

Technological Imagination of Artificial Intelligence in the Light of the Decalogue

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• ABSTRACT •

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Ever since the Enlightenment, technology has influenced human life as a whole through its fast technical advance. It is the technology of artificial intelligence (AI) that is one of the leading modern technologies in the twenty-first century. Scientists who have carried out AI project dream of a technological utopia in which human beings produce a future human species called AI according to their *own* images. In a religious view, this technological dream challenges the prime Christian faith that man was created by God according to His image. Particularly, divine commandments in the Decalogue cannot help but regard this kind of challenge as an idolatrous commitment against God's unique authority. Considering this conflicting situation, this article explores the relation between *imago Dei* (God's image) and *imago hominis* (man's image) through an insightful analysis of Noreen L. Herzfeld on imagination in the technological age of AI, discovers God as the origin of all images including both images from a theological perspective of creation, discloses dangerous aspects of technological imagination to traditional theological imagination in the light of Decalogue (especially its right tablet), and attempts to provide a *Christian theology of imagination* in response to the technological imagination of AI.

Key words: technology, image (imagination), artificial intelligence (AI), Decalogue, Christian theology

I. Introduction: AI Imagination?

Since the Enlightenment helped technology have an enormous influence on the world, technology has had a power to overwhelm all humankind.¹⁾ In the overwhelming swirl of technology, the project of *artificial intelligence* (AI)²⁾ became one of the most eminent tasks representing the twenty-first century advanced technologies.³⁾ In a religious point of view, the “implicit goal of such technologies is the reversal of the curses laid on Adam and Eve or the restoration of the tree of life by the tree of knowledge.”⁴⁾ By contrast, Christianity rooted in the Bible has assumed its theological voice that is fundamentally different from a scientific voice produced by technology.

In this context, this article seeks to examine the relation of scientific

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- 1) To understand how technology has influenced human society as a whole, see George Grant, *Technology and Justice* (Notre Dame: University of Notre Dame Press, 1986), 11-34.
 - 2) “In 1960 John McCarthy, then at MIT, coined the term *artificial intelligence* (AI) for the effort to make computers think. By 1965 the first students of McCarthy, Marvin Minsky (also at MIT), Newell, and Simon had produced AI programs that proved theorems in geometry, exams, and played chess, all with the proficiency of an average college freshman” (Hans Moravec, *Mind Children* (Cambridge: Harvard University Press, 1988), 8).
 - 3) For general understanding of AI project and its advance, see M. Tim Jones, *Artificial Intelligence: A Systems Approach* (Sudbury, Massachusetts: Jones and Bartlett, 2008). Because this article is a theological one, it does not deal with AI project in detail. However, it is important to premise in this article that AI project is one of the crucial scientific projects leading current advanced technologies (See Mihail C. Roco and William Sims Bainbridge, ed., *Converging Technologies for Improving Human Performance: Nanotechnology, Biotechnology, Information technology, Cognitive science* (Dordrecht, The Netherlands: Kluwer Academic Publishers, 2003), 158-178).
 - 4) Gerald P. McKenny, *To Relieve the Human Condition* (Albany: State University of New York Press, 1997), 109.

technology and Christian theology. Because the boundary of this kind of discourse is too large to examine, however, this article focuses specifically on dealing with a technological *imagination* of AI from a theological perspective of creation. For this, it selects Noreen L. Herzfeld's insightful analysis of imagination as its logical framework, develops and reflects upon her analysis in a Christian theological view, i.e., in the light of the Decalogue, especially focusing on its right tablet,⁵⁾ and ultimately suggests a Christian "theology of imagination"⁶⁾ in the era of technology.

II. God's Image and Man's Image

In *In Our Image*,⁷⁾ Noreen L. Herzfeld explores the relation between the image of God (a theological image) and the image of man (a scientific image) in the advance of technology toward its vision of AI. Her imaginal concern begins with a question, why scientists are interested in creating artificial intelligence. In this question, she concentrates on the word *create*, and seeks to examine the relation between scientists'

5) The Decalogue is, of course, not the positive law nowadays. However, it is certain that it still provides a crucial Christian moral standard for mundane Christians. In this Christian moral sense, this article selects the Decalogue and tries to reflect this scientific issue upon it.

6) Kenneth L. Vaux, *Jew, Christian, Muslim: Faithful unification or fateful trifurcation? Word, way, worship and war in the Abrahamic faiths* (Eugene, Oregon: WipfandStock, 2003), 159.

7) Noreen L. Herzfeld, *In Our Image: Artificial Intelligence and the Human Spirit* (Minneapolis: Fortress Press, 2002).

yearning to *create* AI and God's will to *create* man.

To begin with, Herzfeld points out that the “image of God in humankind has become one cornerstone of Christian anthropology, a locus for understanding who we are in relation to both God and the world.”⁸⁾ The notion of God's image begins with the biblical statement, “So God created humankind in his image, in the image of God he created them, male and female he created them” (Genesis 1:27). Including this verse, there are only three passages about the image or likeness of God in the Old Testament: Genesis 1:26-28, 5:3, and 9:6. Especially in Genesis 5:1-3, Herzfeld finds a transition from God's image to man's image: “When God created humankind, he made them in the likeness of God When Adam had lived one hundred and thirty years he became the father of a son in his likeness, according to his image, and named him Seth.” Focusing on the interrelation of God, Adam, and Seth, she discovers that the divine image is inherited from God through Adam to his descendants.

At this point, Herzfeld meets another inevitable question, what the divine image (*imago Dei*) is like.⁹⁾ Despite a traditional Christian legacy that only human beings are connected with God's image and they are precious by virtue of that image,¹⁰⁾ Herzfeld argues that the Bible does

8) Ibid., 6.

9) It is Irenaeus that discusses the “*imago Dei* in some detail, gives a variety of interpretations in different writings” (ibid., 100). For modern theological discourses on *imago Dei*, see Gunnlaugur A. Jónsson, *The Image of God: Genesis 1:26-28 in a Century of Old Testament Research*, tr. Lorraine Svendsen (Stockholm: Almqvist & Wiksell International, 1988)

10) This idea basically follows an Augustinian tradition. To see the *imago Dei* in Augustine, Stanley J. Grenz, *The Social God and the Relational Self: A Trinitarian*

not tell us concretely what the definition of God's image is and what that image is made of. In order to answer that question, that is, to explore the meaning of God's image, therefore, she primarily investigates three representative theological interpretations: the substantive, the functional, and the rational interpretation,¹¹⁾

First, Herzfeld explains the *substantive* interpretation from Reinhold Niebuhr's perspective. Niebuhr emphasizes the divine image as reason, which can be possessed only by man. Because of his rational ability, "[m]an is the only creature which is fully self-conscious. His reason endows him with a capacity for self-transcendence."¹²⁾ Herzfeld views that this Niebuhrian vision toward human self-transcendence stands with an Augustinian tradition that proposes an analogy of being (*analogia entis*) between God and man. Here, the idea of Augustine's *analogia entis* and that of Niebuhr's human self-transcendence seem to provide a theoretical motive for contemporary scientists to accelerate the pace of AI project that intends to make a new human species like AI, transcend all human limitations, and finally arrive at an ideal human technological world.¹³⁾

Theology of the Imago Dei (Louisville and London: Westminster John Know Press, 2001), 153-157).

11) The most common views of the *imago Dei* are the "substantial or structural view, which understands the *imago dei* as consisting of certain attributes or capabilities lodged within the person, and the relational view, which sees the divine image as referring to a fundamental relationship between the human creature and the Creator" (ibid., 142). Herzfeld, here, adds the functional view to the two basic views, and seems to locate it in the middle of the two.

12) Noreen L. Herzfeld, op. cit., 17.

13) It is a fact that Niebuhr encourages man to develop his ability and transcend his power given from God, but it is also a fact that he warns that the excessive

In contrast to this man-oriented scientific vision, the second divine commandment in the Decalogue proposes a God-oriented viewpoint. In this commandment, God's warning against idolatry is based on a theocentric world-view and not an anthropocentric vision. In light of the Decalogue, the anthropocentric scientific vision is a sort of idolatrous narcissism. In this sense, Kenneth L. Vaux argues,

The ultimate idolatry is narcissism. Gazing in the mirror or pool in self-fascination is the all-too-pervasive detour from faith. The extreme arts of asceticism and monasticism, subduing selfconcentration and focusing attention on God alone can be understood as sustaining measures of C-2[the second commandment].¹⁴⁾

Second, Herzfeld expresses the *functional* interpretation through Gerhard von Rad who suggests the image of God as regency. Von Rad criticizes that the substantive interpretation overvalues human mental or spiritual elements by exaggerating the human capability of self-transcendence in God's image. In contrast to Niebuhr, von Rad views man not only as a mental, but also as a physical being. As a biblical scholar, he argues that the Priestly writer (P) in the story of creation does not divide a physical person from an intellectual person in the image of God. Because man has both mental and physical limitations, there is

self-transcendence of man tends to reinforce 'pride' regarded as the origin of sin in the nature of man (Reinhold Niebuhr, *The Nature and Destiny of Man: A Christian Interpretation*, vol. 1 (Human Nature) (New York: Charles Scribner's Sons, 1964), 188).

14) Kenneth L. Vaux, *op. cit.*, 177.

a certain ontological gap between God and man in spite of man's possession of God's image.

In interpreting the word *selem* (image), therefore, he points out that this word is explained only by 'similarity,' that is, 'resemblance,' and no more. Excessive emphases on the analogy between God and man are, for von Rad, "rejected which proceed from an anthropology strange to the Old Testament and one-sidedly limit God's image to man's spiritual nature, relating it to man's 'dignity,' his 'personality' or 'ability for moral decision,' etc."¹⁵⁾ In this sense, he asserts that human beings are functionally responsible for taking part in the will of God who surpasses human nature.¹⁶⁾ He says, "[h]umans are called upon to join God in imposing order on nature, a nature created in reference to humans, and thus to participate in God's saving plan."¹⁷⁾

Third, Herzfeld explains the *relational* interpretation through the image in a Triune God, which is deliberated by Karl Barth. In a biblical verse, "Let us make man in our image" (Genesis 1:2), Barth finds the self-relationship of the triune God in the image of God. The plural in this verse refers to God's nature *per se*. In other words, the triune God reveals *Himself* in the process of his creation. Unlike the substantive

15) Gerhard von Rad, *Genesis: A Commentary* (London: SCM, 1961), 58.

16) Von Rad's concern of responsibility is likely to stand with Paul L. Lehman's standpoint that deals with the Decalogue in the scheme of responsibility. Lehman says that the "Decalogue is the 'codebook' that signals an apperceptive preparation for living by pathways and patterns of reciprocal responsibility in a world that has been made fit for being human in" (Paul L. Lehmann, *The Decalogue and a Human Future: The Meaning of the Commandments for Making and Keeping Human Life Human* (Grand Rapids: William B. Eerdmans, 1995), 85).

17) Noreen L. Herzfeld, op. cit., 23.

interpretation, therefore, there is no room for the Augustinian ontological analogy between God and man. Rather, Barth suggests that the image of the triune God, which *primarily* relates to God Himself, is extended to the relationship not simply with man, but with all of humankind throughout His creation, “According to Barth, ‘image has double meaning: God lives in togetherness with Himself, then God lives in togetherness with man, then men live in togetherness with one another .’”¹⁸⁾ In this regard, Barth says,

Man is created by God in correspondence with this relationship and differentiation [between the I and the Thou] in God Himself: created as a Thou that can be addressed by God but also an I responsible to God; in the relationship of man and woman in which man is a Thou to his fellow and therefore himself an I in responsibility to this claim.¹⁹⁾

In this Barthian view, Herzfeld finds out the analogy of relationship (*analogia relationis*) not only between God and man, but also among all the men,

Through these theological analyses of *imago Dei* (the image of God), Herzfeld speaks about *imago hominis* (the image of man). She says, “AI can be viewed as the attempt to create an *imago hominis*, a machine that is in some way created in the image of the human person, an image loosely defined using the term *intelligence*.”²⁰⁾ She, here, adopts the pre-

18) Ibid., 26.

19) Karl Barth, *Church Dogmatics*, III/2 (Edinburgh: T. & T. Clark, 1960), 198.

20) Noreen L. Herzfeld, op. cit., 33.

vious three interpretations of *imago Dei* into the discourse of *imago hominis*. For instance, a symbolic AI with mentality, e.g., Hans Moravec's transcendent machine,²¹⁾ can be regarded as an example of representing *imago hominis* in the substantive scheme; a chess-playing computer, Deep Blue,²²⁾ which shows its metal ability with its physical appearance on screen, can be understood as an example of approaching to *imago hominis* in the functional structure; a future computer passing the Turing test,²³⁾ which uses relationality to decide intelligence, can be considered as an example of interpreting *imago hominis* in the relational paradigm.

In those three applied interpretations, Herzfeld attempts to look into the image of AI. At this point, it is necessary to reconsider her primary question, why scientists are interested in creating AI. Here, Herzfeld methodologically follows Barth's relational perspective and tries to find

21) Moravec's assumption begins with a strong conviction that machines can think like human beings. Moravec's AI aims at an intelligent machine that AI project is also currently pursuing. Indeed, it was insightful that he already sought to speak of not only how machines could exceed human beings, but also how mind could exist without body (See Hans Moravec, *Robot: Mere Machine to Transcendent Mind* (Oxford: Oxford University Press, 1999)).

22) Deep Blue was a chess-playing computer developed by IBM. On May 11, 1997, the machine, with human intervention between games, won the second six-game match against world champion Garry Kasparov by two wins to one with three draws ("Chess Bump: The triumphant teamwork of humans and computers," <http://www.slate.com/articles/health_and_science/human_nature/2007/05/chess_bump.html> (assessed 14 May 2010)).

23) Turing Test is a "procedure proposed by Alan Turing in 1950 for determining whether or not a system (generally a computer) has achieved human-level intelligence, based on whether it can deceive a human interrogator into believing that it is human (Ray Kurzweil, *The Age of Spiritual Machines* (New York: Penguin Books, 1999), 313).

out a relational parallel between God-man and man-machine within a scheme of creator-creature. In this relational sense, it can be simply answered that just as God is willing to create man according to His image, so scientists (intelligent human beings) are willing to create human-like machines according to their images. In this logic, there seems to be an *imaginal analogy* between God's imagination and man's imagination.

This imaginal analogy is certainly interesting, but surely dangerous to Christian belief. In light of the Decalogue, the second commandment renounces any possibility of this sort of imaginal analogy. This divine commandment implies that only God can make man for Himself in His likeness, not *vice versa*. Indeed, God's command is very clear and very strict: "You shall not make for yourself an idol in the form of anything in heaven above or on the earth beneath or in the waters below" (Exodus 20:4). God who created His image forbids any kind of reproduction of His created image. God's creation of His image is proved to be good,²⁴⁾ but man's reproduction of the creation of His image is supposed to be idolatrous.²⁵⁾ According Anthony A. Hoekema, making this idolatrous self-image finally causes the Fall of man.²⁶⁾ Therefore, it is significant to point out that there is a sharp relational difference between the Creator and the creatures. While the Creator says and com-

24) "God saw all that he had made, and it was very good" (Genesis 1:31).

25) For the attempt of man's reproduction against God's creation, see Brent Waters, *Reproductive Technology: Towards a Theology of Procreative Stewardship* (Cleveland: The Pilgrim Press, 2001), 95-105.

26) Anthony A. Hoekema, *Created in God's Image* (Grand Rapids, Michigan: William B. Eerdmans, 1986), 104.

mands, the creatures are ought to listen to and follow Him, This is the moral reasoning of the Decalogue, which is opposite to that of the imaginal analogy.

III. The Origin of Imagination: God

Throughout the imaginal exploration, Herzfeld focuses on searching for the foundation of all the images. In other words, she concentrates on finding out the origin of both *imago Dei* and *imago hominis*. For this, she uses Barth's relational interpretation again because she believes that any image is necessarily in a certain specific relationship.²⁷⁾ It is God that is the origin of both divine and human image, which she finds out in this relational framework. She says,

A relational interpretation of the *imago Dei* suggests that we are made to be in relationship, not only with other human beings but with God ... The concept of the *imago Dei* has been used over the ages to represent our understanding that what matters most in our nature is that which we share with God. We must never lose sight of that relationship with God, even as we attempt to share aspects of our nature, our work, and our very selves with computers.²⁸⁾

27) Likewise, she is proved to be very Barthian. However, it is necessary to understand that she is a Barthian in her *methodology* of comparing God's image with man's image in relationship.

28) Noreen L. Herzfeld, op. cit., 82-84.

Just as the beginning of God-man relationship is God, so the foundation of man-machine relationship is also God and not man. In this point, her theological notion of *imago hominis* is fundamentally separated from the scientific vision of AI. Unlike this scientific vision, she urges that the relationship of man-man, man-machine, and man-computer is originated from the primary relationship, i.e., God-man relationship. In this sense, she asserts, “[c]omputers cannot replace us, for each of us, as a participant in these relationships, is irreplaceable.”²⁹⁾ If she has to make a decision of either man or computer, therefore, she will probably choose without hesitation man who is prior to computer in relationship.

The idea of God as the origin of all images is not only the core idea of Herzfeld, but also the starting point of Christian theology. Basically, this notion differentiates Christian theology from scientific technology. Scientific technology and Christian theology begin with entirely different starting points. For instance, the origin of technology is a scientific Big Bang theory proposing that the world started contingently with the prime huge explosion billions of years ago, whereas the origin of theology is a biblical faith professing that the world was made by God the Creator in His providence. Here, technology viewing the beginning of the world in contingency is certainly atheistic in terms that it denies a divine Being that created the world. On top of that, it is nihilistic in terms that it nullifies the ground of all existing beings including God.³⁰⁾ In contrast to this technological groundless nihilism, Paul L.

29) Ibid., 94.

Lehmann critically speaks about “No Ground Under Our Feet” with regard to the second commandment that proclaims God as the ground of everything, echoing Dietrich Bonhoeffer’s critical statement about “people with so little ground under their feet.”³¹⁾ Surely, Lehmann’s critique for groundlessness is also inevitable in the standpoint of the second commandment, because the idea of groundlessness intends to make void the theological premise that asserts God as the foundation of everything.³²⁾

In some sense, the atheistic and nihilistic notion of technology is likely to attempt to replace God by technology. Unlike theology that begins with God the Creator and ends with God the Savior, the beginning and the ending of technology is man alone. When man becomes the centerpiece of the world, God becomes marginalized. In this marginalization, the crown of God who promises eternal life is abdicated by technology with its illusion toward a scientific utopia attained by man in this world. In a religious view, the man-centered scientific utopia seems to seek to make technology a god against God. By contrast, God rigidly says in the first commandment of the Decalogue, “You shall have no other gods before me” (Exodus 20:3). When technology becomes one of the ‘other gods,’ it induces man to commit the first commandment. Along with the second commandment, the first is based on a resolute faith

30) In examining the relation of nihilism and technology, Gerald P. McKenny asserts, “nihilism gives birth to technological mastery” (Gerald P. McKenny, *op. cit.*, 45).

31) Paul L. Lehmann, *op. cit.*, 109.

32) Strictly speaking, this theological premise is also the basis of Christian thought on science. For instance, modern theological discussions concerning bioethics are based on a Christian faith that God is the “fountain of life” (Psalm 36:9).

for God alone. In light of the Decalogue, unfaithfulness is directed to a strong temptation of following other gods. When unfaithfulness is reified through this temptation, God's name comes to be insignificant. In the paradigm of technology, therefore, "Apollo, or whatever its name is ... Naming God is unimportant."³³⁾ According to the third commandment,³⁴⁾ however, naming God should be very careful and misusing His name becomes a fatal commitment.

In making AI according to *imago hominis* without *imago Dei*, additionally, some scientists strive to justify their AI project by showing off their technological healing ability. For example, they insist that modern advanced technologies toward the realization of AI can overcome genetic diseases such as Alzheimer and Parkinson. However, it must be indicated that the goal of their justification is not just the overcoming of these incurable diseases, but the transcendence of all human limitations, and ultimately the establishment of their technological utopia in which AI is present in their likeness.³⁵⁾

Furthermore, what they ultimately pursue through the establishment of such utopia is a technological immortal life.³⁶⁾ In the view of imagi-

33) Gerald P. McKenny, op. cit., 145.

34) "You shall not misuse the name of the LORD your God, for the LORD will not hold anyone guiltless who misuse his name" (Exodus 20:7).

35) This technological utopia has been propelled by some radical future scientists, i.e., transhumanists who believe that such a utopia will be realized in near future (See Dong Hwan Kim, "Comparing transhumanism with Christian humanism: a Niebuhrian response to transhumanists," *Mission and Theology*, 28, 2011, 259-280).

36) They try to achieve the technological immortal life by advanced emerging technologies like genetics, nanotechnology, and robotics. To understand their technological vision toward immortality from a theological perspective, see C. Ben Mitchell, et al., ed. *Aging, Death, and the Quest for Immortality*. Grand Rapids:

nation, establishing the technological immortal life signifies making an immortal *imago hominis*. It is certain that the attempt to make the immortal human image through AI project makes ambiguous the biblical image of the immortal God alone. Unlike the human immortal image, Paul points out, “Although they claimed to be wise, they became fools and exchanged the glory of the immortal God for images made to look like mortal man” (Romans 1:22-23). In the utopian dream of AI, praising the invisible image of the immortal God is replaced by praising the visible image of the immortal AI. However, the biblical warning for the reproduction of such technological image is clear. Stephen’s sermon is, for example, monumental: “That was the time they made an idol in the form of a calf. They brought sacrifices to it and held a celebration in honor of what their hands had made” (Acts 7:41). In light of Decalogue, here, man comes to commit not only the second commandment, but also the fourth commandment³⁷⁾ by making his image through AI technology, because he attempts to exchange the sabbatical celebration of the Lord’s Day for the technological celebration of human idolatrous day, i.e., the day of AI.

William B. Eerdmans, 2004), 153-192.

37) “Remember the Sabbath day by keeping it holy. Six days you shall labor and do all your work, but the seventh day is a sabbath to the LORD your God. On it you shall not do any work, neither you, nor your son or daughter, nor your male or female servant, nor your animals, nor any foreigner residing in your towns” (Exodus 20:8-10).

IV. Conclusion: A Christian Theology of Imagination

Ever since the history of the Babel tower (Genesis 11), human beings have always stood before a temptation to establish their own world with their knowledge and power without the help of God. It is certain that the AI project, by which human beings strive to make a new human species according to their *own* images, is in a continuum of that kind of temptation.

Indeed, theology is, in many aspects, in conflict with technology.³⁸⁾ Most of all, theology professes the divine created order based on God's creation, whereas technology proposes the scientific evolution originated from Big Bang; theology believes an eternal life with which only God provides man through mortality, whereas technology dreams of an immortal life by curing fatal diseases and prolonging human life span. In the discourse of imagination, such conflict between theology and technology also appears clearly. The Bible *commands* through the Decalogue not to make any image, and cautions that all worldly images might be idols against God. On the contrary, modern advanced technologies *recommend* human beings to make their own images visionarily

38) This does not mean that theology and technology are, from the outset, in conflict. It is, rather, a fact that some modern theologians like Alister E. McGrath, who suggests a 'scientific theology' by asserting that Christian theology and natural sciences are fundamentally related, seek to overcome a pre-modern dualistic approach of dividing theological realm and scientific realm, and pursue even their supportive relationship (See Alister E. McGrath, *A Scientific Theology*, Vol. 1: Nature (Grand Rapids: William B. Eerdmans, 2001). In this sense, it is necessary to make sure that this article recognizes this modern relational openness and attempts to carefully disclose an excessive man-oriented aspect of technology through its AI project.

through AI project and to justify their participation in the order of God's creation by realizing the *imago hominis*. In addition, the Bible promises a clear image in the heaven beyond worldly cloudy images by professing, "Now we see but a poor reflection as in a mirror; then we shall see face to face" (1 Corinthians 12:12). By contrast, technology dreams of the transformation of the poor reflection into a new technological image, i.e., the image of AI.

In the radical advance of modern technologies, it is, of course, difficult for Christian theology to have influence upon core scientific projects such as AI project with its moral standards like the Decalogue. However, in that polemic situation in which technology seriously challenges to theology, it is imperative for Christian theology to build up its own ideas like *imago Dei* and stand over against the challenge of technological ideas like *imago hominis*. In this respect, Herzfeld's attempt to confirm the Christian idea of *imago Dei* and affirm God as the origin of all images including both *imago Dei* and *imago hominis* is significant in modern theological discourses with regard to technology.

To be sure, the idea of God as the origin of imagination is the key notion that can provide a *Christian theology of imagination* not only for the present, but also for the future. If the Christian theology of imagination, which professes that God is the Origin of imagination covering both *imago Dei* and *imago hominis*, is built up strongly, it will be able to maintain its steadfast faithful voice in the era of technology in which the technological dream of AI is dreamt and the technological image of AI is about to be produced.

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• 국 문 초 록 •

십계명에 비춰 본 AI 테크놀로지의 형상

김동환

18세기 계몽주의의 흐름 속에서 태동한 근대 과학기술은, 소위 테크놀로지 혁명이라 불릴 만큼, 불과 몇 세기 동안에 놀라운 발전을 거듭해오면서 인간의 삶 전반에 걸쳐 엄청난 영향력을 끼쳐오고 있다. 21세기 이후 그 영향력의 중심에는, 인공 지능(artificial intelligence)의 실현을 추진하고 있는 AI 프로젝트가 자리 잡고 있다. AI 프로젝트를 이끌고 있는 미래 과학자들에게 있어서, AI 테크놀로지란, 인간의 형상을 따라 인간에 의해서 만들어지는 새로운 미래 인류를 꿈꾸는, 과학기술의 유토피아로 향하는 야심찬 통로를 의미한다. 종교적 안목에서 볼 때, AI 테크놀로지를 통로로 삼는 과학기술의 꿈은, 창조 신앙으로부터 시작되는 기독교 신학의 근본적인 입장, 즉 인간은 하나님의 형상에 따라 하나님에 의하여 창조되었다는 입장에 도전하고 있다고 볼 수밖에 없다. 특별히 십계명 속에 나타나는 신적 계명들에 빚대어 볼 때, 이러한 과학기술의 도전은 창조주 하나님의 고유 권한을 침범하는 우상 숭배적 범죄로 간주될 수 있다. 최신 과학기술의 꿈과 전통적인 신학적 입장 사이의 이러한 갈등의 상황을 숙고하면서, 본 논문은 Noreen L. Herzfeld의 테크놀로지 시대의 형상화(imagination)에 대한 통찰력 있는 해석을 바탕으로, 하나님의 형상(imago Dei)과 인간의 형상(imago hominis)을 비교 분석하고, 두 형상을 포함한 모든 형상의 근원이 하나님임을 확인하며, 십계명(특히 우측 돌 판의 계명들)의 관점에서 테크놀로지의 형상화의 위험성을 신학적으로 밝혀내고, 궁극적으로 현대 과학기술시대를 향하여 '형상의 기독교신학(Christian theology of imagination)'을 제시하고자 한다.

주제어: 테크놀로지, 형상(화), 인공 지능, 십계명, 기독교신학