet in their sub-basement apartment, the Kims use fraud to successfully gain employment from the Parks through contract and service work. The need for the family to survive justifies document forgery, sabotage, intrigue, and even assault. The luxuries of the Parks tantalize the Kim family and the movie sharply contrasts the food, alcohol, dwelling space, and smell consumed, inhabited, and produced by the two families. While the Kims learn to dress the appropriate way to fit in with the Parks (albeit as subordinates, never as peers), a critical element of

---

[50] Historically, the "middle class" has meant the bourgeoisie or petite bourgeoisie, that is, those who own property. In the US context, property, especially real estate, has been rather easy to come by through the mortgage system. Even my family owned our houses for most of my childhood. It is important, however, to note that since the 1980s policy of "Trickle-Down Economics," income disparity has increased and the truly "middle class" is a disappearing phenomenon. The result is that a sort of white, suburban, upper-lower class aesthetic has prevailed which favors "family restaurant" chains like Chili's and Olive Garden over the cheap fast food of McDonald's and Taco Bell. This segment of the population is not really thriving economically, but the status as upper working-class is sufficient enough to seem "average" for the American populace. See Joshua W. Ehrig, "The Disappearance of the American Middle Class," (MA in Political Science Thesis, Lehigh University, 2003).

[51] Bourdieu, *Distinction*, 92.

[52] Consider, for example, the way that the politics of Bernie Sanders and Alexandria Ocasio-Cortez are denigrated by Fox News and other right-wing media. Sanders's policies are considered "hand-outs" despite the fact that those who benefit from them would be people already deeply underpaid and overworked. The economic disparity between American generations and increased education has led many Millennials to embrace more left-leaning political stances which, in right-wing media once again, are portrayed as childish whines rather than legitimate critiques of economic injustice.

[53] Joon-Ho Bong (봉준호), *Parasite (기생충)*, CJ Entertainment, 2019.

the film's masterful narrative hangs on the fact that they can never escape their *smell*; the odor of the sub-basement stigmatizes the Kims and becomes an olfactory marker of the shame of poverty. Finally, the Kims express admiration and affection for the Parks over and against the antagonism they feel for people in their own income bracket whom they see as vermin in their way. The Kims aspire to gain the favor of the rich Park family while viciously displacing workers occupying the same lower rungs of society. The film lays bare the moral value of the Parks in contrast to the moral disposability of other poor workers, even in the perception of the poor Kim family.

In short, to be poor is to be a person who makes choices in desperation, to operate under "survival" mode rather than "ideal choice" mode. The poor have their tastes dominated and denigrated. Their income level is a source of shame because the rich have so determined. With fractured consciousness, some poor experience greater solidarity and compassion while others experience disdain and shame. This consciousness is perpetually in the minds of poor persons: they are never "free" from their poverty because the need for survival and the domination of their interests creates a position in which choice is to a certain degree predetermined. The poor's choices are dominated and constrained: they can choose authentic poor tastes or sham upper class tastes; they can choose a life of honest work or dishonest parasitism; they can choose respect for the capitalist ethic or "lazy" class consciousness.

Science fiction and general AI interests both highlight the subjugation of AI and the deceit of AI "passing" as human. AI is subjugated because it is created to fulfill a specific function for human beings; it is not free to determine its own destiny. An AI set to run a city, for example, ought to accomplish this task only, any aberration is a threat.[54] At the same time, the goal of the Turing Test and other benchmarks of AI development is imitating human cognitive functioning. AI is meant to "pass" as human despite it not being human. These aren't the same as the experience of the poor *because* the poor are the subject of domination and exploitation. The fictional depiction of an enslaved AI is a *projection* of our current domination and exploitation of human beings. As Philip Hefner notes, AI functions as a "technomirror" which reflects back our own understanding of ourselves.[55] The fiction of AI as enslaved or rebellious serves as a foil for greater social

[54] Rogue AI is a trope of science fiction nearly always predicating dystopia. An interesting twist to this, however, can be seen in the *Mass Effect* trilogy where the "Geth," an AI race created by the Quarian alien race, are depicted through the games as hostile to biological life forms. The third game, however, reveals that the Geth were slaves and victims of genocide before they decided to wage war against organic life forms.

[55] Philip Hefner, *Technology and Human Becoming* (Minneapolis: Fortress, 2003), 40.

critique, whether that be the exploitation of conscious beings or the hubris of Prometheanism.

The above remarks do not entail that an AI could not be "made poor," but this contradicts the actual interests of AI research—AI is being designed to carry out the interests of the designers *on the assumption* that AI should be created expressly to execute the interests of the programmer.[56] Humans are much more stubborn; the poor must be subjugated and brought to understand that the interests of the upper class are the interests of the poor (e.g., trickle-down economics). *Dominated* taste or culture is not *programmed* in; it is reinforced through laws and penal systems, programs of social laud and honor, the structure of economic activity, and the production of culture. The poor are free in an ontological sense to resist this, and in some cases do, but the rich always seek to curb this through violence and repression (e.g., the 1524 German Peasant Revolt) or through appropriation and domestication (consider white cultural appropriation of black music from spirituals to rhythm and blues to hip-hop).[57]

All of this raises the anthropological challenge for AI; unless you have AI that can recognize *its* interests as being in conflict with the interests of its programmers, it will not have personal dignity the way we recognize among humans. Science fiction here provides useful philosophical reflection. Johnny 5 from *Short Circuit* is distinguished as "alive" compared to his virtually identical counterparts because he acts in ways contrary to the programmed goals of his creator. In a curiously Augustinian move, science fiction writers often ascribe "humanity" to AI who seek to go beyond their programming, especially those which seek to emulate their creators such as Data from *Star Trek*, Andrew from *Bicentennial Man* and David from *A.I.: Artificial Intelligence*. With such freedom also comes the ability to choose destruction, such as AM in "I Have No Mouth and I Must Scream" or Skynet from the *Terminator* series. In nearly every case, AI's willful rebellion against its creator, whether malicious or innocuous, reminds us of Hefner's dictum that AI is a "techno-mirror" through which we articulate our own fantasies of what it is to be human. Nonetheless, this mirror ultimately enables us to avoid confronting real human drama: the comparison between AI and the poor serves either to *humanize* AI by using it to displace the position which the poor presently occupy or to *dehumanize* the poor by contrasting AI's condition against the genuinely human in such narratives.[58]

---

[56] As I suggest in the concluding section, building a genuinely "poor" AI may, in fact, be a morally admirable solution to the problems AI creates in respecting the human dignity of the poor.

[57] See Emily Townes, *Womanist Ethics and the Cultural Production of Evil* (London: Palgrave MacMillan, 2006), 50.

[58] An interesting counter-narrative in sci-fi exists in invasion stories, such as H. G. Wells's *War of the Worlds*, Roland Emmerich's *Independence Day* or Rupert Wyatt's

The imagination of science fiction writers does not correlate with the goals of AI researchers, however, who rarely consider the implication of oppressing conscious beings for users' gratification. Nor does the epistemological model of AI square with the experience of the poor and their place in the world: AI is intended to make ideal choices, operate independently of social pressures, have a "universalized" consciousness. As designed, AI will not make choices out of desperation or develop tastes that may not be in its best interest. AI will never fall victim of pay-day loans or pyramid schemes; it will not buy cheap goods or unhealthy foods. AI will be set to always make decisions mathematically predicted to have the best outcome.[59] AI will also never internalize the shame connected to economic inequality. AI is not intended to experience the aspiration to become part of another social class nor the shame of being associated with the class to which it belongs. It will not deny this structure exists, nor will it make decisions benefitting other classes and disadvantageous to its own as a "dominated" decision maker. It will not try to "pass" as something else beyond the functions of the Turing Test, for that would refute universal reasoning. AI will not pursue dangerous paths which may lead to self or other harm out of a desire to prevent failure, but it will also never share the solidarity the poor can and do experience with each other.

The lived experiences inscribed deeply into the consciousness of the poor are not now nor are they planned to become part of the programmed realities of AI. This is to say nothing of other categories of persons (many of whom are more susceptible to poverty), such as women, ethnic minorities, the disabled, or mentally ill, whose experiences *qua* persons on the margins are not intentionally considered by culturally hegemonic programmers.[60] The issue is not only inclusion,

---

Captive State, stories in which technologically and scientifically more powerful beings oppress humans who then must resist alien oppression.

[59] Of course, a key issue here is how the AI is programmed. AI often uses data to teach itself what is the proper course of action, but that data can itself be biased. Recent problems in using AI to set bail illustrate this state of fact well. As such, AI programmed by a poor person to make decisions could, theoretically, internalize these sorts of decisions, but never will do so with the real anxiety that comes about in poverty nor will it, properly speaking, develop a "taste."

[60] Google recently demonstrated this reality in a series of internal personnel decisions. When AI researcher Timbit Gebru, a black woman, tried to publish a paper critiquing the way Natural Language Processing programs like GPT2 both pose environmental dangers because of resource consumption and encode hegemonic biases rampant in online text sources, she was asked to withdraw her paper or remove the names of any Google researchers attached to it. After she asked for an explanation for the decision, Google fired her. Margaret Mitchell, a white female AI researcher, was fired as well. Google's stated interest in diversity, then, conflicts with the reality of their operations. Tom Simonite, "What Really Happened When Google Ousted Timnit Gebru," *Wired* June 8, 2021, www.wired.com/story/google-timnit-gebru-ai-what-really-happened/. The paper in question is available at: Emily M. Bender, Timnit Gebru, Angelina

however; the greater issue at hand is human dignity. As AI becomes more advanced and accepted, its vision of the cognition and, by extension, of the person will become more dominant while conflicting views are relegated further to the margins. To explore further this problem, I consider the social force of technology and potential of AI in the next section.

The Preferential Option Against the Technocratic Paradigm

The idea of "technocracy" is by no means new for theology. Technocracy is typically expressed as the dominance of technology over the world, with every issue seen as a technological problem, scientists and technicians having outsized social influence, and the world being estimated in terms of its efficiency and utility. Romano Guardini addressed this problem in the 1920s and then again in 1956.[61] Guardini's thought was enshrined into magisterial Catholic teaching in 2015 through the encyclical *Laudato Si': On the Care of Our Common Home*.[62] Other Christian thinkers throughout the twentieth century expressed similar concerns, from Nikolai Berdyaev to C. S. Lewis, Thomas Merton to Paul Tillich, and most especially Jacques Ellul. Ellul's work perhaps has the greatest focus on technocracy, characterizing our current world experience as *technique* and, in some of his writings, contrasting this state of affairs with genuine Christian life.[63] Within these various theological approaches, theologians condemn the technocratic paradigm for how it commoditizes the earth, occupies our leisure, reduces the person, and cheapens the sacred.

While I hold my own reservations about the particular conclusions that some of these critics of technology make, the focus on the social transformative nature of technology and the threat it poses to human dignity is of urgent concern. The development of technology has far-reaching consequences on our societies, ideas, and values. The root problem regarding AI *qua* artificial *intelligence* is that this project results in the social construction of intelligence *as* the sort of intelligence that AI manifests. In a cyclical move, then, AI researchers seek to

McMillan-Major and Shmargaret Shmitchell, "On the Dangers of Stochastic Parrots: Can Language Models Be Too Big?," paper presented at *Conference on Fairness, Accountability and Translation (FAccT '21), Virtual Event, Canada, March 3-10, 2021*, dl.acm.org/doi/pdf/10.1145/3442188.3445922.

[61] See Romano Guardini, *Letters from Lake Como: Explorations in Technology and the Human Race*, trans. G. Bromiley (Grand Rapids, MI: Eerdmans, 1994), and Romano Guardini, *The End of the Modern World*, trans. E. Briefs (Wilmington, DE: ISI, 1998), esp. chapter 3.

[62] *Laudato Si'* cites Guardini's *End of the Modern World* eight times, even more than Thomas Aquinas (six times), making it the most cited non-magisterial text in the encyclical.

[63] See, e.g., Jacques Ellul, "Ideas of Technology: The Technological Order," *Technology and Culture* 3, no. 4 (Autumn 1992): 394–421.

create intelligence *as they understand it* and in so doing will be able to define a computer as intelligent if it in turn demonstrates intelligence *as they understand it*. This would be minimally concerning if this did not have repercussions for redefining intelligence within our society.

Actor-Network Theory (ANT) in Science and Technology Studies (STS) explains this problem clearly but also offers us a potential solution. ANT contends that scientific discovery and technological invention are not inevitable, nor accomplished by individual genius. Rather, they are the result of careful "enrollment" of various "actors" across a large-scale network.[64] "Actors" include human and non-human entities such as scientists, scientific instruments, funding institutions, materials being worked with, the object of study, etc.[65] In technology studies in particular, ANT often examines how specific technologies do or do not come into being. For example, some of the more famous cases involve the failure of French transportation ministries to both develop an electric car with Renault in the 70s and develop an autonomous individual mass transit system in the 70s and 80s.[66] In each case, the failure to launch was tied to multiple actors: engineers, technological components, public interest, etc. In cases when a technology or science have been successful, it has been through the enrollment of various actors and their cooperation. As some technology researchers show, however, even the accomplishment of a "successful" technology may not have the exact outcome the initial visionaries expected.

ANT theorist Bruno Latour realized early on that invention and discovery have the effect of shaping moral reality around them. In "Where Are the Missing Masses?" Latour notes that even technologies seemingly as simple as seatbelt alarms or automatic door closers reframe the realm of our moral responsibility and possibility.[67] Taking this further, Latour notes that "social forces" as such do not exist; rather, actors enroll other actors and create possibilities, incentives, prohibitions, or impossibilities for action. Moreover, knowledge and power are functions of networked approval. Scientific knowledge is

---

[64] Michel Callon, "The Sociology of an Actor-Network," in *Mapping the Dynamics of Science and Technology: Sociology of Science in the Real World*, ed. M. Callon, A. Rip and J. Law (London: Palgrave-MacMillan, 1986), 25.

[65] Michel Callon, "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay," in *Power, Action, and Belief: A New Sociology of Knowledge?*, ed. J. Law, (London: Routledge, 1986), 200.

[66] See Michel Callon, "Society in the Making: The Study of Technology as a Tool for Sociological Analysis," in *The Social Construction of Technological Systems*, ed. W. Bijker, T. Hughes and T. Pinch (Cambridge, MA: MIT Press, 1987), 83–103 for the first example and Bruno Latour, *Aramis ou l'amour des techniques* (Paris: La Découverte, 1992), for the second.

[67] Bruno Latour, "Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts," in *Shaping Technology/Building Society: Studies in Sociotechnical Change*, ed. W. Bijker and J. Law (Cambridge, MA: MIT Press, 1992), 253.

not sovereign self-apparent manifestation of truth as the Scientific Revolution claims; it is subject to social contexts and "trials of strength."[68] Latour emphasizes that "sociologics," chains of associations tied to specific claims within a society, shape accepted tenets of belief in a society more than "logics" do.[69] In other words, the way things are in a society, including social arrangements, power relations, laws, accepted forms of knowledge, customs and technological advancement, is a result of the myriad movements, co-operations, resistances and co-optations of the sum total of actors, human and non-human, within the broad social "network."

ANT suggests both how AI threatens the dignity of the poor and how Christians can prevent this degradation. Recall that AI researchers propose a vision of "intelligence" which contradicts the reality of many people, especially the poor. It is tempting to suggest these are just two equivocal uses of the word "intelligence," but human cognition operates as the model for AI work. Even if AI is intended to surpass human cognitive functioning, it is structured in a way that is intelligible to human understandings. The measure of "successful" AI consists of tests comparing AI understanding to human levels, whether that be the "Turing Test," the Winograd Schema or, for specific applications, a comparison to human expertise (e.g., radiological diagnostic accuracy).[70] As such, regardless of whether the AI is being created for a specific application or a general program, the vision is a vision rooted in a model of human thinking.

The real danger to all this comes as AI garners greater and greater interest in the general public. AI research has promised a "major breakthrough" for over fifty years now. It has surpassed human ability in chess, Go, and Jeopardy, but it has yet to produce anything resembling human intelligence. At the same time, popular depictions of AI, consumer AI programs, industry-sized machine learning programs, and other applications have made AI a focus of attention across not only the US but the world. This special issue is indicative of just that development. As AI research becomes more successful in enrolling more actors into its efforts, the meaning of intelligence will be further

---

[68] Bruno Latour, *Science in Action: How to Follow Scientists and Engineers in Society* (Cambridge, MA: Harvard University Press, 1987), 53.

[69] Latour, *Science in Action*, 202ff.

[70] See Scott M. McKinney, Marcin Sieniek, Varun Godbole, Jonathan Godwin, Natasha Antropova, Hutan Ashrafian, Trevor Back, Mary Chesus, Greg S. Corrado, Ara Darzi, Mozziyar Etemadi, Florencia Garcia-Vicente, Fiona J. Gilbert, Mark Halling-Brown, Demis Hassabis, Sunny Jansen, Alan Karthikesalingam, Christopher J. Kelly, Dominic King, Joseph R. Ledsam, David Melnick, Hormuz Mostofi, Lily Peng, Joshua Jay Reicher, Bernardino Romera-Paredes, Richard Sidebottom, Mustafa Suleyman, Daniel Tse, Kenneth C. Young, Jeffrey De Fauw, and Shravya Shetty, "International Evaluation of an AI System for Breast Cancer Screening," *Nature* 577 (2020): 89–94.

concretized on a social level. With the support of the world's richest corporations like Facebook, Google, Microsoft, Apple, and Amazon; government agencies like DARPA; and personalities like Elon Musk, the late Steven Hawking, or Ray Kurzweil with their throngs of followers all reinforcing the "intelligence" factor of AI, the meaning of intelligence across society is being more narrowly defined in the direction of computer calculation by a massive network of actors who have at their disposal political, economic, social, and coercive forms of power. Put simply: if the Department of Defense, Silicon Valley, and some of the "smartest" people in the world say AI is intelligent, that will be the generally accepted understanding of intelligence, and the normative concept for our society; deviating from this norm will be viewed negatively.

The moral problem arises when intelligence has moral weight. Virtually every moral theory, from Thomas Aquinas's natural law to Kantian deontology, utilitarianism to Martha Nussbaum's capability approach considers rationality or intelligence to be a significant moral feature for understanding the moral dignity of human beings. Indeed, an outsized portion of traditional Catholic moral theology is tied to this idea, as one sees clearly in Thomas's *Summa Theologiae*. Human beings, according to Thomas, are God's image "insofar as the image implies an *intelligent* being endowed with free will and movement" (ST I-II Prologue, emphasis mine). The entirety of Thomas's moral thought, from the interrelation of the virtues and their attaining natural happiness to the spark of conscience in the human soul, is tied to this understanding that human *reason* is what makes us morally worthwhile. If the Western moral tradition gives support to this position, it should come as no surprise that AI researchers do as well.

Thus, in an important way, AI raises a paradox for moral theology to consider. How is it that we can, at once, tie dignity to rationality and claim there is an "option for the poor"? The greatest social thinkers of our tradition have asserted that the poor possess a dignity society often ignores, a dignity truer because of this denial. Dorothy Day writes of the necessity of seeing the face of Christ in the poor.[71] Jon Sobrino and Ignacio Ellacuría go so far as to say there is no salvation outside of the poor.[72] To resolve this tension, then, we must either deny that "intelligence" grants dignity—an option creating new anthropological problems while it offers support to ecotheology[73]—or we must ensure that

[71] Dorothy Day, *Selected Writings: By Little and by Little*, ed. R. Ellsberg (Maryknoll, NY: Orbis, 2011), 96.

[72] Sobrino, *No Salvation outside the Poor*, 35–76.

[73] Getting rid of intelligence as dignity's defining factor creates a problem for moral anthropology insofar as some other vision will need to replace this regnant view. This is already an open problem in ethics, as our concept of "intelligence" and its relation to dignity is challenged by numerous non-human species, such as chimpanzees, dolphins, crows, and octopuses, as well, on the other side, as humans who are not

"intelligence" is not circumscribed into the static image of a calculating machine.

In this latter task, the church shows great potential, at least according to ANT. Just as AI researchers have cleverly enrolled actors across a vast network, and just as these actors will ask for their own aims and goals in the accomplishment of AI (such as facial recognition for policing or combat), so too is the church an actor which can resist enrollment or define the terms of its participation. Christianity stands as the largest religion in the world with two billion nominal adherents, and the Roman Catholic Church claims over one billion of those. Those billions who make up the Christian church are actors without whom AI cannot succeed, either because of resistance or rejection, both of which might stymie, halt, or redirect the work of AI.

Such participation must not be engaged in naively, however. The Church has a history in recent years of advocating for moral changes related to, for example, contraception, abortion, and unjust economic structures, which broader society (and even many within the church) has simply ignored. It might seem impractical to assume that Church teaching can effect real change, given our history. With proper negotiation, however, we may be able to "enroll" other social actors to resist the rise of hegemonic AI. The good will the Church still has can be directed toward dialogue with tech industry leaders, government regulatory bodies, scholars across disciplines, Christian engineers, politicians, educators, and others. Pope Francis's aim to foster genuine dialogue with other people of good will across the globe, the subject of his most recent encyclical *Fratelli Tutti*, should be an inspiration to our work in resisting social evils and promoting genuine human good. Prophetic language can appeal to the consciences not only of faithful Christians, but of all people of good will, whose influence might redirect or challenge technological projects likely to tread over the poor.

A place to begin, then, is to affirm the dignity of the poor: the intelligence of those whose experience of the world is not reducible to ideal operations and calculative advantage. We must adopt a hermeneutic of poverty, not as "preferential option *for* the poor," but rather "preferential option *of* the poor." We must prize their perspectives and understanding above the regnant bourgeois voices. This means affirming that intelligence does not exist without moral structuring and

---

neurotypical, especially those with developmental disabilities. Here, we might take note of Martha Nussbaum's capability approach which, after receiving critique from other theorists, was revised to consider different constellations of "capabilities" beyond a neurotypical and anthropocentric approach. See Martha C. Nussbaum, *Frontiers of Justice: Disability, Nationality, Species Membership* (Cambridge, MA: Belknap, 2006). Decentering intelligence from moral dignity further gives room for a better non-anthropocentric moral system. This idea is prevalent among ecological ethicists. See e.g., Rosemary Radford Ruether, *Gaia and God: An Ecofeminist Theology of Earth Healing* (San Francisco: Harper, 1994).

decision making. Intelligence includes the drive to survive, the limitations of material conditions, and the awareness of hegemonic narratives and one's place therein. The Gospel narratives bear eloquent witness to much of this, as God becomes incarnate in a backwater town located within an occupied nation, lives as an itinerant preacher, ministers to other wretched souls and is executed by the politically and materially more powerful. Remembering that we share dignity because we are created in God's image, we must affirm that that image, who "pitched his tent among us" (John 1:14), "was despised and rejected by others; a man of suffering and acquainted with infirmity" (Isaiah 53:3).

CONCLUSION: SOCIOTECHNICAL IMAGINARIES

According to Sheila Jasanoff, sociotechnical imaginaries are "collectively held and performed visions of desirable futures…animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology."[74] Examples include attitudes toward nuclear power in countries like Korea and the US, the problem of GMOs and "fake food" in China, and biotech regulation in the US.[75] In each of these cases, the socially accepted vision of what the future is or could be (for better or worse)—understood through cultural mores, political aims, institutional structuring, and collective aspirations—informs decisions about how to approach and accept new technologies.

Christians are animated by the virtue of hope for the coming fullness of God's reign. Our eschatological visions can and should serve as "sociotechnical imaginaries" as we consider the moral value of any new technology. Does it serve the peaceable kingdom? Will it enable us to beat our swords into plowshares? Does it help bring all nations of the earth together as one? What is its position within the reign of God? In an over-arching sense, how does it aim at a world where "every tear shall be dried" and the hungry "be filled"?

When we consider the value of AI, an important question must be how it fits into our concept of the option for the poor. With Jesus, we must affirm that "the last shall be first, and the first shall be last" (Matthew 20:16). In God's kingdom, we hope for the rectification of wrongs, the elimination of suffering, the anastasis of those who have been downtrodden by society. If AI only serves to reinforce concepts of moral worth rooted in sterilized, disembodied "intelligence," and if it is used to further exacerbate inequality and injustice already prevalent in our world, we must denounce it. To the degree that AI can be

---

[74] Sheila Jasanoff and Sang Hyun Kim, eds., *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power* (Chicago: University of Chicago Press, 2015), 19.

[75] Jasanoff and Kim, *Dreamscapes of Modernity*, 152–73; 219–32; 233–53.

developed to speak with the otherwise voiceless, correct wrongs entrenched in our social structures, and build bridges of understanding and reconciliation between the powerful and oppressed, it can and should be endorsed. This will entail, among other things, collaborating with researchers of good conscience, petitioning governments to regulate AI accordingly, speaking of AI as calculating machinery and not intelligence, and cooperating with various corporations and non-profit organizations to promote advanced software to uplift the poor.

Christians interested in correcting the balance, then, should imagine positive ways AI can direct us toward realizing the Kingdom of God. As a way of thinking in this direction, I offer one particularly poignant example related by Marcella Althaus-Reid. She describes the website *liquidacion.org*, which offers for sale the "dreams" of several Argentinian transvestites. Althaus-Reid calls this repository "the archives from hell," a firsthand account of the struggles of third world, sexual minority poor—persons who experience violence because of their sexual and gender expression, who scrape by in society through prostitution, and who live in an already poor society.[76] Althaus-Reid sees this website as a unique opportunity, a place where the rich may encounter stories of the poor they would otherwise be unable to hear, and one where they must *buy* that privilege, thus benefiting the poor. Here, the true voice of the poorest of the poor comes near to those who have everything. The website is also a gathering of the voices of the poor, a place where they confront each other and us in a "Eucharistic" way.[77]

Althaus-Reid's example demonstrates the potential of technology; while her case study is now seventeen years old, it opens analogical avenues for thinking about how AI can carry out the preferential option. If the voices of the poor, for example, are given to AI as authoritative sources, an AI might better be able to express their pain or anguish. AI trained exclusively on data provided by the poor might be able to correct human or machine biases in favor of the rich. AI trained to ask broad questions of the poor might help us gain a deeper and broader understanding of the experience and mindset of poverty. Perhaps most promising, AI trained by and for the poor might become a truly normative voice the way hegemonic voices currently speak. Our greatest challenges are our imaginative solutions beyond hegemonic frameworks and the funding and labor we can devote to non-capitalistic goals. Truth be told, programming AI to advocate on behalf of the poor is a more reasonable project than programming AI to think like a person. The greater challenge on this front is convincing funding

[76] Marcella Althaus-Reid, "Becoming Queens: Bending Gender and Poverty on the Websites of the Excluded," in "Cyberethics—Cyberspace—Cybertheology," ed. Erik Borgman, Stephen van Erp and Hille Haker, *Concilium*, no. 1 (2005), 103.
[77] Althaus-Reid, 104.

agencies to invest in such efforts because there are no obvious profitable returns.

Ultimately, if we truly embrace the "option for the poor," our attitude toward AI must first and finally be articulated through the question of how it demonstrates that "option." As computer programs become more "human," we must not forget that the most human among us chose the meager life of a carpenter and dwelt among the poor, the sick, the rejected, and the unclean. In making computers more "human," we must not simultaneously seek to distance ourselves from what is most perfectly human. MT

Levi Checketts is Assistant Professor of Religion and Philosophy at Hong Kong Baptist University. His research is on Catholic social ethics and new technologies, especially digital technologies and transhumanism. Dr. Checketts currently leads the Pontifical Council for Culture's AI Concerns Asian subgroup, sits on the board for AI Theology, and is a Networking Fellow with AI and Religion. He is currently writing a monograph on poverty and AI, an expansion of this article, and is republishing Carl Mitcham and Jim Grote's *Technology and Theology: Essays in Christian Analysis and Exegesis* (University Press of America, 1984).