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Sons of Disobedience and their Machines: How Sin and Anthropology Can Inform Evangelical Thought About AI

Abstract

The purpose of this paper is to further discussion about artificial intelligence by examining AI from the perspective of the doctrine of sin. As such, philosophy of mind and theological anthropology, specifically, what it means to be human, the effects of sin, and the consequent social ramifications of AI drive the analysis of this paper. Accordingly, the conclusions of the analysis are that the depravity of fallen humanity is cause for concern in the very programming of AI and serves as a corrupted foundation for artificial machine cognition. Given the fallen nature of human thought, and therefore, fallen AI thought, this paper then examines how this “fallen” AI is already impacting *imago Dei* in the work and in social governance of the technological society.

Keywords

Transhumanism, Artificial Intelligence, Anthropology, Imago Dei, Technological Society, Superintelligence, Sin, Deep Fake

Cover Page Footnote

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By all accounts, modern society is witnessing the consummation of the true technological society.¹ With the very real possibility of the development of superintelligence, artificial minds, and ever-increasing drive/necessity to become technological people, modern humanity “is beginning confusedly to understand at last that it is living in a new and unfamiliar universe.”² Cortez states that answering the questions of “who am I?,” “what am I?,” and “how ought I be in the world?” cannot not be avoided in the face of “genetic engineering, human cloning, artificial intelligence, and globalization...”³ In short, the development of AI and superintelligence and the end-state of the technological society has and will affect every area of biblical theological anthropology. To make matters worse, the modern theologian and biblical anthropologist can hardly draw upon church history to see how others have tried to answer the question of AI, for the phenomenon of AI and the capability for superintelligence is quite recent going back only to the 1940s and the dawn of the computer age.⁴ This does not mean the theologian is powerless, for the doctrine of sin and pervasive depravity can center any discussion on the topic and there is a great deal of biblical evidence and history to draw in any Christian approach to AI. Furthermore and philosophically, as early as Descartes, there was discussion on whether or not machines could be conscious and sentient and how they would be different from humanity. The pure imagination of Descartes, however, has essentially become reality with the development of AI, superintelligence, and humanoid robotics.⁵ So the questions can be asked: is human exceptionalism at stake? Are humans still unique? The underlying philosophical answer is “yes,” but that is only half the story. The thesis of this paper, therefore, is that *imago Dei*, will always maintain a *modus*

¹ Jacques Ellul, *The Technological Society*, trans., John Wilkinson (New York, NY: Vintage Books, 1964).

² Nick Bostrom, *Superintelligence: Paths, Dangers, Strategies* (Oxford: Oxford University Press, 2014), 22-50.; Stan Franklin, *Artificial Minds* (Cambridge, MA: MIT Press, 2001), 399-411.; Jacob Shatzer, *Transhumanism and the Image of God* (Downers Grove, IL: IVP Academic, 2019), 16-36.; quote by, Ellul, *The Technological Society*, 428.

³ Marc Cortez, *Theological Anthropology: A Guide for the Perplexed* (New York, NY: T&T Clark, 2010), 2-3.

⁴ Bostrom, *Superintelligence*, 3-4.

⁵ René Descartes, *Discourse on Method for Reasoning Well and for Seeking Truth in the Sciences*, trans., Ian Johnston, (1637), Part V. Public Domain. http://www.faculty.umb.edu/gary_zabel/Courses/Bodies,%20Souls,%20and%20Robots/Texts/descartes1.htm (Date Accessed October 21, 2019). Descartes says, “whereas, if there was a machine shaped like our bodies which imitated our actions as much as morally possible we would always have two very certain ways that they were not, for all their resemblance, true human beings.”

vivendi difference from any machine,⁶ technology, or technique that *mimics* human thought. Furthermore, intelligence (the practical out workings of AI, superintelligence, and artificial minds) will have dramatic ramifications on human flourishing in essentially all areas of human existence, given human sin.⁷ It is here at the nexus between hamartiology and AI/superintelligence that has been underserved and thus allows for a connection between the fears of AI in popular literature and the cool rejection of such fears in parts of academia.⁸ In other words, the intent of this paper is to show that it is not necessarily the machine that we should fear, but the ones programming and running the machines, and the information they input into them, as a starting point.⁹

⁶ This assumption of the *modus vivendi* difference is based on the *current* understanding that computers are limited to *algorithmic* processing. Since human brains operate with nonalgorithmic methods, the way the brain processes information is thus non-computable. However, there are efforts by materialistic scientists like Sir Roger Penrose and Dr. Stuart Hameroff that propose a quantum mechanical model of the brain (Quantum Tubule Theory). Their theory essentially proposes physical brain processes that are nonalgorithmic. Should their model be successfully engineered, it could generate machines that operate non-algorithmically. Dr. Robert J. Marks of the Walter Bradley Center for Natural & Artificial Intelligence says that such engineering could not be actually called a computer it will need to be given another name. See Robert J. Marks, “Why You Shouldn’t Worry About A.I. Taking Over the World,” <https://stream.org/why-you-shouldnt-worry-about-a-i-taking-over-the-world/> (Date accessed October 22, 2019). This engineering, if successful, Dr. Marks concedes would be cause for worry. See also Bostrom, *Superintelligence*, 30-6.; Stuart Hameroff and Roger Penrose, “Consciousness in the Universe: A Review of the ‘Orch OR’ Theory, *Physics of Life Reviews* 11 (2014), 39-78.; Stuart Hameroff, “Quantum Computation in Brain Microtubules? The Penrose-Hameroff ‘Orch OR’ Model of Consciousness, *Philosophical Transactions: Mathematical, Physical and Engineering Sciences* 356, no. 1743 (1998), 1869-896.

⁷ Keith Gunderson describes the difference between “degree of alacrity difference” and “modus vivendi difference” in *Mentality and Machines*, 2nd ed. (Minneapolis, MN: University of Minneapolis Press, 1985), 193-96. Degrees of alacrity being along a continuum, such as a child swimmer vs. that of an Olympic swimmer. They both swim as humans swim, the Olympian significantly better. Modus vivendi, on the other hand, represents differences in “how and why.” Going back to the swimming example, both a child and Michael Phelps swim differently and for different purposes than a fish, shrimp, tortoise, or porpoise.

⁸ See The Walter Bradley Center for Natural & Artificial Intelligence or the Institute for Human and Machine Cognition as opposed to fear-mongering in popular media.

⁹ This is not to say that a human should not fear the machines themselves. For these machines, fast and capable as they (in fact much faster and much more capable than humans in what they are programmed to do) are would be tools that could autonomously endanger many lives. Here one must realize the difference between the underlying reality of how and why that machine does what it does verses what it is doing. A person is rightly able to fear a nuclear bomb, but that bomb only does what it does because of fission. It is the person behind the bomb which is another object of intent and understanding. In short, an AI (even one of superintelligence) may not be deep intellectually as a human mind (with its intent, motive, and understanding, in fact it may

This paper will limit its investigation to three areas. The first outlines why the programming of AI (whether they are self-aware or not) presents the issue of sin front-and-center. This paper proposes that human depravity is transmitted via the programming. Following from this foundation comes two knock-on problems in the use of AI/superintelligence in human affairs. These problems reside primarily in the realm of economics and the biblical foundations for work (the automation of menial tasks will relegate large swaths of the population as unproductive members of society) and in the areas of state, governance, and the connections to human moral epistemology, especially in political and state action.¹⁰ This focuses on the relatively new concept and expansion of propaganda in the form of AI-created “deep fake” technology to render moral epistemology meaningless in the modern state which focuses solely on ideology, centralization, and obedience to the goals of state via Foucauldian notions of digital panopticons and social organization with algorithmic social credit rather than rule of law.¹¹

Let Us Create In Our Image And Likeness: Toward A Platonic Ideal And The Issues Of Fallenness And Our Desire To Be Like God

Any cogent Christian approach to AI/superintelligence/artificial minds has to take into consideration, right from the start, that any programming done by man

not understand at all) but the ability with mimicked intentionality is rightly an object of fear. The *locus classicus* of AI's lack of understanding its tasks is Searl's Chinese Room allegory. See John Searl, “Minds, Brains, and Programs,” *The Behavior and Brain Sciences* 3 (1980), 417-424.

¹⁰ John Hammett is helpful in summarizing the biblical teaching on human nature. “1) We are created beings. 2) We are created in the image of God. 3) We are created male and female. 4) We are created to work. 5) We are created for community. 6) We are not today as we were created; we are fallen.” See John J. Hammett, “Human Nature,” in *A Theology for the Church*, Revised Edition, ed., Daniel L. Akin (Nashville, TN: B&H Publishing, 2014), 500. The focus for this paper primarily is on the how AI and Superintelligence are affecting numbers 4, 5, 6 respectively. However, this paper also deals with worldview issues in showing differences between physicalist/materialist approaches and biblical worldviews (e.g. numbers 1 and 2). As far as number 3 goes, there are already products with AI enhancements with deep-learning in the sex industry (AI-enhanced Sex dolls and AI-created pornography) which will have ramifications on human sexuality and sinful manifestations of maleness and femaleness. Judith K. Balswick and Jock O. Balswick, *Authentic Human Sexuality: An Integrated Christian Approach*, 2nd ed. (Downers Grove, IL: IVP Academic, 2008), 244-294.

¹¹ Jacques Ellul, *Propaganda: The Formation of Men's Attitudes* (New York, NY: Vintage Books, 1973), 193-250.; G.W.F. Hegel, *Lectures on the Philosophy of World History*, trans., Hugh Barr Nisbet, (New York, NY: Cambridge University Press, 1975), 60.; Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (New York, NY: Vintage Books, 1977), 195-228.

is going to be fallen in some degree.¹² It is here, even in organizations that claim to follow the ideals of the Judeo-Christian worldview,¹³ that philosophy of mind and the *modus vivendi* difference is asserted, rather than a theological position. This paper takes a different approach by starting with theological anthropology and the fallen nature of humanity. Although it would be easy to take comfort in the fact that man and AI will be different, and therefore, a perpetual degree of supremacy for humanity could always exist, the philosophy does not solve the programming and programmers problem, that being sin.

It could go without saying, but nothing humanity creates is perfect. Following Calvin, Hoekema describes this state from original sin as pollution. Hoekema says that this pollution and the degradation of humanity's moral nature produces sin. As such, this

Pervasive depravity, then means, that (1) the corruption of original sin extends to every aspect of human nature: to one's reason and will as well to one's appetites and impulses; and (2) there is not present in man by nature love to God as the motivating principle of his life.¹⁴

The extension of sin's pollution to all aspects of human endeavor cannot be understated. In the case of AI, any emulation of the human mind, any replication of human thought process, and any mimicry of human action on the part of AI, is simply emulating, replicating, and mimicking a fallen creature. Thus, man is creating AI in *our* image. Unlike *begetting* man, as in the case of natural birth (Gen 4:1), the creation of AI is more akin to *making*.¹⁵ The creations of man, as close to man as they become in capability, are still not man. But just because the AI is not capable of original thought, muscle, or will need not preclude the fact

¹² From this point forward the categories of AI, Superintelligence, and Artificial Minds via computer processing, although are differing categories pertaining to differing components of technique of the technological society, AI for instance is only one avenue to superintelligence. The terms will be reduced for brevity sake to AI, unless it is otherwise required for specificity. Bostrom, *Superintelligence*, 23-30.

¹³ The Walter Bradley Center for Natural & Artificial Intelligence, "What's at Stake in the Debate over AI?," July 4, 2018, <https://centerforintelligence.org/2018/07/04/whats-at-stake/> (Date Accessed October 23, 2019).

¹⁴ Anthony A. Hoekema, *Created in God's Image* (Grand Rapids, MI: Eerdmans, 1994), 150.

¹⁵ C.S. Lewis, *Mere Christianity* (New York, NY: HarperCollins, 2001), 158.

that AI does what it does much faster and *more infallibly* than the thinking human.¹⁶

Thus, the problem of sin has constantly hampered the creation of the platonic ideal man and his *polis*. What is driving the desire for the creation of machines that can outclass humans in almost every action? What are the goals and end states? Could it not be that this drive for AI is the technological society's fruition of Satan's deception in the garden: that is to be like God? A sober look at the capability and wants of the creators of AI will show the grim details.¹⁷ The capability for mass data collection, collation, and synthesis is simply the greatest human attempt at omniscience, a capability that resides not with individual direction but collective entities of state and large technological corporations.¹⁸ The untiring mechanics of machines render human muscle and sweat irrelevant. AI never sleeps; it is omnipotent via its information and mechanical techniques. Interconnectivity, mass-surveillance, and accurate panoptic algorithmic prediction of human wants and behavior, at any location, at any time, is the technological society's omnipresence. In short, AI is what we want. A perfected image of ourselves. Perfected techniques of humanity, either by one machine or a combination of machines, are images of what we want to be, which is infallible.

This drive for infallibility however, unfortunately demands the total integration of the man into the technological society and away from the traditional society in which, although always integrated with techniques for the improvement of resources and science, maintained a dichotomy between the man his machines.¹⁹ The technological society, however, in its driving goal of "perfection," demands that every iota of the man be conformed to the image of

¹⁶ Gunderson, *Mentality and Machine*, 58-9. Paradoxically, AI would therefore emulate fallenness "infallibly."

¹⁷ The creators of the capability of AI are few and relegated to large technological companies (Google, Apple, Amazon, Huawei) and their corresponding governments who support the creation for economic, military supremacy, and social organization to meet those ends. See Bruce Schneier, *Data and Goliath: The Hidden Battles to Collect Your Data and Control Your World* (New York, NY: W.W. Norton, 2015), 62-90.; Jacob Shatzer, *Transhumanism and the Image of God*, 27.

¹⁸ Of course there are individuals within these collective units that wield extraordinary power over the modern man.

¹⁹ Stephen B. Clark, *Man and Woman in Christ: An Examination of the Roles of Men and Women in Light of Scripture and Social Sciences* (Ann Arbor, MI: Servant, 1980), 502. Here there should be a decisive effort to separate the very legitimate benefits such as life saving medical technologies, increased food production (although many modern techniques have denigrated soil quality and chemical exposures of pesticides can be carcinogenic), and other scientific discovery from its differing underlying principle of social organization and its effects on social structure.

“perfection” in the machine.²⁰ Any attempt to show the mystery of humanity via the spiritual or man’s passions “are flung against a ring of iron with which technique surrounds and localizes them.”²¹ One need only to look briefly at the predominant tendency in the physicalist and materialistic philosophies of man to see this tendency of reductionism.

In closing this section, it becomes readily apparent that technology and techniques to integrate man socially with the machine are radically transforming social organization, work, the family, and the very ideal of man. Philosopher Shannon Vallor has pointed out that

A futurist’s true aim is not to envision the technological future but our *technosocial* future – a future defined not by which gadgets we invent, but how our evolving technological powers become embedded in co-evolving social practices, values, and institutions.²²

Tainted by sin, the AI creators, given their fallen nature and their drive to mitigate the physical and noetic effects of sin (unbeknownst to them), are attempting to create a technological perfection of the platonic image and thus a technological *polis*, rather than soul-level transformation and biblical, normative community.²³ Below will be the examination of two aspects of how the consummation of the technological society via AI is currently evolving in human value in work via economics and social moral epistemology.

²⁰ Ellul, *The Technological Society*, 410-12.

²¹ *Ibid*, 415.

²² Shannon Vallor, *Technology and the Virtues: A Philosophical Guide to a Future Worth Wanting* (New York, NY: Oxford, 2016), 5. (Italics theirs)

²³ Notice the paradoxical nature. Trying to use a sinful construct (sin tainted AI programming) to perfect a sinful man. The a sinful technique cannot perfect a sinful creature. Thus this attempt is doomed to failure from a biblical worldview. Hence the difference in uses of AI is key for biblical contemplation on the impacts of technology (resource improvement vs. technosocial improvement) the former being, if used properly, techniques for biblical stewardship. The latter devolving into a data driven governance of individuals rather than a biblical construct of individual uniqueness and unalienable rights. See Larry Catá Backer, “Next Generation Law: Data Driven Governance and Accountability-Based Regulatory Systems in the West and Social Credit Regimes in China,” *Southern California Interdisciplinary Law Journal* 28 no. 1 (2018).

AI, IQ, And Work For All *Imago Dei* In The Technological Society

Economics tends to reveal the hearts of men. A common saying is that if you look at a man's pocket book, there you will find his heart. What men spend their money on is what they treasure. At a macro level, the trends of the technological economy show the hearts of the technological society: the use of automation and the reduction of labor demand in both blue-collar (manufacturing) and white-collar (knowledge-based) work.²⁴ In short, the lower your capacity, expertise, and willingness to conform to the technological economy, the more diminished your likelihood for personal (socio-economic) flourishing. The technological economy does not stop for anyone, and success in this economy demands conformity. Market forces are not necessarily blind, nor do they necessarily determine (as in the case of Marx) human moral behavior. However, these market forces (and those who determine economic focus) do, in fact, have a determining element to the human manifestation of work and social organization. This is undeniable. Never before in human history have so few people actually controlled so many of the methods of economic and political engagement (e.g. Big Tech, social media, and government). It seems then that the technological economy could rightly be described as one more similar to that of the old feudal system rather than that of individual engagement. The masses are utterly dependent upon a few companies to ensure economic success!²⁵ As such, these companies, and the social organizers behind them, show their desire for the individual: those that do not conform to the envisioned image are liquidated and determined either to be useless to society, or worse, a threat to the smooth functioning of the technological economy.

IQ and AI: Social organization of the technological society

A biblical worldview demands that everyone is *imago Dei* and created to work.²⁶ The creation and socio-cultural mandate of Gen 1:26-27 makes it abundantly clear that work is a pre-fall institution and work itself, in its own way,

²⁴ Daron Acemoglu and Pascual Restrepo, "Automation and New Tasks: How Technology Displaces and Reinstates Labor," *The Journal of Economic Perspectives* 33, no. 2 (2019), 3-5.

²⁵ Schneier, *Data and Goliath*, 58

²⁶ Hammett, "Human Nature," in *A Theology for the Church*, 500.

images the creator who works to create.²⁷ This includes everyone from the most capable to the least capable. The technological society, especially with the advent of AI, however, has begun the relegation of large swaths of the population because they will lack the capacity to engage the technological man and the state who wishes to maintain economic and military supremacy. In other words, the technological society demands *certain* kinds of work for human flourishing, based on the goals or ends (typically of the state or the corporation). Unfortunately, statistics tell us that many people will not be able to flourish in the new economy dominated by AI's synthesis and analysis of information with infallible accuracy.²⁸ Only those who have the technological expertise to program, manufacture, and interact with, and those rich enough to own the AI, will have the ability to flourish in the truly technological society. This, unfortunately, will be well out of reach for many, simply because they do not have the capacity to do so, based on their genetics, IQ, and socio-economic standing, through no fault of their own.²⁹

An example is that of the US Military. U.S. Code §520 shows that new inductees must reach a certain score on the Armed Forces Qualification Test (at or above the 10th percentile). The law also states preference for those who score in the 31st percentile or above.³⁰ This tenth percentile equates roughly to an IQ of about 81 and the 31st percentile equates to an IQ of about 93. This means that anyone below that 10th percentile (i.e. ten percent of the population) cannot join the military due to cognitive inability to carry out basic soldiering functions. Essentially, to allow them in the military is not worth the costs to train. The numbers are quite staggering. If ten percent of the population do not have the cognitive capability to join the military (an organization who is always looking for people), then what hope do these people have in the AI enabled technological society? According to the census bureau, the United States has a population of over 329 million. That would mean over 3 *million* people are below the cognitive capability to understand more than menial tasks. Huge numbers of people are at risk for having meaningful work taken away from them with continued

²⁷ Hammett, "Human Nature," in *A Theology for the Church*, 524.; Wayne Grudem, *Politics According to the Bible: A Comprehensive Resource for Understanding Modern Political Issues in Light of Scripture* (Grand Rapids, MI: Zondervan, 2010), 325.

²⁸ Richard J. Herrnstein and Charles Murray, *The Bell Curve: Intelligence and Class Structure in American Life* (New York, NY: Free Press, 1994), 155-166, 511.

²⁹ One must remember that it is not the gadgets themselves that are the thing to be worried about, it is the technosocial, technopolitical, and technoeconomic ramifications that are the results of worldview.

³⁰ U.S. Code §520, "Limitation on Enlistment and Induction of Persons Whose Score on the Armed Forces Qualification Test is Below a Prescribed Level."

automation and removal of menial work by AI. The socio-cultural ramifications of this removal of millions of people from the work force would render them totally reliant on others, and more than likely, on state welfare. As such, when the lower cognitive strata of *imago Dei* is prevented from meaningful, albeit menial, work and vocation, the result will be a recipe for social destruction. What can only be described as a tragic-comedy is that in an effort to be productive by increasing the output of the overall economy and national power, the technological society will render wide swaths of the population unproductive. It seems that the technological man regards the removal of the lower cognitive strata of *imago Dei* from the workforce as the price of “progress.”

Mandate over human capital? The perversion of the creation mandate and *imago Dei* by AI.

Rod Dreher says,

Technological Man regards as progress anything that expands his choices and gives him more power over nature. Americans admire the ‘self-made man’ because he has liberated himself from dependence on others by his own efforts and his own creation. For Technological Man, choice matters more than what is chosen. He is not concerned with what he should desire; rather, he is preoccupied with how he can acquire or accomplish what he desires.³¹

The technological society has a way of dealing with men in the same way that man deals with nature. The naturalistic and physicalist philosophies, therefore, seem to show their true colors in the technological society. As shown above, many millions of people are on the cusp of being rendered irrelevant by worldly economic standards of productivity. Technological Man and Society then can dispose of such a man as one that has not evolved to the intellectual standard of the age. In a perversion of the creation mandate, therefore, the Technological Man must show his ruling over nature, by the ruling over human capital as well. Those who do not conform to this image of the Technological Man will fall by the wayside of the technological future.

This has given rise to the manipulation of human capability on the physical level. Much like humanity’s perceived mandate for technological

³¹ Rod Dreher, *The Benedict Option: A Strategy for Christians in a Post-Christian Nation* (New York, NY: Sentinel, 2017), 223.

dominion over nature and the damage that has caused,³² the Technological Man, in an effort to domineer his nature and fallibility (mostly to conform to the economic realities of the technological society), is using technology and technique to enhance human capability (via genetic bio-enhancements and machine-human interfaces), toward the platonic ideal represented by the machine and the “infallible” AI.

The fact is that thinking humanity will remain the same as technology increases is committing what Michael Bess calls the “Jetson’s Fallacy.”³³ A failure to understand that as technology increases and the capabilities of AI move toward superintelligence, humanity will have to change physically and socially, thus altering what it actually means to be human³⁴ (for example, using genetic engineering and bio-mechanical engineering to become more capable in the AI dominated future).³⁵ In fact, both Bostrom and Musk have frequently stated the need for human augmentation for success in a *benign* AI world. Should AI become hostile, the need for human augmentation would be, for the sake of survival, a necessity.³⁶

The perversion of the social and cultural mandate of Gen. 1:26-27 would be two-fold. Firstly, those that refuse the augmentation would, of course, fall drastically behind in an AI-dominated world. Without the capability for symbiosis, the off-grid and *fallible* human without machine properties would be at the mercy of economic manipulation of capital, property, and information.

³² See White’s seminal critique of the effect Christianity, particularly after the Reformation, has had on environmental ethics. Lynn White, “The Historical Roots of Our Ecologic Crisis,” *Science* 155, no. 3767 (1967).; Jürgen Moltmann, *Ethics of Hope*, trans. Margaret Kohl (Minneapolis, MN: Fortress Press, 2012), 134.; Hammett, “Human Nature,” 524.

³³ Michael Bess, *Make Way for the Superhumans: How the Science of Bio-enhancement is Transforming Our World, and How We Need to Deal with It* (London: Icon, 2016), 7. This fallacy is that humanity remains the same as gadgets evolve like the cartoon characters in the “Jetsons.”

³⁴ Shatzer, *Transhumanism and the Image of God*, 2.

³⁵ Bostrom, *Superintelligence*, 36-49.; See Elon Musk, “Neuralink Launch Event,” 5:50-6:27 of 1:44:41 <https://www.youtube.com/watch?v=r-vbh3t7WVI&t=4646s> (Date Accessed November 7, 2019).

³⁶ Referring back to the first section of this paper, the theological foundation and recognition of man’s sin almost certainly guarantee a *hostile* AI. This is done either by the human programmers and nations that own AI (for economic or military supremacy) as in the case of *algorithmic* AI. Should *nonalgorithmic* cognition be achieved (see footnote number 6), these AI would, having been created by man, would be infected in some way by man’s sin and would therefore, in all likelihood become hostile to their own creator. This of course would be the height of irony, considering the rebellion against our own creator.

Essentially, they would be, for all intents and purposes, unemployable. Secondly, and much scarier, is the forced manipulation and augmentation of humanity by totalitarian regimes. Whereas the former is driven by economic forces, which encourages individuals to change “freely” (or suffer the consequences), the latter would be state-forced augmentation. If history is any guide, the state driven by ideologies centered around “national security,” “self-sufficiency,” or “economic supremacy,” would in all likelihood encourage or force augmentation of its citizens. In fact, the so-called AI “arms race” is already at the forefront of geopolitics with Russian President Vladimir Putin stating that the nation that leads in AI “will be ruler of the world.”³⁷ Given, therefore, the high geopolitical stakes for both economic and military survival, the likelihood that governments would manipulate its citizens to conform to the AI future (either by economic incentive or coercion) is certainly a forgone conclusion.³⁸ Thus, the manipulation of human capital both in the individual form (by individual augmentation) and the *technosocial* effects of an AI-dominated future pervert the socio-cultural mandate of Gen 1:26-27. The desires of being preeminent in the global economic or in military might have over shadowed a normative and biblical ruling of nature and have turned it toward means (via AI) to achieve the desires of the heart.

That Hideous Strength: AI, Moral Epistemology, “Deep Fakes,” And Digital Panopticons³⁹

The final frontier of AI and the conforming of the technological man to the perfected *human* image is that of centralization, docility, and conformity to an end goal, driven solely by technological capital and the state.⁴⁰ C.S. Lewis says,

³⁷ Adrian Pecotic, “Whoever Predicts the Future Will Win the AI Arms Race,” *Foreign Policy*, March 5, 2019, <https://foreignpolicy.com/2019/03/05/whoever-predicts-the-future-correctly-will-win-the-ai-arms-race-russia-china-united-states-artificial-intelligence-defense/> (Date Accessed November 7, 2019).; Heather M. Roff, “The Frame Problem: The AI ‘Arms Race’ Isn’t One,” *Bulletin of the Atomic Scientists* (2019), 97.

³⁸ One need only to look toward the emphasis on STEM education in state run schools that orientate students to economic productivity via these specialties over other categories such as philosophy, theology, or other humanities. The need for economic security driving the decisions rather than actual analysis of what it means to be human, nor any discussion of the type of future that *should* be.

³⁹ C.S. Lewis, *That Hideous Strength: A Modern Fairy-tale for Grown Ups* (New York, NY: Scribner Classics, 1996).

⁴⁰ Without a mooring of a biblical worldview there can only be one anchoring foundation given the helplessness of the lone individual, this mooring is the state or the corporation. In the technological society, the entities of corporation and state are essentially one and the same driven toward the same end. The anarchic system (state of nature) culminates in the state and all activities are directed toward that end and the preservation of society and against all forces perceived to be

There is something which unites magic and applied science while separating both from the ‘wisdom’ of earlier ages. For the wise men of old the cardinal problem had been how to conform the soul to reality, and the solution had been knowledge, self-discipline, and virtue. For magic and applied science alike the problem is how to *subdue reality to the wishes of men: the solution is a technique; and both, in the practice of this technique, are ready to do things hitherto regarded as disgusting and impious*-such as digging up and mutilating the dead.⁴¹

The subduing of reality, the subduing of men to the means and ends of the state represents the zenith of the technological society and probably the greatest danger posed by AI. In short, moral epistemology and one of the foundational traits of *imago Dei* (that is being moral creatures able to make practical and reliable moral judgments) is in danger.

Upon examination of the intersection of the antitheses of morality (good and evil) and the political (friend and fiend) one finds how the advent of AI-created “deep fake” technology is on the cusp of rendering moral judgements on global events irrelevant.⁴² That is, the state and a technologically advanced company are able to manipulate all relevant media and prevent access to media that runs counter to the political goals or cultural milieu.⁴³ Essentially, the advent of AI-enabled information creation is the apex of propaganda, ensuring both total electronic censorship via algorithmic filtering and the creation media that cannot be differentiated between true and false.⁴⁴ Returning to Lewis, who, at the dawn

against this end. See G.W.F. Hegel, *Lectures on the Philosophy of World History*, 60.; Thomas Hobbes, *De Cive*, public domain, 3-6, <http://public-library.uk/ebooks/27/57.pdf> (Date accessed November 7, 2019).; John Locke, *Second Treatise on Civil Government*, 2. §4-5.

⁴¹ C.S. Lewis, *The Abolition of Man* (New York, NY: HarperCollins, 2001), 77. (Italics mine).

⁴² Carl Schmitt, *The Concept of the Political: Expanded Edition* (Chicago, IL: University of Chicago Press, 2007), 27.

⁴³ Social trends, like political agendas tend to discredit certain media sources and information *a priori*. A social trend and milieu (ideology) thus precede and power the propaganda. Ellul, *Propaganda*, 42.; See also Lewis, “Bulverism” in *God in the Dock: Essays on Theology and Ethics*, ed. Walter Hooper (Grand Rapids, MI: Eerdmans, 2014), 299-302.

⁴⁴ For instance, AI powered algorithms are already being used for internet censorship of politically damaging information around the world. Anything deemed “fake news” or “propaganda” can be essentially totally censored by new technology (the censoring and changing of information is ironically propaganda as well). Pete Norman, “U.S. Unleashing Military to Fight Fake News, Disinformation,” *Bloomberg*, August 31, 2019, <https://www.bloomberg.com/news/articles/2019->

of the technological era, made the astute observation that the power of the state enabled it to easily fake information needed for political ends, saying,

But every modern State has powers which make it easy to fake a trial. When a victim is urgently needed for exemplary purposes and a guilty victim cannot be found, all the purposes of deterrence will be equally served by the punishment (call it a ‘cure’ if you prefer) of an innocent victim, *provided that the public can be cheated into thinking him guilty.*⁴⁵

A “deep fake” is a technique for image synthesis based on AI. Essentially, this technology takes existing images and superimposes them on one another. So what this means is that a video can look like one thing, but actually be a combination of videos. For instance, AI can put one face onto another person’s face and make it look like said person did something they did not do. And also put one person’s words into another’s mouth, and thus forge images or sounds together to make it look like an event took place, which did not.⁴⁶ Thus, one finds that without specialized knowledge and technological capability (ownership of AI to analyze AI images to determine if they were AI-derived), the general public is able to be duped and cheated into moral decisions (for instance, on issues of war and peace) with information that appears real but is in fact a false reality. Rendering the problem more severe, the flip side of the coin is that any counter-information that could falsify the media in question could be rendered inaccessible by AI algorithm in mass-cyberspace censorship, which would be undetectable by the average observer.⁴⁷ Essentially, “deep fake” technology is

08-31/u-s-unleashes-military-to-fight-fake-news-disinformation (Date accessed November 12, 2019).; Barney Warf, “Geographies of Global Internet Censorship,” *GeoJournal* 76, no. 1 (2011), 3.

⁴⁵ C.S. Lewis, “The Humanitarian Theory of Punishment,” in *God in the Dock*, 323. (Italics Mine).

⁴⁶ See an example of a Deep Fake of President Obama at <https://www.youtube.com/watch?v=AmUC4m6w1wo> (Date Accessed November 7, 2019). Other examples include Deep fake pornography in which images of celebrities or others are superimposed onto existing pornographic images making it look like they are performing sex acts which they did not do.

⁴⁷ One must remember that the technological man relies almost exclusively on technological means to receive his news and information about happenings in lands other than his own (this was true even when news was distributed via paper and pamphlet. This was exacerbated by telegraph, then radio, then television, then the internet, now with AI.) The information is the same (geopolitical events, terrorist attacks, economics and stock data, natural disaster) the speed of dissemination and reaction time has changed (formation of opinion and moral judgement) is now essentially reduced to zero. Most importantly the potency of information and propaganda has

where truth about geopolitical events comes to die.⁴⁸ As such, man, created a moral being, capable of making moral decisions, is fully justified in making moral decisions on the information he is presented,⁴⁹ but in all reality, “deep fake” technology renders these judgements pointless. For the technological man is simply making a moral judgement on information crafted by actors, either state, corporate, or other nefarious programmers (e.g. algorithmic AI, or possibly in the future, by the AI superintelligence itself, by non-algorithmic AI).⁵⁰ Going back to Lewis and the ability of the state to manipulate and create fake trials with all the trimming of “real” evidence, the zenith of the technological society with the advent of AI-created information goes well beyond anything man has experienced before and renders man at the mercy of both the state and his corporate and technological feudal lords, who have unfettered access to all his so-called personal information.⁵¹

Thus, the implications of AI and “deep fake” technology on *imago Dei* and theological anthropology are quite extensive. AI not only enables the total restriction and censorship of digital information, in what can only be described as the technological society’s book burnings, but also enables the creation of mass and nearly undetectable deception. This undermines two fundamental attributes central to the doctrine of man (community and morality). We are created to live in community. The state can, with this power, determine who is in and out of this community (e.g. who is friend and who is fiend). Manufactured geopolitical events (created via “deep fake” technology) takes public opinion, derived from the fact that we are moral beings, and uses that against man. The medium of the internet makes this much more effective, where the plethora of information, and its constant distraction, render contemplation and reflection on any one thing an impossibility. As such, “deep fake” technology not only makes it impossible to

reached its apex in the technological society. Thus the problem of reliable information and moral decision making in the realm of geopolitics (who is friend and fiend) has always been spurious because of the nature of the state and source of technological information. One can never be sure of the truthfulness of news reports and can always be assured that they are the “victims” of propaganda.

⁴⁸ Oscar Schwartz, “You Thought Fake News Was Bad? Deep Fakes are Where Goes to Die,” *The Guardian*, November 12, 2018, <https://www.theguardian.com/technology/2018/nov/12/deep-fakes-fake-news-truth> (Date Accessed November 12, 2019).

⁴⁹ David Baggett and Jerry L. Wells, *God and Cosmos: Moral Truth and Human Meaning* (New York, NY: Oxford, 2016), 180-212.

⁵⁰ See footnote 6.

⁵¹ Schneier, *Data and Goliath*, 60-1.

know what is really going on, but should the state choose to do so, could filter, via AI, any information to the contrary. Thus, moral knowledge and the ability for collective moral decision-making is rendered useless and has to be acquiesced to the state (i.e. those with the technology and intelligence to make decisions). In short, the technological man's only recourse and only concern is not with the truth of events, but whether or not the current state of things leads to the fulfillment of his desires and the indulgences of the mind and the flesh (Eph. 2:2-3).

At the end of the day, economic and political expedience rule the day. A world of "deep fakes" is a world that renders normative geopolitical structures, collective moral decision-making, and accountability obsolete. In short, what the dictators and social organizers of the past could only dream of has become a reality. The sons of disobedience and their machines not only manipulate the individual, but render man's primary weapon for judgement and accountability (moral knowledge) useless. For, only those with access to AI (government and technological corporations) can determine what is true or not, and it need not actually be truth, but simply partial truth.⁵² The technological man therefore can only appeal to what is working (economic, military supremacy, state survival, and material comforts) as truth. Technique thus becomes ends and anything that stands in the way of technique (even normative and biblical social formation) is deemed an existential threat.

Ellul points out that modern man loves and worships "facts." What is factual (what works: i.e. technique) is the definition of good. The "facts," even if they are "deep fake," for one cannot tell the difference, is what the technological man obeys.⁵³ Unfortunately, the owners of "facts" have never before in human history been so limited in number – limited to the state and big technological companies who can not only manufacture facts ("deep fakes"), but have the ability to censor dissenting information, and, lastly, have the ability to discredit any dissent with the information gathered from panoptic surveillance of every man, woman, and child ever connected to an electronic device, whether voluntarily or involuntarily.

Digital panopticons and returning to the problem of sin

The insights of Foucault loom large in any critical analysis of the technological society and its obvious centralization and drive for panoptic

⁵² Propaganda must always contain some truth. The apex of propaganda in the form of AI created propaganda is no different and adheres to the principles and techniques established by Goebbels. Russel Lemmons, *Goebbels and Der Angriff* (Lexington, KY: University of Kentucky, 1994), 4.

⁵³ Ellul, *Propaganda*, xv.

omniscience. The ability to create reality and “truth” and the total disruption of human moral knowledge in regards to political interaction with the advent of “deep fakes” is one side of the coin (pushing information and propaganda), whereas the other side of the coin is the pulling of information and mass surveillance. Sober analysis of cyberspace has shown that, despite any possible liberating and emancipatory effect digital connectedness has brought (usually represented by economic growth and the ability to make money),⁵⁴ an equally chilling and Orwellian reality has been created and greatly enabled by AI. Geosurveillance, invasions of privacy, and now the ability of the state and corporation to form digital panoptic analysis of human action are used primarily to build up technological and military hegemony, develop a fear-based culture, and minimize dissent.⁵⁵

A full analysis of the surveillance state (or corporation) and its chilling effects on individuals and society is outside the scope of this paper.⁵⁶ However, the effects and power of AI-enabled constant surveillance of every individual is upon us and needs to be addressed by the theological community, viewed through the ever-present problem of sin, as discussed above. The creation of the social credit system in China,⁵⁷ and the corporate version of the same systems created in the West, show that society is on the cusp of an AI-enabled sci-fi dystopia, imagined by the likes of Orwell, Huxley, or Boye.⁵⁸

The technological society creates data as its exhaust, and AI enables the technological state and corporation to know exactly the patterns, habits, vices, and

⁵⁴ Of course this economic growth is only possible in a technological environment, where only *certain* types of jobs thrive. See the discussion above on economics and AI’s impact on work. Furthermore, the assumption that the ability to make money and economic growth (i.e. spending power) of the individual (or society) equals emancipation is certainly flawed and centered around materialistic notions about worth.

⁵⁵ Barney Warf, “Geographies of Global Internet Censorship,” 3.

⁵⁶ Peter Gill, *Policing Politics: Security Intelligence and the Liberal Democratic State* (Great Britain: Frank Cass Co, LTD, 1994), 171.

⁵⁷ Larry Catá Backer, “Next Generation Law: Data Driven Governance and Accountability-Based Regulatory Systems in the West and Social Credit Regimes in China.”; See also how even democratic societies use panoptic surveillance systems to control populations and dissent (both governmental and corporate). This information has been made possible by the Edward Snowden revelations. See Bruce Schneier, *Data and Goliath: The Hidden Battles to Collect Your Data and Control Your World* (New York, NY: W.W. Norton, 2015), 62-90.

⁵⁸ George Orwell, *1984* (New York, NY: Signet Classics, 1950).; Aldous Huxley, *Brave New World* (New York, NY: Alfred A. Knopf, 2013).; Karin Boye, *Kallosain*, trans. Gustaf Lannestock (Madison, WI: University of Wisconsin Press, 2002).

predispositions of every person.⁵⁹ It seems common knowledge by now, but targeted advertisements are delivered to a phone or other device because of internet searches or conversations. Likewise, what totalitarian regimes could only dream of with analog dossiers, is now possible with simple and cheap electronic storage. China's social credit system can now rate individuals based on their behavior (what the state deems as good behavior) and allows or denies them access to markets. AI thus allows the mass-collection of personal information and the processing of information that was beyond the reach of the earlier efforts of the technological, but analog, state.

This brings the theological conversation back into focus. Firstly, the desire of the corporation and the state to collect and analyze the data exhaust of the technological man can only be described in terms of power. These organizations want power over the individual. In fact, they commodify and devour the individual as their primary business model. In short, humanity is their product, and they sell to the highest bidder. Furthermore, the centralization of the state and methods of the state, by their very ontology, treat human beings (*imago Dei*) like mere objects and statistical inventory as a matter of course. This is done for survival of political power (economic or military dominance) but always leads to violations, not only of the individual but of whole groups of people. As such, one finds that the technological states not only pursue omnipotence and omniscience for matters of war and actual survival, but more and more, simply for normal governance.⁶⁰ Again, the drive for God-like capability and striving for the platonic ideal meets the theologian head-on. Thus, the problem of sin is front and center for the technological society. We want to be like God. On the one side of the coin, man wants to control man and the way he thinks and perceives (propaganda and "deep fakes"), but in order to do that man must know what man is thinking and doing (mass surveillance). Power, therefore, demands both knowledge and capability (two sides of one coin).

It seems then, that the primary problem with AI and its results is sin. The problem is that the technological society depends on centralized power. Those with AI are very few and participation in the technological society is one more akin to feudalism. The choice is not between being affected by surveillance or not, but who will be doing the surveilling.⁶¹ As such, the distribution of power in the technological society (limited to those with AI) brings us to a frightful reality.

⁵⁹ Schneier, *Data and Goliath*, 18.

⁶⁰ Jean Gebser, *The Ever Present Origin*, trans. Noel Barstad and Algis Mickunas (Athens, OH: Ohio University Press, 1985), 431.

⁶¹ Schneier, *Data and Goliath*, 60-1. We essentially hope that our feudal lords are good (not likely considering the commodification model. You (your data) will be sold for profit to the highest bidder. Akin to a Modern day slave trade.

The problem, fortunately, is one that has already been identified by Lord Acton. Acton says that “Power tends to corrupt and absolute power corrupts absolutely. *Great men are almost always bad men*, even when they exercise influence and not authority; still more when you add the tendency of the certainty of corruption by authority.”⁶² The technological society enabled by AI is one that has never been seen before in history: absolute power in the hands of very few organizations. Thus, the technological society and AI are infected with the very same problem as our ancient ancestors. The human problem is sin. No technology or technique of social control by AI will solve the problem to transform man. Transformation of the man cannot be brought about by technique or technology, no matter how advanced. The drive of the state and corporation in the manipulation of man by data and AI is simply an attempt to forge man in to an image of their creation. The productive man. The technological man. It is the ideal man for the *polis*.

Conclusion

In closing, this paper has examined only a few connections between theological anthropology and the technological society but is focused primarily on AI and its ramifications on the *imago Dei*. The analysis of AI shows that sin infects both the programming of AI and the uses of AI. Since sin is the pervasive problem, we find, paradoxically, that sinful man is attempting to use a sinful means (AI) to achieve personal and societal perfection. Of course, this “perfection” is one that is focused only on state or economic development, rather than perfection in righteousness. Having established the sinful desires behind the creation of these techniques, this paper examined several of the practical effects of AI on *imago Dei*. The first being the adulteration of the nature of work and how the technological society and its technical advancement could rob many people of meaningful work based solely on their intellectual inability to keep up. These unfortunate persons are simply casualties of “progress.” Those not smart enough, through no real fault of their own, given the genetic and determined nature of IQ and other attributes, are simply to be liquidated in the new economy. Lastly, this paper focused on the more chilling aspects of the technological society and its use of AI, and the control and manipulation of man by the loss of moral epistemology and the dystopian nature of mass-surveillance.

It seems then, the issue at hand is one of transformation because of the sin nature. The technological society demands transformation of the man to economic efficiency and docility toward the state, but Christ demands transformation to His image. As such, we find that man, capable as he is to create (*homo faber*), is much

⁶² John Emerich Edward Dalberg. Lord Acton, *Acton-Creighton Correspondence* (Public Domain, 1887), Letter I, <https://oll.libertyfund.org/titles/acton-acton-creighton-correspondence> (Date Accessed November 20, 2019). (Italics Mine).

less able to control what he creates and use correctly what he creates. The prospect of AI in the hands of sinful man is like a child playing with a bomb. Bostrom is right when he says, “Such is the mismatch between the power of our plaything and the immaturity of our conduct.”⁶³ Bostrom further states,

For a child with an undetonated bomb in its hands, a sensible thing to do would be to put it down gently, quickly back out of the room, and contact the nearest adult. Yet what we have here is not one child but many, each with access to an independent trigger mechanism. The chances that we will all find the sense to put down the dangerous stuff seems almost negligible. Some little idiot is bound to press the ignite button just to see what happens. Nor can we attain safety by running away, for the blast of an intelligence explosion would bring down the entire firmament. Nor is there a grown up in sight.⁶⁴

The problem of sin is persistent and fatal. Bostrom asks for the best of human nature to stand up to control our AI-enabled technological society.⁶⁵ The problem of pervasive depravity and its solution is, therefore, thrown into sharp relief. There are two methods to deal with this depravity. The first is the technical means offered by man. Sinful technological man sees others where they are and where they should be according to his standard. Those deemed abnormal are to be coerced into proper behavior.⁶⁶ This, of course, is done by technical means. We examined the economic means and governmental means (propaganda and surveillance). Christian theology, however, demands another standard. This standard of transformation, by a perfect and truly omniscient being (a sinless panopticon), sees where man is and where he should be according to His immutable standard. Thus, man’s only hope to diffuse the ticking timebomb of AI in the technological society, is transformation of the soul, not by the state or technological corporation, but by Christ.

⁶³ Bostrom, *Superintelligence*, 259.

⁶⁴ Bostrom, *Superintelligence*, 259.

⁶⁵ *Ibid*

⁶⁶ Foucault, *Discipline and Punish*, 199.

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