

Izvorni znanstveni članek/Article (1.01)

Bogoslovni vestnik/Theological Quarterly 83 (2023) 2, 379—389

Besedilo prejeto/Received:10/2022; sprejeto/Accepted:01/2023

UDK/UDC: 27-9"01/07":004.89

DOI: 10.34291/BV2023/02/Machidon

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From Fear to Theosis: Patristic Reflections on Artificial Intelligence

Od strahu do teoze: patristična razmišljanja o umetni inteligenci

Abstract: Artificial Intelligence (AI) has already become a ubiquitous and autonomous force transforming our society and how humans interact with the world around them and each other. The staggering development and widespread of AI technology in the last decade raise debates on its evolution potential and social anxiety concerns about its detrimental effects. Techno-optimists expect AI to evolve into a sentient and conscious entity, reaching and surpassing human-level and thus challenging our understanding of the world and the fundamental principles of our society. This paper provides theological reflections on AI evolution and its effects on society and Christian spiritual life. It discusses the risks of AI hindering man's spiritual ascent towards God by autonomously shaping man and society in its image, as expressed by advocates of technological determinism. Finally, it proposes an authentic and liberating Christian viewpoint on AI and today's disruptive technologies by employing a patristic perspective.

Keywords: artificial intelligence, technological determinism, theological anthropology, patristics, eschatology

Povzetek: Umetna inteligenca (UI) je že postala vseprisotna in avtonomna sila, ki spreminja našo družbo in način, kako ljudje komunicirajo s svetom okoli sebe in drug z drugim. Osupljiv razvoj in razširjenost tehnologije umetne inteligence v zadnjem desetletju sprožata razprave o njenem razvojnem potencialu, pa tudi zaskrbljenost družbe zaradi njenih škodljivih učinkov. Tehnooptimisti pričakujejo, da se bo UI razvila v čutečo in zavestno entiteto, ki bo dosegla in preseгла raven človeka in tako izzvala naše razumevanje sveta ter temeljnih načel naše družbe. Prispevek prinaša teološki razmislek o razvoju UI ter njenih učinkih na družbo in krščansko duhovno življenje. Obravnava tveganja UI kot ovire za človekov duhovni vzpon k Bogu, saj človeka in družbo avtonomno oblikuje po svoji podobi – kar trdijo zagovorniki tehnološkega determinizma. O tem predlaga pristen in osvobajajoč krščanski pogled na umetno inteligenco in današnje prelozne tehnologije z uporabo patristične perspektive.

Ključne besede: umetna inteligenca, tehnološki determinizem, teološka antropologija, patristika, eshatologija.

1. Introduction

Artificial Intelligence is increasingly becoming a pervasive, transformative force across a vast array of domains - such as health, banking, manufacturing, human resources, industrial systems, and transportation, to name just a few. AI-powered systems bring the promises of improved efficiency, increased productivity, reduction of costs (Aly 2020, 2–5), and, in general, higher and faster computing capabilities for any given computing task (Zhang and Lu 2021, 2–4). However, AI is not just automizing processes but also influencing decision-making by making this process faster and more data-driven. We interact with AI daily, often seamlessly: we encounter it in our smartphones, cars, homes, and work environments. Therefore, there is a high chance that many of our actions end up as input data for an AI-based system. Moreover, AI's pervasive and somewhat obfuscated nature may expose people to unknown risks. As such, an increasing number of research efforts attempt to identify and raise awareness regarding the ethical and societal challenges brought forward by AI (Khan et al. 2022, 383–384).

Artificial General Intelligence (AGI) is the next evolutionary step for AI and involves acquiring the capability of understanding and learning any new task like a human can. The seeds of AGI have been around since the middle of the 20th century, being planted with the establishment of cognitive science, a research field that has proposed various theories for modelling the human mind as a computational framework: from the classic computational theory of mind (CCTM) to Fodor's representational theory of mind (RTM), and, more recently, to van Gelder's dynamical approach to cognition (Rescorla 2020). Researchers expect that once a reality, AGI will be on an exponential learning curve, consistently growing in its intelligence and abilities, up to the point where it will be able to self-evolve. There is an almost unanimous agreement between researchers from different fields (computer science, philosophy, theology) that AGI will be the most ethically consequential technology ever created. Already, AI-related anxiety has emerged to become a universal phenomenon that impacts people's lives and has the potential to generate significant social issues (Li 2020, 1). Two of the most discussed AI anxiety dimensions in related literature (3) relate closely to AGI: artificial consciousness anxiety and existential risk anxiety.

The former refers to a scenario where AI will become sentient - like an artificial brain with human-like consciousness - and exist independently from human control (Haladjian and Montemayorb 2016, 219–222). Such a development may challenge human status while at the same time fostering debates on whether or not we should recognize AI as a new species, a form of sentient - yet artificial - life (Buttazzo 2008, 146). Moreover, some voices expect AGI to merge with biological organisms leading to cyborgization, raising additional questions regarding the nature of human identity (Aliman 2017, 188–191) and potentially leading to confusion in differentiating between artificial and natural, between humans and AI agents (Galanos 2017, 587–588). Furthermore, this potential autonomous evolution of AI can lead to somber scenarios where a super-AI would either turn against

humanity and destroy it (Bostrom 2002, 15–16) or permanently and drastically curtail its potential (Li 2020, 3). Such a foreseen outcome generates the latter AI anxiety dimension - the existential risk anxiety.

Given the radical social transformation caused by AI and how it influences how people relate to one another, theology can bring a consistent contribution to the ongoing interdisciplinary debate on the role and dangers of AI in today's society. It can answer fundamental questions regarding the relationship between *Imago Dei*, human creativity, and the limits of AI evolution (Dorobantu 2019, 14). The link between theology and AI is also visible in the tendency of AI researchers and advocates to resort to theological terminology to underline the importance of their accomplishments and to imply that from a religious evolution perspective, AI is the ultimate step, playing a crucial role in the salvation of humanity (Oeming 2022, 354–355). Doing this creates a somewhat “mystical” aura around artificial intelligence, contributing even more to AI-related anxiety among religious groups. In many religious communities, there is a general distrust toward artificial intelligence, with clergy and laymen fearing its implementation might lead to negative transformations in their personal lives and society (Vinichenko et al. 2021, 21). Fears of a negative impact of AI on religious activity were also reported (2020, 66).

This article will first provide an analysis of the social and spiritual implications of AI and its evolution potential through the lens of Jacques Ellul and Marshall McLuhan, both advocates of technological determinism. Next, it will analyze the main concerns regarding AI's potential to detrimentally shape us and our interactions by turning to Christian anthropology, specifically the writings of St. Maximus the Confessor, a 7th-century Byzantine monk, and theologian. Finally, the paper discusses the limits of AI evolution and how Christians should relate to AI (and technology in general) in light of the writings of Maximus and the 20th-century Orthodox neo-patristic theologian Fr. Dumitru Stăniloae.

2. AI and Technological Determinism

Three philosophical perspectives on the relationship between technology and society can be identified (Poel 2020, 500): a) technology as an autonomous force that determines society; b) technology as a human construct that human values can shape; and c) a co-evolutionary perspective on technology and society where neither of them determines the other. The fear of AI taking over the world pertains to the first philosophical perspective, established in the 20th century by philosophers such as Martin Heidegger, Jacques Ellul, Marshal McLuhan, and Langdon Winner (van de Poel 2020, 500–502). This view is shared not only by techno-pessimists like Ellul, or more recently, Stephen Hawking and Nick Bostrom, but also by techno-optimists and AGI supporters, such as Frank Tipler and Ray Kurzweil (506).

Ellul introduced the concept of autonomous technology, i.e. technology is a closed system, “a reality in itself /.../ with its special laws and its own determina-

tions" (Ellul 1967, 134) that ultimately conquers every aspect of human society. One can say this to be the case for AI also, given its widespread across all areas of human life. For Ellul, technology and its effects on society cannot be seen as good or evil - all technology is a disruptive, self-augmenting force that engineers the world on its terms. He feared the impact of systems or complexes of techniques on human society and warned the result could only be "an operational totalitarianism" (391). Ellul concludes the world technology creates is "the universal concentration camp" (100), a somber picture very similar to what today's AI's harshest critics warn: that humanity will end up enslaved in a world ruled by it.

Ellul also condemned the sacralization of technology and raised awareness for Christians not to worship it, a trend that, according to him, will lead to technology becoming society's new religion. Ellul is often credited as a fatalist, primarily due to his early works focusing on the tyranny of the latest technologies and the fallenness of contemporary culture (Christians 2006, 157–159). However, once Ellul defined the totalitarian character of technology and raised awareness about it, he moved on in his later works to discuss the only authentic solution in his view: restoration through a transformed life in Christ. This restoration and transformation of life require a man to gain a genuine consciousness of the problem, so he can consciously reject the artificiality. If misrelating to technology brings tyranny, Ellul argues that the solution is an authentic Christian life, a life by definition one of freedom that arises from each person's relationship with Christ (157).

Sharing with Ellul the same deterministic perspective on the technology's outcome on society, Marshall McLuhan introduces a more in-depth vocabulary. He defines any technology as an "extension of man" that ultimately and inevitably causes unforeseen cultural implications (McLuhan 1994, 7–16). McLuhan acknowledges that people create new technologies (new "media", as he calls them in his writings) to fulfil a particular intent or need. Only after that technology became mainstream and widely used (often decades later) did its cultural implications (what McLuhan called its "message") become visible. However, this message, often unobserved and almost always unanticipated, can change us and our society without us being aware. One of the most iconic examples McLuhan uses to illustrate his theory is the invention of the printing press, an essential driving force for progress and cultural expansion since it allowed the distribution of printed material (the original design of this technology). McLuhan, however, argues that this also changed how people think by amplifying linear and logical thinking to the detriment of more intuitive, non-linear, and even mystical thinking (1962, 110–111).

The mainstream perspective on AI is that it represents a new, enhanced form of intelligence that can improve our society. Applying McLuhan's model to AI, however, we are faced with the question: is AI a different type of intelligence, or is it extending human intelligence (Braga and Logan 2017, 2)? McLuhan states that "all media are extensions" of some human faculty – mental or physical (McLuhan 1994, 21). These extensions are connected closely to our senses, to the human faculties they extend, and tend to shift our sensory balance outwards, from the

human sensor or faculty towards the extension. According to McLuhan, “when these [sensory] ratios change, men change” (McLuhan and Fiore 2005, 41). This change is caused by another concept McLuhan introduced: “amputation”- The ultimate unintended consequence of an extension is the numbing - going as far as an amputation - of the faculty it extended (McLuhan 1994, 42). If AI extends human intelligence, it will also contribute to its decline to some extent, causing us to lose some of our cognitive autonomy to AI and ultimately altering our perspective on the nature of the human spirit (Braga and Logan 2017, 6).

3. Becoming like What You Worship

McLuhan’s example of Narcissus, who fell in love with his image reflected in the water (McLuhan 1994, 41), is an analogy for people seeing a reflection of themselves in the technology they are using and ending up serving or worshipping that technology as if they were worshipping themselves. McLuhan states: “by continuously embracing technologies, we relate ourselves to them as servomechanisms. This is why we must, to use them at all, serve these objects, these extensions of ourselves, as gods or minor religions.” (46)

Based on McLuhan’s theory, Braga and Logan advocate AI as the pool Narcissus looked into and fell in love with his image. AGI and AI supporters seem mesmerized by the beauty of logic and rationality to such an extent that they end up dismissing (or amputating) the remaining dimensions of the human intellect, such as the emotional, moral, or spiritual ones (Braga and Logan 2017, 6–7). The authors argue that AI is limited and oversimplifies the concept of intelligence. It can be viewed as a unicameral brain with a left-brain bias, missing the dynamics of emotional chemistry present in the human brain (7).

McLuhan’s view on technology can be summarized as “We become what we behold. We shape our tools, and then our tools shape us.” (Culkin 1967, 70) This applies very well to AI: we have devised AI algorithms, systems, and agents that not only interact with us (they “watch” us how we move, how we act, and “learn” from this, i.e. the data used for training AI systems is “produced” by humans) but they also “design” us by recommending (and indirectly deciding) what videos we see, what products we buy, what content we read, and so on. AI is thus converging us to our bubbles and feeding us constantly with content of their choice, shaping us in this process without us noticing it.

Worshipping a technology that, in turn, shapes its worshipers is not something new. At the core of this process stands an ancient and eternal principle: you become like what you worship. We can find one of the oldest such admonitions in Psalm 115:8, where the Psalmist warns those who trust in idols, “Those who make them become like them; so do all who trust in them” (Ps 115:8). The implication here is that people worshipping other things in place of God will become like their idols. We can see the same principle in a question that God asks Israel in the book

of Jeremiah regarding Israel's pursuit of idols: "What wrong did your fathers find in me that they went far from me, and went after worthlessness, and became worthless?" (Jer 2:5) Going after worthless and empty idols led them to become worthless and empty themselves.

Christian spirituality takes one step further the principle of "becoming like what you worship". The patristic tradition of the Church expresses this through the voices of Church Fathers such as Saints Irenaeus, Athanasius, and Augustine, in the well-known phrase: "God became man that we might become God." (Cooper 2005, 35) Saint Maximus the Confessor, widely regarded as the greatest Byzantine theologian, builds upon this tradition and expresses his fully developed understanding of the direct and mutual reciprocity between divine incarnation and human deification in *Ambigua* 10: "For they [the Fathers] say that God and man are paradigms of each other so that as much as man, enabled by love, has divinized himself for God, to that same extent God is humanized for man by His love for mankind; and as much as man has manifested God who is invisible by nature through the virtues, to that same extent man is rapt by God in mind to the unknowable." (Maximus the Confessor 2014, 165) God takes bodily form in man to the extent that man deifies himself through the cultivation of virtue. Hence, worshipping God and being engaged in an authentic Christian life (by the cultivation of virtue) puts humans on the path of "theosis", of becoming like God (you become like what you worship).

Worshipping AI (Ellul) and becoming its "servomechanisms" (McLuhan) can ultimately lead to humans getting their lives "shaped" by AI in a way that is detrimental to them. While AI advocates hope that it will contribute to humans morphing into an improved, transhuman stage, the thinking of Ellul and McLuhan, corroborated with Christian spirituality, warns us that it might lead to the opposite - morphing not into trans-human but sub-human.

4. The Discarnate Man and the Incarnate Church

Today's online, digital technologies - especially AI - achieve a massive extension of the human senses and nervous system, creating an online presence that takes precedence over the physical, "incarnate" presence, rendering the body obsolete and thus leading to the "discarnate man" (McLuhan 1977, 80). Given his Catholic faith, McLuhan identified this new paradigm as a critical challenge to Christianity: "discarnate man is not compatible with an incarnate Church." (1987, 543) Christian spirituality revolves around the divine-human relationship, in which the status of the human body plays a central role, as confirmed by the Church's bi-millenary tradition (Delicata 2011, 232). The good news of the Gospel is a truth that communicates itself in authentic personal encounters. One can experience this truth personally, in the complete unity of oneself's - body and soul. Disembodiment and virtualization lead to a simulated reality that, as Pope Benedict XVI warned in 2010, can hinder our experience of God, which requires enhancing our senses

and expanding our experience of reality. Ultimately, they will immerse us in a self-contained virtual environment where we become “indifferent to the Truth” (234).

To better understand the importance of “incarnation” for the Church and Christian life, we turn again to the theology of Saint Maximus the Confessor. Maximus considers the Incarnation of Christ “the heart of the world existence - not only in terms of redemption but also in terms of the creation of the world” (Zinkovskiy and Zinkovskiy 2011, 44). For Maximus, the concept of hypostasis in Christ represents an integrative principle in the God-man relationship. Based on this, he defines the same concept of hypostasis in man as the highest integrative principle that unifies the body and the soul (59). Consequently, human hypostasis is, according to Maximus, the basis (σύστασις) of the objective reality of his nature, which gives this nature independence, unity, individuality and uniqueness (Stead 1989, 32).

St. Maximus also asserts inseparable kinship of the body and soul, both during this life and in the Kingdom of God: “the reason of a unifying power /.../ does not allow the weakening of the /.../ union due to [their] natural differences, nor the appearance of a particularity stronger than the kinship given to them mystically in unity, that could encompass each of these in itself, distinguish them and tear them apart one from the other.” (Maximus the Confessor 2000, 27) The power of unity will prevail even more following the eschaton, when “the body will become like the soul /.../ in terms of honor and glory, showing in all one divine power /.../ [that] will keep the bond of union unbroken through it for endless ages.” (27) Maximus considers the Christian life’s ultimate goal as the restoration of the harmonious hierarchy of soul and body, their consonance, their passionless and peaceful state, and joint divinization (Zinkovskiy and Zinkovskiy 2011, 53). Hence, the Confessor sees perfection (human likeness with God by grace, achieved through theosis) as the hypostasis-nature unity of the objective reality of a human (i.e. the harmonic unity of body and soul).

5. Relating to AI and Technology on the Path to Theosis

A theological analysis of the implications of Artificial Intelligence has to consider the broader discussion on the meaning of technology in the context of theological anthropology. We again turn to Maximus the Confessor, who in *Ambigua* 45 discusses three different understandings of technology as an anthropological reality following the Fall of Man. He makes these arguments as an analysis of Gregory the Theologian’s understanding of Adam’s prelapsarian condition, as expressed in his famous verse in the oration On Pascha: “He (i.e. Adam) was naked in his simplicity and in a life devoid of artifice, and without any kind of covering or barrier. For such was fitting for the primal man.” (Maximus the Confessor 2014, 193)

The first understanding relies on a close relationship between technology and pathos, linking man’s prelapsarian apatheia (dispassion) with the lack of needing artifacts: the first man lived “a life devoid of artifice.” In his second argument,

Maximus makes the case that before the fall, man was not just in harmony with the environment but also had a single need: “the unconditioned motion of the whole power of his love for what was above him, by which I mean God” (197), and thus having no intellectual curiosities and being “wholly undistracted by any of the things that were beneath him, or around him, or oriented to him” (197). Finally, in his third contemplation, the Confessor argues that the original man was perfectly and naturally virtuous and had “no need to rely on ideas discursively drawn from sensible objects in order to understand divine realities” (199).

In his notes on the *Ambigua*, the Orthodox Neo-patristic theologian Fr. Dumitru Stăniloae shows that according to Maximus, three layers are standing between man and God, which are pulling man towards those things beneath him, hindering his ascent upwards towards God: the irrational fantasies of passions, the principles of technical skills, and the natural principles derived from the law of nature (2006, 450). Adam, before the Fall, did not have to face these three layers, having a direct, unmediated experience of God. We now must proceed through and beyond these layers to achieve our goal of reestablishing the prelapsarian, Adamic state and relation with God. To achieve this, Fr. Stăniloae argues that we must first recognize the irrational fantasies of passions for what they are (inconsistent mirages) and consequently destructure (dismiss) them. At the same time, the principles of technical skills, according to Stăniloae, “are made by man, who in turn to make them uses the natural principles” (451). However, these “natural principles” must become known to man “not only for the help they provide in making technological principles” but also because through them, man satisfies “his natural thirst for knowledge” which includes the knowledge of God (451). Stăniloae concludes that “technology must not develop beyond the real needs of man and should not be used to harm him. Man must remain its master, and he should not be impeded by it in his ascend towards God.” (451)

Fr. Stăniloae also notes that Maximus, in his second contemplation, does not imply that before the Fall, Adam was deprived of the natural principles and the principles of technical skills, nor was he despising them. Instead, Adam possessed these principles “as a simple and unitary understanding” (452). According to Stăniloae, Adam had a global understanding of all the natural and technical principles, an understanding which the postlapsarian man must also acquire but following a different path than Adam: going through the specific knowledge of natural and technological principles and practicing virtues (452).

According to Maximus, the postlapsarian world is implicitly technical, and humans are bound to create and use technology and make tools that not only have a practical use but also “mediate and transform their experience and knowledge of the rest of creation” (Delicata 2018, 42). Based on Maximus and the interpretation of Fr. Stăniloae, the “natural principles and the principles of technical skills” are necessary until the eschaton. Humans must get to know, learn to master, and rightfully use them in their ascend towards God to fulfill their destiny - returning to the same level of closeness to God as before the Fall. However, as Stăniloae warns, a correct understanding and use of technology are mandatory, so it will

meet its purpose and not become an obstacle in man's spiritual ascent. Hence, technology should mediate our relationship with the divine without separating us further from God (by discarnation and amputation of our senses, intellect, and emotions).

St. Maximus also offers interesting reflections on the possibility of a new form of "artificial" life emerging some time in the future, i.e. by AI evolving into a conscious, sentient entity. In *Ambigua* 42, commenting on St. Gregory the Theologian's oration "On Baptism", the Confessor states that ".../ there has never existed, nor is there now, nor will there ever be, any nature among created beings, subsisting according to its own principle, that is anything other than what it is at present; and it is not now nor will ever be in the future something it was not in the past. /.../ the production and substantiation of created beings admits of absolutely no increase or decrease in terms of what they essentially are" (Maximus the Confessor 2014, 179–181).

St. Maximus is obvious in stating that other than the existing "natures" of the created beings, which have existed in the world since Creation, there will not be different "natures" that will subsist according to their own principle: the principles of technical skills cannot, consequently, transcend their nature and "evolve" into something different that they always were. In light of what Maximus states, AI would not transcend into a conscious, sentient AGI capable of evolving and self-replicate by itself ("subsisting according to its own principle"), as advocated by the AGI prophets. Fr. Stăniloae's comment on this fragment of *Ambigua* also emphasizes this: "Man can create new forms in the world through technique and art, but they never last forever, nor do they multiply by themselves. /.../ That's why human technology /.../ has limited expansion possibilities." (2006, 440)

6. Concluding Remarks

Technological determinism, through its prophets such as Ellul and McLuhan, argues that technologies act as autonomous and self-augmenting forces transforming society and humans and disembodimenting us: extending our senses and faculties while "amputating" or "numbing" them. As a result, the new "homo technologicus," whose creation AI contributes significantly to, is becoming "discarnate", a reality that challenges the Christian vocation of continuous spiritual ascent towards God. Indeed, as this paper shows by turning to the writings of St. Maximus the Confessor, Christian anthropology and spirituality have always emphasized the inseparable kinship of the body and soul as a central principle in the divine-human relation.

However, while concerns over the detrimental impact of an AI-shaped society on religious and spiritual life may be justified, Christian spiritual life should not become aground by AI-related fear and anxiety. The Christian life is an authentic transformation and restoration of man: as Pope Benedict XVI stated in his encyclical on hope "Spe Salvi", "the Christian message [is] not only 'informative' but

‘performative’”. As St. Maximus and Fr. Stăniloae both argue, in the postlapsarian world, man must master technology and use it not merely for practical reasons but also for mediating and transforming their experience and knowledge of the rest of creation and God. Correctly understanding the principles of technical skills is, according to Maximus and Stăniloae, a necessary step in man’s ascent towards God; as such, fear and anxiety over AI will only make us stumble in this journey as worshipping it and becoming its servomechanisms would do the same.

Christian patristic tradition offers us a positive and liberating perspective to correctly relate to AI and technology in general and to use them for mediating our relationship with the divine without separating us from God: to commit ourselves to the path of deification by grace and the practice of virtues. As Maximus writes in *Ambigua* 45, to correctly “perceive in all things the ray of true knowledge”, one must first remove “all the dark fluid of passions and every material attachment from their intellectual eyes” (Maximus the Confessor 2014, 193). Only purified from all passions can our intellectual eyes correctly relate to the principles of technical skills and contemplate “the meanings of all things encountered” (2006, 447). This way, we will see and use things for what they are, without fear and anxiety towards them, and AI and technology would transcend from tools that deterministically shape humans and society into means by which humans participate as co-creators in the world, fulfilling God’s commandment.

Abbreviations

- AGI** – Artificial General Intelligence.
CCTM – Classic computational theory of mind.
RTM – Representational theory of mind.

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