

PERSONHOOD REVISITED: IMPLICATIONS FOR HUMANOIDS

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ABSTRACT. Technological innovations in Artificial Intelligence have reached a state where human-like robotics are endowed with rich personality and cognitive intelligence, able to engage emotionally and deeply with people. This progress in developing humanoids opens the way for a robot to obtain not just human, but superhuman attributes, such as omniscience and omnipotence, autonomy and self-awareness, freedom and interpersonality. On the other hand, this futurist situation could be considered as a possible threat to Christian anthropology, since it reaches a creation having the likeness of humanity that seem to retain a sense of personhood. This paper attempts to confront these challenges facing Christian theology today through first, revisiting Christian anthropology and the Patristic views on personhood, which look at a human being as an unfathomable mystery. Second, it presents the implications of this theology upon the arguments that consider humanoids as persons, showing that this postmodern issue is not just a crisis in anthropology, but also has its roots in a crisis in knowledge. Finally, this paper affirms that Christians are called to embrace science and technological progress. This can be done when rationalism is led by the intellect, the spiritual cognitive center of humankind. In doing so, humankind reaches epignosis, the correct or divine knowledge, the gift of true perception, or right discernment, which surpasses all rational human knowledge and algorithms, and directs all technological powers to God's glory.

Keywords: Orthodox Church, Patristics, Artificial Intelligence, Humanoids, Personhood, Christian Anthropology, Divine Knowledge

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Technology in itself is necessary to life and provides many facilities
(St. Basil the Great, *The Longer Rules*, PG 31, 1017B).

*For a man is not merely whosoever has hands and feet of a man, nor
whosoever is rational only, but whosoever practices piety and virtue with
boldness* (St. John Chrysostom, *Instructions to Catechumens*, PG 49: 232).

*The most important problem for the Orthodox theology of tomorrow will be
to reconcile the cosmic vision of the Fathers with a vision which grows out of the results
of the natural sciences* (Fr. Dumitru Stăniloae, *Theology and the Church*, p. 224).

Partakers of the Divine nature (NKJV, 2 Pet. 1:4).

Introduction

From “Johnny Five”, the first fictional robot to become a US citizen in the 1986 movie “Short Circuit,” dreamt up by comic science fiction screen writers Steven Seth Wilson and Brent Maddock, to “Sophia” the female-looking humanoid who was granted a Saudi Arabian citizenship, developed by the Hong Kong-based company Hanson Robotics in 2016, the world is crossing boundaries and moving faster than ever before. Hanson states that the purpose of their Artificial Intelligence (AI) robotics is to “simulate human personalities, have meaningful interactions with people and evolve from those interactions.”² These human-like robots are “endowed with rich personality and holistic cognitive AI... able to engage emotionally and deeply with people. They can maintain eye contact, recognize faces, understand speech, hold natural conversations, and learn and develop through experience.”³

Artificial Intelligence brings in a new breakthrough in scientific progress. This progress in developing humanoids opens the way for a robot to obtain not just human, but superhuman attributes in knowledge, such as omniscience and omnipotence, autonomy and self-awareness, freedom and interpersonality. On the other hand, the contemporary human life with its increased individualization and social conflict makes humans feel psychologically lacking social and legal rights, blurring their self-identity and weakening their freedom and distinctiveness. Humans oftentimes feel as a “non-person.”⁴ The advent of this scientific development is inciting theologians to offer a series of reflections about AI’s development and its implications.

² Hanson Robotics Website: www.hansonrobotics.com.

³ Hanson Robotics Website: www.hansonrobotics.com/hanson-robots/

⁴ Christos Yannaras, *The Freedom of Morality*. Contemporary Greek Theologians Series, book 3 (Crestwood, NY: St. Vladimir’s Seminary Press, 1984), 19.

Indeed, AI supports healthcare using robotics in surgery for better precision than human hands. People with neurological conditions are able, through AI technologies, to control phones and computers with their brain. Maybe this advance will help elderly care issues and cure dementia. In this context, is it acceptable to consider these powerful inventions as possible tools in the service of human Christian salvation? What are the risks associated with the use of these ever-growing popular technologies? Will robots become more intelligent than humans? Does AI have a potential to solve even the problem of death?⁵

In addition, possessing this technology gives nations and companies authority and power over widely different fields of human life and production. Do humanoids,⁶ who are becoming more autonomous, interactive or adaptable, have a sense of responsibility, or do they lead to “the Frankenstein narrative in which technology turns against its human creators and threatens their existence”?⁷ In an ideological regime, how could humanoids be controlled for the good of humanity? Can this new, futurist situation be considered “the greatest threat to Christian theology since Charles Darwin’s *On the Origin of Species*”?⁸ More specifically, can these technological advances reach a point close to the creation of a likeness to human personhood, leading to the reconstruction of Christian anthropology?

In fact, various writers bring to the fore essential arguments related to Christian anthropology, in an effort to integrate humanoids in the anthropological definitions.⁹ They discuss the human body and creation, and three futurist concepts: “embodiment, sociality, and situatedness.” They also present the importance of intellection as a defining common trait for both humans and humanoids. They ponder upon the “Christianization” of humanoid robots, their initiation into the Christian teaching, and even the consideration of the possibility of a robot coming to be in the image of God.¹⁰

⁵ Derek Schuurman overviews optimistic predictions about the capabilities of AI, in his article “Artificial Intelligence: Discerning a Christian Response,” *Perspectives on Science and Christian Faith*, vol. 71, no. 2, (2019), 75-82.

⁶ Sophia by Hanson Robotics and Erica by Hiroshi Ishiguro are perhaps the most famous humanoid “celebrities.” Sophia has a female face that can display emotions. She speaks English, makes jokes, and can hold a reasonably intelligent conversation with Sophia.

⁷ Schuurman, 77.

⁸ Jonathan Merritt, *The Atlantic*, Feb 3, 2017. <https://www.theatlantic.com/technology/archive/2017/02/artificial-intelligence-christianity/515463/>. Accessed 9 September 2020.

⁹ Amy Michelle DeBaets, *The Robot as Person: Robotic Futurism and A Theology of Human Ethical Responsibility among Humanoid Machines*, PhD Thesis, (Emory University, 2012), 50-104. <http://holden.library.emory.edu/ark:/25593/bp.4jb>. Accessed 30 August 2020.

¹⁰ DeBaets, *The Robot as Person*, 137-142, 213-221.

Thus, the underpinning fear emanating from this threat is reconstructing the “traditional” understanding of the knowledge about the human being and human existence. Scientists are searching into the prospects of transhumanism, and of living forever by changing the bases of what it means to be human. Hence, the challenges facing humans today are defined by St. Sophrony of Essex as follows: “The contemporary spiritual, theological problem concerns the person.”¹¹ It is an era of a crisis in understanding anthropology.

In an in-depth article about anthropology and Artificial Intelligence, Scott Hawley identifies various challenges, one of which is “the unavoidable human tendency to anthropomorphize, which yields a cognitive bias that can manifest in ways such as projecting moral agency and/or patiency toward machine intelligences... [T]he over-identification of human attributes with AI is likely to evolve.”¹² Thus, these challenges facing Christian theology today are not about atheism or about dogmatic definitions against heresies. In view of this “unavoidable human tendency” and the state that it could lead to, how would Christian anthropology respond to these challenges? Can this “over-identification of human attributes” reach the level of human repentance and discernment in knowledge? The defying challenge is to present in a convincing way the precepts of Christian anthropology in a postmodern world which is skeptical about everything, including the human composite.

Confronting these questions today necessitates to primarily revisit Christian anthropology, returning to first principles and the pristine theology of personhood as taught by the Holy Fathers, the voice of the Orthodox Church’s Tradition. Thus, in the following, we will first present Christian anthropology, then discuss the challenges of AI based on the precepts of this anthropology.

Christian Anthropology

Christian anthropology and its vision of personhood describe the very nature and purpose of human existence. Yet, the human being is a paradoxical, wondrous mystery, since the human heart “is deep” (NKJV, Ps. 64: 6). This mystery cannot be sufficiently and exhaustively understood and described. For this reason, the emphasis in Christian anthropology is on direct lived experience, rather than on abstract ideas and speculative modelling. The Patristic writings present the human creation not as philosophical ideas and theories. These writings arise

¹¹ Nicholas Sakharov, *I Love, Therefore I Am: The Theological Legacy of Archimandrite Sophrony* (Crestwood, NY: St. Vladimir’s Seminary Press, 2002), 66.

¹² Scott H. Hawley, “Challenges for an Ontology of Artificial Intelligence,” *Perspectives on Science and Christian Faith*, vol. 71, no. 2 (2019), 90.

from profound experiential knowledge of the depth of human nature and their communion with the mystery of the Divine. The Fathers have acquired this knowledge through their ascetical life of prayer, purification, and contemplation. They have been careful to avoid the danger of a rational schernatization of this image.

Thus, Christian anthropology is embodied as a shared composite of the little narratives of countless men and women, married and unmarried alike, informed by the experience of living in the Christian Tradition. Together, these local mediated experiences of people from different ethnic identities, lifestyle choices, and age groups, reflect one single Light. This Light is seen as a mysterious halo, an inexplicable crown of light rays, often depicted in iconography. The living, undeniable witness of their lives is the continuous assurance of those who choose, even in our postmodern age, to be engaged in this path of eternal life, and be transformed by God, filled by love and light.

The subjective experience of having a conscious inner potential, a thirst for encountering the infinite, and a desire to be in communion with this “Other” is felt in human life and ultimately on the deathbed. It is about facing the undeniable and unavoidable reality of death.¹³ The human being is the only creature who can contemplate his or her bodily mortality. This reality generates an end-of-life crisis, especially in facing one’s unavoidable mortal suffering. On the deathbed, one confronts unresolved existential questions about human nature, not merely shattered bones and feathers, but as an infinite spiritual reality and a spiritual communion with the “Unknown Other.” In fact, Christ’s death opened the door of paradise to the thief on the Cross and reestablished this lost communion with the Divine.¹⁴ This divine communion is, for the Orthodox Church, what fulfills one’s search for the meaning of creation and existence. In this regard, the created *anthropos* is teleologically inclined to “both see and experience the splendor [ἀπαύγασμα] of God.”¹⁵

This face-to-face encounter with the Truth defines human anthropology: I am a person (ἄνθρωπος) made out of the dust of the ground and slime of the earth, and uniquely honored by God to receive His breath of life (*nephesh* - ψυχή), as a vital divine force, which became, according to St. John Chrysostom,

¹³ Interestingly, Heidegger, in his work *Being and Time*, defines the human way of being as a being-toward-death (*Sein-zum-Tode*).

¹⁴ Jack Khalil, “An Interpretation of Rom 3:21–26 within Its Proper Context,” *Participation, Justification and Conversion* (in collaboration), edited by Athanasios Despotis, WUNT II 440, (Tübingen: Mohr Siebeck 2017), 221, 236-7.

¹⁵ *On Theophany, Oration 38*, NPNF 207: 348; PG 36:323A. In opposing the Gnostics who view matter as evil, St. Irenaeus of Lyon spoke about the totality of the human being, in *Adversus Haereses* 5:6.1. As a bodily being, the human acts as one united entity of body and soul, and righteous acts are “performed in bodies” in *Adversus Haereses* 2:29.2.

“the origin of the soul’s being”.¹⁶ I am created *in* God’s own sublimely glorious and honored image (κατ’ εικόνα Θεοῦ), given self-consciousness, identity, freedom, and self-restraint, and living according to His likeness (καθ’ ὁμοίωσιν).

According to the Christian revelation, the term found in the creation narrative of Genesis, “το κατ’ εικόνα” (that which is according to or in the image of), describes the core of being “human.” Adam is μικρόθεος by virtue of being created in God’s image. Being “in the image” calls for response and responsibility towards both God and the human community.” In this regard, humans are endowed, through this image, from the beginning, with the faculties of freedom of will and sovereignty, or self-determination (αὐτεξούσιος) in order “to rule over everything upon earth,” as St. Irenaeus of Lyon affirms.¹⁷ This gift of freedom gives each human being the independent ability to choose a direction for his or her mode of existence, to walk voluntarily on the path of deification, and the unconstrained free choice to live in virtue. Deification is a gift available to all humans, after the Incarnation, Resurrection, and Ascension of the Lord Jesus Christ. Thus, the foundation or starting point for Christian anthropology is Christ, the God-Man; it is a Christocentric anthropology.¹⁸ Christ, by His incarnation, united the created and uncreated.

Adam, being a composite of both material and immaterial elements of the cosmos, has been allocated the role of both μικρόκοσμος and μακρόκοσμος. St. Maximus the Confessor emphasizes the role given to humans as mediators between the seen and unseen, material and spiritual, presence and the absence, and as microcosms.¹⁹ Due to their work as mediators and their responsibility to exercise dominion over all creation (Gen. 1:28), human beings have direct

¹⁶ St. John Chrysostom on the book of Genesis, Homily 12, Hill 2010: 167; PG 53:103.

¹⁷ *Adversus Haereses* 4.37.1, ANF 1:518; PG 7:1085. Interestingly, the Postmodern philosopher Jacques Derrida, in his book *The Beast and the Sovereign*, critically looks upon sovereignty as a “devouring” tool,” since it is linked to the dehumanized beast. In his poststructuralist, political theory, the sovereign constructs the beast, in order to attack it. Then, it endeavors to extinguish it in order to hide this cruel reality.

¹⁸ Defining the creation of the human being in the image of the Uncreated God is a very critical issue for what it means to be human. This manner of creation is contrary to the views of nineteenth century philosophy or classical paganism, which projects on pagan divinities human attributes, as Ludwig Feuerbach claims: “Religion knows nothing of anthropomorphisms – anthropomorphisms are not anthropomorphisms to it. The essence of religion is precisely that it regards the attributes of God as the being of God... Subjectively, religion is emotion; objectively also, emotion is to it an attribute of the Divine Being.” From his book, *Essence of Christianity*, trans. Marian Evans (London: Trubner and co. Ludgate Hill, 1884), 25. The material anthropology of postmodernism muses on the idea that human beings exist “in the image and likeness of the universe,” thus bound by the limits of time and space. Khalil, “An Interpretation of Rom 3:21–26 within Its Proper Context,” 226.

¹⁹ St. Maximus the Confessor, *Ambiguum* 41, PG 91:1305BC.

responsibility to care for creation as stewards (οἰκονόμοι) (1 Pet. 4:10) by maintaining its integrity and by perfecting it in opening it up to God through their own pursuit to live in the likeness of God.²⁰ They are called to a cosmic, “royal priesthood” (NKJV, 1 Pet. 2:9), offering the world to God and bestowing God’s blessing on the world. This task of mediation is a human “priestly vocation” rooted in the very *logos* of human nature, as said in the Anaphora of Divine Liturgy of St. John Chrysostom: “Thine own of Thine own, we offer to Thee, in behalf of all, and for all.” Thus, any technological progress is looked upon through this prospect.

Being created in the image as λογικός (rational, logical, or reasonable), according to the Cappadocian Fathers and St. John of Damascus, is more than just being intelligent (νοερών). Etymologically, λογικός points to the active participation of humans in the Logos (λόγος). Being λογικός means participating in the Logos, the Word of God, a relational capacity for communicating with one another and with God.

St. John the Damascene explains that the inbreathing describes a gift of communion, being ontologically connected in a relationship of fellowship with God, knowing Him and participating in the divine glory.²¹ This “ability of knowing God” and of “living in communion with Him” opens the way for another principle found in the Genesis’ Creation account: “according to the likeness” (καθ’ ὁμοίωσιν).²² This principle is a dynamic continuous *turning* (αποστρέφω) towards God through disposing one’s will to do the works of virtue. It is also responding to God’s love and using the gift of freedom and self-determination, to fulfill all the divinely installed potential in the created human being.

Thus, God has given the created human being all the faculties to realize and achieve this end. He or she can freely opt to use these faculties in an abnormal direction, or counter-nature. Nature by its faculties has a movement,

²⁰ Christian anthropology sees the Theotokos and Ever-Virgin Mary as the prototype and supreme example of what it means to be a human being, a steward of creation, where the perfect synergy between her human will and the Divine grace fulfilled the goal of deification. “Mary co-operates with the economy” (*Adversus Haereses* 3.11.7; PG 7/1:953B).

²¹ St. John of Damascus, *On the Exposition of the Orthodox Faith*, NPNF 209: 309-310; PG 94:920B.

²² While offering a patristic synthesis on the various interpretations about the attributes of creation in the image of God, Vladimir Lossky explains that this image of God in man is given these various interpretations: “... in the sovereign dignity of man, in his lordship over the terrestrial world; sometimes it is sought in his spiritual nature, in the soul, or in the principle, ruling [ἡγεμονικὸν] part of his being, in the mind [νοῦς], in the higher faculties such as the intellect, the reason [λόγος], or in the freedom proper to man, the faculty of inner determination [αὐτεξουσία], by virtue of which man is the true author of his actions. Sometimes the image of God is identified with a particular quality of the soul, its simplicity or its immortality, or else it is described as the ability of knowing God, of living in communion with Him, with the possibility of sharing the divine being or with the indwelling of the Holy Spirit in the soul...” From the book, *The Mystical Theology of the Eastern Church* (London: James Clarke, 1957), 115-116.

or an orientation, toward God, and to the project of deification, but human beings have the power, in their free-will, to follow this movement, or go against it. The human nature remains unchanged, only the orientation of human energies is either with or against nature. For example, there is a capacity of love within human nature. It is not, however, nature that loves, but the person who loves. Also, the human faculties are the same as well, but the *orientation* of the movement of these faculties, such as the intelligence, memory, etc., changes: they are operated toward God or against God. This is the human choice. Memory is oriented to remember the good or to deliberate on the bad; desire is oriented to love God or to love oneself egoistically; and energy is deployed to combat sins in pursuit of holiness or to create enmity.

Being created according to His likeness is obtaining the eternal potential to grow, and having the unquenched thirst and deep longing to fully realize this spiritual life as communion with God. Human beings have the potential of fulfilling this likeness through their cooperation with God's grace and communion with God, in freely choosing to live a virtuous life, to become "partakers of the divine nature" (NKJV, 2 Pet. 1:4), to be "transformed into the same image from glory to glory, just as by the Spirit of the Lord" (NKJV, 2 Cor. 3:18), and receive deification. This human's constant, free, and dynamic growth in love and virtue toward deification is what constitutes the greatness of man and the ineffable beauty of the way God created humanity.²³

Regarding knowledge, the Fathers thought of reason, mind or intellect (*nous*),²⁴ as more than the reasoning brain that regulates human social connection with oneself and one's environment and the central nervous system, or the DNA or cellular memory (DNA), which determines a human organism. Both the brain and the DNA are well known scientific subjects of study. However, the intellect is the moral insight, perception reasoning, discernment, and freedom of choice, and the organ through which one receives the revelation from God. The intellect is a central cognitive center for the human being's soul, as the brain is the cognitive center for the body. It is the place of communion between the created human being and God's uncreated energy.²⁵

²³ Panagiotis Nellas emphasizes this point on the deification of man as follows: "[T]he true greatness of man is not found in his being the highest biological existence, a 'rational' or 'political' animal, but in his being a 'deified animal,' in the fact that he constitutes a created existence 'which has received the command to become a god.'" In the book, *Deification in Christ. Orthodox perspectives on the Nature of the Human Person*, trans. Norman Russell of Zöon Theoumenon, (Crestwood, NY: St. Vladimir's Seminary Press, 1987), 30.

²⁴ According to Fr Andrew Louth, "*Nous*, then, is more like an organ of mystical union than anything suggested by our words 'mind' or 'intellect.'" In his book, *The Origins of the Christian Mystical Tradition: From Plato to Denys* (Oxford: Clarendon Press, 1981), xv-xvi.

²⁵ Fr. George D. Metallinos, *The Way, an Introduction to the Orthodox Faith* (Kalambpaka: St. Stephen's Holy Monastery, Holy Meteora, 2013), 108-109.

Revisiting Christian anthropology leads to a reemphasis that the human being remains a deep mystery of Creation, a noetic existence known only by the Creator, and discovered solely through an ontological relationship of the human with the authentic Truth. This Truth is Love, Freedom, Incarnation, and Participation.

Implications on Artificial Intelligence

First, discussion about anthropology is today based less on a theological, and more on a sociological view. This latter has different precepts and goals. It views human personhood as the interaction of a combined product of several causal human capacities, such as volition, emotion, identity and virtue formation, all residing in the body, but mostly in the brain. It incorporates the physical, emotional, and ethical patterns and practices that shape how persons think and act in the world. In other words, this sociological anthropology defines a person as “a conscious, reflexive, embodied, self-transcending center of subjective experience, durable identity, moral commitment, and social communication who – as the efficient cause of his or her own responsible actions and interactions – exercises complex capacities for agency and inter-subjectivity in order to develop and sustain his or her own incommunicable self in loving relationships with other personal selves and with the nonpersonal world.”²⁶ However, in Christian anthropology, the inbreathing of God makes each human a person, and the Holy Spirit in Pentecost opens the way for human deification. Therefore, the epistemological approach of Christian anthropology is not philosophical or sociological, but rather sacramental. The human being is a mystical being, a holy sacrament or a *mysterion*, a priest of creation, an icon, and a place for the Divine Presence and Theophany.²⁷

Also, Christian anthropology reveals a glimpse of the mystery of human being since its complexities are inherent in its composite. First, it points that the human bodies are not simply complex biochemical, or algorithmic, machines. The human body is rather a temple of the Holy Spirit, that God created and where God is glorified. In addition, the holistic view of the human being considers both the body (σῶμα) and the soul (ψυχή) as integral parts of humankind, both having equal dignity and sacredness. This holistic view denies the existence of

²⁶ Christian Smith, *What is a Person? Rethinking Humanity, Social Life, and the Moral Good from the Person Up* (Chicago: University of Chicago Press, 2010), 61.

²⁷ Lars Thunberg, *Man and the Cosmos: The Vision of St. Maximus the Confessor* (Crestwood, NY: St. Vladimir's Seminary Press, 1985), 127-140; Nikolaos Loudovikos, *A Eucharistic Ontology: Maximus the Confessor's Eschatological Ontology of Being as Dialogical Reciprocity* (Brookline: Holy Cross Orthodox Press, 2010), 36-42.

any form of religious dualisms, such as body-mind, material-spirit, etc. The fact that the human being is made of a synthetic body and soul, and in his or her totality is a holistic, psychosomatic **total union**, denies the ideas of material reductionism and secular naturalism.²⁸

Since the breath of God makes Adam a living being, and breathing in the face of someone, means transmitting to the other “something very inwardly yours, your own self-consciousness or your spirit,”²⁹ human beings have an important dimension unfound in any other living organism: communion with the Divine. Fr. Stăniloae describes the inbreathing as installing an ontological reality, which is the relational dimension and the potential of Human-Divine communion and dialogue in the created being: “Herein lies the image in its wholeness... The spiritual breathing of God produces an ontological spiritual breathing of man, namely, the spiritual soul, which has its roots within the biological organism and is in conscious dialogue with God and with its fellow human beings.”³⁰ This ontological breathing gives man the aptitude of knowing, or rather of experiencing, the power of God, while living “in the likeness” of God. Thus, the importance of spirituality within the life of the Orthodox Christian faithful, without which there no meaning to earthly life. The ultimate fulfillment of this spiritual life is the human participation in the Light of the eternal glory of the Risen Christ, holiness, theosis (θέωσις), deification by Divine Grace, or union with God in Divine love. Therefore, human life finds its ultimate fulfillment beyond death, in the eternal boundless communion of “righteousness, peace, and joy in the Holy Spirit” that constitutes the Kingdom of God (Rom. 14:17). However, an alternative kind of spirituality is being hewn. This novel, soul-denying spirituality has embraced an anti-ascetic, relative, private, individualistic, sentimental spirituality, and has an objective of feeling-good and being self-content and self-aware, and of finding meaning, transcendence, and connectedness within oneself.

Since there is this dimension of human-divine communion, the quality of life ought to be principally founded on the sanctity of life, a sanctity drawn from this Divinity, the Holy Trinity (Mat. 5:48, Rom. 5:5, 1 Cor. 12:3).³¹ This

²⁸ The Church has condemned in various councils (Council of Gangra held in 340 (Canons 1, 4, 9, 10), Apostolic Canons (Canons 5, 51), and Quinisext Council held in 692 (Canon 13)) all attempts to deform the holistic view of the human being.

²⁹ Christos Yannaras, *Elements of Faith. An Introduction to Orthodox Theology*, trans. Keith Schram (Edinburgh: T & T Clark, 1991), 54-55.

³⁰ Dumitru Stăniloae, *The Experience of God: Orthodox Dogmatic Theology, Volume Two, The World: Creation and Deification*, trans. and ed. Ioan Ionita and Robert Barriger (Brookline: Holy Cross Orthodox Press, 2000), 84-85.

³¹ A godhead based on Artificial Intelligence (AI) is developed through computer hardware and software.

communion is not just an encounter but a sharing of the deep self (including rationality, emotionality, creativity), and a rejuvenation, for the Christian is a new creation in Christ. In the sharing of human suffering on the Holy Cross, which is a great Divine mystery as well, Christ opened the way for humans to a communion of real existential love, compassion and mercy. Embodied humanoids cannot fathom the deep mystery of this Divine communion, since they do not carry within the breath of God, as it is solely given to humankind, once and forever. Thus, they may be able to provide a sort of companionship and friendship to human beings, but since this communal and interpersonally relational living is not drawn upon the image of Christ, it cannot be genuinely human.³²

In Christian anthropology, the attainment of the noblest human virtues of goodness, love, mercy and justice requires the discipline (spiritual askesis) of continued repentance and total purification of life, the heart, the mind, and the soul. Humanoids carry the ability to correct themselves according to data and algorithms, but not according to Divine revelation, in which “It is no longer I who live, but Christ who lives in me” (NKJV, Gal.2:20). “Augmented humans” are taught to work in harmony with technology and machine intelligence to expand and enrich life and the human potential. However, humanoids are in the line of thought of Darwin’s sketch: being guided solely by nature. Thus, they can be genetically predisposed to intense sexual appetite, or made liable to alluring behavior through their physical seductive appearance. Humanoids are preprogrammed. Robots as Chatbots, with superhuman abilities, can possibly get their teaching knowledge not from the Bible and the Holy Fathers, but from seemingly, and not genuinely, Christian sources.

Human language is one example of the complexities inherent in elements of speech such as metaphors and similes, which robots are limited in using, despite becoming increasingly sophisticated, responsive, and more “natural.”

In terms of logic and thought, the human mind (not intelligence) moves spirally, for it is brought up to the new level by each dialectic identity, which one psychologically experiences as a jump. Artificial intelligence, however, moves only in the human-defined space of formal logic, but not in the dialectic one that represents human thinking. Its conclusion is linear, but never cyclical, because in this case it would stop at the same time as it would begin to work, since it would somehow annul itself.

The greatest danger of artificial intelligence lies in imitating the idea of Descartes that human existence is through self-thinking. As a result, postmodern philosophical views towards the intellectually disabled do not see these people as

³² DeBaets, *The Robot as Person*, 224-231.

“persons,” because they are not able rationally to express themselves, thus, in their philosophical views, cannot retain a sense of personhood. In Christian anthropology, these people remain as persons, since the powers of their soul remain a potential within them, even if it is not manifested through the action of the body.³³

Human consciousness is much more than solving problems extraneous to itself. The consciousness of the modern man is so much defined by the technical values, that every choice that a person makes is according to the technological compass and is conditioned by technology, as humanoids act. The choice is no longer rooted in freedom and is necessarily reduced to technology. However, persons have free-will. This makes them capable of responsibility and of giving and receiving love.

The emphasis on the rationalization of society in the Enlightenment and modernity did not achieve liberation, happiness, and control. The mind, which is a human faculty, became a tool for inhumane activities and achievements. Many of these atrocious and massively inhumane events, unseen before in world history, were looked upon as products of modern rationalism and industrialization, making warfare in particular more brutal, deadly, and destructive. Many felt disillusioned and lost their belief in progress through rational thought. Their hope in having people think for themselves and discover truths through reason alone had been shattered. This reality was even manifested in the people’s lives and level of maturity. They lost trust in rationalism and instead began to pursue logical positivism or empiricism empiricism, with a tendency towards “exclusive humanism” whereby subjectivity and relativity were slowly penetrating the humanistic fields.³⁴ This has precisely led to the creation of an apparition of the omnipotent, smartest ever, subject of “I” that thinks, despite that effectively there is no “I” anymore, but an animated object only. Human personhood defines existence by communion and love: “*amo ergo sum* -- I love therefore I am.”³⁵

In the best description of these new technological inventions, they are called “artificial.” Metaphorically speaking, Robotic human-likeness is some kind of “revenge of ‘non-I’ object over ‘I’ subject, a turnover of ‘I’ supremacy into the domination of ‘non-I.’”³⁶ In his book *Simulacra and Simulation*, French sociologist Jean Baudrillard suggests that this present era of postmodernity is that of the

³³ St. Gregory of Nyssa, *On the Making of Man*, 29:6, NPNF 205: 420; PG 44:237.

³⁴ Charles Taylor, *A Secular Age* (Cambridge, MA: Harvard University Press, 2007), 19, 27.

³⁵ Sakharov, *I Love, Therefore I Am*, 16.

³⁶ Aleksandar Petrović, “Middle Ages and Artificial Intelligence,” *Dictionary of Technology and Electronic Personality in Orthodoxy and Artificial Intelligence. Dictionary of Technology and a Double Logos: A Contribution to the Dialog between Science and Religion*, ed. Aleksandar Petrović and Aleksandra Stefanović (Athens: Institute of Historical Research, National Hellenic Research Foundation, 2019), 52.

beginning of the era of hyper-reality in which modern electronic mass media and the consumer society blurs the distinction between image and reality, leading to the fragmentation of reality and the loss of meaning. Baudrillard projects that simulation is playing a wide role in human societies and perception. He characterizes the social reality in the postmodern era as one of hyperreality. After all, isn't the fall a social occurrence?

One of the most critical virtue of humankind is that of discernment or good judgement: *diakrisis* (διάκρισις). This virtue helps humans make critical ethical decisions. *Diakrisis* is a spiritual gift through which one discerns the inner states. It is a gift which pertains to the pure nous. St. John Cassian (Philokalia I) writes: "Discrimination [discernment] is no small virtue, but one of the most important gifts of the Holy Spirit ... [it is] ... nothing worldly or insignificant. It is the greatest gift of God's graces ... the ability to discriminate between spirits that enter into him and to assess them accurately." Thus, *diakrisis* helps one regard with much respect and approval whatever is holistically beneficial for the physical, mental and spiritual harmony of the human being for the glory of God and the sanctification of the life. Since *diakrisis* carries much of the Christian ethical decisions, artificial intelligence devoid of *diakrisis* in the Christian sense becomes the biggest challenge posed before ethics, since it makes the world reduced to the abstract "I" and its reflections in technological mirrors, and decisions are made at the expense of the common good. "Technology is therefore everything that a selfhood is no longer and cannot be. It is like a mirror of Dorian Gray in which we are getting better while we actually disappear admiring our image."³⁷

Conclusion

The anthropological crisis has its roots in the degradation of knowledge. This degradation is uncovered in the first incident of human temptation, falling into vanity and self-deception, as it is described in the book of Genesis: "Your eyes will be opened, and you will be like God, knowing good and evil" (NKJV, Gen. 3: 4). Certainly, when the first human being, having the image of God the Creator and His Light, freely chose to accept this malicious call to be another "god," dark clouds overshadowed his inner vision of true knowledge. As a result of this confusion, created humans turned into a miserable creature filled with diseases and death, annihilating in dust (Gen. 3:11). This state of the fall led to the degradation concerning the knowledge about what it is to be truly human,

³⁷ *Ibid.*

and to the failure in distinguishing between the created (the universe and humankind) and uncreated (God), and between essence and energies.

Technology appeared after the fall. Hence, even though science and all technological progress could lead to a better living conditions, they will always be limited because human beings are limited by their fallen condition. Scientists have the power and authority to use earthly tools in helping Creation. However, they would eventually reach the boundaries of “unknowability” where the Mystery of God begins. Scientists, who acquire the knowledge of the heart, can have, while working within their God-given mandate, the discernment to control and subdue human inventions, rather than to be subdued and controlled by them.

In his study of St. Basil the Great, the blessed Elder Aimilianos of Simonopetra presents *two* principles concerning the assessment and control of technological progress: first, their use in restraint, according to the basic and necessary need, and second, spiritual vigilance which “arms people so that they can stave off the disastrous effects of the technological society.”³⁸ The ultimate human mission is summarized by the blessed Fr. Dumitru Stăniloae, who affirms that “man through his science is not merely the passive spectator of the causal processes of the cosmos, but can give shape to these processes actively.”³⁹ Therefore, humans living in and for Christ are called to embrace technological progress and enlighten its path, since “we cannot understand nature and the meaning of science and technology without recognizing a higher human destiny, the calling of man to find his fulfillment in God.”⁴⁰

Anthropologically, the human mental reasoning, which is based on the brain, logical processes or syllogisms, reaches only scientific facts and figures or *gnosis* (γνώσις), and leads to inventions in the form of images and information. When rationalism is content with its findings, it thinks of itself as reaching the “full” knowledge by its own power. In this way, sole “rationalism” which is anthropocentric reaches the summit of self-justification and pride, the cause of the fall. However, when rationalism is led by the *nous*, the spiritual cognitive center, the human being filled with the Grace of God reaches *epignosis* (ἐπίγνωσις), the correct or divine knowledge, true perception, or right discernment, which surpasses sole rationality. As St. Gregory Palamas affirms in his life and teachings, human beings in Christ are called to be filled with the spiritual, mystical

³⁸ Archimandrite Aimilianos, Abbot of the Holy Monastery of Simonos Petras. “Orthodox Spirituality and the Technological Revolution.” *Spiritual Instruction and Discourses, Vol I: The Authentic Seal* (Ormylia Publishing, Holy Cenobium of the Annunciation of the Mother of God, Ormylia, Halkidiki, Greece, 1999), 351-352.

³⁹ Dumitru Stăniloae, *Theology and the Church*, trans. by Robert Barringer (New York: St. Vladimir's Seminary Press, 1980), 224.

⁴⁰ *Ibid.*, 225.

knowledge and to experience the communion and union with God.⁴¹ Attaining this degree of knowledge, the rules of nature are surpassed. The testimonies of thousands of luminary saints and charismatic spiritual elders, both ancient and contemporary, are the standing proofs of this long tradition in acquiring this *epignosis*.⁴²

The Creator did not abandon His creation, but as a loving Father sent His only begotten Son to enlighten man again with the light of true knowledge, bringing healing and salvation by the illuminating grace of the Holy Spirit. The call of God for people is repent, since repentance leads to true knowledge, to the gate of the human heart. Acquiring this knowledge leads humans to be *fully* human, and to manage in *diakrisis* all scientific progress and technological achievements, including their use of humanoids, fulfilling their role as “mediators.” The words of St. Gregory the Theologian summarize it all in inciting the humans to listen to the voice of God, to conform freely to the Divine likeness, and to be enlightened and regenerated, in order to “become what we once were.”⁴³

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⁴¹ *Triads* 2. 36. St. Gregory Palamas, *The Triads*, ed. John Meyendorff (New York: Paulist Press, 1983), 19, 31, 83.

⁴² One contemporary example is St. Porphyrios of Kavsokalyvia, who had, according to thousands of testimonies, the special charisma of Divine grace to recognize the truth of meanings, the depths of human thoughts hidden in one’s sub-consciousness, and describe things hidden deep in time and place. The power of his charisma cannot even come close to any powerful humanoid or futurist robotic dream.

⁴³ Orations 39, *On the Holy Lights*, II.7; *Discours 38-41*, Sources Chrétiennes, vol. 358, intro. Claudio Moreschini, trad. P. Gally (Paris, Cerf, 1990), 152; NPNF 207: 352.

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