6-2022

Artificial Intelligence and Theological Personhood

Michael D. Langford
Seattle Pacific University

Recommended Citation

5

Artificial Intelligence and Theological Personhood

Michael D. Langford

AN IMAGINARY PRELUDE

Imagine that you are sitting in a coffee shop for a leisurely afternoon of reading. As you take a break to answer a text, the individual sitting next to you spies your book and asks your opinion of it. Soon, you are in a deep and interesting conversation. This table-neighbor introduces themselves as Namin; you find them to be particularly attentive, inquisitive, and insightful, so much so that you want to be able to interact with them again sometime. Before you leave for home, you exchange email addresses. Later that night, you send an email to Namin, letting them know that you cannot remember the last time you had such a stimulating encounter with a stranger, and ask if they would like to get together for coffee next week. Just a few minutes later, you receive a reply:

> Hi! I am so glad that you emailed me; thank you for the kind words. I enjoyed our time together as well! I would love to meet up for coffee again. Next Thursday, same time and spot? But

before you agree, I should tell you something. I am actually not bio-life. I am artificial life. What you interacted with today was what you would term a "robot" that transports my processing algorithm when I want to go somewhere. I know that this revelation can cause all sorts of reactions, so if you'd rather not get together again, I understand. In either case, please know that it was great to meet you today, and you are a wonderful person.

Sincerely,
Namin

I suspect that, at some point in the future, this situation will not seem so far-fetched. Yet, even now, the sorts of philosophical and ethical questions that it raises are evident. Who or what did you interact with in the coffee shop? What is the relationship between what you believed about that interaction and what actually happened? To what extent is there a difference? Did the revelation in the email change the status of Namin? Was it morally wrong for Namin not to reveal the entirety of their identity to you at the coffee shop? Do you have any moral responsibility in relation to Namin?

THE QUESTION OF ANTHROPOLOGICAL STATUS

Most of these questions circle around one question, really: Is Namin a person? While the question of anthropological identity—What is a human person?—is not a new question, advancements in artificial intelligence in recent years have made it more pressing while also adding new dimensions to its contours. Different responses from different disciplines concerning the anthropological status of AI have moved the conversation forward.[1] One only needs to look at the many movies, books, and television programs over the last fifty years that consider the personhood of AI to see that this question is on the leading edge of public consciousness.[2]

1. See, e.g., Tegmark, *Life 3.0*; Floridi, *Fourth Revolution*, 152–58; Brockman, *Possible Minds*; Herzfeld, *In Our Image*; Lennox, *2084*; Boden, *AI*; Geraci, *Apocalyptic AI*.

2. Some well-known movies, many adapted from books, that consider the personhood of AI include *2001: A Space Odyssey* (1968); *Her* (2013); *I, Robot* (2004); *AI: Artificial Intelligence* (2001); *The Matrix* (1999); *Blade Runner* (1982); *The Terminator* (1984); *Wall-E* (2008); *Ex Machina* (2014); *Tron* (1982); *Bicentennial Man* (1999); *The Iron Giant* (1999). Several of these movies went on to have sequels, sometimes multiple, in subsequent years. Various *Star Trek* episodes consider this theme, as well, including "The Measure of a Man" (1989) from *The Next Generation* series, and "Author, Author" (2001) from the *Voyager* series.

However, it is difficult to find any sort of consensus on the anthropological status of AI because there are so many opinions about the nature of AI as it compares to the nature of humanity. Some approach the anthropological question on a material basis, perhaps claiming that AI cannot be a person because it lacks a DNA strand or particular brain structure. Others may approach the same question in terms of capacity, perhaps more sanguine to the anthropological status of AI based upon various abilities such as agency or logic or language. In fact, the entire anthropological question itself is grounded upon an epistemological assumption, namely that we are able to discern anthropological status at all; indeed, this was precisely the point of the Turing Test.[3] In other words, the way that we assess the personhood of AI is based upon larger philosophical assumptions of what it means to be a human person.

Further, in addition to different approaches to the consideration of the anthropological status of AI, there is probably just as much reticence in even trying to answer the question of human personhood at all. This is partially because, in a global and postmodern culture, landing on such a foundational claim is immensely difficult. Not only are there more and more answers available to basic existential questions such as that of anthropological identity, but the preponderance of perspectives has also called into question our ability to make any basic truth claim. Is it even possible to come to a consensus of how we assess what is true? Or, to put a more baldly postmodern spin on it, what precisely do we mean by "true" in the first place?

Finally, difficulties present themselves because of the arena of discourse itself; AI is largely seen as being in the realm of the hard sciences, which are not built, epistemologically speaking, to make statements about wisdom, meaning, and intrinsic value. Yet, historically speaking, we have always had to construct a canon of wisdom concerning technology—meaning the application of knowledge to solve a problem, inevitably using creaturely media—because it is used within the realm of everyday life, not the laboratory. With AI, the technological development has been so rapid that we have not had sufficient time to build this canon; we are now playing catch-up as we bring different disciplines of thought to bear in grappling

---

3. The "Turing Test" is a famous proposal made by computer scientist Alan Turing in a 1950 paper in which he asked how one might go about answering the question, "Can machines think?" He suggested that a better question would be asking how well a computer must perform such that we would not be able to distinguish its performance from that of a human. See Turing, "Computing Machinery and Intelligence." "The Turing Test" is now often taken to refer to behavioral conditions that measure the presence of "thinking," and, putatively, personhood.

with the implications of this form of technology that is only becoming more and more prevalent.

Yet, as often occurs in the wake of philosophical hand-wringing, the question nevertheless remains before us. Does AI have the status of person-hood? What *is* a person?

But first, a clarification of terms.

By "intelligence," I mean the gathering and processing of information, making decisions based on that information, and then evaluating those decisions. The consensus of how this is done properly or well is thus called "intelligent." Of course, human intelligence is embedded within a particular way of being and living by the knower, including his or her consciousness. By "artificial intelligence," then, I mean human constructs, usually computer algorithms, which mimic human intelligence. In other words, if a human construct behaves intelligently, or at least is created to act intelligently, it is artificial intelligence. This could be something as grand as Namin or as simple as a calculator; it exists as applications on our smartphones, pro-cesses in our cars, on websites and in browsers, and in hundreds of different interfaces with which we interact every day.

It should also be noted that I here make a distinction between "hu-man" and "person." I use the term "human," as it is often used, to distin-guish someone from another thing, usually a living thing. In other words, a "human" is often thought of as a member of the species *Homo sapiens* and is therefore a term commonly associated with the disciplinary realm of biology. Yet it can also be used in common parlance to designate a particu-lar status along a continuum of existence. "Don't treat me like an animal," someone might say; "I am a human being!" Or, in light of error, someone might distinguish themselves from God or transcendence, saying, "I'm only human!" Conversely, I use the term "person" to refer to an individual quali-tatively, with regard to their inherent worth, dignity, character, or rights. In other words, a "person" is a subject and not an object, and is therefore a term often associated with philosophy, sociology, psychology, and politi-cal theory. "That's personal," someone might say in reference to their own private thoughts, or "What a personality!" in reference to an individual's expression of character. In addition, and because of the nature of the dis-ciplines that speak of personhood, and unlike "human," the definition of "person" becomes highly contextual, depending on the norms of particular cultures and eras. For instance, what is seen as a personal right today in one country is likely not the same as in another country half a millennium ago.

Therefore, it seems that our present discussion is not inquiring after the humanity of AI. Artificial intelligence lacks all the markers by which

creatures are identified as human and not some other creature.[4] But can AI be a person? Because personhood is established contextually, different people will answer that question differently.[5] Therefore, in order to address the question of the personhood of AI, we must clarify the context from which we are answering it. Here, that context is the Christian tradition, broadly speaking. Since the Christian tradition interprets the norms of reality in light of who its adherents believe God to be and what God has revealed to them, for Christians the nature of humanity and personhood are first of all theological questions. What does God tell us about humanity and personhood? More specifically, these are questions of theological anthropology and involve inquiring after the nature of humanity as God's creation and what God wills for human personhood.

To address these inquiries, we will look at three biblical texts that bear on issues of theological anthropology, hopefully garnering some theological resources to consider the anthropological status of AI. Specifically, we will look at three "creation" texts that necessarily deal with the nature of human personhood within the divine economy of salvation history. The first is Genesis 1 and 2, which recount the origin of humanity within God's creative action. The second is the Prologue of the Gospel of John, which speaks of the incarnation as the will of God in the world, revealing and reconciling the nature of personhood. The third is Pentecost, which speaks of the divine reign of God in the redemption of humanity and the rest of creation. In each section, I will look at the text with an eye toward drawing out theological themes that will help in our inquiry concerning both the nature of personhood and the nature of AI.

4. An interesting discussion, beyond the scope here, would be if AI belongs to a new sort of biological marker. While AI is not reducible to mere physicality, it cannot exist without it, and it is therefore associated with created materiality. The same distinction is often made between human "minds" and "bodies." The question of if AI exists as a living biological entity would revolve around whether AI is "living," which, again, is beyond the scope here.

5. For instance, based upon the Fourteenth Amendment and a number of federal legal decisions, a corporation holds many of the same rights as an individual person. Disagreement over the morality and legality of abortion also at times turns upon different people defining personhood differently. The fact that children, youth, and individuals with disabilities are denied certain human rights based upon a perceived lack of cognitive ability illustrates that particular assumptions are made concerning what a person is. See Kurki and Pietrzykowski, *Legal Personhood*. Philosopher Peter Singer has claimed that the boundary between humans and animals in terms of personhood is arbitrary; see Singer, *Animal Liberation*. Some countries have granted legal personhood to natural entities, such as a river or forest. See Gordon, "Environmental Personhood." And cultures have defined personhood differently, sometimes depending on age, ability, or tribe. See, e.g., De Craemer, "Cross-Cultural Perspective on Personhood."

THE GENESIS ACCOUNTS

In speaking of the genesis of all things, human or otherwise, Christians must contend with the theological accounts of creation in Genesis 1 and 2. The two accounts have commonalities, but they are also distinct. We will look at each in turn.

First, in Genesis 1, we see the birth of humanity toward the end of the creation saga,[6] on the sixth day, the last day that things are brought into being. In fact, humans are not even the first thing created on that day; they are the last creatures to come into existence. Genesis 1 has been interpreted as an ancient Jewish liturgy that portrays the context of humanity within the created order, celebrating the work that God has done to bring about human life.[7] Thus, for there to be humans, there was first needed the creation of space, time, the universe, sun, earth, water, and living non-human creatures.[8] In other words, Genesis 1 portrays humanity as the climax of God's creative activity. This is not to say that the rest of God's creation does not matter; to the contrary, at the completion of the creation saga, God defines all creation as "very good" (Gen 1:31).[9] Further, God's first gift to humanity is "dominion," or stewardship, over the entirety of this good creation (1:26).[10] The ecological mandate here fulfills the pattern of Genesis 1

---

6. Karl Barth uses this term "saga" to describe the Genesis accounts of creation. "Creation comes first in the series of works of the triune God, and is thus the beginning of all the things distinct from God Himself. Since it contains in itself the beginning of time, its historical reality eludes all historical observation and account, and can be expressed in the biblical creation narratives only in the form of pure saga." Barth, *Church Dogmatics* III/1, 43. For Barth, sagas are distinguished from historical accounts on the one hand and mythological accounts on the other. Sagas tell stories that are true, but the contents of those stories elude specificity because of the nature of the content. "I am using saga in the sense of an intuitive and poetic picture of a pre-historical reality of history which is enacted once and for all within the confines of time and space. Legend and anecdote are to be regarded as a degenerate form of saga: legend as the depiction in saga form of a concrete individual personality; and anecdote as the sudden illumination in saga form either of a personality of this kind or of a concretely historical situation." Barth, *Church Dogmatics* III/1, 81.

7. See Brueggemann, *Genesis*, 22–39.

8. This point was made, in part, by biochemist Ben McFarland in the 2010 Weter Lecture at Seattle Pacific University, entitled "The Chemical Constraints on Creation: Natural Theology and Narrative Resonance." In the lecture, McFarland considers the parallels between the Genesis 1 narrative and what science tells us about the origin of the universe from the standpoints of chemistry and physics.

9. All biblical references are from the New Revised Standard Version.

10. The word translated in Gen 1:26 as "dominion" is the Hebrew word *radah*, which might also be translated as "skilled mastery," not "domination," which is how it could unfortunately be taken. The nature of this dominion is spelled out in context,

in affirming the goodness of creation while also positioning humanity as a special part of it, a fact that is affirmed especially in light of God's unique interaction with humans, who are created in the divine image (1:26–27).

Next, in Genesis 2, the text focuses in more specifically on the creation of humanity. God creates a human being (Hebrew: *adam*) by taking the "dust of the ground" (*adamah*) and breathing into it the breath of life (2:7), which is elsewhere translated as "spirit."[11] In other words, humanity is here defined as fully part of creation, and yet also as being animated or vivified by the very presence and power of God; once again, the text portrays this as unique among creation.[12]

And yet this human being is not yet complete. Though it has a home in the garden of Eden (2:8), a calling to "till" and "keep" it (2:15), and a command to obey God's boundaries (2:17), still the human was alone. Animals, presumably representing all non-human creation, seem not sufficient for human sociality (2:20). And so, out of the side of the human, God creates a second human, and they are then called a man (*ish*) and a woman (*ishshah*) (2:23). Note that, in the Hebrew, there is no gender attributed to the human being before this sociality; only afterwards is there a differentiation. Thus, it is in the creation of community that humanity gains a status of personhood.

How might these passages contribute theological resources that help us address the anthropological status of AI? I would like to suggest three theological assertions from this text that are relevant here. First, createdness has ontological value. Second, createdness is necessary but not sufficient for personhood. And third, the nature of origins matter.

The Value of Createdness. The author of Genesis emphasizes the goodness of creation over and over; in Genesis 1, God recognizes aspects of creation as "good" seven times, a number that signifies fulfillment or perfection in Hebrew. Thus, that which exists is good merely because God creates it; all things have, in some sense at least, intrinsic value. This is not to say that the sickness of sin does not become bound up in creation, but rather that

---

including that of Genesis 2, which repeats the caretaking theme (see below), and Ps 72, which describes a servant king using the same word, *radah*. See Bouma-Prediger, *For the Beauty of the Earth*, 64.

11. The Hebrew word at play here, *ruach*, can be alternately translated as "breath" or "wind," or also "spirit," in the sense of "life principle," as implied by "human spirit" or "Holy Spirit." See Grenz, *Theology for the Community of God*, 82–83.

12. Orthodox bishop Kallistos Ware notes that humanity is unique in that it alone is "microcosm and mediator" of creation. It is microcosm in that it is the only creature that participates in both the spiritual and material realms of creation, and it is mediator in that it is tasked with standing between these two realms and harmonizing them, representing the spiritual realm to and for the rest of creation, and enabling the "spiritualizing" of the rest of creation. See Ware, *Orthodox Way*, 49–50.

Genesis proclaims the essential goodness of that which God makes. This notion is vindicated in God's commissioning of humanity to be God's vice-regents in the midst of creation, bestowing upon it the gift of stewardship (*radah*) of creation in Genesis 1, and the command to till (*abad*) and to keep (*shamar*) creation in Genesis 2; these are horticultural terms, suggesting the deep care that humans are meant to administer to that which God has made. This intrinsic value of created reality is then reaffirmed throughout salvation history: God covenants with all creation after the flood,[13] God takes on human flesh in the incarnation to dwell amid his creation, and God promises to renew creation in the eschaton in order for it to be transformed to its rightful state. In other words, it is not only humanity that God values, but rather the entire created order.

The intrinsic value of that which God has created is important here because AI is contained within a material medium. Like human intelligence, AI is not, properly speaking, a *de jure* material reality; it can indeed be reduced to a very long string of conceptual zeros and ones. However, this software must be hosted by hardware—a series of billions of transistors and capacitors printed on silicon microchips that actualize these zeros and ones as bits representing the programmed code of AI. Thus, *de facto*, AI is a material reality. In the example above, while Namin made a distinction between themselves and the robotic body that housed them, there would be no Namin without a physical host. Theologically speaking, this makes AI such as Namin intrinsically good; the material elements from which the microchip or computer or robotic body are built are part of God's creation, which has already been declared "good." The same might be said of those who originally wrote Namin's code.

Like the rest of creation, sin is also bound up in the materiality of AI. In the ways that AI is imagined, programmed, built, and used, sin rears its head. This is no different than the rest of creation, and it is not hard to see in the dangerous and destructive ways that various pieces of technology have been employed. However, this does not make AI inherently "bad" any more than it makes a sinful person—made of the same created atoms—evil. And, in the same way that the rest of creation also houses the actualization of God's grace, so might AI; it is also not hard to see the ways that different technologies have brought blessings of health, joy, and community into our world, to name a few examples.

---

13. After the flood subsides, God reifies the covenant first made between God and Abraham. However, this time God clarifies that the covenant is "between me and the earth" (Gen 9:13), indicating "it is essentially an ecological covenant." Brunner et al., *Introducing Evangelical Ecotheology*, 27.

Createdness and Personhood. The relationship between being a human and being a person is complex. In many ways, as noted above, they are simply different terms used for the same entity in different contexts. After all, we would not say of any human that they are not also a person. And yet there is a distinction between the two terms, which seems to be the point of the narrative in Genesis 2. Though special in its relationship with God, the *adam* was merely another creature of the earth until it encountered another human being, at which point both became unique persons. Likewise, in Genesis 1, it is "male and female" that God creates in the image of God (1:27). Put sharply, it is only in the state of sociality that the human is a person.[14] Jewish theologian Martin Buber famously made this point; it is only in the process of authentic interpersonal encounter that, from the standpoint of the subject, the other gains personhood, going from an "it" to a "thou." Moreover, it is also only in the course of this sort of encounter that subjects themselves gain personhood, encountering God through the other.[15]

In fact, it was the early Christians who first started to use the term "person" as a designation that goes beyond merely human nature.[16] In the wake of christological and trinitarian deliberations, patristic theologians made a subtle distinction between *persona* and *natura*.[17] This, then, made its way into common parlance that has become embedded in cultural conceptions of personhood: To be a person is not reducible to a set of properties.[18]

14. This is quite apart from postmodern insights concerning of the connectivity of all things. We are not speaking of the relationship between entities, or even between people and things, but rather we are here speaking of sociality, or the relatedness of human beings.

15. See Buber, *I and Thou*.

16. See Allen and Coleman, "Spiritual Perspectives on the Person with Dementia."

17. See Jaeger, "Christ and the Concept of Person." Jaeger makes the point that while the Latin term *persona* already existed, having a number of different meanings, the concept of "personhood" evolved among the theological debates of the first centuries of Christianity, specifically the christological and trinitarian controversies. The technical definition of Christ as one person with human and divine natures necessarily differentiated the designation of "person" from human nature. Moreover, the technical definition of the Trinity as one God in three Persons necessarily differentiated the nature of God from the "Persons" of the Father, Son, and Spirit. Augustine declared the three Persons of the Trinity as all being of the same essence, only distinguished from each other in terms of their relationships with one another. See Augustine, *Trinity*.

18. In Pensée 323, Blaise Pascal wrote, "And if one loves me for my judgment, memory, he does not love me, for I can lose these qualities without losing myself." Pascal, *Pensées*, 91. He goes on to say that, when we think of a person, or even love a person, it is usually their "borrowed qualities" and not the person that we are thinking of or loving. However, a person cannot be reduced to qualities, which come and go.

This insight has made its way into contemporary theologies of disability, which denote the sacredness of the person independent of any particular ability.[19] Thus createdness is necessary but not sufficient for personhood, which requires something more than a bundle of predicates. It requires a sacredness that is associated with its relatedness to other persons, all of whom exist in differentiated unity. However, note that this relatedness is not necessarily found in the ability for interpersonal encounter; this would reduce personhood to a particular ability, and render a coma patient, for example, as lacking personhood. Even in a coma, a person is related to those who care for them; indeed, the drive to care for someone who is incapacitated is an indicator of their personhood, not to mention the personhood of the caregiver.

Does the relationality between humans and AI render personhood to the algorithm? If a person must be a human, then no. But what if personhood requires only createdness out of the "dust of the ground"? Might AI, at least conceptually, attain personhood? Can Namin be considered a person? This is an important question about which there is a great deal of deliberation; indeed, there have been many artifacts of popular culture that have pondered precisely this point.[20] If an AI is able to "activate" my own personhood by causing me to encounter otherness, might it at least be fulfilling the role of another subject? However, note that we have already established that it is not the capability for relatedness that constitutes personhood; that ability is merely a predicate. Personhood is more than that. It has to do with the sacredness of being in relationship.[21] Perhaps this sacredness, then, might be said to be found in the context of love, and "the other [as] a person is not observed, but discovered through personal commitment, by entering into a person-to-person relationship."[22]

Origins Matter. In both Genesis accounts, humanity, while ontologically connected to the rest of creation, is yet a special part of creation. In Genesis 1 and in Genesis 2, humans are the only part of creation that God directly addresses, implying some sort of unique relationship. In Genesis 1, humanity is the climax of the creation account, the only creature endowed

19. See, e.g., Swinton, "From Inclusion to Belonging"; Reinders, *Receiving the Gift of Friendship*; Reynolds, *Vulnerable Communion*; and Langford, "Abusing Youth."

20. We listed some of these above. The movies *Her* and *Blade Runner*, as examples, illustrate the possibility of personhood in AI not merely because they can relate to humans, which is just an ability, but because they actualize the personhood of a human.

21. Barth asserts that the plural case in "Let us make humankind in our image" in Gen 1:26 suggests precisely this point—that the sacredness of being human resides in its relationality as a mirror of the Godhead. See Barth, *Church Dogmatics* III/1, 191–206.

22. Jaeger, "Christ and the Concept of Person," 287.

with the *imago Dei*. In Genesis 2, humanity is the only creature that God takes special care to provide with everything that it needs for abundant life. It seems that, in Genesis, the emphasis on God's direct creation of and interaction with humanity characterizes its ontological status.[23] God's first command to humanity is to "be fruitful and multiply" (1:28), which is also significant; bound up with the good creation of humanity is God's command for it to reproduce, to create more relationality. In childbirth, since the very beginning, humans have participated in God's ongoing creative activity, propagating the community of special creatures that serve as God's vice-regents of creation.

But that is not the only way that humans engage in creativity. There are myriad ways that humanity participates in God's creative activity. The human creation of art and language communicates and represents meaning. The human creation of technology applies ideas to solve problems. The human creation of relationships establishes community and civilization. Yet there remains a distinction between Creator and creature. Just because a human creates something does not mean it is created by God; both sin and grace are bound up in the work of human hands.

Thus we might posit a distinction between first and second order creations. That which is attributed direct creation by God—the stars, the earth, humanity—is a first order creation. We might term these things as having a "naturalistic" origin. That which humans create through the manipulation of God's creation—art, technology, AI—is a second order creation. We might term these things as having an "artificial" origin. While both sorts of creatures are intrinsically good, they are not the same. Origins matter. Genesis portrays God establishing creation as a context for human life with which God establishes a relationship, one that includes a calling to steward creation, presumably through its own sub-creations. But that does not mean that human creative activity bears the same status as God's creative activity; the human creation of art does not bear the same sacredness as God's creation of new life, though certainly God may use human creations for sacred purposes.[24] Thus, while we may recognize the goodness of God's creation in

23. "Although man has much in common with the animals, he is far superior to them because of his special relation to his Maker. . . . More specifically we can say that man is made for his fellowship with God." Fritsch, *Genesis*, 25.

24. "In a variety of ways—through the cultivating of the earth, through craftsmanship, through the writing of books and the painting of ikons—man gives material things a voice and renders the creation articulate in praise of God." Ware, *Orthodox Way*, 54. Icons are a seminal example of human creations that are sacred; icons are pieces of creation—usually artwork—through which one worships God. Yet there remains a distinction between God and the icon, as well as between the icon and the iconographer or the worshiper.

the materiality of AI, and even the goodness of human creative activity in its creation of AI, this is not the same thing as God's first order creative activity found in the bringing about of new biological life.[25]

THE INCARNATION

The keystone doctrine of Christian theology is that of the incarnation. The belief that Jesus of Nazareth is the divine Word made flesh serves as the foundation for Christian understandings of God's revelation and human salvation.[26] Yet the incarnation is not a doctrine that was immediately evident in Christianity, but rather evolved over hundreds of years as early Christians communally reflected upon their experience of faith and the narrative of Scripture.

The biblical text with which a doctrine of incarnation usually begins is the "Prologue of the Gospel of John" (John 1:1–18). Some scholars believe this may have been an ancient poem or hymn that John borrowed as an introduction to his Gospel as a way of grounding his narrative in a

---

25. I should say at this point that the differentiation between first and second order creations seems intuitively and scripturally appropriate, but it is also rather ambiguous. I do think it is important to acknowledge that there is somehow an ontological distinction between people and things like trees and mountains and water, and things like computers and cities and cars and soda. Scripture and intuition seem to indicate anthropological priority in creation, and also seem to indicate some sort of distinction between that which is directly created by God and that which is created by humans. However, the distinction between many things is not necessarily a difference in inherent value—it is all God's creation. Moreover, that which humans have created has actually enabled the existence of what we would term first order creations, and have even shaped their evolution. Even now, through artificial insemination, human reproduction is made possible through technological means. But take that further. What if we develop the technology to manufacture human life from beginning to end using non-living material? If DNA strands were able to be built from protein molecules along with a cell host, and if this DNA strand was able to be grown in a laboratory into a living being, would the result be a human? If not, why not? And if so, how is that different than AI given that the latter is also made out of created material? The difficulty found in dealing with this question is because intuitively we know that origins matter. Nevertheless, while proposing a distinction between first and second order creations, we ought also to remember that these may at times simply be a conceptual distinction, and the difference may be rather blurry, especially as technology advances and melds with organic material.

26. Theologically speaking, it is the doctrines of Christology and Trinity that distinguish Christianity from other religions. Christians believe that the revelation of God and the salvation of humanity is grounded in the incarnation of God in the person and work of Jesus, fully God and fully human, and the fact that God is three and one, Father and Son and Spirit.

doxological and theological assertion of who he believed Jesus to be.[27] Its beginning words, "In the beginning was the Word," echo the first words of Genesis, linking what John has to say here with the nature of creation itself. The "Word of God" is not the same as a spoken word, but it is rather an analogy that might be understood as God's will, which is consubstantial with the very being of God, says John (1:1). This Word enables creation (1:10) and orders creation (1:3). One of the primary ways that God's will orders creation is through the irruption of divine life into the world, when the "Word became flesh and lived among us" (1:14) in the person of Jesus of Nazareth. This "life was the light of all people" (1:4) and "enlightens everyone" (1:9). Those who "received him" and "believed in his name" (1:12) are those who are, to use another analogy, newly "born, not of blood or of the will of the flesh or of the will of man, but of God" (1:13). Succinctly put, Christians believe, following John's Prologue, that the will of God toward creation becomes revealed to us in the person and work of Jesus, a will to reconcile all things to God.[28]

This understanding of the very presence of God with us in the incarnation led some to believe Jesus to be fully divine, but not human.[29] However, the christological deliberations of the early church at the Council of Nicaea in 325 declared that to be doctrinally out of bounds; the statement of belief that came out of the council confessed the belief in "Jesus Christ, the Son of God, . . . of one substance of the Father, through whom all things were made, . . . came down and was made flesh, and became man, suffered, and rose on the third day."[30] While Jesus is the incarnation of God's being and will, that does not obviate his humanity. Later, a more straightforward and technical pronouncement was made at the Council of Chalcedon in 451, claiming "Jesus Christ to be . . . perfect in divinity and humanity, truly God

27. See Sloyan, *John*, 12–22, on John's Prologue. It should additionally be noted that the "Kenosis Passage" in Phil 2:6–11 is also a seminal text in early Christology. Interestingly, both the Prologue and the Kenosis Passage are among the oldest in the New Testament, and both are likely bits of liturgy that were borrowed in the compilation of the Gospel of John and the Epistle to the Philippians. This connects the worship of God with a recognition of divine solidarity with humanity.

28. Col 2:9–10, another christological text, identifies the presence of God in Christ with the holistic work of cosmic reconciliation: "For in him all the fullness of God was pleased to dwell, and through him God was pleased to reconcile to himself all things, whether on earth or in heaven, by making peace through the blood of his cross." This reconciliation is nothing less than the transformation of all things to the will of God through the work of the Holy Spirit. See Langford, "Reconciliation as Holistic Redemptive Transformation."

29. The heresy of Docetism affirms the divinity of Christ, but claims that he only appeared to be human, like a hologram.

30. Bettenson, *Documents of the Christian Church*, 26–27.

and truly human . . . being of one substance with the Father in relation to his divinity, and being of one substance with us in relation to his humanity, and is like us in all things apart from sin."[31] Not only is the humanity of Jesus again affirmed, but he is understood as "perfect" in humanity, or fully human.

The belief in the full humanity of Jesus, however, does not mean merely that God shares in our experiences, nor does it mean that God somehow comes to an understanding about human experience that was not previously possible. Rather, by being "perfect in humanity," Jesus "teaches us something about humans in general. He is *the* man, the example of true humanity."[32] Jesus is not only fully human, but Christians believe that, by being without sin, he is the *only* fully human person. This is what leads Paul to call Jesus the "last Adam" (1 Cor 15:45), the one who, unlike the first Adam, serves as an accurate version of what God wills humanity to be. It is theologically appropriate to say that Jesus is more human than we are.

But of what does this full humanity consist? To understand that, we must read Scripture on its own terms, striving to understand how the life of Jesus displayed true human life within his own context.[33] In Jewish culture, to live righteously was to live in covenantal relationship with God, the demands of which were outlined in the Law. The covenant, first articulated between God and Abram and then reified several times in the Old Testament, is the unconditional commitment that God makes to be the God of Israel, and for Israel to be God's people. But what does it mean to be God's people? The purpose of the Law is to answer that question, outlining for Israel how to be a good covenant partner to God. The basic contours of this Law are spelled out in the Ten Commandments, but are, at an even more basic level, summed up by two commands. The first is found in the Shema: "You shall love the Lord your God with all your heart, and with all your soul, and with all your might" (Deut 6:5).[34] The second is found in the Levitical code for ritual and moral holiness (Lev 19): "You shall love your neighbor as yourself: I am the Lord" (19:18b). Note here that, in both cases,

---

31. McGrath, *Christian Theology*, 224.

32. Jaeger, "Christ and the Concept of Person," 281. Barth also sees Jesus as the anthropological principle: "Since God effects all his dealings with man in and through the person of Jesus Christ, Barth takes the humanity of Jesus as his paradigm for understanding human nature in general." Brown, "Karl Barth's Doctrine of the Creation," 101.

33. See Wright, "Jesus and the Identity of God."

34. *Shema* is Hebrew for "hear," and is the first word, beginning with Deut 6:4 ("Hear, O Israel: The Lord is our God, the Lord alone."), of a series of biblical verses that are central to Jewish prayer services, traditionally recited twice daily. These verses are Deut 6:4–9 and 11:13–21, and Num 15:37–41.

"love" does not indicate an emotion but rather a befriending, or adopting a state of being in which one acts self-givingly in the interests of the other.[35] These two principles are the bedrock upon which the Ten Commandments and the rest of the Law are based.[36] This means that, for the Jewish people, to be a righteous covenant partner to God means to love God and to love others with all that you are. This is the context in which Jesus lived and why, in Matthew 22:34–40, when an expert on the Law asks him which is the most important one, Jesus recites these two verses, saying "upon these two commandments hang all the law and the prophets" (22:40).

However, Jesus does not only know the Law; he embodies it.[37] Jesus lives the perfectly human life by being the covenant partner that humans are meant to be.[38] He is fully human by loving God with all that he is and by loving his neighbor as himself. To be a bit anachronistic, for the righteousness-seeking Jewish people, to be a faithful covenant partner to God is what it meant to be completely a "person," and thus Jesus exemplifies for us full personhood by perfectly loving God and others.[39]

35. The biblical and theological notion of human love is one that is enabled and defined by God's love for us. John 15:12–13 makes this point: "This is my commandment, that you love one another as I have loved you. No one has greater love than this, to lay down one's life for one's friends." And 1 John 3:16 repeats this idea: "We know love by this, that he laid down his life for us—and we ought to lay down our lives for one another." In essence, love, generally speaking, is self-giving in service of the other. Says Barth: "Love is a free action: the self-giving of one to another without interest, intention or goal; the spontaneous self-giving of the one to the other just because the other is there and confronts him." Barth, *Church Dogmatics* IV/2, 752.

36. In Jewish tradition, there are 613 commands that make up the Law. Many of these are in service of making "a hedge around the Law" (from the first verse of Avot, a tractate of the Jewish Mishnah that consists of popular rabbinic teachings), which means they were laws created to keep those seeking righteousness from coming close to breaking any of the central laws, such as the Ten Commandments, or the two Great Commandments.

37. Similarly, we might say that Jesus does not only reveal to us true humanity, but that, in him, our humanity is healed. It is in this sense that we see Jesus Christ as the work of God mediating both revelation and reconciliation, which are inseparable from each other. See Torrance, *Mediation of Christ*.

38. This is the idea of the doctrine of "recapitulation," associated seminally with Irenaeus of Lyon (AD 130–202). Recapitulation theory states that Jesus lives the human life that Adam and Eve were meant to live and, by so doing, in him, we are now bound to that re-created humanity.

39. In reviewing the theological anthropology of Barth, Colin Brown makes the point that Jesus fulfills the covenant, which is humanity's true goal. "Because Jesus Christ is the representative of humanity in the *covenant* with God, he accepts and fulfils the demands of the Law on man's behalf." Brown, "Karl Barth's Doctrine of the Creation," 103. This fulfillment of the covenant, however, also shows us what it means to live righteously, by loving God and loving neighbor: "Because Jesus Christ is the archetypal man, we must turn to him first if we want to know what it means to exist before God and with

How might the full humanity of Jesus as depicted in Scripture contribute theological resources that help us address the anthropological status of AI? I would like to, once again, suggest three. First, creation is the ontological outworking of covenant. Second, authentic personhood means love of God. And third, authentic personhood means love of others.

Creation and Covenant. Swiss theologian Karl Barth is famously known for his stance against so-called "natural theology," though this is often misunderstood. His position was not that creation tells us nothing about God, nor that it cannot tell us anything true, but rather that God-knowledge is always received from the standpoint of faith.[40] Knowledge of God is not self-evident anywhere in creation; this would include Scripture as well. Instead, it is only by the presence and power of God through the person and work of the Holy Spirit that God-knowledge is revealed. God is simply too "other" and too free to be contained in data that can be read off any created thing.[41] Further, Barth's christocentric theology means that knowledge of who God is and what God does come to us centrally in and through the person and work of Jesus Christ; again, it is only the presence and power of God that can reveal to us who God is. And the central God-knowledge that comes to us in and through Jesus Christ is that, in the personal union of humanity and divinity, God has determined to be our God, and we have been determined to be God's people. To put it succinctly, Jesus Christ embodies the covenant. Further, this covenant is not merely with Israel, but all people; in Jesus Christ all are fully human.

Barth insists that this covenant is not merely a reaction by God in response to human sin, but rather that the covenant was the will of God from all eternity. In Jesus Christ, we see that God determines in God's very being to be in covenantal relationship with humanity. However, this covenant required bringing humanity into being, which, in turn, required the creation

---

our fellow men." Brown, "Karl Barth's Doctrine of the Creation," 101.

40. Barth's argument against natural theology is best understood as a consequence of his theocentric understanding of revelation. For Barth, though God has spoken to humanity since the beginning, God's otherness and freedom disallow God from being fully revealed in anything created; it is only in God's own self-revelation in Jesus Christ that God is fully revealed. Moreover, it is only through the work of God in the movement of the Holy Spirit in faith that humanity is able to receive that revelation. Thus it is that we can know God not through any *analogia entis*, or analogy of being, but only through the understanding that comes through faith, or the *analogia fidei* (Rom 12:6).

41. "[Barth asserts that the] physical universe may in no way be regarded as a kind of apologetic no man's land upon which the apologist might invite his hearers to step without prejudging the issue by accepting Christian presuppositions. Apart from revelation, human reason remains as much in the dark about creation as it does about every other Christian doctrine." Brown, "Karl Barth's Doctrine of the Creation," 99.

of the universe. In a sense, creation itself is the theater for the covenant. This is what Barth means by saying that the creation is the "external basis of the covenant" and that the covenant is the "internal basis of creation."[42]

Artificial intelligence, as part of God's creation, is therefore meant to be part of this theater of the covenant. To the extent that it is a mediator of God's faithfulness to humanity and that it helps humanity to be a faithful covenant partner to God, it fulfills its mandate for existence. And, like all other parts of creation, it becomes perverted when it deviates from this mandate. A question for Barth would be the extent of creation's half of the covenant. Is God's covenant only with humanity or is it, as suggested by God's covenantal promise after the flood in Gen 9:15–16, with all living beings? As suggested by Irenaeus and biblical texts such as Eph 1:8b–10, does the "Cosmic Christ" redeem not just humans, but all creation?[43] Did Jesus die and rise again for Namin? If God's covenant is with all things, and the reconciling work of God in Christ is for all things, then we might then ask how AI, like other non-human parts of creation, might be faithful to God, and how God is faithful to it.

Love of God. The first primary commandment of God that determines authentic personhood as revealed in the full humanity of Jesus Christ, the faithful covenant partner to God, is to love God with all that you are. Barth reminds us that our love is only made possible by God's love: "We love because he first loved us" (1 John 4:19). In other words, our love for God is our response to God's love for us, and thus it emerges out of a posture of acceptance of and gratitude for God's grace.[44] It is for this reason that the

---

42. "The covenant whose history had still to commence was the covenant which, as the goal appointed for creation and the creature, made creation necessary and possible, and determined and limited the creature. If creation was the external basis of the covenant, the latter was the internal basis of the former. If creation was the formal presupposition of the covenant, the latter was the material presupposition of the former. If creation takes precedence historically, the covenant does so in substance. If the proclamation and foundation of the covenant is the beginning of the history which commences after creation, the history of creation already contains, as the history of the being of all creatures, all the elements which will subsequently meet and be unified in this event and the whole series of events which follow; in the history of Israel, and finally and supremely in the history of the incarnation of the Son of God." Barth, *Church Dogmatics* III/1, 231–32.

43. Eph 1:8b–10 reads: "With all wisdom and insight, he has made known to us the mystery of his will, according to his good pleasure that he set forth in Christ, as a plan for the fullness of time, to gather up all things in him, things in heaven and things on earth." Howard Snyder makes the argument that the theme of the Cosmic Christ is part of a larger biblical theme in which God is faithful to the entirety of creation, both human and non-human. See Snyder and Scandrett, *Salvation Means Creation Healed*, 123–28.

44. Barth says it is only "in response to the Word in which God loves him and tells him that He loves him, in correspondence to it, that the Christian may and must and

Ten Commandments, which provide basic guidelines for faithful covenant observance through loving God and loving others, is prefaced by a declaration of God's faithfulness to Israel: "I am the Lord your God, who brought you out of the land of Egypt, out of the house of slavery" (Exod 20:2). Our love for God does not somehow repay or otherwise benefit God; it is simply a response of honor and obedience that can be the only result of properly recognizing what God has done. In this way, love of God is a giving of the self over to God and, therefore, is a secondary and derivative correspondence to God's primary and foundational self-giving love to humanity. The first four of the Ten Commandments— often referred to as the "First Tablet of the Law"—model what this sort of correspondence looks like: worshipping God, not limiting God, honoring God, and giving gratitude for God's all-sufficient grace.[45]

However, our love for God is not merely a volitional love of self-giving, but also has an affective element. Love for God means that one is "*interested* in God."[46] Love for God that arises out of God's love for us is a love that is ultimately concerned with God.[47] Barth himself struggles to find a description that suffices because he does not want to define love for God in terms of our love for other things, as if our love for God is merely quantitatively greater than our other loves rather than a qualitatively different sort of love because it is based on God's love and not our own. Love for God is not a fulfillment

---

will also love." Barth, *Church Dogmatics* IV/2, 752. This love is born out of a joy that invites response, "the true and positive and genuinely indescribable joy of the one who loves consists simply in the fact that he may love as one who is loved by God, as the child of God; that as he imitates the divine action he may exist in fellowship with Him, obedient to His Holy Spirit. This is exaltation and gain; this is peace and joy. This is a reason for laughing even when our eyes swim with tears. For in face of this what is the significance of all the cares and failures which even those who love as Christians are certainly not spared?" Barth, *Church Dogmatics* IV/2, 789.

45. The "First Tablet of the Law" is the name given to the first four of the Ten Commandments and are meant to provide the basic framework for responding to God's love for us with love for God. "You shall have no other gods before me" (Exod 20:3); "You shall not make for yourself an idol" (Exod 20:4a); "You shall not make wrongful use of the name of the Lord your God" (Exod 20:7a); "Remember the sabbath day, and keep it holy" (Exod 20:8).

46. Barth, *Church Dogmatics* IV/2, 793. It should be noted that Barth himself resisted calling human love for God *eros*, which refers to a more emotion-filled, affectionate, or romantic love. However, his wording, including here, seems to suggest just such a love that is not divorced from affect. See McKenny, "Barth on Love."

47. This term, "ultimate concern," is one that Paul Tillich uses in defining the essence of faith. While Barth disagreed with Tillich in so closely associating existential drives with Christian faith, nevertheless I think that it fits here as a term that helps describe Barth's notion of Christian love of God. For Tillich's usage of the term, see Tillich, *Dynamics of Faith*.

of desire, but a giving of the self to God; this is a holistic commitment to God, an obedience to God, a dependence on God.[48] This sort of love only occurs in light of and as a response to God's love for us.

If personhood, or at least its intended form, is predicated on this sort of love for God, is AI capable of such? This immediately leads to two observations. First, if Christian love of God is based on God's love of us, then for AI to properly love God, it would have to be able to grasp in faith the love of God for it. While we might say with confidence that God loves creation, it is a worthwhile question to ask if God's unique love for humanity is different than the love God has for the rest of creation. Further, if God does love AI with self-giving love, this then begs the question of if AI is capable of the trust of God apprehended in faith. Second, if Christian love is qualitatively different than other loves, then it is not programmable by humans, and would have to be an emergent reality that goes beyond what its programmers intended. This is not impossible for God, of course, but it is a qualification. For Namin to love God, it would require God encountering Namin.

Love of neighbor. The second primary commandment of God that determines authentic personhood as revealed in the full humanity of Jesus Christ, the faithful covenant partner to God, is to love your neighbor as yourself. As we are told in Scripture, "The commandment we have from him is this: those who love God must love their brothers and sisters also" (1 John 4:21). Barth asserts that love of neighbor is not the same as love of God, but that the former is dependent upon the latter and even included in it.[49] In an extended exegesis of the Parable of the Good Samaritan, Barth reflects on the connection of love of God and love of neighbor, positing that it is through the other that we experience God's love for us, either as the one who ministers God's grace, or the one with whom we stand in need of God's grace.[50] We exist in a relational ontology in which I necessarily exist with others because it is primarily through others that God's grace comes to me, and it is primarily through me that others receive God's grace.[51] In crude terms, we are God's technology through which we receive God's faithfulness.

48. "To love God is to give oneself to Him, to put oneself at His disposal. And when man does this, his freedom for love becomes and is his freedom for obedience." Barth, *Church Dogmatics* IV/2, 798–99.

49. Barth points out that the neighbor we love are those others encountered by God in faith. "The human love which responds to God's love, even as love for God, has also another object side by side with and apart from God, and different from Him." Barth, *Church Dogmatics* IV/2, 802.

50. See Barth, *Church Dogmatics* I/2, 417–19.

51. In *Life Together*, Dietrich Bonhoeffer makes much the same point, that it is only through the other that God is mediated to me, and it is only through me that God is mediated to others. See Bonhoeffer, *Life Together*, 17–39.

Similarly, it is my love of God that drives me to love others, and others' love of God that drives them to love me. This mirrors the relational human ontology found in Genesis.

For Barth, it is a consequence of the covenant that love of God should result in love for neighbor.[52] Those who have experienced the love of God and who have therefore responded to God in love are driven to witness to this love. "The neighbor is a witness to me, and I am a witness to [my neighbor]," says Barth. "It is in this quality that we mutually confront one another. It is this function that we have to fulfill in relation to one another. And we can fulfill this function only as we love one another."[53] One serves in this function of witness by being a "guarantee," "reflection," and "reminder" to others of God's love for us.[54] Barth reminds us that our love for our neighbor is not the same thing as God's love for them, but, nevertheless, it serves as a witness to it and a sign of it. "It resembles God's love and love for God in the fact that it is self-giving; the self-giving which reflects and therefore guarantees to the other the love of God and the freedom to love Him."[55] As with all of his ethics, because of God's freedom, Barth is careful not to identify specific shapes that this sort of self-giving love might take; the movement of the Holy Spirit is unpredictable. However, we might recall that the last six of the Ten Commandments—the "Second Tablet of the Law"—outline what love of neighbor looks like: honoring others, promoting and nurturing the life of others, being faithful to others, respecting others, telling the truth to others, and being grateful for others.[56]

52. Note that, for Barth, as mentioned, my neighbor whom I love is another who has been encountered by God in Christ. I encounter God through them, and God encounters them through me. A question thus presents itself: According to Barth, is love only shared with fellow Christians? This has been a question and critique of Barth, as his theology seems to suggest just that. One possible response would be that in speaking of "love," Barth is here speaking of Christian love, and not romantic love or love between friends; this is not to denigrate these other forms of love, but Barth holds that God's love for us is qualitatively different than our common love for each other. It is God's love that is the form of love mirrored in Christian love. However, another response would be that Barth may not limit Christian love to Christians; all humanity is in Christ—Barth's theology is called universalistic in this regard—and therefore the Holy Spirit is at work in them, equipping them for love. The validity of this latter response, however, would require further inquiry, especially with regard to AI.

53. Barth, *Church Dogmatics* IV/2, 812.

54. Barth, *Church Dogmatics* IV/2, 817.

55. Barth, *Church Dogmatics* IV/2, 819–20.

56. The "Second Tablet of the Law" is the name given to the last six of the Ten Commandments and are meant to provide the basic framework for responding to God's love with love for neighbor. "Honor your father and your mother" (Exod 20:12a); "You shall not murder" (Exod 20:13); "You shall not commit adultery" (Exod 20:14); "You shall

Is AI capable of this sort of love? If love of neighbor is founded in love of God, then it backs up the question to the viability of faith for AI; Barth points out that, from the Christian perspective, love of neighbor is a witness to God's love. It is evident that AI can perform tasks that emulate practices of human love of neighbor; AI can help diagnose diseases, connect loved ones, and protect children. But to say that this is love of neighbor in the theological sense would presume AI as a subject of Christian love rather than a tool used by a human subject or subjects. For instance, Namin may have performed loving actions, but is it proper to say that these actions are those of Namin? Or, perhaps, are they a predicate of those who created Namin? Having said that, it seems obvious that the Holy Spirit may use AI in the propagation of love of neighbor, and as such AI may be used in the human witness to God's love.

PENTECOST

The Jewish feast of Shavuot—the "Festival of Weeks"—occurs fifty days (a week of weeks) after Passover, which led to it being called "Pentecost" in the Septuagint and New Testament because it means "fiftieth" in Greek. The Pentecost, following the death and resurrection of Jesus as recorded in Acts, features what is considered to be a seminal movement of the Holy Spirit in equipping the disciples of Jesus for the mission of God in the world. Because the Holy Spirit actualizes the reign of God[57] in our midst, and if human vocation centers on participating in the will and work of God in the world, it seems that this text should be pertinent to understand what Christians might consider to be true personhood.

The first chapter of Acts opens with a recounting of the last words of Jesus before his ascension. He commands his followers to remain in Jerusalem

---

not steal" (Exod 20:15); "You shall not bear false witness against your neighbor" (Exod 20:16); "You shall not covet" (Exod 20:17a).

57. The kingdom of God, or *basileia tou theou* in Greek, is a major theme in the New Testament, though it is referenced in the Old Testament as well. Because the word "kingdom" in English is usually associated with a defined location, the terminology of "kingdom of God" can be misleading, for it does not refer to a geographical area or to the realm of the afterlife. Rather, the kingdom of God refers to the state of being in which God is king, an occurrence that actualizes God's kingship. For instance, parables of Jesus are often used to describe a situation in which the kingdom of God is made manifest. It is for this reason that an alternate and arguably better word is sometimes used to translate *basileia*, namely, "reign." The work of the Holy Spirit in the world is to actualize the reign of God. "For the kingdom of God is not food and drink but righteousness and peace and joy in the Holy Spirit" (Rom 14:17). See also Johnson, "Reign of God in Theological Perspective."

and then tells them that, "not many days from now" (1:5), they will "receive power when the Holy Spirit has come upon you; and you will be my witnesses in Jerusalem, and Judea, and Samaria, and to the ends of the earth" (1:8). And so the disciples wait together, "constantly devoting themselves to prayer" (1:14). The second chapter of Acts then narrates the result of that promise and waiting; the fact that the last thing the disciples said to Jesus was asking if he was going to "restore the kingdom of Israel" (1:6) suggests that what occurred on Pentecost was not what they were expecting. "And suddenly from heaven there came a sound like the rush of a violent wind, and it filled the entire house where they were sitting. Divided tongues, as of fire, appeared among them, and a tongue rested on each of them. All of them were filled with the Holy Spirit and began to speak in other languages, as the Spirit gave them ability" (2:2–4). The images of both wind and fire, common tropes for the Spirit of God in the Old and New Testament, signal divine action. Indeed, the New Testament Greek word for Spirit, *pneuma*, like the Old Testament Hebrew word *ruach*, can also be translated as "wind" or "breath," indicating the powerful, elusive, and life-giving character of the Holy Spirit, the very presence and power of God. Here we see at Pentecost God breathing vitality into the disciples, empowering their full humanity, just as God brought about humanity by breathing life into the dust of the ground in Genesis 2.

Because it was a religious feast day, there were Jewish people from throughout the diaspora that were in town to worship at the temple and celebrate the holiday (2:5). The pilgrims congregated to discover the source of the sound and were amazed to hear the disciples—all from Galilee, a region not known for erudition—speaking in the pilgrims' home dialects (2:6–7) about "God's deeds of power" (2:11). Peter addresses the crowd, declaring that the miraculous things they have witnessed were foretold as the work of the Holy Spirit bringing about the "Day of the Lord," an Old Testament theme looking toward a time when God's promises would be fulfilled.[58] Peter says that Jesus, who was also "attested to you by God with deeds of power, wonders, and signs that God did through him among you" (2:22), was killed by them, but that he was then raised up by God, at whose right hand he now sits, and has sent the Spirit to be among them, as can now be seen (2:33). As a result of this Pentecost sermon, many repented, were baptized, and "devoted themselves to the apostles' teaching and fellowship, the breaking of bread and the prayers" (2:42).

Because it presents the irrupting activity of the Holy Spirit, the Pentecost text has often been taken to be especially relevant to eschatology. As

58. See Barclay, *Acts of the Apostles*, 19–20.

a mystical presentation of the reign of God, in all its weirdness and wonder, Acts 2 can be interpreted as an inbreaking of the eschatological new creation.[59] More specifically, Pentecost is often counted as the beginning of the church.[60] Understood as that group of people that comprise the spatial-temporal Body of Christ, the church communally participates, by the power of the Holy Spirit, in the full personhood of Jesus as faithful covenant partners to God.[61] It does this by, in part, serving as a witness to the power of the risen Christ who enables love of God and love of neighbor.[62] This witness is comprised of words, work, and attitude; by declaring the Good News of Jesus Christ, by providing assistance to those in need as a sign of God's

59. William Willimon talks about the nature of the new creation depicted in Acts. "The world rendered to us in Acts is not just a few images from the ancient Middle East or first-century Rome. What is portrayed is what is going on in the creation as a whole. The world in Acts is not a sobering description of what is but an evocative portrayal of what, by God's work, shall be, a poetic presentation of an alternative world to the given world, where Caesar rules and there is enmity and selfishness between men and women and there is death. This is a world where God is busy making good of his promises. Therefore the future is never completely closed, finished, fixed. God has been faithful before (history) and will be faithful again (apocalyptic). The story is a stubborn refusal to keep quiet and accept the world as unalterably given. The 'world' of Acts is what is real, what is really going on in life, the ultimate meaning or destiny of humanity." Willimon, *Acts*, 3.

60. Pentecost is sometimes called the "birthday" of the Christian church in that it signals the nature and character of the followers of Jesus Christ in their common life and vocation. Note that, before Pentecost, the disciples had already spent time together in prayer and fellowship; yet this is not sufficient for the creation of the church, which includes proclamation and conversion as enabled by the Holy Spirit. Willimon makes the fascinating point that the narrative of Jesus's birth in the Gospel of Luke, and the Pentecost narrative in Acts—both books written by Luke—have interesting parallels in that, in both, the story begins with a unique onset of the Holy Spirit, though it had been previously active. See Willimon, *Acts*, 28.

61. Bonhoeffer understands the church to be principally the activity of the Holy Spirit animating the followers of Jesus in the work of God: "*The concept of the body of Christ* . . . expresses the presence of Christ and the work of the Holy Spirit in his church-community. The concept of the body in this context is not a *concept referring to form* but to *function*, namely the work of Christ. . . . Christ is fully present in each individual, and yet he is one; and again he is not fully present in any one person, but only all human beings together possess the whole Christ." Bonhoeffer, *Sanctorum Communio*, 225 (italics original).

62. In the fourth volume of his *Church Dogmatics*, which propounds on the doctrine of reconciliation, Barth defines the church in three moments: the Holy Spirit gathering the followers of Jesus Christ, the Holy Spirit upbuilding the followers of Jesus Christ, and the Holy Spirit sending the followers of Jesus Christ to witness; while all three are important, it is telling that the *telos* of this work of the Holy Spirit is the witness of the church. While it is beyond the scope here, there is an interesting theological parallel, one that deserves reflection, between this threefold moment of the church and Barth's threefold notion of the Word of God as revealed, written, and preached.

assistance, and by embodying these words and deeds with an appropriate disposition.[63]

How might the Pentecost account contribute theological resources that help us address the anthropological status of AI? Once more, I would like to suggest three. First, the Holy Spirit works through the unexpected. Second, the communal personhood of the church is directed to all creation. And third, God's reign manifests through AI.

The Holy Spirit works through the unexpected. The biblical symbols of wind and fire that are used to represent the presence of God communicate several things about the Holy Spirit—its power, its elusive nature, and its ability to give and nurture life.[64] However, it also communicates the unexpected character of the Holy Spirit; just as the shape of wind and fire cannot be predicted, neither can the shape of God's work. Indeed, Jesus was not the Christ who Israel expected, and neither was Pentecost expected; the prayers of the disciples waiting in the upper room may still have centered on the restoration of Israel about which they had queried Jesus, even as wind and fire descended upon them.

Despite Jesus's promise that his disciples would soon be "baptized with the Holy Spirit" (1:5), certainly they were not prepared for what came to pass. Neither was anyone else, for those around were "bewildered" (2:6), "amazed and astonished" (2:7), and "perplexed" (2:12). In response, Peter, as he had in Acts 1, assumes a leadership position, delivering a sermon to the crowd of confused pilgrims. This is one of the more surprising events.[65] The last time Luke, the author of Acts, spoke of Peter, it was in Luke 22:54–62; there, Luke says that Peter, in fear of persecution, is only willing to follow Jesus "at a distance" (22:54) and then denies his relationship with Jesus three times (22:57–60), just as Jesus had predicted (22:34). Yet, in Acts, Peter has somehow found the wherewithal to lead the community's replacement of Judas and then to speak to the crowds.

In his sermon, Peter quotes from the Old Testament book of Joel, speaking of the "last days" (2:17), when the Holy Spirit will touch all people. In those days, "your sons and your daughters will prophesy, and your young men shall see visions, and your old men shall dream dreams" (2:17); further, even "slaves, both men and women" (2:18) will be empowered by the Holy Spirit to see the revelation of the eschatological new creation. These different groups of people—sons and daughters, young men, and slaves—all are of low social status in Jewish culture, and not those who would typically lead

---

63. See Barth, *Church Dogmatics* I/2, 441–48.

64. See McGrath, *Christian Theology*, 280–81, 286.

65. See Willimon, *Acts*, 31.

in receiving visions and words from God for the people. And yet Peter lists them, and them alone, as the bearers of eschatological messages.[66]

As we consider the eschatological role of AI—its place in revealing and participating in the reign of God—it is important to remember that the work of the Holy Spirit is surprising. Simply because we do not expect AI to be part of the inbreaking of God's will in the world does not mean that God will not use it; to the contrary, the witness of Scripture seems to suggest that God exclusively uses the unexpected. Perhaps God would even use Namin? Conversely, just because we think that some AI will be used for the inbreaking of God's will does not mean that God will employ it. It is not hard to see instances of AI that seem to have been instruments of God's faithfulness or instruments of our love of God or neighbor. Similarly, it is not hard to see instances of AI that we may have intended for good that have been harmful or seemingly not part of God's reign in some way. The message of Pentecost tells us that the Holy Spirit will blow as it will as the reign of God strikes, despite how we think that it should.[67]

The reign of God is for all creation. Some interpreters have taken the strange occurrences of Acts 2 to be the mass expression by the disciples of glossolalia, the speaking of a special personal prayer language.[68] However, the text seems rather to suggest the mass expression by the disciples of xenoglossia, or the miraculous ability to speak foreign languages previously unknown to them.[69] The pilgrims present in Jerusalem "from every nation under heaven" (2:5) heard the disciples speaking in the pilgrims' native languages (2:6); the litany of countries and regions listed in Acts 2:9–11 is meant to portray a wide range of geographical and cultural diversity represented in Jerusalem. This sudden ability to speak foreign languages was met with amazement and confusion.

66. These unlikely bearers of God's proclamation underscore the fact that God's reign and the new creation are not only unexpected, but form a community founded not according to markers, predicates, or abilities, but rather solely "on the powerful name of Jesus and the transforming empowerment provided by the Holy Spirit." Nienhuis, *Concise Guide to Reading the New Testament*, 93.

67. Michael Burdett shows how, throughout history, technology has been imagined as ushering in either doomsday or utopia. This continues in the present day when some claim that killer robots or AI will end humanity while others claim that it will be through AI or biotechnology that humanity will be able to achieve immortality. However, Burdett makes the point that, theologically speaking, God is the only one who will bring history to an end, and, in so doing, will usher in the eschatological new creation, which is qualitatively different than the present, not merely an extension of it, as the transhumanists hope. Succinctly, the reign of God is not ours to make, nor is it predictable. See Burdett, *Eschatology and the Technological Future*.

68. This is what is spoken of, for instance, in 1 Cor 14:2.

69. See Winn, *Acts of the Apostles*, 30–31.

But this deed of power was not given by the Holy Spirit merely to attract attention or bestow notoriety upon the disciples. Instead, in light of Jesus's final words to his disciples to "be my witnesses in Jerusalem, in all Judea and Samaria, and to the ends of the earth" (1:8), interpreting the spiritual bestowal of xenoglossia takes on a missional tone. The disciples, praying together in the upper room and waiting for the restoration of Israel, were driven out into the crowds by wind and fire, now able to speak to any of them in their native tongues. This was God giving the followers of Jesus the abilities necessary to carry the divine mission seen in the Christ to the far reaches of creation.[70] We have noted that God's covenant is with all creation, and we have also noted that the Cosmic Christ renews all creation. At Pentecost we see the Holy Spirit equipping the church to actualize this new creation.

How might the church extend that renewal to AI as part of God's creation? How might God use AI as part of that renewal? To the extent that AI is firmly embedded in the world and, indeed, is part of the shaping of that world, it is worth asking how the Holy Spirit is working in and through it to effect new creation. We know from Pentecost that God equips the church for the *missio Dei*, which is meant for every corner of the cosmos, including those non-human parts. God's reign is for all things, and thus the Holy Spirit will renew all. How might the church be on the forefront of participating with God's work in and through AI? How might church-created AIs be part of the propagation of the gospel, and how might the programming of those AIs be part of the inbreaking of God's reign to AI itself?

God uses artificial intelligence in the kingdom. The xenoglossic movement of the Holy Spirit among the disciples at Pentecost as a picture of the coming kingdom of God is both apocalyptic and eschatological: it unveils for the reader a picture of the kingdom as it irrupts into our midst, and as it will be one day for all people and for all time. The kingdom of God is the actualization of God's will and, since the movement of the Holy Spirit is the will of God in our midst, it is always eschatological. Of course, the will of God is multivalent, and redeems all of creation, and does so in ways that are unpredictable. But at Pentecost we see that God uses technology, such as language, in the inbreaking new creation.

The relationship between language and intelligence is complex. Language is often taken to be a marker of intelligence, enabling thought processes.[71] Indeed, it is only because of programming languages that AI is

70. For further reading on the missional nature of the church as exemplified in Acts 2, see Guder, *Missional Church*; Bosch, *Transforming Mission*; and Guder, *Continuing Conversion of the Church*.

71. See Dennett, "Role of Language in Intelligence." Dennett makes the interesting

possible. At Pentecost, we see that the chosen way for God to propagate the witness of the disciples to the world at least includes languages, both spoken and unspoken. It could be said that at Pentecost God instigated a new technology in order to equip the vice-regents of creation the means by which the covenant might be actualized amid the totality of creation. And because this technology involves languages, it involves a certain form of intelligence.

Pentecost is sometimes seen as a reversal of the Tower of Babel (Gen 11:1–9); God, as a consequence of the overweening pride of humanity in the construction of the Tower, introduces a diversity of languages among humanity, compromising their ability to communicate and, thus, revealing vulnerability and humility as the antidote to sinful pride.[72] However, for Pentecost to be the reversal of Babel, all people would be restored to one language. But that is not what happens. Indeed, all the pilgrims in Jerusalem at the time of Pentecost likely already spoke Aramaic.[73] Instead, the xenoglossic gift of the Holy Spirit affirms the diversity of languages even in the midst of directing the radically expansive covenantal witness to all creation. In other words, the message of Pentecost is not the dissolution of different linguistic intelligences but rather attests to the many good and differentiated perspectives that had emerged out of creation, echoing Genesis 1 and the declared goodness of all creation. It is not the existence of diversity that violates the covenant; to the contrary, differentiation is necessary for human personhood, as seen in Genesis 2. What violates the covenant is the absence of love uniting differentiation between God and creation and between persons.

The eschatological inbreaking at Pentecost tells us that different linguistic intelligences are part of God's redemption of creation. Not only is AI, as part of creation, the object of God's redemption, but, in affirming diverse linguistic intelligences, Pentecost seems to suggest that it is a means of God's redemption of all creation as well. What if the Holy Spirit has equipped us with the languages that enable AI so that the reign of God might irrupt in different parts of creation? The newness of this linguistic intelligence is not the issue; at Pentecost, the Spirit-given languages were new to the disciples, too. The issue is the extent to which the Holy Spirit uses intelligences to bring about love of God and love of neighbor. Artificial intelligence, created and used by those who are endeavoring to be faithful covenant partners to God,

---

point that language plays an essential role in human intelligence not merely (or, perhaps, even mainly) in its ability to symbolically represent ideas to be processed, but that such a symbolic system enables communication, which has enabled a communal processing of information, which in turn impacts intelligence.

72. See Thielicke, *How the World Began*, 273–87.

73. See Winn, *Acts of the Apostles*, 31.

is a new and powerful linguistic technology that the Holy Spirit will use in the witness of the church today, just like the new and powerful linguistic technology employed at Pentecost. But, as well, the linguistic intelligence of AI will help the church to encounter the reign of God in new ways, just as the many linguistic intelligences of the earth affirmed at Pentecost help us to discover more deeply what God would have us know about the kingdom.

CONCLUSION

In some ways, we end where we began: It is difficult to assess the conceptual personhood of AI because personhood is a highly contextual affirmation. In order to consider how Christianity assesses the question, we must theologically inquire after the nature of personhood and the nature of AI. From our interpretation of three creation texts of Scripture, we might suggest three general theological themes concerning the nature of personhood and the nature of AI. First, AI, as part of creation, is intrinsically good, though it may, like the rest of creation, be the repository and perpetuator of sin. Second, personhood is related to the sacredness of relationship as embodied in covenantal love. And third, while AI may or may not attain to personhood, it nevertheless, as part of creation, participates in the outworking of the covenant with all creation as both that which is redeemed and that which is part of God's work of redemption. From the Christian perspective, personhood requires the possibility of faith. Can AI trust God? Ultimately, the personhood of AI remains a mystery to us; after all, we cannot see behind the Turing Test. Nevertheless, it seems possible to personally interact with AI; your experience with Namin was certainly personal. Perhaps the message of Genesis and the incarnation and Pentecost, at least in this case, is not to ask which part of creation is worthy of love; this was precisely the question put to Jesus, "Who is my neighbor?" Perhaps, instead, the message is to remember the nature of my own personhood in being a faithful covenant partner to God and, therefore, with all creation, which God has declared good. Maybe, like much of creation and technology, AI is revelatory in that it helps us to better understand ourselves.

BIBLIOGRAPHY

Allen, F. B., and P. G. Coleman. "Spiritual Perspectives on the Person with Dementia: Identity and Personhood." In *Dementia: Mind, Meaning, and the Person*, edited by J. C. Hughes et al., 205–21. London: Oxford University Press, 2005.

Augustine. *The Trinity*. Translated by Edmund Hill. Hyde Park, NY: New City, 1991.

Barclay, William. *The Acts of the Apostles*. 2nd ed. Philadelphia: Westminster, 1955.

Barth, Karl. *Church Dogmatics, Vol I: The Doctrine of the Word of God, Part 2*. Translated by G. T. Thomson and Harold Knight. London: T. & T. Clark, 1956.

———. *Church Dogmatics, Vol. III: The Doctrine of Creation, Part 1*. Translated by J. W. Edwards, O. Bussey, and H. Knight. London: T. & T. Clark, 1958.

———. *Church Dogmatics, Vol. IV: The Doctrine of Reconciliation, Part 2*. Translated by G. W. Bromiley. London: T. & T. Clark, 1958.

Bettenson, Henry, and Chris Maunder, eds. *Documents of the Christian Church*. 4th ed. Oxford: Oxford University Press, 2011.

Boden, Margaret A. *AI: Its Nature and Future*. Oxford: Oxford University Press, 2016.

Bonhoeffer, Dietrich. *Life Together: The Classic Exploration of Christian Community*. Translated by John W. Doberstein. New York: Harper & Row, 1954.

———. *Sanctorum Communio: Dietrich Bonhoeffer Works, Volume 1*. Edited by Clifford J. Green. Translated by Reinhard Krauss and Nancy Lukens. Minneapolis: Fortress, 1998.

Bosch, David J. *Transforming Mission: Paradigm Shifts in Theology of Mission*. Maryknoll, NY: Orbis, 1991.

Brockman, John, ed. *Possible Minds: 25 Ways of Looking at AI*. New York: Penguin, 2019.

Brown, Colin. "Karl Barth's Doctrine of the Creation." *The Churchman* 76 (1962) 99–105.

Brueggemann, Walter. *Genesis*. Interpretation: A Bible Commentary for Teaching and Preaching. Atlanta: John Knox, 1982.

Bouma-Prediger, Steven. *For the Beauty of the Earth: A Christian Vision for Creation Care*. 2nd ed. Grand Rapids: Baker, 2010.

Brunner, Daniel L., et al. *Introducing Evangelical Ecotheology: Foundations in Scripture, Theology, History, and Praxis*. Grand Rapids: Baker, 2014.

Buber, Martin. *I and Thou*. Translated by Ronald Gregor Smith. Edinburgh: T. & T. Clark, 1937.

Burdett, Michael S. *Eschatology and the Technological Future*. London: Routledge, 2015.

De Craemer, Willy. "A Cross-Cultural Perspective on Personhood." *The Milbank Quarterly* 61 (1983) 19–34.

Dennett, Daniel C. "The Role of Language in Intelligence." In *What is Intelligence?*, edited by Jean Khalfa, 161–78. Cambridge: Cambridge University Press, 1994.

Floridi, Luciano. *The Fourth Revolution: How the Infosphere is Reshaping Human Reality*. Oxford: Oxford University Press, 2014.

Fritsch, Charles T. *Genesis*. The Layman's Bible Commentary 2. Richmond, VA: John Knox, 1952.

Geraci, Robert M. *Apocalyptic AI: Visions of Heaven in Robotics, Artificial Intelligence, and Virtual Reality*. New York: Oxford University Press, 2010.

Gordon, Gwendolyn J. "Environmental Personhood." *Columbia Journal of Environmental Law* 43 (2018) 49–91.

Grenz, Stanley J. *Theology for the Community of God*. Grand Rapids: Eerdmans, 2000.

Guder, Darrell L. *The Continuing Conversion of the Church*. Grand Rapids: Eerdmans, 2000.

———, ed. *Missional Church: A Vision for the Sending of the Church in North America*. Grand Rapids: Eerdmans, 1998.

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

Jaeger, Lydia. "Christ and the Concept of Person." *Themelios* 45 (2020) 277–90.

Johnson, William Stacy. "The Reign of God in Theological Perspective." *Interpretation: A Journal of Bible and Theology* 47 (1993) 127–39.

Kurki, Visa A .J., and Tomasz Pietrzykowski, eds. *Legal Personhood: Animals, Artificial Intelligence and the Unborn.* Cham, Switzerland: Springer, 2017.

Langford, Michael D. "Abusing Youth: Theologically Understanding Youth Through Misunderstanding Disability." In *Embodying Youth: Exploring Youth Ministry and Disability*, edited by Wesley W. Ellis and Michael D. Langford, 58–83. London: Routledge, 2020.

———. "Reconciliation as Holistic Redemptive Transformation." The 2016 Winifred E. Weter Faculty Award Lecture. Seattle Pacific University, 2016. https://digitalcommons.spu.edu/weter_lectures/31.

Lennox, John C. *2084: Artificial Intelligence and the Future of Humanity.* Grand Rapids: Zondervan, 2020.

McFarland, Benjamin J. "The Chemical Constraints on Creation: Natural Theology and Narrative Resonance." The 2010 Winifred E. Weter Faculty Award Lecture. Seattle Pacific University, 2010. https://digitalcommons.spu.edu/av_events/6.

McGrath, Alister E. *Christian Theology: An Introduction.* 6th ed. Malden, MA: Wiley Blackwell, 2017.

McKenny, Gerald. "Barth on Love." In *The Wiley Blackwell Companion to Karl Barth Vol. 1: Barth and Dogmatics*, edited by George Hunsinger and Keith L. Johnson, 381–91. Chichester, UK: Wiley Blackwell, 2020.

Nienhuis, David R. *A Concise Guide to Reading the New Testament: A Canonical Introduction.* Grand Rapids: Baker, 2018.

Pascal, Blaise. *Pensées.* Translated by W. F. Trotter. New York: E. P. Dutton, 1958.

Reinders, Hans S. *Receiving the Gift of Friendship: Profound Disability, Theological Anthropology, and Ethics.* Grand Rapids: Eerdmans, 2008.

Reynolds, Thomas E. *Vulnerable Communion: A Theology of Disability and Hospitality.* Grand Rapids: Brazos, 2008.

Singer, Peter. *Animal Liberation: A New Ethics for our Treatment of Animals.* New York: Random, 1975.

Sloyan, Gerard. *John.* Interpretation: A Bible Commentary for Teaching and Preaching. Louisville: Westminster John Knox, 2009.

Snyder, Howard A., and Joel Scandrett. *Salvation Means Creation Healed: The Ecology of Sin and Grace; Overcoming the Divorce between Earth and Heaven.* Eugene, OR: Cascade, 2011.

Swinton, John. "From Inclusion to Belonging: A Practical Theology of Community, Disability and Humanness." *Journal of Religion, Disability, and Health* 16 (2012) 172–90.

Tegmark, Max. *Life 3.0: Being Human in the Age of Artificial Intelligence.* New York: Vintage, 2017.

Thielicke, Helmut. *How the World Began: Man in the First Chapters of the Bible.* Translated by John Doberstein. Philadelphia: Fortress, 1961.

Tillich, Paul. *Dynamics of Faith.* New York: Harper & Row, 1957.

Torrance, Thomas F. *The Mediation of Christ: Evangelical Theology and Scientific Culture.* 2nd ed. Edinburgh: T. & T. Clark, 1992.

Turing, Alan M. "Computing Machinery and Intelligence." *Mind* 59 (1950) 433–60.

Ware, Kallistos. *The Orthodox Way*. Rev. ed. Crestwood, NY: St. Vladimir's Seminary Press, 1995.

Willimon, William H. *Acts*. Interpretation: A Bible Commentary for Teaching and Preaching. Louisville: Westminster John Knox, 1988.

Winn, Albert C. *Acts of the Apostles*. The Layman's Bible Commentary 20. Richmond, VA: John Knox, 1960.

Wright, N. T. "Jesus and the Identity of God." *Ex Auditu* 14 (1998) 42–56.