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The Technosapien Temptation in AI, Genetic Engineering, and Mars Colonization

Abstract. The technosapiens among us promise technological transformation. The *technosapien temptation* is to trust in the call to digital transformation, even if what is promised is more than technology can deliver. Here are six scenarios tempting the present generation: (1) Despite the capacity of cyberspace and social media to actualize our potential for global peace, disinformation along with conspiracy theories and competing ideologies are fragmenting our consciousness and balkanizing human community; (2) Despite dramatic increases in computing capacity, neither AI (artificial intelligence) or IA (intelligence amplification) can empower the sinful human person to advance in virtue let alone deification; (3) Despite the promise of CRISPR gene-editing for healing through therapy, a slight mistake in germline gene-editing risks irremediable damage to the human species; (4) Despite plans to employ bio-nano-tech to enhance human intelligence, the promethean impulse in the transhumanist vision actually replaces the human species with a posthuman superintelligence; (5) Despite the heart pounding success of the Iron Dome defense, AI controlled lethal autonomous weapons threaten more military dehumanization; (6) Despite the ambitious plan to colonize Mars with Earthlings, the change in gravity will so alter human physiology that our descendants living on Mars will become Martians, not Earthlings in diaspora. Do any of these technologies offer us the equivalent scientific salvation? The public Christian theologian needs to assess the threats and promises of technosapienism in light of God's promises that through sanctification we can become Christlike, living the holy life on Earth as well as in the future resurrection.

Keywords: Transhuman, CRISPR, gene editing, public theology, Mars, cold evil.

Contribution. This article demonstrates how the public theologian can contribute to the wider global discussion regarding the fast-moving frontier of technoscientific advance. Culturally, the public theologian points out how certain technologies of human enhancement – such as AI (Artificial Intelligence), IA (Intelligence Amplification), CRISPR gene editing, and Mars settlement – promise more than they can deliver. Through discourse clarification, what we label the technosapien temptation risks a tragic idolatry when we expect advancing technology to cure all human ills, especially redemption from human sinful behavior. No matter how much new technology imparts to the common good, it will fall short of utopian expectations.

Use of AI. Despite the fact that this article takes up AI as subject matter, AI was not employed in its textual composition.

If geologists can safely say we are living in the Anthropocene epoch, might cultural critics be equally safe in saying *Homo sapiens* have entered the *Homo digitalis* or Technosapien epoch? Will the present generation of hybrid teenagers who cannot tell where their fingers end and their cell phones begin recall the bygone era of solitary meditation, poetry recitation, and liturgical singing?

To protect the human from losing the evolutionary race to the posthuman, the Godmother of AI, Stanford's Fei-Fei Li, warns us to refer to technology as only a human "tool" (Li 2023). By calling AI a "tool," Dr. Li tries to erect a bulwark to protect us from being conquered by a superintelligent Singularity. However, tool language will not protect us if in our hearts we want a techno-human symbiosis.

Tool language intends to deafen us to what the siren of technological progress is actually calling us to, namely, self-transformation. Tool thinking distorts our social imaginary by conflating the human and the machine in a manner we may eventually regret.

The invention of successful new machines only deepens and expands our mechanistic outlook on reality, reinforcing what MIT's Max Tegmark refers to as belief in "mechanistic inevitability" (Tegmark 2024). We then analogize, describing the non-mechanical in mechanical terms. The human body, for example, has become a machine in the minds of medical

researchers so that it can be surgically repaired with interchangeable parts. Airport security metal detectors routinely sound the buzzer for titanium heart stents and knee or hip replacements. Might the merging of humanity with technological artifice redeem us from the drudgeries of being human?

Enter the technosapien temptation. The *technosapien temptation* is the enticement to surrender our human soul to the dazzling promises of the technological imperative. By *technological imperative* I mean the tacit doctrine which holds that new technologies are inevitable and essential and that they must be developed and accepted for the good of society.¹ *Technosapienism*, accordingly, becomes a belief system that builds on the technological imperative to construct a vision of the coming posthuman species, a more highly evolved species created and designed by the present generation.

Is this a good idea? Not according to Pope Francis. Scientific and technological progress shine with clinquant dress, but they only clothe a hollow mannequin underneath.

There is a growing awareness that scientific and technological progress cannot be equated with the progress of humanity and history, a growing sense that the way to a better future lies elsewhere. This is not to reject the possibilities which technology continues to offer us. But humanity has changed profoundly, and the accumulation of constant novelties exalts a superficiality which pulls us in one direction. It becomes difficult to pause and recover depth in life (Pope 2015).

The shallow can never quench the thirst of the deep. The temptation of technosapienism is to forget the depth while drinking lugubriously from the shallows.

In the shallows, we are wading in six puddles where we find a number of anxious people splashing with alarm: (1) Digital disintegration; (2) Intelligence amplification's impact on virtue and deification;

¹ According to British semiotician Daniel Chandler, "the doctrine of the technological imperative is that because a particular technology means that we *can* do something (it is technically possible) then this action either *ought* to (as a moral imperative), *must* (as an operational requirement) or inevitably *will* (in time) be taken" (Chandler 2020).

(3) CRISPR gene editing and germline engineering; (4) Transhumanist anthropology and eschatology; (5) lethal autonomous weapons systems (LAWS); and (6) Mars colonization. Though relatively shallow when compared to the heavier anthropological questions, one or more of these six appear on the worry list in many quarters.

Let us ask both the Christian church and the wider culture: does technosapienism provide genuine hope for human betterment? Does it complement or compete with the biblical promise of repentance and renewal? Does technosapienism lift up promises it cannot keep? Does technosapienism threaten realistic and healthy human self-understanding?

By addressing these questions, we will engage in an exercise in public theology, where the Christian theologian takes up challenges posed by the culture beyond church doors. Here's my working definition: "Public theology is conceived in the church, critically reasoned in the academy, and offered to the wider culture for the sake of the common good." (Peters, *The Voice of Public Theology* 2023, 3).

Added to the above list is a distinct concern of the public theologian: what might be the future impact of *ex vivo* Artificial Intelligence (IA) or even *in vivo* brain implants for Intelligence Amplification (IA) on individual spirituality and on the global quest for world peace? Our task in what follows is to assess realistically the promises and threats of the next stage in technological revolution. And further, I recommend we say, "get behind me, Satan," to the technosapien temptation (Mark 8:33).

1. Digital Divisiveness and Dehumanization

We *Homo sapiens* daily risk sacrificing our own humanity to the handheld cell phone or laptop computer. "Brain Rot" is the result. This term, *brain rot*, has won the prize for the term of the year awarded by the *Oxford English Dictionary*. What is brain rot? "Brain rot is a symptom of mindless scrolling through nonsense memes and sludge content. It is the sensation of faculties warmly smothered by one too many AI-generated pictures" (Guarino 2024).

How might this affect church life? On the one hand, the digitization of church life is making the global Christian community more inclusive because it includes the disabled. Elderly and homebound worshippers can participate fully in worship from their beds when it is online. “The digital church has helped create a more inclusive church,” avers Pastor Candi Cann (Cann 2022, 228). On the other hand, in the wider society digitized human relations are divisive if not downright dehumanizing. So, the first on our list is digital dehumanization and divisiveness.

Despite the promise of shared cyberspace and social media to actualize our potential for global human connectedness, no spirit of a single planetary society is emerging. Rather, disinformation along with conspiracy theories and competing ideologies are fragmenting our consciousness and balkanizing global community. Allegiance to truth has become replaced with impersonal algorithmic manipulation and, in some cases, outright fake news. Media analyst Luciano Floridi attributes the loss of truth-reverence to the business model.

On the fake news issue in particular, the business model we have is based on advertisement. Advertisement wants clicks. Clicks require big news. Big news requires fake news ... There is no way out. If we don’t like the outcome, we need to change the source. You don’t change the world by just changing the consequences. You need to change the causes, but no one at the moment wants to change the business model in the background (La Porte and Narbona 2021, 128).

When truth-reverence is de-centered, disintegration becomes ineluctable. Can we expect further disintegration? Will the cyber-balkanization of the human race constitute a loss of loyalty to a shared human essence? Will the weight of ideological pluralism crush the fragile structures of human unity? Will global communication hinder or help our attaining world community?

The technosapien temptation is not limited to interchanging the human with the machine. Dehumanization includes the habit of *othering* people. Dehumanization begins when we turn portions of the “we” into a “they.” Do the “they” remain human? Or do “they” slide gradually down

a slippery slope to a sub-human status? Once at the sub-human level, do we lose our moral obligations toward them? Apparently so.²

Please be clear: it is not the digitization of data that dehumanizes. No. It is a traditional human othering now pulling the trigger on a digital weapon.

Othering rhetoric justifies class division, racial strife, sexism, patriarchy, colonialism, and countless structures of inequality. Most dangerously, the rhetoric of dehumanization justifies preparing for war.

In the face of dehumanizing divisiveness, leading AI techies have told the Pew Research Center that what is needed is a single planetary society that shares the cooperative values necessary to prevent innovations from going off the rail.

Digital cooperation to serve humanity's best interests is the top priority. Ways must be found for people around the world to come to common understandings and agreements – to join forces to facilitate the innovation of widely accepted approaches aimed at tackling wicked problems and maintaining control over complex human-digital networks (Pew 2018).

The technosapien temptation leads us into *cold evil*. Cold evil does not rise out of hot anger or even smoldering hatred. Cold evil is not the expression of a person with malice or evil intent. Rather, cold evil is the destructive result of institutions supported by people who feel distant, disinterested, uninvolved (Kimbrell 2000).

“Cold evil requires a rethinking of sin,” avers Noreen Herzfeld when assessing the global impact of AI's enormous energy consumption. “While the medieval seven deadly sins were individual sins of commission, today much of the evil in the world comes from corporate acts. Many are sins of omission” (Herzfeld 2025, 149). In a depersonalized and dehumanized

² Othering could positively contribute to human self-understanding, according to theologians Tracy Trothen and Calvin Mercer. “The task of encountering advanced AI as other--not us and not God--will be necessary for understanding advanced AI and also to achieve greater intentionality around what it means to be human and what we value about being human” (Trothen 2025, 170).

technosapien context, human sin exacts its violence through distance and disinterest.

Here is what should not go unnoticed: the very concept of dehumanization presupposes the existence of a single universal humanity toward which we are morally responsible. Where do we find this single universal human race? It exists as an ideal. Human unity is a social imaginary that guides our moral commitment. The very concept of dehumanization requires a prior commitment to a planetary community made up of human persons treated with proper dignity.

Political philosopher Eric Voegelin reminds us that the very mental picture of a universal humanity requires God to be in the frame. “Universal mankind is not a society existing in the world, but a symbol which indicates [human] consciousness of participating, in this earthly existence, in the mystery of a reality that moves toward its transfiguration. Universal mankind is an eschatological index” (Voegelin 1956–1987, 4:305).

If the concept of a universal humanity is an eschatological ideal rather than a daily experience, we might borrow the term, *catholicity*, and employ its evocative power in a secular context. “Catholicity in its essence refers to the fullness of humanity understood eschatologically,” proposes Russian Orthodox physicist and theologian, Alexi Nesteruk” (2015, 43). “Humanity then must only be understood in the context of the promise of God for its salvation, as constituting the locus point of the meeting of God and his creation, as the mediating agency, which is supposed to bring the whole universe through its genuine knowledge to new creation” (Nesteruk 2015, 43).

How then should we use social media? Or contribute to social media? When social media tempts us to *other* other people, Christians must assert on behalf of the wider culture that there exists a single universal humanity and, further, that each individual be treated with dignity while affirming fidelity to the common good. Christians have reasons to hope that God will eschatologically confirm this conviction of today’s faith.

In sum, the increased digitization of our daily life constitutes one form of technosapien temptation. Initially, each new gadget presents itself as an added convenience or new brand of entertainment. But soon thereafter it absorbs our attention, attention that can no longer be given to the

other human persons around us. We de-personalize and eventually de-humanize. Like a Trojan Horse, we welcome into our fold a technological wolf in sheep's clothing.

2. Intelligence Amplification, Virtue, and Deification

Second, could hour by hour access to Artificial Intelligence (AI) increase the soundness of our moral judgment? Could a deep brain computer implant for purposes of Intelligence Amplification (IA) enhance our capacity for pursuing virtue or even holiness? Could machine intelligence enrich the life of our inner soul?³

Yes, says Braden Molhoek at the Center for Theology and the Natural Sciences in Berkeley, California. He thinks IA could at minimum improve moral decision-making. Deep brain implants could also allow people to improve their moral deliberation process and, thereby, render better moral decisions. But sound moral decision-making is not the same as developing virtuous character over time.

Despite dramatic increases in computing capacity, neither AI nor IA can empower the sinful human person to advance in virtue let alone sanctification. No matter how sophisticated, techno-intelligence will have no effect on infusing habitual virtue. Why? Because acquiring virtue or living a sanctified life requires habit formation, not infusion of intelligence. Molhoek makes this clear.

³ Neither the theory of intelligence in AI nor the metaphysics of transhumanism operate with an integrated vision of embodiment, consciousness, and related matters. This according to Nigerian scholar Ojochogqu Abdul at the University of Lagos. "The link between embodiment and consciousness creates problems for retaining the idea of the 'human' in ways that the materialist conception falls short of solving. The matter/mind, body/mind problem therefore attends to big history and transhumanism, and in trying to develop both projects, the approach in understanding both human nature, self, and the nature of ultimate reality taken in metaphysical materialism has not been adequate in clearing lingering obstacles impeding the grasp of the basic stuff of existence, an understanding necessary to both construct a comprehensive picture of the Universe, achieve a holistic remaking of the human species, and as well guide a successful artificial design of intelligent, inorganic life" (Abdul 2019, 724).

It is problematic to speak of engineering virtue. Enhancing one's moral capacity does not make one more virtuous, it simply increases the ability to act ethically. Virtues are stable dispositions that require habituation. Increasing moral capacity will likely make a person more able to act ethically but it does not infuse virtue (Molhoek 2022, 402).

If implanted technology could amplify our intelligence, could we rely on our human brain cooperate in the pursuit of virtue? Neuroscientist and Orthodox theologian Hermina Nedelescu would answer affirmatively. She tells us that we humans have a central nervous system which is designed to minimize deviations from affective neutrality. That is, our brains have a baseline equilibrium (Nedelescu 2024, 368).

Does this mean our brains are pre-wired for a healthy spiritual equilibrium? Should we trust our brains to edify our soul? Nedelescu answers positively. Yet, we still need to ask about the possible role a deep brain implant for purposes of intelligence amplification might have on the life of the soul.

Deep down, what our soul yearns for is a center for integration, a transcendent center that would orient all our thoughts, feelings, and impulses. Might the pursuit of virtue orient the entire person toward the Good? Maximus the Confessor answers affirmatively. "Anyone who through fixed habit participates in virtue, unquestionably participates in God, who is the substance of the virtues. For such a person freely and unfeignedly chooses to cultivate the natural seed of the Good" (Maximus, *The Ambigua* 2014, 7,105).

The Good is not the self. Rather, the Good is that toward which the soul orients the self. Toward what do our souls aim? Toward virtue, neighbor love, holiness, sanctification. That's where the soul finds peace, calmness, and equanimity.

Your or my soul is oriented toward sanctification, perhaps even deification. The path toward refining our self-centering in God is, in the language of John Wesley and his Methodist disciples, *sanctification*. The sanctifying process pursued by the justified Christian leads to increased holiness concluding with perfection: "Pure love reigning alone in the heart and life, this is the whole of scriptural perfection" (Wesley 1952, 52).

In the language of Orthodox Christianity, *theosis* or *deification* are the much heavier terms to designate such holiness. Jesus Christ “was made man that we might be made God,” Athanasius told us (Athanasius 1891, IV,65). Nedelescu adds, “when empowered by the Holy Spirit our soul centers itself in God and we take on divine properties” (Nedelescu 2024, 372).

Whether called *sanctification* or *deification*, God’s own Holy Spirit empowers the soul to recenter the self in God. This God-centeredness expresses itself in virtue and love.

What a deep brain implant could accomplish is to provide our brain with access to a larger pool of information. IA might even enhance our capacity for computation. But there is no reason to think that IA could actually amplify our intelligence. More and faster information processing would have no impact on one’s capacity for reasoning with that information. An increase in quantity of information does not increase the quality of one’s intelligence or capacity to reason let alone render sound moral judgments.

Most importantly for our discussion here, IA should not be expected to strengthen or weaken our soul’s capacity to center the self, let alone re-center the self in God. The soul’s pursuit of *theosis* relies on both free will and empowerment by God’s Holy Spirit habituated over time.

If the technosapien temptation entices us with promises of enhancing our intelligence, virtue, and holiness, then it’s time to wave the stop flag. It is reasonable to expect *ex vivo* AI and *in vivo* IA to provide increased access to information. But information will not enhance our human intelligence let alone our virtue. Even if such technology could enhance our intelligence, it would not affect the centeredness of our self nor the spiritual advance of our soul. We dare not ask AI or IA technology to do the work assigned to us or assigned to the Holy Spirit in cultivating virtue, sanctification, or deification.

3. CRISPR Gene Editing and Germline Engineering

Third, does CRISPR gene editing constitute a technosapien temptation? After all, CRISPR promises replacement of malfunctioning genes that predispose us to diseases such as cystic fibrosis and breast cancer. Genetic engineering means healing. It might also mean enhancement. It might also mean increased longevity if not immortality (Gouw and Peters, *The CRISPR Revolution in Science, Religion, and Ethics* 2025).

Are there reasons for caution? Yes. Despite the promise of CRISPR gene-editing for healing through therapy, a slight mistake in germline gene-editing risks irremediable damage to the human species as a whole. If the devout Christian wants to make a contribution to the global common good, I recommend advocating for public policy that supports genetic engineering for therapy but not germline modification. What does this mean?

Today's CRISPR revolution in gene-editing provides medical technology not only for therapy but also enhancement (A. M. Gouw 2018). And germline enhancement applied inter-generationally could lead to a new hominid species. Will the present generation, in the name of medical therapy, divert human evolution in the direction of a posthuman species?

How does it work? CRISPR—an acronym for *Clustered Regularly Interspaced Short Palindromic Repeats*—provides a new, inexpensive, and widely available AI driven technology for editing the genomes of plants, animals, and humans. CRISPR gene editing works like a guided missile system. The missile is an enzyme, Cas9. Upon the laser-like precision of single guided RNA (sgRNA) locating its target gene, like a guided missile, the Cas9 endonuclease locks onto the specific target on a DNA strand, cuts it, deleting it from the DNA landscape.

Here is the promise: with CRISPR-Cas9, you can not only delete a gene, but also insert a different gene (or prescribed sequence of nucleotides). Overall, CRISPR technology can be used for highly specific and convenient gene editing, either inserting sequences in target genes, deleting genes, or turning genes off. With perhaps 4,000 monogenetic diseases such as

Cystic Fibrosis or Huntington's Disease, CRISPR promises therapies that could significantly improve human health and wellbeing (A. M. Gouw 2018).

With this promise comes a peril, namely, the risk of so damaging the species genome that it cannot be repaired. How might this happen? Through unanticipated side effects of germline modification.

Here is what we need to ask to assess the peril. Is it moral for well-meaning gene-editors to remove a gene associated with a disease from the human germline, thereby providing a healthy genome for the patient's children, grandchildren, and on for future generations? What are the unforeseen risks? Should such edits take place, would this lead to the evolution of a posthuman successor to our ancestors?

Jennifer Doudna, co-recipient of the Nobel Prize for inventing CRISPR-Cas9 gene editing, shrinks from giving a green light to germline gene editing. "Future clinical applications of human germline genome editing should not proceed unless, at a minimum, there is (a) a compelling medical rationale, (b) an evidence base that supports its clinical use, (c) an ethical justification and (d) a transparent public process to solicit and incorporate stakeholder input" (Doudna 2/13/2020, 235). In short, be cautious when it comes to germline intervention.

Along with the geneticist and bioethicist, the public theologian has questions as well. If laboratory scientists edit the human genome according to engineering design, will these scientists be usurping the role of God? (T. Peters, *Playing God? Genetic Determinism and Human Freedom* 2nd Ed, 2003). Can we equate divine will with our inborn nature prior to engineering it? Does altering the human genome for therapy or enhancement or design constitute dangerous hubris or pride? If our scientists play God, will it backfire? Will nature roar up in anger and punish the human race for violating something sacred? (T. Peters, *Should CRISPR Scientist Play God?* 2017).

Transhumanists dangle a form of genetic immortality before our hungering faces. By altering the genes that cause aging, we could purportedly expect to live as biological organisms for the indefinite future. Silicon Valley's Ray Kurzweil entices us with the simulacrum of

everlastingness. “By around 2030, the most diligent and informed people will reach “longevity escape velocity”—a tipping point at which we can add more than a year to our remaining life expectancy for each calendar year that passes. The sands of time will start running in rather than out” (Kurzweil 2024, 192).

Is this realistic? Perhaps not. Longevity researchers at the Geron Corporation are convinced that extra-genetic factors determine that human life expectancy will top out at about 120 years regardless of genetic regeneration. “Leading demographers claim that human lifespan is fixed at a natural limit around 122 years,” according to the U.S. National Institutes of Health (NIH 2021). Even so, NIH is tentatively open to factors that may lengthen maximum lifespan. The technosapien temptation just may be promising more than it can deliver. The jury is out.

How, then, should we handle the technosapien temptation posed by CRISPR gene editing? It is my judgment as a theologian and ethicist that there is no warrant for putting up a stop sign to halt CRISPR technology. Human creativity belongs inherently to the *imago Dei*. And we are created by the God who does “new” things (Isaiah 65:17). Theologian Philip Hefner aptly describes the human being as God’s “created co-creator” (Hefner 1993, 35). We should pray for the success of laboratory experiments on gene editing.

CRISPR provides a dramatic opportunity for the human race to exercise our God-given creativity. Humbled by the realization that we cannot create perfection through technological innovation, we should still be good stewards of genetic technology on behalf of improved human health and longevity. Relative improvement in human health and longevity, even if something less than total sanctification, is worth treating with gratitude.

In summary, neither a green light nor a red light should govern CRISPR traffic. I recommend a yellow traffic light for CRISPR research and therapy: proceed but proceed with caution.

4. Transhumanist Anthropology and Eschatology

Fourth, the promethean impulse in the transhumanist vision anticipates augmenting the human species with a posthuman superintelligence. During the *trans* stage in *transhumanism*, the technosapien temptation comes in the form of near eschatological promises of increased access to information, enhanced intelligence, the advent of a takeover by superintelligence, cybernetic immortality, and the utopian solution to all social and ecological problems.

Natasha Vita-More lays out the all-encompassing scope of the transhumanist or Humanity Plus (H+) project.

As a philosophy transhumanism deals with the fundamental nature of reality, knowledge, and existence. As a worldview, it offers a cultural ecology for understanding the human integration with technology. As a scientific study, it provides the techniques for observing how technology is shaping society and the practice for investigating ethical outcomes. Its social narrative emerges from humans overcoming odds and the continued desire to build a world worth living in. These processes require critical thinking and visionary accounts to assess how technology is altering human nature and what it means to be human in an uncertain world (Vita-More, *History of Transhumanism*, 2019. 49)

Oxford's Nick Bostrom dreams of a technological eschatology akin to the New Jerusalem in Revelation 21–22.

Let us make a leap into an imaginary future posthuman world, in which technology has reached its logical limits. The superintelligent inhabitants of this world are autopotent, meaning that they have complete power over and operational understanding of themselves, so that they are able to remold themselves at will and assume any internal state they choose....in any technological utopia we have a realistic chance of creating...a large portion of the constraints we currently face have been lifted and that both our internal states and the world around us have become much more malleable to our wishes and desires. (Bostrom, *Dignity and Enhancement* 2008, 202–203).

This is a vision of utopia via technology with as large a scope imaginable (Kull 2016).

To get to the transhumanist utopia, our transhumanist friends plan to employ bio-nano-tech to generate a posthuman superintelligence (Gouw and Brian Patrick Green and Ted Peters, *Religious Transhumanism and Its Critics* 2022). To be a *trans-human* is to pave the way to becoming a *post-human*. Our posthuman successors, according to the transhumanists, will be more intelligent than us. In addition, our posthuman successors will take control of all branches of society. Will our posthuman grandchildren discard the present generation as archaic? Out-of-date? Dispensable?

Looking on the horizon for the arrival of a posthuman species assumes that human nature is malleable, changeable, even subject to engineering. Philosophical posthumanist Francesca Ferrando attempts a "...radical deconstruction of the human as a fixed notion, emphasizing instead its dynamic and constantly evolving side and celebrating the differences that inhabit the human species itself" (Ferrando 2019, 187).

According to the H+ anthropology, human nature can be altered, enhanced, improved, and made more intelligent (A. Gouw, *Is Transhumanism: Good Science? Bad Science? Pseudo-Science?* 2022). "Current humanity need not be the endpoint of evolution," presumes Nick Bostrom at Oxford University's Future of Humanity Institute (Bostrom 2015). As AI and IA accelerate in the fast lane, we can anticipate crossing a threshold toward a posthuman world. That threshold is dubbed Singularity by Ray Kurzweil.

...we will merge with AI and augment ourselves with millions of times the computational power that our biology gave us. This will expand our intelligence and consciousness so profoundly that it's difficult to comprehend. This event is what I mean by the Singularity (Kurzweil 2024, 1).

Once we have entered and crossed beyond Singularity, everything about us will be digitally changed: our bodies, our minds, our souls, and our spiritual ties to the cosmos. Technology will no longer be our tool. It will be our re-creator.

In short, the transhumanist version of technosapienism touts a tempting vision of a posthuman future characterized by a merging of humanity with technology as the next stage of our human evolution. Humanity Plus is calling us forward. *Posthuman* refers to who we might become if transhuman efforts achieve their goals. A proposal to guide evolutionary progress toward such a radical change in human nature carries us well beyond science and technology as a human tool. As a means of ultimate transformation, it becomes *de facto* a religious quest. “Transhumanism is, essentially, a religious endeavour,” observes Villanova theologian Ilia Delio (Delio 2024, 147).

How might the H+ promise be received by persons of faith in Jesus Christ? Christian anthropology certainly affirms that human essence is not fixed, not permanent. Who we are today as sinful beings subject to death is not who we will be in the resurrection. When God raises us from the dead just as God raised Jesus on the first Easter, we will be transformed. We will be renewed, Christ-like, essentialized. Transformation into Christlikeness is what Christians look forward to.

Australian theologian Doru Costache sees this built right into the purposeful direction creation is taking. “The Orthodox doctrine of creation preaches the teleological conditioning of the universe....All that occurs within the universe points to its eschatological state, understood as significantly different from the current shape of things” (Costache, *The Orthodox Doctrine of Creation in the Age of Science* 2019, 62).

As discussed above, Christian spirituality anticipates our human transformation into Christlikeness – *theosis* – concomitant with the fulfillment of God’s purposes with all of creation. But, as we can see, God is not the only one to promise such a dramatic transformation. Our H+ friends anticipate a parallel eschatology. As AI and IA accelerate toward the speed of light, we can anticipate crossing a threshold toward a posthuman and even utopian world.

I believe we should address visionary H+ with both respect and careful discernment (T. Peters, *The Ebullient Transhumanist and the Sober Theologian* 2019). On the one hand, like Christian spirituality committed to sanctification and transformation, transhumanists plan to design

a future, improved species. On the other hand, the Christian doctrine of original sin issues a warning: no bio-tech advance can eliminate or even reduce the human propensity to concupiscence let alone violence.

Such a transhuman or posthuman future will be initially designed by humans in the present. Who are we in the present? Well, we and our techie friends are sinners with feet of clay whose judgment can be misguided, malefic, even monstrous. Given what we know about human history, we have no reason to believe that Singularity will be redemptive. No technology we design can be salvific. Nor do we have reason that posthuman technology will under its own power come to save us from ourselves. The technosapien temptation is, to use Jesus' words, like building a house on sand (Matthew 7:26).

The public theologian warns us to trust only in God's promises for a redemptive future while morally anticipating that eschatological reality by pursuing now the common good. German public theologians Christoph Hübenthal and Christiane Alpers remind us that...

...Redeeming the world is exclusively the work of God. But by fulfilling its ethical tasks and pursuing justice, human flourishing and the common good public theology *foreshadows* and *depicts* the universal salvation as it was already accomplished in Jesus Christ and is yet to come in its fullness (Hübenthal and Alpers 2022, 6).

Between now and the biblically promised divine transformation, we creatures in God's image are enjoined to pursue ethical creativity aimed at making this epoch healthier, more just, and more peaceful (T. Peters, Christian Transhumanism and Transhumanist Christianity 2024).

Cautiously, Roman Catholic bioethicist Brian Patrick Green filters the promises of human technological enhancement through this ethical sieve. "I believe that Christians should be a particular kind of techno-progressive, specifically one which seeks to use technology for the sake of human development. Specifically, as with all issues of moral salience, we need to direct technological developments towards good and away from evil" (Green 2017, 12).

Proceed. But proceed through the yellow light of caution and resist the technosapien temptation to seek salvation through technological transformation

5. Lethal Autonomous Weapons Systems

Israel's Iron Dome (*Kippat Barzel*) is the likely harbinger of future AI directed defense systems. Developed by Rafael Advanced Defense Systems in partnership with Israel Aerospace Industries and largely funded by the United States, the Iron Dome intercepts and destroys drones, rockets, and artillery shells fired by enemies.

In April and October 2024 Iran attacked Israel with barrages of ballistic missiles, Cruise missiles, and drones numbering in the hundreds. Israel's near total defense was multilayered. French and British aircraft shot down drones. U.S. Navy destroyers intercepted ballistic missiles. And Israel used its Arrow, David's Sling, and Iron Dome systems against missiles and drones at varying altitudes (Panter October 16, 2024). Only one percent of enemy bombs even crossed Israel's border let alone exacted damage on the ground. Many around the world was stunned with admiration.

The Israel Defense Force relies on the Lavender System of AI while big data integrates signal, intelligence, imagery, and spatial data to reveal in real time actionable targets. Tomorrow's warfare is being designed in today's AI labs.

The Iron Dome is defensive. What about offense? Offensive weaponry known as Lethal Autonomous Weapon Systems (LAWS) shocks the ethicist like a 220-volt socket shocks a wet finger. Once we ask AI to search for an enemy and destroy it all on its own, there will be no turning back. No human soldier can blurt out, "Oh no! I changed my mind."

LAWS comprise a special class of weapon systems that employ sensor suites and computer algorithms to independently identify a target. Then they employ an onboard weapon system to engage and destroy the target without manual human control of the system. To date such systems are not yet in widespread development. But development is speeding up. It is widely believed LAWS would enable military operations in

communications degraded or denied battle situations in which traditional systems may not be able to operate.

Matthew J. Gaudet at the Santa Clara University School of Engineering invokes Just War Theory to evaluate the place for LAWS both in *jus ad bellum* or justification of war and also *jus in bello* or justice within a war. Going to war might be justified when a nation seeks to right an injustice. That would be *jus ad bellum*. In no way would LAWS serve as such a justification. Yet, once a war has begun, *jus in bello*, the ethicist becomes concerned about criteria such as discrimination of combatants and proportionality of violence. Then LAWS is subject to ethical evaluation.

For *jus ad bellum* or justice of the war, avers Gaudet, “War must always be aimed at a *right intention*, a desired future state that rectifies the injustice that gave us just cause but also minimizes harm on both sides of the conflict” (Gaudet 2024, 102). When we turn to *jus in bello* or justice in war, the lack of alignment with human intention turns LAWS into a pariah. “The criterion of right intention is where things get truly problematic. One has to question whether a machine is even capable of comprehending right intention without human input” (Gaudet 2024, 105).

Once the human component to military decision-making is removed and turned over to machine intelligence, ethicists become chilled to the bone. Not just ethicists. The entire informed world is worried about LAWS. Approximately 30 countries and 165 non-governmental organizations have called for a preemptive ban on LAWS due to ethical concerns.

So also has United Nations Secretary-General António Guterres. Guterres maintains that lethal autonomous weapons systems are politically unacceptable and morally repugnant. He has called for their prohibition under international law. He recommends that States conclude, by 2026, a legally binding instrument to prohibit lethal autonomous weapon systems that function without human control or oversight, and which cannot be used in compliance with international humanitarian law, and to regulate all other types of autonomous weapons systems (UN 2023).

Gaudet concludes that “we must make active choices to develop only AI systems which will contribute to a culture of encounter and to ban others, such as Lethal Autonomous Weapons Systems.” This is not unrealistic.

We have already successfully done this with chemical weapons, biological weapons, and nuclear weapons (Gaudet 2024, 110).

What is the technosapien temptation when it comes to Lethal Autonomous Weapon Systems? Ethicists who have examined the issue fear that the removal of human decision-making at the moment of crisis would dehumanize the enemy whom we kill. The consequence of taking the life of any of God's precious creatures should remain a matter for the human conscience. AI guided machines have no conscience, no sense of responsibility. Hence, they have no reverence for human dignity let alone the moral gravity of killing. As long as machines are aligned to human ends, they should be aligned in real time to human conscience.

6. Colonization of Mars

Sixth, might ambitious plans to establish human settlements on Mars constitute a technosapien temptation? Despite the enterprising plan to colonize Mars with Earthlings, the change in gravity will so alter human physiology that our descendants living on Mars will become Martians, not Earthlings in diaspora. Is this what we earthlings want?

One of the puddles we wade in is wet with cosmology and the excitement of space exploration. Why, you might ask, is cosmology and space exploration relevant to AI and spirituality? Because we creatures of God belong inextricably to God's magnificent creation as a whole. "Cosmology and anthropology are intrinsically intertwined as two parts of one and the same book of created being," physicist and Russian Orthodox thinker Alexi Nesteruk exclaims. "A proper anthropology cannot be a-cosmic, whereas cosmology is anthropic by its very constitution" (Nesteruk 2015, 16). If we Earthlings travel to off-Earth locations, will we remain Earthlings? Does it matter spiritually?

Plans for colonization of Mars by Earthlings may take advantage of CRISPR gene editing along with AI and IA so that our descendants living on Mars would become Martians, not Earthlings in diaspora. Could space exploration lead to an extraterrestrial posthuman species that would no longer recognize its terrestrial ancestors?

The new environment that colonists traveling to Mars will encounter is more hostile than any previously confronted on Earth. Because Mars' gravity is only 38% of Earth's, Earthling muscles will atrophy and bodies will re-shape. Because Mars' atmosphere is so thin and composed of 95% carbon dioxide, Earthlings must negotiate it through encapsulated space suits. Because Martian dust is so pervasive and so fine, it will threaten constantly to penetrate the seals intended to keep it out.

With these challenges in mind, space entrepreneurs are asking: could CRISPR editing of colonists' genomes enhance the environmental adaptability of colonists? (Szocik 2020). Might we then forecast that, in time, genetically modified and environmentally adapted Earthlings on Mars might become something posthuman? Perhaps even Martian?

A band of secular critics has risen up to take a stand against Mars colonization *per se*. Employing the term, *space expansionism*, these critics reject technosapien ideology as applied to space exploration. Why? Without using theological vocabulary, critics of space expansionism fear that space explorers will transport human sin to other worlds. "Humanity's problem is not that it is stuck on Earth but that it is stuck in an inherited, fragmented, stratified, and violence-prone international system" complains political scientist Daniel Deudney (Deudney 2020, 368). Therefore, "The expansionist objective of colonizing Mars and other celestial bodies beyond Earth should be explicitly relinquished" (Deudney 2020, 375). His point: keep human sin on Earth where it originated. Don't transport it to Mars.

The public theologian should keep ears attuned to all voices in this ongoing debate. The debate is already religious, even though it appears to be non-religious. It is already religious because the debate is over the question: can technological progress save the human by advancing to the posthuman in an off-Earth location? An implicit salvation question is built into the technological imperative as it applies to genetic engineering, transhumanism, and space colonization.

Conclusion

We have identified puddles for wading in the waters of the *Technosapien Temptation*. We ask: are we willing to sell the human soul to the posthuman machine? Not if the present generation is discerning, cautious, and judicious. “Big things are going to happen soon,” forecasts Max Tegmark. “Let’s prepare” (Tegmark 2024). Yes, we should prepare. Let us proceed, to be sure. But proceed with caution.

On behalf of preparatory caution, the public theologian measures present reality against the criterion set by God’s promise of the coming kingdom. “The rationale for public theology,” says Sangyil Sam Perk, “is the vision of the kingdom of God: that the reign of God can be realized in the world in which all people, regardless of their social and economic status, live their lives with their God-given dignity and freedom so that no human rights are violated and their fair share of resources are guaranteed” (Park 2017).

New AI and IA technologies promise enhancement of human health and even longevity. But they risk promising more than they can deliver. The cure for original sin cannot be found in technological transformation, only in a divinely graced transformation.

In our haste to give in to the technosapien temptation, we humans may prematurely sacrifice our humanity – our humanity is inextricably tied to our relationship of self, other, and God – on the altar of the impersonal machine. “Persons live personally by living interpersonally; so doing, they image God,” according to a scholarly research team working within the Vatican’s newly established Centre for Digital Culture (Gaudet, et al. 2024, 57). Here is where caution is called for. We must make clear to ourselves that the impersonal machine has no redemptive value.

In our technosapien epoch, we should re-ask with Anne John Varghese, “How can I be part of the solution in a troubled world?” (A. J. Varghese 2024, 77). We have learned enough about the human condition from Scripture and experience to be discerning, cautious, and judicious. Wherever human people have gone since leaving the Garden of Eden, they have ferried original sin with them. Every technological

promise for human improvement has borne a second edge, an opportunity for increased efficiency in doing evil. There is no technology devisable by a sinful human race that can eliminate its own propensity for sin. Only divine grace has this salvific capacity.

What then is the message of the public theologian to the church and to the wider society? That message takes a double form. On the one hand, applaud the creativity and wizardry of technological innovators who promise some level of betterment for the human future. Insist too that new technologies are dressed properly in the robes of justice, equal access, preservation of human dignity, and even compassion.

On the other hand, the prophetic accent of the public theologian's voice should communicate warning: do not expect from technological progress more than it can deliver? Do not give in to the technosapien temptation. Do not rely on promises that no one other than God can fulfill. Finally, our salvation is in God's grace and not in the next new gadget.

References

- Abdul, Ojochogwu. 2019. "Advancing Neural Monism in Big History and Transhumanist Philosophy." In *Transhumanism Handbook*, by ed Newton Lee, 717–40. Switzerland: Springer.
- Athanasius. 1891. "On the Incarnation." In *The Nicene and Post Nicene Fathers of the Christian Church IV*, by ed. Philip Schaff. Grand Rapids MI: Eerdmans.
- Bostrom, Nick. 2008. "Dignity and Enhancement." In *Human Dignity and Bioethics*, by US President's Council on Bioethics, 173–206. Washington DC: https://www.academia.edu/38307610/Human_dignity_and_bioethics?email_work_card=thumbnail-desktop (accessed 1/2/2022).
- Bostrom, Nick. 2015. *Transhumanist Values*. <http://www.nickbostrom.com/>.
- Cann, Candl. 2022. "Digital Church: Virtual Faith of Contemporary Christianity." In *Handbook of Contemporary Christianity in the United States*, by ed. Mark A Lamport, 220–31. Lanham MD: Roman and Littlefield.
- Chandler, Daniel. 2020. *The Technological Imperative*. <http://visual-memory.co.uk/daniel/Documents/tecdet/tdet07.html>, Technological or Media Determinism.

- Costache, Doru. 2019. "The Orthodox Doctrine of Creation in the Age of Science." *Journal of Orthodox Christian Studies* 2 (1): 43–64. doi.org/10.1353/joc.2019.0003.
- Delio, Ilia. 2024. "Transhumanism and Transcendence." In *The Cambridge Companion to Religion and Artificial Intelligence*, by eds Beth Singler and Fraser Watts, 131–47. Cambridge UK: Cambridge University Press.
- Deudney, Daniel. 2020. *Dark Skies: Space Expansionism, Planetary Geopolitics, and the Ends of Humanity*. Oxford: Oxford University Press.
- Doudna, Jennifer A. 2/13/2020. "The promise and challenge of therapeutic genome editing." *Nature* 578 (7794): 229–36.
- Ferrando, Francesca. 2019. *Philosophical Posthumanism*. London: Bloomsbury.
- Gaudet, Matthew J. 2024. "Lethal Autonomous Weapon Systems, Just War, and a Culture of Encounter." In *The Promise and Peril of AI and IA: Technology Meets Religion, Theology, and Ethics*, by ed Ted Peters, 97–110. Adelaide: ATF.
- Gaudet, Matthew, Noreen Herzfeld, Paul Scherz, and and Jordan Wales. 2024. *Encountering Artificial Intelligence: Ethical and Anthropological Investigations*. Eugene OR: Pickwick.
- Gouw, Arvin. 2022. "Is Transhumanism: Good Science? Bad Science? Pseudo-Science?" In *Religious Transhumanism and Its Critics*, by Brian Patrick Green, and Ted Peters, eds Arvin M Gouw, 295–308. Lanham MA: Lexington.
- Gouw, Arvin M. 2018. "Challenging the Therapy/Enhancement Distinction in CRISPR Gene Editing." In *The Palgrave Handbook of Philosophy and Public Policy*, by ed David Boonin, 493–508. New York: Palgrave.
- Gouw, Arvin, and eds. Brian Patrick Green and Ted Peters. 2022. *Religious Transhumanism and Its Critics*. Lanham MA: Rowman and Littlefield / Lexington.
- Gouw, Arvin, and Ted Peters. 2025. *The CRISPR Revolution in Science, Religion, and Ethics*. London: Bloomsbury.
- Green, Brian Patrick. 2017. "The Catholic Church and Technological Progress: Past, Present, and Future." *Religion* 8 (6): 2–16.
- Guarino, Ben. 2024. "Why 'Brain Rot' Is 2024's Word of the Year." *Scientific American*, December 3: <https://www.scientificamerican.com/article/why-brain-rot-is-2024s-word-of-the-year/>.
- Hefner, Philip. 1993. *The Human Factor*. Minneapolis MN: Fortress Press.
- Herzfeld, Noreen. 2025. "Call Me Bigfoot: The Environmental Footpring of AI and Related Technologies." In *The Promise and Peril of AI and IA: New Technology Meets Religion, Theology, and Ethics*, by ed. Ted Peters, edited by Ted Peters, 131–50. Adelaide: ATF Press.

- Hübenthal, Christoph, and Christianne Alpers. 2022. "Introduction." In *T&T Clark Handbook of Public Theology*, by eds Christoph Hübenthal and Christianne Alpers, 1–12. London: T&T Clark.
- Kimbrell, Andrew. 2000. *Cold Evil: Technology and Modern Ethics*. <https://centerforneweconomics.org/publications/cold-evil-technology-and-modern-ethics/>, Salisbury CT: Schumacher Center.
- Kull, Anne. 2016. "Cyborg and Religions? Technonature and Technoculture." *Scientia et Fides* 4 (1): 295–311; DOI: <http://dx.doi.org/10.12775/SetF.2016.016>.
- Kurzweil, Ray. 2024. *The Singularity is Nearer*. New York: Viking.
- La Porte, José María, and Juan Narbona. 2021. "Colloquy with Luciano Floridi on the anthropological effects of the digital revolution." *Church, Communication, and Culture* 6 (1): 119–138. DOI: <https://10.1080/23753234.2021.1885984>.
- Li, Fei-Fei. 2023. *The Worlds I See*. New York: Flatiron Books.
- Maximus. 2014. *The Ambigua*. Cambridge MA: Harvard University Press Dumbarton Oaks Medieval Library 2 Volumes.
- Molhoek, Braden. 2022. "The scope of human creative action: Created co-creators, imago Dei and Artificial General Intelligence." *HTS* 78 (2): 1–7; <https://doi.org/10.4102/hts.v78i2.7697>.
- Nedelescu, Hermina. 2024. "Intelligence Amplification and the Inner Life of the Soul." In *The Promise and Peril of AI and IA: Technology Meets Religion, Theology, and Ethics*, by ed Ted Peters, 361–72. Adelaide: ATF.
- Nesteruk, Alexei. 2015. *The Sense of the Universe*. Minneapolis MN: Fortress Press.
- NIH. 2021. *No limit to maximal lifespan in humans: how to beat a 122-year-old record*. <https://doi.org/10.18632/oncoscience.547>, Washington DC: Mikhail V Blagosklonny in PMC PubMed Central.
- Panther, Jonathan. October 16, 2024. *Missile Defense: How Vulnerable Is Israel to Iran's Attacks?* <https://www.cfr.org/expert-brief/missile-defense-how-vulnerable-israel-irans-attacks>, Council on Foreign Relations.
- Park, Sangyil Sam. 2017. "Public Theology and preaching in Korean Protestant Churches." *Review and Expositor* 14 (3). <https://doi-org.grace.gtu.edu/10.1177/0034637317720219>.
- Peters, Ted. 2024. "Christian Transhumanism and Transhumanist Christianity." *Scientia et Fides* 12 (2): 63–80. DOI: <https://apcz.umk.pl/SetF/article/view/49259/40169>.
- Peters, Ted. 2nd Ed, 2003. *Playing God? Genetic Determinism and Human Freedom*. London and New York: Routledge ISBN0-415-94248-0-415-94249-7.
- Peters, Ted. 2017. "Should CRISPR Scientist Play God?" *Religions* 8 (4). <https://doi.org/10.3390/rel8040061>.
- Peters, Ted. 2019. "The Ebullient Transhumanist and the Sober Theologian." *Scientia et Fides* 7 (2): 97–117. DOI: <http://dx.doi.org/10.12775/SetF.2019.01>.

- Peters, Ted. 2025. *The Promise and Peril of AI and IA: Technology Meets Religion, Theology, and Ethics*. Adelaide: ATF.
- Peters, Ted. 2023. *The Voice of Public Theology*. Adelaide: ATF.
- Pew, Research Center. 2018. "Artificial Intelligence and the Future of Humans." <chrome-extension://efaidnbmninnibpcapjpcglclefindmkaj/http://tony-silva.com/eslefl/miscstudent/downloadpagearticles/AIhumanfuture-pew.pdf>.
- Pope, Francis. 2015. "Laudato Sí." http://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html.
- Szocik, Konrad. 2020. *Human Enhancements for Space Missions*. Switzerland: Springer.
- Tegmark, Max. 2024. *On Superhuman AI*. https://www.youtube.com/watch?v=_Xd-kzi8H_o: YouTube.
- Trothen, Tracy: Calvin Mercer. 2025. "AI, IA. and Theological Anthropology." In *The Promise and Peril of AI and IA: Technology Meets Religion, Theology, and Ethics*, by ed Ted Peters, 151–72. Adelaide: ATF.
- UN. 2023. *Lethal Autonomous Weapons Systems (LAWS)*. <https://disarmament.un-oda.org/the-convention-on-certain-conventional-weapons/background-on-laws-in-the-ccw/>, Office of Disarmament Affairs.
- Varghese, Anne John. 2024. "Open Doors." In *And the Whole World Stopped*, by Felix Guerdah and et.al., 61–73. Scriber Marketer.
- Voegelin, Eric. 1956–87. *Order and History, 5 Volumes*. Baton Rouge LA: Louisiana State University Press.
- Wesley, John. 1952. *A Plain Account of Christian Perfection*. London: Epworth.